

## **SOCIOECONOMIC CONDITIONS ON THE PENNSYLVANIA FRONTIER: THE GERMANS AND SCOTS-IRISH OF CUMBERLAND COUNTY, 1765-1775**

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**ABSTRACT:** *Tax assessment, estate inventories, and demographic data for Cumberland County, Pennsylvania from 1765 to 1775 were used to determine the socioeconomic conditions that existed on the frontier just prior to the revolution. Although the majority of taxpayers in Cumberland County fell within the lowest income category, there were some important differences evident among the two predominant ethnic groups—the Scots-Irish and Germans. Earlier Scots-Irish settlers often fell into the lower economic categories, while German settlers, who arrived in large numbers around 1765, tended to fall more often into the higher economic categories, and this trend strengthened over time. The distribution of livestock, land holdings, and cleared land—key indicators of wealth—appears to have been dependent upon the distribution of the ethnic groups, with Germans owning more livestock and larger farms, as well as having more land cleared for agricultural production. The general rise in economic conditions of Cumberland County settlers between 1765 and 1775 is attributed in large part to the influx of German immigrants and the method of farming they employed, but also to an overall economic maturation of the county as farms become more productive.*

**Keywords:** *Socioeconomic, Pennsylvania Frontier, Cumberland County*

### **INTRODUCTION**

While many historical studies have examined the cultural characteristics of the well-established regions of Pennsylvania east of the Susquehanna River, few have focused on the socioeconomic conditions that existed at the periphery of the settled landscape. This study is an attempt to fill that gap by examining the socioeconomic conditions that existed on the Pennsylvania frontier from 1765 to 1775. Although settlers had crossed the Susquehanna as early as 1730, Cumberland County marked the edge of the frontier well past the end of the French and Indian War (c1758-1765). This research is an attempt to reconstruct the economic conditions on the frontier by using extant tax data and estate inventories for Cumberland County and previously published ethnic data derived from local cemeteries and church birth-baptismal records as primary data sources. Our goal is to extend the colonial period socio-demographic work of Lemon (1972) west of the Susquehanna River to the colonial frontier. In doing so, we hope to provide a more complete picture of frontier conditions and the processes that led to these conditions.

### **HISTORICAL SETTING**

Most settlers emigrating to Pennsylvania entered through Philadelphia and fanned out to settle the counties of Northampton, Berks, and Lancaster west and north of the port city (Graeff, 1944). Despite the increasing number of settlers occupying this eastern region during the early 1700s, few people migrated to lands west of the Susquehanna River, and those that did settled the lands that later became York county. It is believed that few, if any, settlers entered the lands that now make up Cumberland County until sometime after 1730 (Wing and Scott, 1879). Most of the land east of the Susquehanna River had been taken up by the initial waves of English and German immigrants, so it was the later Scots-Irish immigrants who were the first to cross the Susquehanna into Pennsylvania's Cumberland Valley (Fletcher, 1950). Population dynamics in Cumberland County during the initial years of settlement were often influenced by external forces, perhaps the most important being Indian resistance. Upon the outbreak of the French and Indian War, population declined within Cumberland County as settlers retreated to the east to escape the hostilities. Although for all practical purposes the French and Indian War had ended in Cumberland County by the early 1760s, it took several years for the population to return to its pre-

war level (History of Cumberland and Adams Counties, Pennsylvania, 1886). Prior to the war settlers held proximity to markets to be of utmost importance, yet as lands east of the Susquehanna River became more densely populated and land prices surrounding the commercial centers increased, all ethnic groups began to look toward the west. Therefore it was a different mix of immigrants that returned to Cumberland County in the second wave of settlement that started around 1765, composed not only of Scots-Irish, but significant numbers of German and English families. It is during this second wave of settlement that German and English settlers began to supplant the earlier Scots-Irish settlers, who then migrated north toward central Pennsylvania. Life on the early frontier was difficult and many western settlers found the challenges of carving a living out of the wilderness too great. We suspect that there were as many discouraged former settlers returning to the east as there were hopeful new settlers heading west.

## DATA AND METHODS

For the purpose of this research, the geographic boundaries of the study area are confined to the land that comprises present-day Cumberland County, although the county extended much farther west during the late colonial period (Figure 1). Because settlement was only in its initial stages, few people had moved beyond the present-day boundaries, and Cumberland County was considered to be a frontier region at this time. To represent the period from 1765 to 1775, data were collected for the three sample years of 1765, 1770, and 1775. This ten year time period was selected because it represented a relatively stable period between the end of the French and Indian War and the beginning of the American Revolution, the region's population was small enough to include all taxpayers in the analysis, and tax assessment data were available for the sample years. The townships that existed within the boundaries of present-day Cumberland County during this time period were Allen, Carlisle, East Pennsboro, Hopewell, Middleton, and West Pennsboro. Newton Township was carved out of Hopewell Township in 1767, and therefore was included in only the 1770 and 1775 results (Figure 2).

Tax assessments were utilized as the primary data source because they were the most consistent form of systematically collected economic data that date back to colonial times in Cumberland County (see Lemon and Nash, 1968 for a review of early tax data). Estate inventories for several individuals in each economic class were used to

gauge what constituted a person's real wealth. While a total of 21 separate taxable items appeared in the assessments of 1765, 1770, and 1775, the distributions of the seven most prevalent items were used to characterize the region's economic status. These items included horses, cows, sheep, warranted land, located land, patented land, and cleared land. During colonial period, land was taxed based in part on its classification: located (also called unwarranted), warranted, or patented. Located (unwarranted) was land for which the settler had not requested a warrant, and to which the occupant had no written title. Warranted referred to land that had been surveyed and for which a payment of five pounds or more had been paid, and therefore had a written warrant. Patented referred to land that was formally purchased from the proprietors via full payment (Munger, 1991).

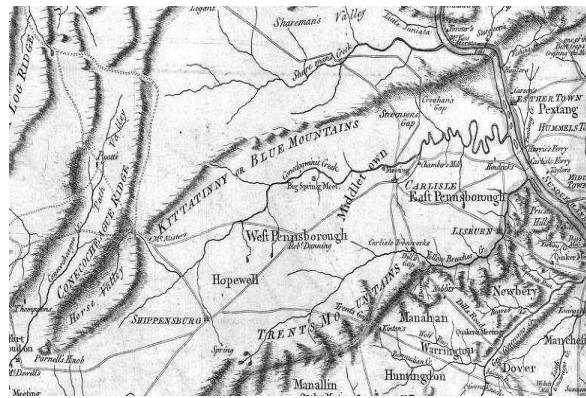


Figure 1. A section of William Scull's 1770 map of Pennsylvania showing the settled portion of Cumberland County.

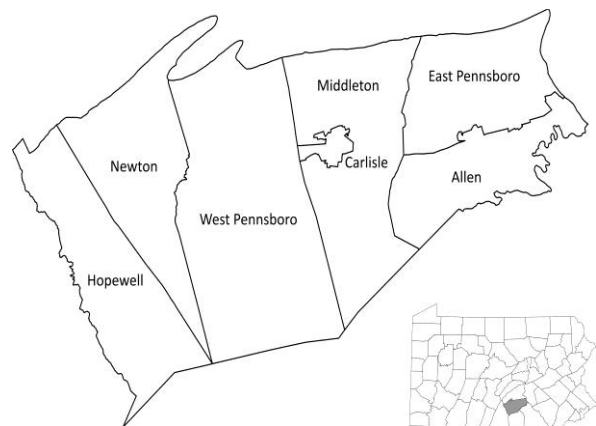


Figure 2. Townships as they existed in 1770.

Ethnic data were derived from grave marker inscriptions compiled by Marr (2004) and church birth-baptismal records (Wright, 1994). Ethnicity was determined through surname analysis, and only those surnames that were easily identifiable as belonging to a specific ethnic group were used. Grave marker inscriptions do not necessarily indicate when a person was living at a particular location, only that they died or were buried at a location. To address this problem, only grave marker inscriptions for those people who died with five years of the three study years were used (1765-1770, 1770-1775, 1775-1780), since it is a reasonable assumption that they were living in the township a few years prior to death. While not a perfect measure, this method is more than adequate for determining the relative proportions of the various ethnic groups in each township.

In this study we have tried to determine socioeconomic patterns in Cumberland County using tax records to derive the number of farms, acreage per farm, cleared acreage, acreage in grain, and the numbers and types of livestock that existed in the county during this time period (see Lord 1975 for similar work in Lancaster County). In doing this, we have attempted to reconstruct the *average farm* that existed in the county and each of its townships, and identify ethnic differences within these data. It should be noted that for the purpose of this study taxable wealth is considered to be synonymous with actual wealth. While taxable and actual wealth may differ in individual cases, as found by Lemon and Nash (1968), on average it was found that taxable wealth was a reasonable surrogate for actual wealth.

### ECONOMIC CONDITIONS ON THE FRONTIER

Based on birth and baptismal records<sup>1</sup> there appears to be evidence of three distinct waves of immigration into Cumberland County. The first, small wave occurred beginning around 1752 and lasted about three years. The second, larger wave began just as the French and Indian War was ending in 1765 and lasted through the end of the decade. The third, which began at the end of the 1770s and continued through the turn of the century, was a combination of both immigration and natural increase. Given that the extant birth-baptismal records are rather incomplete prior to 1765, the first immigration wave was probably larger than depicted. While few areas were completely homogeneous in terms of the nationality of settlers, Fletcher (1950) suggested that the dividing line in 1765 between predominantly Scots-Irish-occupied lands and predominantly German-occupied lands was

somewhere in Hopewell Township. Based on an examination of the surnames, the first migration wave was predominantly Scots-Irish, and in all likelihood these settlers migrated to Hopewell Township in response to proprietor Edward Shippen's purchase and subsequent sale of land in this area. However, significant numbers of Scots-Irish settled in Carlisle and Middleton Township. The second immigration wave following the war was overwhelmingly Germans, with lesser numbers of Scots-Irish and English (Figure 3).

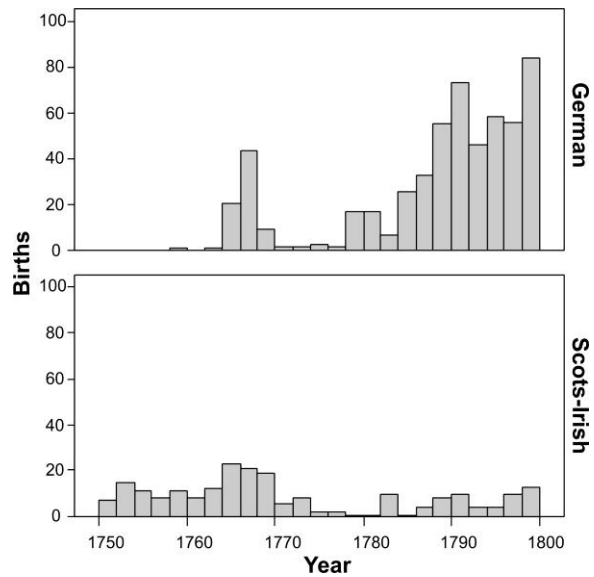


Figure 3. Births by ethnic group, 1750 – 1800.

In 1765, those areas that were predominantly Scots-Irish ranked lowest on nearly all of the basic economic indicators (Table 1). The one exception appears to be Middleton Township, but the slightly higher rankings may be due to large number of individuals categorized as 'Other' for this research.<sup>2</sup> Of particular interest are the very low percentages across all economic indicators for Hopewell Township. Outside of Carlisle, Hopewell Township had the largest Scots-Irish population and the data found in Table 1 give credence to the suggestion that there was an ethnic boundary here. Also of note is the number of Scots-Irish immigrants that did not own land but worked either as freemen or were indentured. While a large proportion of these settlers were not captured in the tax records, surname analyses of both grave markers and birth-baptismal records point to their presence.

By 1770 the ethnic makeup of most townships had changed markedly. Both Hopewell and Newton (which was carved out of Hopewell) townships show a substantial increase in the proportion of German settlers (Table 2). There is also an overall increase in the basic economic indicators, especially the percent horse, cow, and sheep owners. In most cases Scots-Irish farmers, particularly those who were frontier farmers, owned less livestock than German farmers, commonly possessing only one horse and one cow (Dunaway, 1944). Furthermore, German farmers were large proponents of grazing livestock as a means of maintaining soil fertility,

while Scots-Irish farmers were unlikely to practice livestock husbandry (Fletcher, 1950). Perhaps more telling are the increases in located (unwarranted) landholdings without subsequent increases in warranted and patented landholdings in both Hopewell and Newton townships. Since this is the first step in acquiring land, increases in unwarranted landholding suggests that more settlers had moved into the area and had begun to establish farms. By 1775 the ethnic pattern had become well established, with increasing numbers of Germans and decreasing numbers of Scots-Irish moving into Cumberland County (Table 3).

Table 1. Basic Economic Indicators: 1765

<b>1765 Township</b>	<b>Taxed Pop</b>	<b>Avg Taxes (£)</b>	<b>Percent Horse Owners</b>	<b>Percent Cow Owners</b>	<b>Percent Sheep Owners</b>	<b>Percent Located Owners</b>	<b>Percent Warranted Owners</b>	<b>Percent Patented Owners</b>	<b>Percent Germans</b>	<b>Percent Scots-Irish</b>
<i>Allen</i>	82	6.2	84.1	85.4	46.3	24.4	52.4	22.0	78	15
<i>Carlisle</i>	203	5.5	37.9	51.2	3.9	0.0	0.0	0.0	7	87
<i>Hopewell</i>	150	3.9	13.3	13.3	12.0	8.7	38.0	3.3	18	80
<i>Middleton</i>	153	8.4	66.7	64.1	47.1	11.1	46.4	16.3	0	50
<i>W Pennsboro</i>	120	6.4	87.5	86.7	65.8	25.8	60.8	13.3	86	14

Table 2. Basic Economic Indicators: 1770

<b>1770 Township</b>	<b>Taxed Pop</b>	<b>Avg Taxes (£)</b>	<b>Percent Horse Owners</b>	<b>Percent Cow Owners</b>	<b>Percent Sheep Owners</b>	<b>Percent Located Owners</b>	<b>Percent Warranted Owners</b>	<b>Percent Patented Owners</b>	<b>Percent Germans</b>	<b>Percent Scots-Irish</b>
<i>Allen</i>	111	3.5	73.0	72.1	47.7	4.5	55.0	26.1	27	18
<i>Carlisle</i>	140	4.1	45.0	69.3	5.7	0.0	0.0	0.0	0	60
<i>Hopewell</i>	97	3.8	71.1	80.4	38.1	26.8	40.2	2.1	56	19
<i>Middleton</i>	134	5.7	77.6	81.3	26.1	0.7	74.6	17.9	37	37
<i>Newtown</i>	111	3.1	80.2	80.2	57.7	61.3	27.9	6.3	71	29
<i>E Pennsboro</i>	132	5.1	81.8	81.1	60.6	10.6	53.0	29.5	17	44
<i>W Pennsboro</i>	160	4.8	86.3	85.6	53.8	20.0	65.0	13.8	50	0

Table 3. Basic Economic Indicators: 1775

<b>1775 Township</b>	<b>Taxed Pop</b>	<b>Avg Taxes (£)</b>	<b>Percent Horse Owners</b>	<b>Percent Cow Owners</b>	<b>Percent Sheep Owners</b>	<b>Percent Located Owners</b>	<b>Percent Warranted Owners</b>	<b>Percent Patented Owners</b>	<b>Percent Germans</b>	<b>Percent Scots-Irish</b>
<i>Allen</i>	130	12.1	86.9	89.2	49.2	12.3	47.7	28.5	58	13
<i>Carlisle</i>	165	5.9	42.4	75.8	4.2	0.0	0.0	0.0	9	45
<i>Hopewell</i>	128	11.1	78.9	82.8	21.9	34.4	33.6	2.3	48	6
<i>Middleton</i>	141	10.4	80.9	83.7	22.0	10.6	75.9	4.3	33	20
<i>Newtown</i>	129	9.5	80.6	80.6	66.7	27.9	33.3	5.4	54	31
<i>E Pennsboro</i>	172	12.0	87.2	91.9	57.0	15.1	45.3	33.7	20	37
<i>W Pennsboro</i>	249	11.8	76.7	82.7	48.2	29.3	45.0	10.4	56	0

While farming communities were ubiquitous throughout the colonies, Pennsylvania farms often spanned greater areas and were self-sufficient in nature, taking on a more individualistic appearance (Fletcher, 1950). This difference that characterized Pennsylvania farms was most likely the result of relatively inexpensive land prices and the purchase of large tracts of land by settlers. However, as settlers moved through the land acquisition process, the acreage was taxed at a progressively higher rate. Furthermore, if the land was cleared it was classified as such and taxed at a higher rate. Because no formal deadlines were in place for obtaining a deed or improving the land, settlers often took generations to complete the process (Schweitzer, 1987). To combat this, the tax assessments of 1765 and 1775 included unimproved lands, which were not included in previous years (Marietta, 1995), and the Pennsylvania Assembly decided to tax these unimproved lands. These taxes most likely led to the high rate of land-clearing that was evident in Pennsylvania prior to the revolution, as unimproved land was taxed but not earning income (Table 4).

Table 4. Cleared Land, 1770-1775

<b>Township</b>	<b>1770</b>	<b>1775</b>	<b>Percent Change</b>
<i>Allen</i>	3358	4434	24.3
<i>Carlisle</i>	0	0	0.0
<i>Hopewell</i>	1850	2023	8.6
<i>Middleton</i>	4797	6180	22.4
<i>Newtown</i>	2846	4491	36.6
<i>East Pennsboro</i>	4381	6553	33.1
<i>West Pennsboro</i>	5456	7998	31.8
<b>Total</b>	22688	31679	8991.0

Also important in terms of the breakdown of taxation among classes was the nearly complete absence of an upper class during this time period (Figure 4). Between 1765 and 1770 most settlers fell in the lowest tax categories, however, by 1775 the distribution of taxes paid become much less skewed. This is likely due to the combined influences of increasing numbers of German immigrants to the county and the passing of a decade in which frontier residents were able to accumulate wealth. What is not seen in these graphs is any increase in the number of truly wealthy individuals. Just as the migration of national groups served as a determinant for farming practices, migration patterns also serve as an explanation for the geographic distribution of the wealthiest individuals. Because affluent settlers had

little incentive to relocate, they remained in the eastern counties where they first settled. Conversely, a lack of wealth among settlers belonging to lower economic classes served as the primary push factor that resulted in their westward migration in search of better opportunities. Included in these poor settlers that moved west were young farmers. Unless they inherited substantial wealth or a farm, young men were unable to purchase land in eastern counties due to the fact that land prices there increased tenfold from 1730 to 1790. While farms were often subdivided for future generations, there was a limit on how many subdivisions could occur before the well-being of a family was jeopardized, as smaller farms resulted in less production and therefore, a decrease in the family's ability to accumulate capital (Lemon, 1972).

Because wealth was the principal inhibitor of migration and the predominant direction of migration was from east to west, it is not surprising that counties in eastern Pennsylvania were characterized by larger upper classes than frontier regions such as Cumberland County. In 1775, only 4.5 percent of the taxes in Cumberland County were paid by the wealthiest 25 percent of taxpayers. Conversely, between 1758 and 1759, 33.9 percent of the taxes of Lancaster County, located east of Cumberland County, were paid by the wealthiest 10 percent of taxpayers (Lemon, 1972). Similarly, the upper 10 percent of taxpayers in Chester County, located even further east, accounted for 29.9 percent of the county's taxes in 1760. By 1800, over 80 percent of Chester County's taxes were paid by the wealthiest 40 percent of taxpayers (Lemon, 1972). Time is another important component that contributes to the maturation of a region's economic structure. Although it is not large, an increase in Cumberland County's upper classes is apparent (Figure 4). From 1765 to 1775, the percentage of taxes paid by the wealthiest economic class increased 1.3 percent. It is likely that if the region's stratification of wealth were examined several decades after the revolution, this upper class would continue to expand as settlers who experienced monetary success remained and those who did not continued to migrate west.

### **GERMAN AND SCOTS-IRISH INFLUENCES**

The "average farm" in Cumberland County improved somewhat between 1765 and 1775, and although the farms may have been larger, productivity was below that of Lancaster and Chester counties. By far the biggest changes occurred in Hopewell Township, which saw improvements for

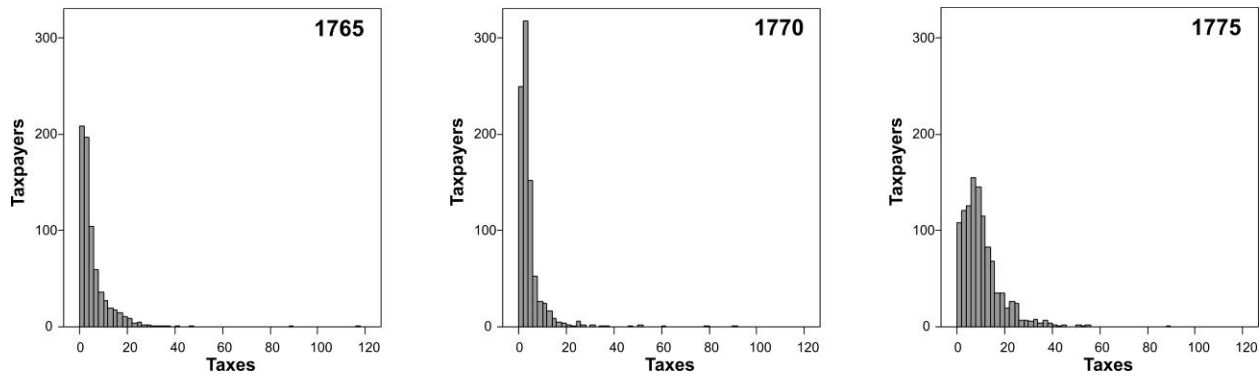


Figure 4. Taxes paid for all townships, 1765 – 1775.

nearly all economic indicators. Between 1770 and 1775 the total amount of land owned by a single farmer declined for all townships, while the average amount of cleared acres tended either to increase or remain relatively unchanged (Table 5). It appears as though up to 1770, people were still moving into the county and acquiring land from the proprietors. Acquisition then peaked at some point around 1770 and by 1775. While settlers continued to migrate into the county, the rate at which subdivision occurred surpassed the rate at which new lands were being purchased. This suggests that the early, large, but mostly unprofitable landholdings were being parceled out as smaller, more manageable—and profitable—family farms. The increase over time with regard to taxation in Cumberland County was likely the result of the significant inflation that preceded the American Revolution, as well as the maturation of both the economic status of individuals within the region and the region as a whole.

The distribution of livestock was primarily the result of the distribution of various ethnic groups and the farming practices employed by these groups. It is likely that the low numbers of horses, cows, and sheep owned by taxpayers in Hopewell Township during 1765 is evidence that the dividing line between the Scots-Irish, who commonly owned less livestock, and the Germans, who practiced livestock husbandry and therefore owned greater numbers of farm animals, was somewhere within the boundaries of the township.

Although the economic condition of Cumberland County improved over time, examination of the estate inventories of sample individuals from each economic class suggest that substantial disparity existed between the vast majority of settlers in the lowest economic strata and those few individuals that made up the highest strata. Most of the wealth held by the lowest economic classes was in the form of tools of the trade—looms, carpentry tools, farm implements—items which

could not be easily converted to cash. At the top of the economic scale luxury items such as ‘cash on hand’, bedding, silverware, and clothing, made up a larger share of a person’s wealth. Also prominent were security bonds and promissory notes, which often accounted for half of the estate’s value. With wealth so highly concentrated, those few individuals of means often acted as financial institutions, in some cases holding dozens of promissory notes and security bonds.<sup>3</sup> Almost without exception these wealthiest individuals lived in either Carlisle or Shippensburg, and based on their surnames were likely Scots-Irish or English. Of interest were the surnames of the people for whom bonds were held, who appeared to be overwhelmingly Scots-Irish or English as well. For example, the 1772 estate inventory of John Mitchell lists that he held nine bonds totaling £346 11s 2p (approximately \$66,400 in 2007. See Officer, 2008) all of which were to fellow Britons. Similarly, William Peebles held three bonds and twenty-nine notes totaling £225 11s 6p (approximately \$47,100 in 2007), only two of which could not be attributed to Britons. This suggests that a few wealthy Scots-Irish and English provided loans for newly arrived people of more limited means to purchasing land, but only within their ethnic group. Based on this it would seem reasonable to conclude that this system was responsible, at least in part, for the overall increase in wealth seen over the study period. However, when the average wealth measures are examined relative to the ethnic makeup of each township, a more complex picture emerges.

Those townships whose populations were predominantly German tended to have positive associations with all measures of wealth, as well as high and positive associations with land ownership and clearing the land for farming (Table 6). Conversely, townships with large Scots-Irish populations were negatively associated with all measures of wealth, although the associations were not significant. However, the Scots-Irish did have

Table 5: The “Average Farm”: 1770 – 1775\*

<i>1770</i>	<i>Average Taxes</i>	<i>Average Horses</i>	<i>Average Cows</i>	<i>Average Sheep</i>	<i>Average Located Acres</i>	<i>Average Warranted Acres</i>	<i>Average Patented Acres</i>	<i>Average Cleared Acres</i>	<i>Average Farm Acreage</i>
<i>Allen</i>	3.5	1.5	1.7	3.0	4	75	47	30	156
<i>Hopewell</i>	3.8	1.1	1.6	2.1	42	70	3	19	134
<i>Middleton</i>	5.7	1.6	1.8	3.2	0	139	43	36	219
<i>Newton</i>	3.1	1.3	1.6	3.1	80	43	13	26	162
<i>E Pennsboro</i>	5.1	1.8	2.1	3.1	13	88	69	33	203
<i>W Pennsboro</i>	4.8	1.6	2.1	3.4	35	112	35	34	215

<i>1775</i>	<i>Average Taxes</i>	<i>Average Horses</i>	<i>Average Cows</i>	<i>Average Sheep</i>	<i>Average Located Acres</i>	<i>Average Warranted Acres</i>	<i>Average Patented Acres</i>	<i>Average Cleared Acres</i>	<i>Average Farm Acreage</i>
<i>Allen</i>	12.1	1.8	2.1	4.5	16	64	37	34	117
<i>Hopewell</i>	11.1	1.6	1.7	4.3	53	50	3	16	106
<i>Middleton</i>	10.4	1.9	2.0	5.7	14	90	6	44	110
<i>Newtown</i>	9.5	1.9	2.3	4.9	75	47	10	35	132
<i>E Pennsboro</i>	12.0	2.0	2.6	4.8	16	59	57	38	132
<i>W Pennsboro</i>	11.8	1.8	2.1	5.8	31	65	20	32	116

\*Carlisle was removed since no farms were located with the town limits.

Table 6: Spearman’s Correlation ( $\rho$ ) of Average Wealth Measures by Ethnicity

<i>Ethnicity</i>	<i>Average Horses</i>	<i>Average Cows</i>	<i>Average Sheep</i>	<i>Average Located Acres</i>	<i>Average Warranted Acres</i>	<i>Average Patented Acres</i>	<i>Average Cleared Acres</i>	<i>Average Farm Acres</i>
<i>Germans</i>	0.59*	0.60*	0.58*	0.57*	0.24	0.45*	0.52*	0.63*
<i>Scots-Irish</i>	-0.29	-0.42*	-0.18	0.05	-0.56*	-0.55*	-0.25*	-0.27

\* Significant at 0.05

significant negative associations for land ownership and clearing. In other words, as the number of Germans in a township increased, so did the average wealth of the township, while the opposite was true of Scots-Irish. German ethnicity was also positively associated with average farm acres, while Scots-Irish ethnicity displayed no association, suggesting that Germans had more land cleared and under cultivation.

From these analyses a picture emerges which allows us to begin to characterize the socioeconomic conditions on the Pennsylvania frontier prior to the Revolutionary War. Early Scots-Irish settlers in Cumberland County borrowed heavily from the wealthy class—to purchase land and begin farming, purchase additional land, or perhaps pay taxes on land already owned. The Scots-Irish adopted the Indian practice of *girdling* to clear land in which a wide belt of bark was removed from the base of the trunk, causing the tree to eventually die. Settlers who practiced girdling did not, however, wait for the trees to die before planting crops. Instead,

crops would be planted amongst the trees. As the trees died, limbs would fall to the ground, which allowed for greater sunlight exposure to crops. While this method initially required less work, it took years before much acreage could be cultivated and for the farms to become profitable (Fletcher, 1950). As immigration to the county continued the larger landholdings were subdivided into smaller farms. The Germans, who entered the county later, cleared the land by cutting down all trees, removing large stumps, and clearing underbrush, allowing for immediate use of the land in a much more profitable manner. Simply stated, the German farming technique would result in a more rapid accumulation of wealth, all other conditions being equal. This begs the question: did the two ethnic groups who entered Cumberland county start from socioeconomically similar positions or were the German migrants wealthier?

Whether or not the Germans entering the county were better off than their Scot-Irish neighbors is difficult to gauge, but the evidence suggests that

they were not (Table 7). In 1765 and 1770 there were no significant correlations between ethnicity and taxes (e.g. wealth), indicating that both ethnic groups during that period had roughly similar levels of wealth. However, by 1775 places with large German populations had become more strongly associated with wealth, while those with large Scots-Irish populations were negatively associated with wealth.

Table 7. Spearman's Correlation ( $\rho$ ) of Ethnic Groups and Taxes Paid by Year

<i>Ethnicity</i>	<i>1765</i>	<i>1770</i>	<i>1775</i>
<i>Germans</i>	0.00	0.15	0.85*
<i>Scots-Irish</i>	-0.47	-0.53	-0.78*

\*Significant at 0.05

It appears as though the early Scots-Irish settlers borrowed from their wealthy countrymen and purchased large farms, which were mostly unprofitable. These farms were then subdivided and sold to newly arriving German immigrants, whose farming techniques allowed them to more rapidly accumulate wealth. Unprofitable Scots-Irish farms were replaced by more profitable German farms, resulting in a substantial change in the ethnic makeup of the county. Although the upper class remained small throughout the study period, the influx of Germans into the county resulted in the development of a small, but growing middle class.

## REFERENCES

Dunaway, W.F. 1944. *The Scots-Irish of Colonial Pennsylvania*. The University of North Carolina Press.

Fletcher, S.W. 1950. *Pennsylvania Agriculture and Country Life: 1640-1840*. Harrisburg, PA: Pennsylvania Historical Museum Commission.

Graeff, A.D. 1944. *The History of Pennsylvania*. The John C. Winston Company.

*History of Cumberland and Adams Counties, Pennsylvania*. 1886. Chicago: Warner, Beers, and Co. Lemon, J. T. and Nash G.B. 1968. The Distribution of Wealth in Eighteenth-Century America: A Century of Change in Chester County, Pennsylvania, 1693-1802. *Journal of Social History* 2: 1-24.

Lemon, J.T. 1972. *The Best Poor Man's Country*. Baltimore, MD: The Johns Hopkins Press.

Lord, A.C. 1975. The Pre-Revolutionary Agriculture of Lancaster County, Pennsylvania. *Journal of Lancaster County Historical Society* 79(1): 23-42.

Marietta, J.D. 1995. The Distribution of Wealth in Eighteenth-Century America: Nine Chester County Tax Lists, 1693-1799. *Pennsylvania History* 62(4): 532-545.

Marr, P. 2004. Reconstructing the demographics of Cumberland County: 1750-1800. *Cumberland County History* 21(2): 50-61.

Munger, Donna Bingham. 1991. *Pennsylvania Land Records: A History and Guide for Research*. Wilmington, DE: Scholarly Resources Inc.

Officer, L.H., "Purchasing Power of British Pounds from 1264 to 2007," Measuring Worth, 2008. URL <http://www.measuringworth.com/ppoweruk/>.

Wing, C. and J. Scott. 1879. *History of Cumberland County, Pennsylvania*. Salem, WV: Walsworth Publishing Co.

Wright, F.E. 1994. *Cumberland County, Pennsylvania: Church Records of the 18<sup>th</sup> Century*. Westminster, MD: Family Line Publications.

<sup>1</sup> In many cases only the year of baptism is recorded, however, baptisms typically occurred very close to the date of birth. In those cases where no date of birth was recorded, date of baptism was used.

<sup>2</sup> While only German and Scots-Irish ethnic groups are discussed in this paper due to their large numbers, other ethnic groups settled in Cumberland County, principally the English and French.

<sup>3</sup> Security bonds were used to secure collateral for private loans.