

## *Economic Change and Political Realignment in Antebellum Pennsylvania*

**A**mericans living in the 1850s experienced a number of economic, social, and political upheavals. The disruption most studied by historians has been the realignment of the parties in the middle of the decade—the disappearance of the Whigs, the remolding of the Democrats, the unexpected entrance of the Know Nothings, and the creation and eventual dominance of the Republicans. At the same time the political system underwent realignment, the economy was responding to the twin forces of industrialization and market expansion. For nearly three decades manufacturing enterprises had operated in the United States, but it seemed that in the 1850s industrial activity accelerated, and by 1860 many northerners heartily welcomed the prospect of even further advances. While the pace of industrialization increased and brought more citizens within its purview, a coincident revolution in transportation altered market structure. Most individuals had been accustomed to local markets and local exchanges; the rise of a more efficient transportation system, the railroad, suddenly opened local economies to outside producers and price competition. By the mid-1850s railroads had constructed a rudimentary national market, and this development suddenly threw numbers of Americans into a vastly more competitive situation than they had ever known.

Interpretations of the political realignment of the 1850s have generally not sought linkages between economic disruption and the travails of the party system. The current view of the party turmoil of the 1850s holds that the demise of the second American party system was due to ethnocultural forces. Historians such as Paul Kleppner,

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Ronald P. Formisano, and Joel Silbey argue that the major unsettling factors in American life after 1844 were immigration and Catholicism. Large numbers of Protestant Whigs and Democrats, as well as youthful citizens still in the process of forging political allegiances, found inadequate the responses of the established parties to a perceived cultural threat. These angry persons formed the Know Nothing party. But internal strains within the Know Nothing party were too great, and by 1856 it began disintegrating. Another party formed out of the collapse of the Whigs, the Republicans, managed to overcome coalitional problems on the basis of antislavery and anti-southernism and finally constructed a victorious alliance of disparate northern groups.<sup>1</sup>

The ethnocultural interpretation has not gone unchallenged. A number of historians continue to stress the impact of slavery-related issues upon the party system, while others have viewed skeptically the claim that party loyalty was totally a product of ethnicity and religious disposition, having little to do with economic status, wealth, or occupation.<sup>2</sup> More recently, Michael F. Holt has argued that the

<sup>1</sup> Paul Kleppner, *The Third Electoral System, 1853-1892: Parties, Voters, and Political Cultures* (Chapel Hill, 1979), 24, 55-73; Ronald P. Formisano, *The Birth of Mass Political Parties: Michigan, 1827-1861* (Princeton, 1971), 5-8, 218-54, 310-25; Joel H. Silbey, "The Surge of Republican Power: Partisan Antipathy, American Social Conflict, and the Coming of the Civil War," in Stephen E. Maizlish and John J. Kushma, eds., *Essays on American Antebellum Politics, 1840-1860* (College Station, 1982), 199-229. See also Michael F. Holt, *Forging a Majority: The Formation of the Republican Party in Pittsburgh, 1848-1860* (New Haven, 1969), 124-41, 188, 311-12; Holt, *The Political Crisis of the 1850s* (New York, 1978), 120-22, 139-40, 156-81; William E. Gienapp, *The Origins of the Republican Party, 1852-1856* (New York, 1987), 423-39; James L. Huston, "The Demise of the Pennsylvania American Party, 1854-1858," *Pennsylvania Magazine of History and Biography* (hereafter, *PMHB*) 109 (1985), 473-97.

<sup>2</sup> For an example of an author who emphasizes the slavery issue in antebellum politics, see Eric Foner, "Politics, Ideology, and the Origins of the American Civil War," in George M. Fredrickson, ed., *A Nation Divided: Problems and Issues of the Civil War and Reconstruction* (Minneapolis, 1975), 15-34. For examples of critics of the ethnocultural thesis, see Dale Baum, *The Civil War Party System: The Case of Massachusetts, 1848-1876* (Chapel Hill, 1984), 42-43, 84-99; Stephen L. Hansen, *The Making of the Third Party System: Voters and Parties in Illinois, 1850-1876* (Ann Arbor, 1980), 39-56, 59-82; and Richard L. McCormick, "Ethno-Cultural Interpretations of Nineteenth-Century American Voting Behavior," *Political Science Quarterly* 89 (1974), 369-71. The slavery theme is introduced into realignment theory by Jerome M. Clubb, William H. Flanagan, and Nancy H. Zingale, *Partisan Realignment: Voters, Parties, and Government in American History* (Beverly Hills, 1980), 19-45.

rise of Know Nothingism in the 1850s owed something to economic frustration. He posited that the displacements created by a national market upset customary business patterns in the eastern states and forced individuals to seek other employments. At the same time, industrialization began undermining old craft traditions of production. Together, market transformation and industrialization destroyed many of the usual means of acquiring a subsistence. To some extent, then, Know Nothingism was a reaction to an injurious alteration in economic life.<sup>3</sup>

This essay explores the possible linkages between political realignment and economic transformation by investigating the antebellum experience of Pennsylvania, for that state not only underwent a considerable upheaval in politics, it also displayed a marked industrial advance and market reorientation. Michael F. Holt's formulation was essentially correct; it can be demonstrated that economic change had a decided impact on the party turmoil of the 1850s. In fact, the influence economic transformation exercised upon antebellum party politics may have been more potent than Holt had originally suggested.

Throughout the Jacksonian period, Pennsylvania Whigs and Democrats battled ferociously for political supremacy, with the Democrats obtaining a slight advantage. During the early 1850s, the Whigs began disintegrating. They committed political blunders in the election of 1852, and party leaders failed to recognize growing public concern over immigration and Catholicism. Between 1852 and 1854 secret Know Nothing lodges invaded Pennsylvania and attracted a large following. The Know Nothings, soon to be known as the American party, entered politics in 1854 and revealed their terrific success in recruiting the state's native citizenry. They captured 120,000 votes (33.4 percent of the total), and on a county basis they reduced the normal percentages obtained by the Whigs by one-half and the Democrats by one-tenth. The 1854 election was the peak moment of

<sup>3</sup> Michael F. Holt, "The Politics of Impatience: The Origins of Know Nothingism," *Journal of American History* 60 (1973), 324-30; Holt, *Political Crisis of the 1850s*, 159-61. See also Ronald P. Formisano, *The Transformation of Political Culture: Massachusetts Parties, 1790s-1840s* (New York, 1980), 175-80, 326-43; and Baum, *Civil War Party System*, 73-75.

Pennsylvania nativism; party splits over the selection of a U.S. Senator, the growing furor over bleeding Kansas, and the failure of the organization to capture other anti-Democratic groups led to its downfall. In 1856 the Americans received 82,000 ballots, while the newly formed Republicans procured almost 148,000. After 1856, the story of Pennsylvania opposition politics is the narrative of the slow absorption of the anti-Democratic forces into the Republican coalition.<sup>4</sup>

For a number of years prior to the emergence of the Know Nothing party, Pennsylvania's economy had been undergoing a basic structural change. The most visible signs of the state's altered economic condition between 1840 and 1860 were an upsurge in industrial activity, a growing urban population, and a diminution in agricultural production. Perhaps the most remarkable aspect of the state's economic transformation lay in the occupations of its citizens in 1840, 1850, and 1860. Those employed in agriculture fell from 60 percent of the population in 1840 to between 30 and 40 percent in 1860. Both the categories of commerce and manufacturing gained significantly.<sup>5</sup>

Historians have frequently ascribed a number of social changes in the northern states at this time to the process of industrialization.

<sup>4</sup> Richard P. McCormick, *The Second American Party System: Party Formation in the Jacksonian Era* (Chapel Hill, 1966), 141-47; Holt, *Forging a Majority*, 123-58; Roger Dewey Petersen, "The Reaction to a Heterogeneous Society: A Behavioral and Quantitative Analysis of Northern Voting Behavior, 1845-1870, Pennsylvania a Test Case" (Ph.D. diss., University of Pittsburgh, 1970), 182-210, 241-47; Erwin Stanley Bradley, *Simon Cameron: Lincoln's Secretary of War: A Political Biography* (Philadelphia, 1966), 90-105; John F. Coleman, *The Disruption of the Pennsylvania Democracy, 1848-1860* (Harrisburg, 1975), 63-101; William Gudelunas, Jr., "Nativism and the Demise of Schuylkill County Whiggery: Anti-Slavery or Anti-Catholicism," *Pennsylvania History* 45 (1978), 225-36; Gienapp, *Origins of the Republican Party*, 139-47, 208-13, 396-405, 420; Huston, "Demise of the Pennsylvania American Party," 482-97. Voting results based on the *Tribune Almanac*, 1855, 1857, and *Clearfield Republican*, Nov. 2, 1854. Average loss of Democrats and Whigs in 1854 determined by comparison to an average county vote for Whigs and Democrats received in the presidential elections of 1836, 1840, 1844, and 1848.

<sup>5</sup> Based on calculations of occupations contained in U.S. Department of State, Census Office, *Compendium of the Enumeration of the Inhabitants and Statistics of the United States . . . in 1840* (Washington, 1841); U.S. Interior Department, Census Office, *The Seventh Census of the United States: 1850* (Washington, 1853); and *Eighth Census of the United States* (4 vols., Washington, 1864-1866). Figures taken from category titled "Occupations." Farmers, according to the censuses, numbered 207,533 in 1840, 206,347 in 1850, and 180,613 in 1860. The figures for manufacturing and mercantile occupations present some difficulty because the selection of categories in the 1850 and 1860 censuses involves considerable and subjective guesswork.

Commonly referring to various forms of the modernization thesis, such scholars have depicted the era's socioeconomic change as one in which agricultural laborers and craftsmen lost their world of individualistic work rhythms, non-market production, and personal relationships; they then had to adapt to factory discipline, industrial time, machine production, and diminished craft skills.<sup>6</sup> Yet there are reasons for questioning the extent of social upheaval this obvious increase in manufacturing between 1840 and 1860 produced, for the industrialization that occurred largely extended older work routines rather than replaced them. Iron manufacturing seemed, except in some isolated instances, not to have altered greatly for decades. Studies of shoemakers, hatmakers, and machine-builders, among others, have stressed the continued craft content of working-class jobs almost into the twentieth century. Historians have found that frequently what occurred in many manufacturing concerns was often not displacement of individuals by machines but rather a degradation of craft skill through division of labor or through outwork systems.<sup>7</sup> Moreover, the

<sup>6</sup> Richard D. Brown, *Modernization: The Transformation of American Life, 1600-1865* (New York, 1976); Anthony F.C. Wallace, *Rockdale: The Growth of an American Village in the Early Industrial Revolution* (New York, 1978), 177-83, 327-37; Susan E. Hirsch, *Roots of the American Working Class: The Industrialization of Crafts in Newark, 1800-1860* (Philadelphia, 1978), 8-13, 21-51; Alan Dawley, *Class and Community: The Industrial Revolution in Lynn* (Cambridge, 1976), 25-78; David Montgomery, "The Working Classes of the Pre-Industrial American City, 1780-1830," *Labor History* 9 (1968), 3-22; Bruce Laurie, *Working People of Philadelphia, 1800-1850* (Philadelphia, 1980), 3-30; Paul E. Johnson, *A Shopkeeper's Millennium: Society and Revivals in Rochester, New York, 1815-1837* (New York, 1978), 15-21, 102-6.

<sup>7</sup> David Bensman, *The Practice of Solidarity: American Hat Finishers in the Nineteenth Century* (Urbana, 1985), xvii-xx, 217-25; David A. Hounshell, *From the American System to Mass Production, 1800-1932: The Development of Manufacturing Technology in the United States* (Baltimore, 1984), 92-114, 164-65; Walter Licht, *Working for the Railroad: The Organization of Work in the Nineteenth Century* (Princeton, 1983), 19-25; Paul Paskoff, *Industrial Evolution: Organization, Structure, and Growth of the Pennsylvania Iron Industry, 1750-1860* (Baltimore, 1983), 106-35; Dawley, *Class and Community*, 42-50, 73-78; Alfred D. Chandler, Jr., *The Visible Hand: The Managerial Revolution in American Business* (Cambridge, 1977), 52-78; David Montgomery, "Workers' Control of Machine Production in the Nineteenth Century," *Labor History* 17 (1976), 485-509; Steven J. Ross, *Workers on the Edge: Work, Leisure, and Politics in Industrializing Cincinnati, 1788-1890* (New York, 1985), 68-104; Francis G. Couvares, *The Remaking of Pittsburgh: Class and Culture in an Industrializing City, 1877-1919* (Albany, 1984), 9-30; David Grimsted, "Ante-bellum Labor: Violence, Strike, and Communal Arbitration," *Journal of Social History* 19 (1985), 5-28. These authors generally find the mid-nineteenth century to be awkward; although important innovations occurred, manufacturers continued to rely upon traditional modes of production.

occupations for Pennsylvania listed in the 1860 census do not promote the view that skilled labor was being decimated by machinery. The census for Pennsylvania listed some 180,000 farmers, 137,000 laborers with no indication as to type of job performed, and 6,509 factory hands. But the census listed 29,855 carpenters, 22,612 shoemakers, 14,990 blacksmiths, 12,200 seamstresses, 11,902 apprentices, 9,429 tailors, 7,218 weavers, 6,691 masons, 6,541 machinists, 5,597 mantua makers, 5,206 millers, 5,126 painters, 4,240 wheelwrights, 3,942 iron workers, 3,933 coopers, 3,576 milliners, 3,156 teamsters, 3,104 moulders, and 3,077 printers. All other occupations which could be classified as manufacturing contained less than 3,000.<sup>8</sup> Although there is uncertainty about job content for many of these positions, the above list appears weighted significantly toward skilled rather than unskilled labor. Many Pennsylvanians undoubtedly experienced difficulties in adapting to manufacturing jobs, but it is questionable as to how large that group actually was.

More profound in its effects upon the antebellum populace than industrialization was the railroad, for that mode of transportation increased market size, destroyed local economies, and placed individuals into an intensely competitive economy. The enlarged market created opportunities for many, but it also produced drastic change and bitter disappointment for others. The railroad's impact upon Pennsylvania's economy and the upheavals it generated can be documented quite specifically.<sup>9</sup>

Prior to 1845, canals, turnpikes, and rivers largely determined the trade patterns of Pennsylvania's counties. Between 1790 and 1830 the state had financed the construction of several thousand miles of

<sup>8</sup> *Eighth Census: Population*, 440-41. See the comments about the Pennsylvania mid-century economy by David Montgomery, *Beyond Equality: Labor and the Radical Republicans, 1862-1872* (New York, 1967), 4-7, 8-11.

<sup>9</sup> A number of studies point to the unsettling social and political consequences of market change, that is, improved transportation: Whitney R. Cross, *The Burned-Over District: The Social and Intellectual History of Enthusiastic Religion in Western New York, 1800-1850* (New York, 1950), 75-78; J. Mills Thornton, III, *Politics and Power in a Slave Society: Alabama, 1800-1860* (Baton Rouge, 1978), 267-91; Steven Hahn, *The Roots of Southern Populism: Yeoman Farmers and the Transformation of the Georgia Upcountry, 1850-1890* (New York, 1983), 137-69; and Robert A. Gross, "Culture and Cultivation: Agriculture and Society in Thoreau's Concord," *Journal of American History* 69 (1982), 42-61.

turnpikes.<sup>10</sup> In the 1830s the state legislature committed public resources to canals as a means of improving transportation and, as well, of warding off incursions of Baltimore merchants seeking to tap even more produce of the Susquehanna River region. By 1850 the state had a canal (the Mainline) which virtually stretched from Philadelphia to Pittsburgh; a number of canals to the coal counties of Lehigh, Schuylkill, and Luzerne; canals on the West Branch and North Branch of the Susquehanna River; and canals along the Shenango River in the western part of the state.<sup>11</sup> The canal and turnpike network generally complemented each other; turnpikes carried passengers whereas the canals moved bulky freight. Pennsylvania's canals, however, only partially improved market conditions. The Mainline had too many locks and other physical imperfections to provide swift transportation facilities.<sup>12</sup> (See Map 1.)

A skeleton of a railroad system in Pennsylvania had emerged by the time of the nativist explosion in 1854. Three important trunk lines operated either in or on the periphery of Pennsylvania: the Pennsylvania Railroad (completed 1852-1854); the New York and Erie Railroad (completed 1852); and the Baltimore and Ohio Railroad (completed to Wheeling, Virginia, 1852). By the spring of 1854 western products flowed to the East Coast almost frictionlessly by use of these lines. There were as well a number of railroads in the southeastern corner of the state, connecting the coal mining and agricultural regions in the Susquehanna River area to the urban markets of Philadelphia, Baltimore, and New York. An important

<sup>10</sup> Joseph Austin Durrenberger, *Turnpikes: A Study of the Toll Road Movement in the Middle Atlantic States and Maryland* (Valdosta, 1931), 56-57.

<sup>11</sup> George Rogers Taylor, *The Transportation Revolution, 1815-1860* (New York, 1951), 36; James Weston Livingood, *The Philadelphia-Baltimore Trade Rivalry, 1780-1860* (rprt.; New York, 1970), 22-23, 74-76; Thomas C. Cochran, *Pennsylvania: A Bicentennial History* (New York, 1978), 87-95; Philip S. Klein and Ari Hoogenboom, *A History of Pennsylvania* (New York, 1973), 184-85.

<sup>12</sup> Taylor, *Transportation Revolution*, 26-31, 154-56; Durrenberger, *Turnpikes*, 118-19; Stephenson Witcomb Fletcher, *Pennsylvania Agriculture and County Life, 1840-1940* (2 vols., Harrisburg, 1955), 2:317-18. Information for Map 1 taken from George Rogers Taylor and Irene D. Neu, *The American Railroad Network, 1861-1890* (Cambridge, 1956), map insert; Klein and Hoogenboom, *History of Pennsylvania*, 185; Cochran, *Pennsylvania*, 95; Wayland F. Dunaway, *A History of Pennsylvania* (2nd ed., New York, 1948), 591-99; James Truslow Adams, *Atlas of American History* (New York, 1943), plates 55, 109.





feature of the railway system in Pennsylvania as it stood by 1854 was that the eastern portion of the state (east of the Susquehanna River and below the town of Sunbury) had developed adequate railroad facilities, but west of the Susquehanna River the only railroad services in existence were those provided by the Pennsylvania Railroad. The feeder lines in the western part of the state were yet to be constructed.<sup>13</sup> (See Map 1.) Certainly this system by 1860 was imperfect, as it would take another decade before the iron-horse had access to every county in the state. Nonetheless, the Pennsylvania antebellum railroad greatly augmented trade activities throughout the state. Individuals may have had to use wagon or boat to get to a railroad facility, but once in place railroads lowered remaining transportation charges, in comparison to other modes of travel, and the speed of delivery permitted products a greater geographical distribution than was possible with the canal system.

By virtue of their ability to carry freight and passengers speedily over great distances, the railroads wrought a considerable alteration in the Keystone state's economy. The first and probably most obvious change occurred in agriculture. Until 1840, Pennsylvania farmers had largely been self-sufficient and generally had traded in local markets. Transportation improvements granted access to more distant areas and especially to urban markets. Sometime between 1840 and 1860, Pennsylvania farmers made the passage from self-sufficient farming to commercial agriculture.<sup>14</sup>

The transition from self-sufficiency to commercial agriculture entailed a new set of economic realities governing the choice of crops. Until 1854, Pennsylvania had been one of the nation's leading grain-growing states—second in the nation in bushels of wheat produced

<sup>13</sup> Taylor and Neu, *American Railroad Network*, 26-29; Robert B. Saylor, *The Railroads of Pennsylvania* (College Park, 1964), 2-91; Alfred D. Chandler, ed. and comp., *The Railroads: The Nation's First Big Business: Sources and Readings* (New York, 1965), 3, 8-9, 25-26, and map pp. 4-5; Edward Hungerford, *Men of Erie: A Story of Human Effort* (New York, 1946), 97-99; H.W. Schotter, *The Growth and Development of the Pennsylvania Railroad Company* (Philadelphia, 1927), 27, 30, 36-37; Caroline E. MacGill, *History of Transportation in the United States before 1860* (Washington, 1917), 371, 396, 410, 412.

<sup>14</sup> Fletcher, *Pennsylvania Agriculture*, 2:1, 5, 33, 41, 331-32; Jeremy Atack and Fred Bateman, *To Their Own Soil: Agriculture in the Antebellum North* (Ames, 1987), 201-4; Clarence Danhof, *Change in Agriculture: The Northern United States, 1820-1870* (Cambridge, 1969).

in 1840 and first in 1850. In the antebellum decades, the premier northern commercial crop was wheat, and Pennsylvania farmers, though reserving a considerable proportion for home consumption, sent much of their annual wheat harvest into the channels of trade. The railroad, however, enabled western grains to flood eastern markets, drive down the price of cereals, and ruin the competitive position of many Pennsylvania farmers. In terms of output per farm, there was a marked decline in wheat (see Table 1). Yet such gross statistics fail to indicate the tremendous internal shifting transpiring in Pennsylvania agriculture between 1840 and 1860.<sup>15</sup> For example, Clinton County in the central portion of the state had in 1850 produced 299 bushels of wheat per farm; in 1860 that total fell to 158 bushels. Some counties retained their agricultural competitiveness: Lancaster County improved its wheat production over the decade from 243 bushels of wheat per farm to 320 bushels. Other Pennsylvania agricultural endeavors of a commercial nature that suffered from western competition were swine- and sheep-raising (that is, packing and wool production.)<sup>16</sup>

The alterations that this enlarged national market made in Pennsylvania's agriculture were evident by 1860. There were surges in

<sup>15</sup> The calculations and interpretations presented here are based on county production reported in the census years 1839-40, 1849-50, and 1859-60. However, Pennsylvania suffered severe damage to its wheat crop due to pests in 1859-60. How much the drop in wheat production was due to Pennsylvania farmers shifting to other endeavors or to destruction by insects is conjectural, although the census enumerators pointed to the midge as the chief agent of lowered yields: *Eighth Census: Agriculture*, xxxiv. Yet despite insect ravages, Pennsylvania farmers were evidently moving out of wheat for market reasons. The output of wheat per farm for Pennsylvania counties in the ninth census reveal that 39 counties had less wheat production per farm in 1869-70 than in 1849-50, and only 24 counties had more: *Ninth Census*, 3:233, 361.

<sup>16</sup> Calculations made from *Seventh Census* (1850) and *Eighth Census* (1860). Number of farms for 1850 is provided in J.D.B. DeBow, comp., *Statistical View of the United States . . . Being a Compendium of the Seventh Census* (Washington, 1854), 298. On agricultural change induced by railroads and western competition, see Fletcher, *Pennsylvania Agriculture*, 2:5, 98, 139, 261-66; Paul W. Gates, *The Farmer's Age: Agriculture 1815-1860* (New York, 1960), 156-72, 416-17; Danhof, *Change in Agriculture*, 21-23, 31-45; *Eighth Census: Agriculture*, xxxiii, xxxv; Percy Wells Bidwell and John I. Falconer, *History of Agriculture in the Northern United States, 1620-1860* (Washington, 1925), 329-30. The use of output divided by the number of farms is not to state that all farms in a county regardless of size either increased or decreased production; it is merely a measure to standardize production for each county so that comparisons can be made between counties.

output of corn, dairy products, and crops related to raising livestock (see Table 1). The rise in corn production was partly an expected and natural one; of all the northern staples, corn had the greatest variety of uses for farmers (as animal provender, family consumption, or local trade). It also might have been that many Pennsylvania farmers turned to corn when wheat no longer proved reliable as a marketable crop. Dairy products and livestock-related activities grew in output because of the influence of urban markets. Eastern city populations demanded fresh butter and milk as well as requiring oats and hay to sustain city animals.<sup>17</sup> In northern, western, and eastern counties—where access to railroad facilities existed—this transition was noticeable. Grain cultivation instead concentrated in south-central and southeastern counties (such as Lancaster, Adams, Franklin, Cumberland, and Mifflin), and even these counties turned to livestock-raising and fruit-growing to escape western competition. In some southwestern counties, a considerable number of individuals continued to produce wool.

The change in Pennsylvania's agriculture can be demonstrated by the use of maps. Maps 2 and 3 show the county production of wheat per farm (an average obtained by dividing county crop output by the total number of farms in the county). In 1850 wheat cultivation was strongest in the central portion of the state with significant production occurring in the western and southeastern part of the state. By 1860 (Map 3), wheat farming had massively contracted to the state's central and southeastern areas. And even these maps do not portray how much the central counties of Clinton, Centre, Lycoming, Mifflin, Juniata, Huntingdon, Blair, and Union lost in the process of change.<sup>18</sup> Butter, representative of dairying, took an opposite but geographically

<sup>17</sup> On the uses of the various crops, see Fletcher, *Pennsylvania Agriculture*, 2:98-99, 123, 126, 128-29, 178, 262; *Eighth Census: Agriculture*, xlviii; Atack and Bateman, *To Their Own Soil*, 114, 121, 148-49, 172. Atack and Bateman indicate that cheese production was a laborious process usually undertaken only by farmers with extensive holdings; most farmers preferred to market surplus butter rather than to attempt to remake it into cheese (pp. 155-59).

<sup>18</sup> The figures for the change in county wheat output per farm in bushels for the counties listed in the text are as follows, with the 1850 figure listed first, the 1860 figure second: Clinton, 299, 158; Lycoming, 183, 109; Centre, 416, 251; Union, 221, 148; Blair, 324, 211; Huntingdon, 253, 152; Mifflin, 389, 253; Juniata, 225, 121.

Table 1  
**Pennsylvania Agricultural Output, 1840, 1850, 1860**

| Category         | Census Year of: |            |            |
|------------------|-----------------|------------|------------|
|                  | 1840            | 1850       | 1860       |
| Milch Cows (no.) | NA              | 530,224    | 673,547    |
| (per farm)       | NA              | 4.16       | 4.32       |
| Sheep (no.)      | 1,767,620       | 1,822,357  | 1,631,540  |
| (per farm)       | NA              | 14.28      | 10.46      |
| Swine (no.)      | 1,503,964       | 1,040,366  | 1,031,266  |
| (per farm)       | NA              | 8.15       | 6.61       |
| Wheat (bush.)    | 13,213,077      | 15,367,691 | 13,042,165 |
| (per farm)       | NA              | 120.46     | 83.59      |
| Rye (bush.)      | 6,613,873       | 4,805,160  | 5,474,788  |
| (per farm)       | NA              | 37.67      | 35.09      |
| Corn (bush.)     | 14,240,022      | 19,835,214 | 28,196,821 |
| (per farm)       | NA              | 155.48     | 180.72     |
| Oats (bush.)     | 20,641,819      | 21,538,156 | 27,387,147 |
| (per farm)       | NA              | 168.82     | 175.54     |
| Wool (lbs.)      | 3,048,564       | 4,481,570  | 4,752,522  |
| (per farm)       | NA              | 35.13      | 30.46      |
| Butter (lbs.)    | NA              | 39,878,418 | 58,653,511 |
| (per farm)       | NA              | 312.59     | 375.93     |
| Cheese (lbs.)    | NA              | 2,505,034  | 2,508,556  |
| (per farm)       | NA              | 19.64      | 16.08      |

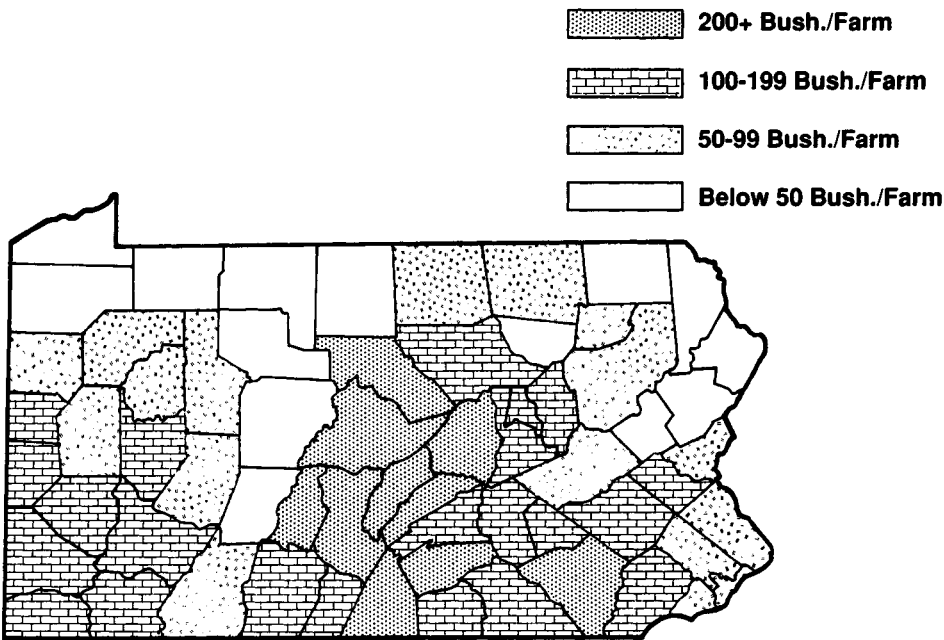
Sources: *Sixth Census* (1840); *Seventh Census* (1850); *Eight Census* (1860); J. D. B. DeBow, *Statistical View of the United States . . .* (1854)

interesting course. In 1850 the output of pounds of butter per farm was somewhat scattered over the state, but distinctly strong in the Philadelphia region where an urban demand for dairy products existed and where farmers could easily get their products to the city (see Map 4). By 1860, the spread of butter production was remarkable (see Map 5). But just as remarkable was the geography, for butter production extended around the periphery of the state and a portion of the center.<sup>19</sup>

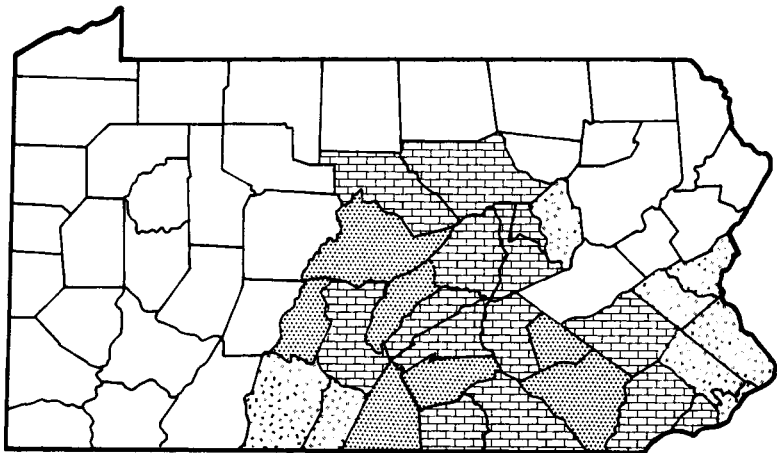
The general tendency of the state's agriculture, then, was toward dairying and livestock-raising—that is, to alternatives to wheat farming.<sup>20</sup> But this transformation was far from complete. Although there existed a growing urban demand for dairy products, eastern farmers evidently failed to seize available opportunities. In the 1850s, some Pennsylvania farmers began sending fluid milk to urban centers, but butter was the state's most prominent dairy product and was an important item in local exchanges. Making butter was the province of farm women and children and remained so until the 1880s, even though the production of butter increased dramatically over time. Dairying in the northern and eastern states actually exhibited negative productivity for the last four decades of the nineteenth century—farmers failed to improve either their herds or methods of extraction. Moreover, dairying and livestock-raising were not adequate income substitutes for wheat production. Jeremy Atack and Fred Bateman have demonstrated that an average eastern farmer acquired a small but important monetary supplement from the sale of butter, but such

<sup>19</sup> The butter output per farm was calculated in the same manner as was wheat production: the county total of butter produced (in pounds) divided by the number of farms in the county. The categories constructed for output per farm in Maps 2 through 5 were somewhat arbitrarily chosen for illustrative purposes. However, Atack and Bateman indicate that the average Pennsylvania farm in their *non-urban sample* produced 40 bushels of wheat and 389 pounds of butter and contained 67 acres of improved land and 46 acres of unimproved land. They insist that most farms had surplus butter to sell on the market, so the 300 pounds division used in Maps 4 and 5 may be taken to mean that the marked counties used butter in commercial transactions (local or regional). Wheat production under 50 bushels per farm was undoubtedly for home consumption, and commercial wheat farming probably occurred only in counties with output above 100 bushels per farm. Atack and Bateman, *To Their Own Soil*, Table 7.2, 112-13, 159. It also should be noted that butter production in 1860 as displayed in Map 5 is following railroad construction.

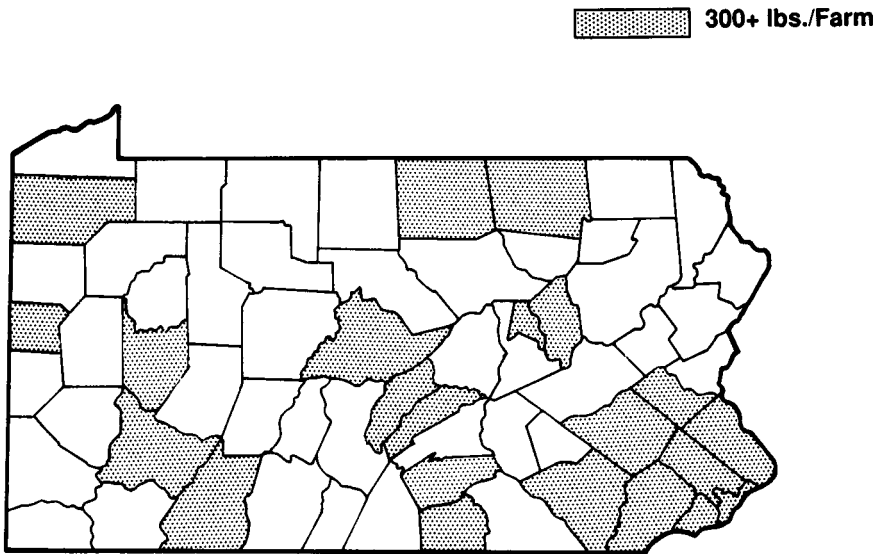
<sup>20</sup> This point is specifically made by Fletcher, *Pennsylvania Agriculture*, 2:98-99, 139.



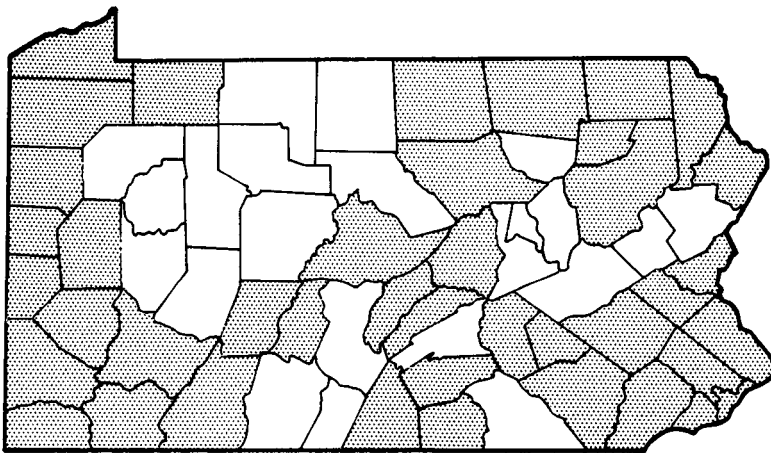
Map 2: Pennsylvania County Production  
of Wheat Per Farm, 1850



Map 3: Pennsylvania County Production  
of Wheat Per Farm, 1860



### Map 4: Pennsylvania County Production of Butter Per Farm, 1850



**Map 5: Pennsylvania County Production  
of Butter Per Farm, 1860**

activity did not replace the earnings that had earlier been obtained from the sale of wheat. Pennsylvania farmers suffered in the antebellum decade. An indication of the troubles that Pennsylvania endured between 1840 and 1860 was the migration of the state's farmers to the West. As the historian of Pennsylvania agriculture, Stephenson W. Fletcher, noted, the years 1840 to 1860 were a "period of painful adjustment."<sup>21</sup>

A second distinct impact upon the Pennsylvania economy that the change in transportation efficiency induced was the geographical distribution of industrial activity. During the decades of canal and turnpike supremacy, the high cost of shipment enabled many small entrepreneurs to establish modest manufacturing establishments throughout the state in order to supply local needs. The railroads drastically lowered freight charges and enabled enterprises in Philadelphia and Pittsburgh to ship their wares into the hinterland and damage, if not destroy, the smaller businesses. Of course, improved transportation facilities aided some counties; it was between 1840 and 1860 that the coal and iron counties of Cambria, Luzerne, and Schuylkill rose to prominence. But many firms in the interior of the state failed, and the number of individuals employed in manufacturing as a ratio to the entire county population fell considerably—as in Centre, Cumberland, Dauphin, Franklin, Mifflin, and Perry counties. One of the results of the transportation revolution, therefore, was to concentrate manufacturing activities in fewer locations; iron works, coal mines, and textile plants in other parts of the state withered.<sup>22</sup>

<sup>21</sup> Ibid., 2:364, see also 2:5, 77, 96-99, 121-22, 139, 165-69, 183-95, 237-55, 261-66, 274; Holt, "Politics of Impatience," 325-38. On the switch of easterners to dairying and their failure to develop more sophisticated techniques, see Eric Brunger, "Dairying and Urban Development in New York State, 1850-1900," *Agricultural History* 29 (1955), 169-74; Fred Bateman, "Improvement in American Dairy Farming, 1850-1910: A Quantitative Analysis," *Journal of Economic History* 28 (1968), 255-73; Clarence H. Danhof, "The Farm Enterprise: The Northern United States, 1820-1860s," *Research in Economic History* 4 (1979), 150-61; Attack and Bateman, *To Their Own Soil*, 146-61. Attack and Bateman estimate that the average yearly sale of butter surplus amounted to the equivalent of one or two months' factory wages: *To Their Own Soil*, 159.

<sup>22</sup> Fletcher, *Pennsylvania Agriculture*, 2:33, 41-42. The percentage of manufacturing employees to total county population in the counties named in the narrative are as follows, with the 1840 figure first and then that for 1860: Cambria, 04.6, 08.5; Centre, 08.2, 03.6; Cumberland, 07.0, 03.3; Dauphin, 07.5, 05.0; Franklin, 09.5, 02.6; Mifflin, 06.7, 03.4;



The third discernible upheaval in Pennsylvania's business life that market expansion generated occurred in mercantile and service operations. Because of the inefficiencies of the Mainline Canal and the turnpike network, travelers and freighters invariably had to make several overnight stops before traversing the length of the state. This circumstance gave rise to a number of inns, hotels, and merchandisers servicing travellers, drovers, and freight haulers; along the Mainline Canal a number of individuals were required to help traffic move from one lock to another and over the portage road. By 1854, the railroad had decimated these services. The railroad made it possible to move across the state in a single day, thus eliminating the need of intermediate stops for the night. Joseph Durrenberger, almost the sole historian of the turnpike movement, has written: "With the transference of travel from turnpikes to other modes of transportation many villages and even whole sections of the county found that they had been robbed of their well-earned prosperity." An occupation severely affected by the coming of the railroad was the drover, the individual who brought swine or other animals from the trans-Appalachian West to Philadelphia and other eastern markets via the Pennsylvania turnpike. A poetic lament of the period indicated succinctly his fate:

Now all you wagoners who have got good wives,  
Go home to your farms and there spend your lives.  
When your corn is all cribbed, and your small grain is stowed,  
You'll have nothing to do but curse the railroad.<sup>23</sup>

A fourth disturbance in the Pennsylvania economy was only tangentially related to market expansion but was perhaps symptomatic of the tendency to modernization. The counties of Jefferson, Lycom-

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Luzerne plus Wyoming, 05.9, 08.2; Perry, 08.5, 02.8; Schuylkill, 07.2, 19.7. The relocation of industrial activity can also be demonstrated by the use of maps, but the exercise is omitted here for reasons of space limitation.

<sup>23</sup> Quotes from Durrenberger, *Turnpikes*, 143; see also 117-40; lament quoted in George Swetnam, *Pennsylvania Transportation* (Gettysburg, 1964), 21, but see also 17-20. Holt, "Politics of Impatience," 326; Tarring S. Davis, *A History of Blair County, Pennsylvania* (2 vols., Harrisburg, 1931), 1:57-58; Taylor, *Transportation Revolution*, 26-28, 154-56; Philip D. Jordan, *The National Road* (Indianapolis, 1948), 196, 226-27; William H. Koontz, ed., *History of Bedford and Somerset Counties, Pennsylvania* (3 vols., New York, 1906), 2:206-7.

ing, Clinton, Northampton, and Clearfield on the Allegheny and Susquehanna rivers produced lumber, shipped it downstream to Harrisburg or Pittsburgh, and then sent it to eastern (or western) markets. The customary mode of operation was rafting, in which lumbermen lashed the timber together and floated the logs downstream. In the early 1850s eastern companies entered the vast interior Pennsylvania woodlands and ravished the forests. The facet of corporate operation which most angered the small entrepreneurs and rugged individualists of the hinterland was the practice of "booms"—partitioning the river so that the company could float a mass of logs before releasing them to market. This use of the river to warehouse corporate lumber interfered with the practice of rafting, and throughout the lumber counties mass meetings were held to denounce "foreign capital" and greedy "monopolies." One Democratic editor feared that Governor William Bigler suffered in the gubernatorial contest of 1854 because, although residing in Clearfield County, the governor, it was believed, had not protected the county's economic interest.<sup>24</sup>

Local editors and officials early in the decade realized the necessity of obtaining railroad connections. A number of meetings were held in the central and western parts of the state to entice residents to subscribe money to build railroad lines and enable their farmers to move produce more cheaply to market. One of the resolutions at such a meeting in Bedford County revealed the growing fear of those localities bereft of railway services: "[T]he public mind of Bedford County is awakening to the fact that we are rapidly falling behind the age—that the grain of the central parts of our county is as far from market as that raised in Northern Illinois or Michigan."<sup>25</sup>

Attempts to raise funds for railroad development had an obvious geographical focus: the subscription battles occurred in the central portion of the state. Most railroad schemes sought to build feeder roads to link up with the Pennsylvania Railroad. Subscription meetings occurred in Centre, Huntingdon, Bedford, Fulton, Union, Northumberland, Juniata, Clinton, Blair, Fayette, Somerset, and Allegheny

<sup>24</sup> *Clearfield Republican*, June 3, July 15, Aug. 12, Sept. 29, 1853; editorial comment, Oct. 21, 1854; Fletcher, *Pennsylvania Agriculture*, 2:157.

<sup>25</sup> *Bedford Gazette*, April 15, 1853; see also Bellefonte *Democratic Watchman*, Nov. 28, Dec. 12, 1855, May 21, 28, 1856; *Washington Weekly Reporter*, April 23, 1859.

counties. These subscription meetings often incited a violent opposition, with various members of the community arguing against soulless corporations and schemes designed to enrich New York bankers. In fact, most subscription attempts failed. But the animosity they engendered could quite literally split a community: in 1855 the county of Snyder was formed out of Union because a dispute arose over the route of a proposed railroad.<sup>26</sup>

Pennsylvania's adjustment to new business conditions imposed by a broadening of market competition needs to be understood clearly. Market expansion neither plunged the state into depression nor destroyed its agricultural strength. To the contrary, Pennsylvania remained one of the most important grain-growing states in the Union, and its industrial prowess grew steadily. What occurred was not a shattering of the state's economy but an internal reshuffling of its resources and business activities. Some individuals managed to compete successfully in the new market system and to continue normal economic routines; others switched into endeavors that promised better rewards; and some were simply hurt in the change—market competition ruined their accustomed manner of earning a competence but, for a variety of reasons, they experienced difficulty in finding a suitable alternative.<sup>27</sup> Thus, whatever connections there may have been between market change and political affiliation is not for antebellum Pennsylvania a question of political reaction to depression and a stagnant economy, but rather one of linkages between a recasting of local economic structure and political identification.

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<sup>26</sup> *Lewistown Gazette*, June 22, 1854, July 19, 1855; *Bedford Gazette*, Sept. 23, 30, 1853; John Blair Linn, *History of Centre and Clinton Counties, Pennsylvania* (Philadelphia, 1883), 92, 171-72; Koontz, ed., *History of Bedford and Somerset Counties*, 1:220-28, 289-90; Franklin Ellis, *History of that Part of the Susquehanna and Juniata Valleys, in the Counties of Mifflin, Juniata, Perry, Union, and Snyder, in the Commonwealth of Pennsylvania* (2 vols., Philadelphia, 1886), 1:444-47; Saylor, *Railroads of Pennsylvania*, 14-16, 192, 269. These subscription fights set the stage for the local tax upheavals following the Panic of 1857 described in Holt, *Forging a Majority*, 228-58.

<sup>27</sup> See the pertinent comments of Stanley Lebergott, *The Americans: An Economic Record* (New York, 1984), 100, 281-82.

Bivariate and multiple correlation techniques were employed to assess whether or not the economic alterations Pennsylvania underwent exercised any influence upon the state's political system. A number of economic variables were constructed to see if they produced significant correlations with party voting in some of the major elections in the 1850s (that is, the presidential elections of 1852, 1856, 1860, and the state supreme court judgeship election of 1854). Likewise, variables were formed to detect associations between political parties and other attributes of the social environment—age, religion, and nativity.<sup>28</sup> The social variables that exhibited significant associations with a political party were placed into a multiple regression; then the best single measure of a relationship between party and an economic factor was added to the batch of social variables in order to determine whether the explanatory power of the economic variable retained its potency in the presence of those measuring social attributes.

The first set of economic variables to be discussed are ones generated by taking the county output of a crop (rye, butter, wheat, and so forth) and dividing the figure by the county number of white adult males (to standardize for population differences). It turns out that these variables are crucial in the analysis that follows and therefore deserve some extended comment. Virtually all counties in Pennsylvania produced wheat, corn, oats, hay, butter, buckwheat, potatoes, and the like.<sup>29</sup> However, the output of any one crop or product (standardized for population) varied from one county to another, indicating differences as to agricultural pursuits. When these crop

<sup>28</sup> The dependent variables were percent votes cast by a political party in a given election of the eligible voters. To estimate eligible voters, I followed the procedure outlined by William E. Gienapp, "Nebraska, Nativism, and Rum: The Failure of Fusion in Pennsylvania, 1854," PMHB 109 (1985), note to Table 2, p. 456. Voting results obtained from the *Tribune Almanac*. Economic variables using crop outputs are created by dividing the county output of the crop by the total number of white adult males in order to standardize for population. Age variables are constructed by the age group divided by the number of white adult males; religious variables are the number of church accommodations divided by the county population; nativity is immigrants divided by the whole population, individuals born in Pennsylvania divided by the county population, and American citizens born outside of Pennsylvania divided by the county population. Material taken from the published censuses. Variables are constructed from the 1850 census used in analyzing elections 1850-54; variables are constructed from the 1860 census used in analyzing elections 1856-60.

<sup>29</sup> Atack and Bateman, *To Their Own Soil*, Table 10.4, p. 171; *Eighth Census: Agriculture*, 122-23.

outputs are correlated with county voting percentages for a party, the resulting statistics reveal whether or not a consistent pattern emerges between voting and agricultural production.

The interpretation herein given to crop output is vital. The variables measuring rye, wheat, or corn output are not to be understood as demonstrating how rye, wheat, or corn farmers voted; the variables as constructed preclude such a generalization. Rather, these measures of crop output are taken to indicate the market orientation of some portion of the county's economy.<sup>30</sup> Farmers as an occupational group might have voted all for one party or another, but if their farms were enmeshed in an area of commercial development, their crop productions would likely be commercial as well. The crop output, therefore, becomes a means of detecting market activity within a county and not simply the market persuasion of a specific group of farmers.<sup>31</sup>

Thus, it would appear that a county's production of wheat would indicate its degree of integration into market operations during the Jacksonian period. A continued production of wheat in the mid-1850s can be taken to mean that either some localities successfully responded to western competition or that others were unable or unwilling to alter their commercial orientation to meet the new conditions imposed by the railroad. Likewise, a county's production of butter—or crops connected with livestock-raising—can be viewed as revealing the

<sup>30</sup> It should be recognized that any individual Pennsylvania county contained a number of different types of market activity, from nearly complete self-sufficiency to extreme commercialization. A crop output exhibits a tendency of some portion of the county's economy and cannot be taken as emblematic for the entire county's economy.

<sup>31</sup> Using statistical procedures based on units of analysis that group population in order to develop generalizations about individual behavior is an example of the problem termed the "ecological fallacy." The associations found in correlation and regression analysis can be misleading if one tries to presume causality between the variables. For example, the relationship in antebellum Pennsylvania between industrial capital per white adult male and Democratic party county percentage voting is positive (though weak). This should only be interpreted as the more industrial capital a county had, the greater was its percentage Democratic vote. It emphatically does not mean that industrial capitalists voted Democratic (though they might have). The reason for the positive association appears to be that as industrial capital increases, the number of industrial workers increases; frequently those laborers were Catholic immigrants. Therefore, the positive association between industrial capital and Democratic voting is misleading if one interjects causality and a too strict definition of the variables without further investigation. In a similar fashion, the crop output variables in this study are taken to illustrate market orientation of some portion of a county's economy rather than the activities of rye, wheat, or corn farmers.

extent a local economy was successfully adapting to new economic conditions.<sup>32</sup>

One crop output measure requires further elaboration. The county output of rye per white adult male has consistently significant correlations with the Democratic (positive) and Republican (negative) parties. Pennsylvania in 1860 was the nation's leading rye producer, and secondary accounts indicate that rye grew in poor soils where commercial crops such as wheat failed, and that rye was used frequently for home consumption (bread). However, rye also had an ethnocultural dimension. Rye was important in brewing liquors, and people of German ancestry had traditional recipes calling for rye. And there are statistical connections between rye and the *nay* vote on a prohibition referendum in 1854 and between rye and the religious groups of German Reformed and Lutheran. For the purposes of this paper, it would seem fair to conclude on the basis of secondary sources that rye, although it possessed an ethnocultural dimension, was indicative of semi-subsistence agriculture—that is, agriculture not integrated into an extensive market economy.<sup>33</sup>

The results of bivariate correlations between political parties in the elections of 1852, 1854, 1856, and 1860 with crop output variables are presented in Table 2. The correlations reveal marked differences between the parties based on county agricultural production, and

<sup>32</sup> Attack and Bateman argue that dairying—butter production in particular—represented an extension of home manufacturing. The essence of their argument may be conceded, but the point is that dairying entered commerce instead of being confined to home consumption; therefore, dairying in Pennsylvania became a commercial activity in response to altered market conditions. Attack and Bateman, *To Their Own Soil*, 207.

<sup>33</sup> On wheat and rye, see Fletcher, *Pennsylvania Agriculture*, 2:127; *Eighth Census: Agriculture*, ix; Gates, *Farmer's Age*, 156-58, 173; Bidwell and Falconer, *History of Agriculture in the Northern United States*, 353-54; see also Sarah F. McMahon, "A Comfortable Subsistence: The Changing Composition of Diet in Rural New England, 1620-1840," *William and Mary Quarterly* 42 (1985), 31-33. Correlation between rye and German Reformed was .364, between rye and Lutheran, .638, between rye and *nay* vote for prohibition, .588. The contention that rye will be used in this paper as an indicator of semi-subsistence agriculture also rests on the fact that when rye and German Reformed and rye and Lutheran are placed in multiple regressions on Democratic voting in 1852, 1854, and 1856, rye continues to be the more important independent variable. This shows that after rye is controlled for the influence of these two religious denominations, it still retains explanatory potency. However, these multiple regressions have at times statistical problems because the rye and religious variables act as suppressors.

these differences in turn intimate that an essential feature of the parties was orientation to market activity.<sup>34</sup> The Democrats appear to have been a party that simply did not correlate at all on the county level with commercial crops. For all elections 1852, 1854, 1856, and 1860, the correlations between county Democratic voting and various crop outputs were either significantly negative or simply uncorrelated at all. This was true particularly in the case of wheat, the most important commercial crop of the time. The one crop that Democratic county voting did significantly and positively correlate with was the production of rye. These findings argue that the economic base for the Democratic party, on a county level of aggregation, was essentially non- or semi-commercial; Democratic county voting was attached to something of a localist viewpoint in economic affairs.<sup>35</sup>

Whig county percentage voting in 1852 offers an intriguing contrast to Democratic county voting. Whig county voting in 1852 registered positive associations with virtually *all* commercial crops except hay, and significantly positive with the crops of wheat and oats (see Table 2). Moreover, the Whig county level voting was positively associated with the dollar value of farms. These correlations can be interpreted as meaning that the level of Whig voting in a county rose in accordance with the county's extent of commercial exchange.<sup>36</sup> The findings presented here thereby reinforce an interpretation of the Jacksonian party system that postulates that an essential difference between Democrats and Whigs was orientation to commercial involvement; the Whigs welcomed and sought further market expansion, whereas the

<sup>34</sup> The unit of analysis throughout this paper is the county, and all conclusions should be understood in terms of the voting behavior of these aggregate units.

<sup>35</sup> The pattern of correlations concerning Whig and Democratic voting also hold for the gubernatorial election 1851, congressional elections 1852 and 1854, and the canal commissioner election 1853. The party competition for the elections reported in Tables 2 and 4 and Table 9 is as follows: presidential election 1852, Whigs, Democrats, Free Soilers; in the Pennsylvania Supreme Court judgeship of 1854, Whigs, Democrats, Know Nothings (Americans); in the presidential election of 1856, Democrats, Republicans, Know Nothings; in the gubernatorial election of 1860, Democrats, Republicans.

<sup>36</sup> The farm value variable was constructed by dividing the dollar value of farms in the county by the number of white adult males. Table 2 only indicates the significance level of  $r$  in cases when the significance is greater than .01 or .001. In virtually all cases in this paper any bivariate correlation that is stronger than  $+/- .220$  is significant at the .05 level.

Democrats either feared or were ambivalent to commercialism and desired to maintain local economies and local control.<sup>37</sup>

What occurred with the cracking of the parties in 1854 is rather impressive. The Democratic vote level associations with crop productions remain indicative of non-commercial agriculture, but the strength of the associations, especially with the crops that demonstrated the greatest growth in antebellum Pennsylvania (livestock, oats, butter, hay) significantly increased in a negative direction. At the same time, the associations between crops and Whig county level voting—that is, the vote of those who continued to remain in the old Whig organization—switched distinctly from positive relationships with the commercial crops of the Jacksonian period (wheat, corn, and slaughter) to the crops now favored by the new, competitive market conditions—butter, hay, oats. The association between 1854 Whig county voting and wheat production fell from  $r = .463$  in 1852 to  $.142$  in 1854, but for butter the association increased from  $r = .065$  in 1852 to  $.434$  in 1854. Whig county voting in 1854 appears to have maintained its strength in localities where there had been a successful adaptation to novel market conditions.

A positive association between production of wheat and a political entity seems to have attached itself to the Know Nothing movement (see Table 2). But at the same time, the Know Nothing county vote in 1854 and 1856 was distinctly negatively associated with the crops of butter, oats, and hay—the crops the alteration in the market favored. It appears that Know Nothingism was connected to a county's difficulties in adjusting to market change. The county Know Nothing vote was related to the production of the commercial crops of the Jacksonian period that faced western competition in the 1850s, but

<sup>37</sup> See, for example, Thomas B. Alexander, Peggy Duckworth Elmore, Frank M. Lowrey, and Mary Jane Pickens Skinner, "The Basis of Alabama's Ante-Bellum Two-Party System by Quantitative Analysis Methods," *Alabama Review* 19 (1966), 262-66; Donald B. Cole, *Jacksonian Democracy in New Hampshire, 1800-1851* (Cambridge, 1970), 151, 157-58, 165, 169; Donald J. Ratcliffe, "Politics in Jacksonian Ohio: Reflections on the Ethnocultural Interpretation," *Ohio History* 88 (1979), 28-32; Harry L. Watson, *Jacksonian Politics and Community Conflict: The Emergence of the Second American Party System in Cumberland County, North Carolina* (Baton Rouge, 1981), 206, 262-67, 299, 319-22; William G. Shade, "Society and Politics in Antebellum Virginia's Southside," *Journal of Southern History* 53 (1987), 178-83. Shade, however, also indicates that religion in Prince Edward County, Virginia, was more important than commercial orientation: *ibid.*, 187-90.



the negative relationships between Know Nothing voting and new market crops intimates that a successful response to changed market conditions vitiated the strength of Know Nothing county voting. On the basis of county voting, Know Nothings appeared to have been a party that harbored a commercial orientation, but the orientation was to the past rather than to the future.

The foregoing discussion postulates that an economic influence—here, the impact of market change—affected the strength of the Pennsylvania Know Nothing movement. This assertion merits further exploration. The literary record of Know Nothingism is not one of economic grievances. It is, rather, a record of betrayed republicanism, xenophobia, and anti-Catholicism.<sup>38</sup> The economic content of Know Nothingism in written form seems to have been limited to anger over wage competition from foreigners and increased taxes to fund poorhouses suddenly swollen with immigrant paupers. Perhaps the most that can be said of the tie between the Know Nothings and market change is that the altered economic circumstances produced a climate of frustration, apprehension, and anger. It is likely that the influx of immigrants between 1840 and 1857 would have produced a nativist reaction regardless of the state's economic health; certainly the state had a history of nativist activity and hostility to Catholicism. But the frictions generated by market transformation enhanced the appeal of Know Nothings and permitted the movement to obtain a strength it might not have acquired under different conditions. Market change was probably operating as a background condition fueling the spread of Pennsylvania Know Nothingism.

Secondary work on the Know Nothing movement, moreover, has provided historians with a social profile of the party's rank and file: youthful, Protestant, middle/lower class, urban/village residency.<sup>39</sup> Pennsylvania had two major urban centers in Pittsburgh and Philadelphia (Allegheny and Philadelphia counties), and it may be safely assumed that processes shaping the Know Nothing movement there

<sup>38</sup> On the characteristics of the Know Nothings, see Holt, *Political Crisis of the 1850s*, 154-72; Ray Allen Billington, *The Protestant Crusade, 1800-1860: A Study of the Origins of American Nativism* (rev. ed., New York, 1952), 322-25, 334-36; Gienapp, "Nebraska, Nativism, and Rum," 457-58, 463-67.

<sup>39</sup> For example, Gienapp, "Nebraska, Nativism, and Rum," 457-58, 463-67; Gienapp, *Origins of the Republican Party*, 92-100, 145-46, 160-66.

were different from those in the countryside. Yet the Know Nothings scored quite highly in many non-urban counties, attracting over 40 percent of the total vote in such counties as Fayette, Clinton, Lycoming, Blair, Jefferson, Huntingdon, and Perry. The impact of market change affected not only agriculture but entire local economies as well. In non-urban counties, the difficulties associated with economic transformation could easily have been transmitted to village merchants and artisans.<sup>40</sup>

Analysis of Republican county voting presents interesting complications. The Republican organization in Pennsylvania appeared in 1855 and drew minimal support in the elections of that year. In the presidential election of 1856 the party fared much better, becoming the major opposition party to the Democrats.<sup>41</sup> As Table 2 indicates, the Republican party in 1856 had two decisive features: one, Republican county voting was definitely not associated with the commercial crops of the Jacksonian period (wheat and corn); and, second, its county voting was strongly and positively associated with crops favored by the transformed market conditions (e.g., butter, livestock). A comparison of the correlations between Know Nothing voting and Republican voting in 1856 in Table 2 reveals that the two parties were arising from disparate economic bases. The Republican vote in 1856 emphasizes that the party on a county level had adapted to new market conditions and had foregone the commercial activities of the Jacksonian era. The Republicans on a county level appear to have

<sup>40</sup> Correlations between parties and socioeconomic variables were found in several ways. Those reported in this article were for all counties. However, correlations were calculated when Philadelphia and Allegheny counties were omitted; there was no difference in the results. An attempt also was made to divide the state into four regions (the northern tier, eastern counties, southern counties, and interior and western counties); in some areas Republicans were associated with wheat-growing (northern tier), and Know Nothings with rye (southern counties). Yet the overall patterns given in the text appear to have prevailed even when the state was subdivided.

<sup>41</sup> In 1855, in Pennsylvania, the Democrats faced a "fusion" opposition besides the Republican party. The fusion obtained 149,745 votes, the Democrats 181,281, the Republicans a meager 7,223 (there were also scattered votes for Whigs and nativists). The Republicans only received votes in 37 counties, and only received more than 5 percent of the total vote in 18 counties. The most distinguishing characteristic of the Republicans at this point—to the extent that a correlation is valid at all—is Presbyterian attendance ( $r = .672$ ). In the presidential race of 1856, the Republicans received 148,000 ballots, the Know Nothings 82,000.

been a party that seized market opportunities; it was the party welcoming economic change.

What then happened to the Republicans is presented in Table 3. After 1856 the Republicans and Know Nothings commenced the process of amalgamating into one opposition party. In the gubernatorial race of 1857, the correlations reveal a continued positive association between Republican county voting and those crops favored by market change. In 1858 and thereafter, however, the correlations between crops and Republican county voting, except for rye and butter, seem to disappear. The evident reason is that the merger of the Know Nothings and Republicans into one organization practically cancelled out the economic dimensions that had differentiated the two groups in 1856. The continuing impact of the slavery-extension issue in the form of the Lecompton Constitution, a state-wide depression in 1858 that elevated the tariff issue, and a shared loathing of the Democratic party enabled the two factions to combine (in 1858 the opposition party was called the "People's party," but it soon became simply the Republican party).<sup>42</sup> One can interpret this happenstance to mean that political concerns eventually outweighed economic differences. However, it should be noted that the distinction between the Republicans and Know Nothings was not between haves and have-nots. Rather, the distinguishing feature between the two parties was a commercial orientation toward the future versus a commercial orientation to the past. When the two parties combined, nonetheless, the effect statistically was to obliterate the economic essence of both: an acceptance of market behavior.

The analysis so far indicates that political realignment coincided neatly with the change in Pennsylvania's market structure. Jacksonian politics involved a party system that to some extent reflected a division over commercial involvement, the Whigs representing those who

<sup>42</sup> On the coalition of Republicans and Know Nothings in Pennsylvania, see William E. Gienapp, "Nativism and the Creation of a Republican Majority in the North before the Civil War," *Journal of American History* 72 (1985), 555-56, Table 5 on p. 555; James L. Huston, *The Panic of 1857 and the Coming of the Civil War* (Baton Rouge, 1987), 151-66, 254-60. See also the intelligent and useful remarks of Donald J. Ratcliffe, who argues that as a party evolves the original economic impulse may be lost over time due to the growth of party loyalty and ethnocultural considerations: Ratcliffe, "Politics in Jacksonian Ohio," 9-11.

avored market activities, the Democrats those who favored local activities and who either mistrusted or were ambivalent to extensive economic activities. The explosion of the Jacksonian party system in the mid-1850s coincided with the alteration in Pennsylvania's market structure induced by the completion of railroad lines. The Republican party was the party of adaptation to market conditions and responsiveness to market signals. Democrats, in terms of their aggregate voting performance, continued to evince hostility or nonchalance to commercial development. And the Know Nothings appeared to be the party of those who failed to adjust to market realities; the party drew its county voting strength from an economic base that adhered to the commercial conditions of the Jacksonian period.<sup>43</sup>

The essential division of the parties that so far has been presented in this paper involves three types of crops: non-commercial (rye), traditional (of the Jacksonian era), and new market. It was determined that for further analysis some method needed to be devised to collapse the agricultural variables into fewer ones that retained the basic division of non-commercial, traditional commercial, and new market commercial agriculture, in order to avoid using a number of different variables all of which illustrated the same phenomenon. To do this, the agricultural variables were correlated with one another to establish groups with positive relationships. Rye generally correlated with nothing; wheat, corn, and possibly slaughter seemed to fit together; and

<sup>43</sup> Note that this depiction of the economic attitudes of the Whigs, Democrats, and Republicans is similar to the conclusions of a number of other authors. Holt, *Forging a Majority*, 43-46, 75-77, Glyndon G. Van Deusen, *The Jacksonian Era, 1828-1848* (New York, 1959), 97, Edward Pessen, *Jacksonian America: Society, Personality, and Politics* (Homewood, 1969), 256-66, Jean Baker, *Affairs of Party: The Political Culture of Northern Democrats in the Mid Nineteenth Century* (Ithaca, 1983), 144-47, 157, Joel Silbey, *A Respectable Minority: The Democratic Party in the Civil War Era, 1860-1868* (New York, 1977), 25-27, Eric Foner, *Free Soil, Free Labor, Free Men: The Ideology of the Republican Party before the Civil War* (New York, 1970), 11-39. Besides the correlations reported in Tables 2 and 3, other correlations were computed that used variables constructed in somewhat different ways. Voting strength also was measured as percent of total vote cast, crop output variables were constructed in per capita terms and even as a raw score unstandardized for population. In all cases the basic relationships between parties and agricultural output were the same and were usually statistically significant. Due to the insect problems of the 1859 census year, bivariate correlations were run with the wheat and butter production of the 1870 census and party voting in the 1850s, and the results still conformed to the pattern given in Table 2.

butter, cheese, oats, and hay appeared to be the mix of activities associated with livestock-raising and dairying. Prices for all agricultural products were obtained and then an estimate was made of the value of total county agricultural output per white adult male.<sup>44</sup> Next, the value per white adult male of the crops collected into groups of non-commercial, traditional commercial, and new market commercial were calculated; finally, a percentage was obtained that was a ratio of each of the crop value categories to the total value of county agricultural output. These figures were then correlated with the political variables. The results appear in Table 4. With the agricultural variables collapsed together, the bivariate relationships between parties and the category of commercial status stands out even more strongly. For example, Know Nothing county voting correlated with the percentage of value of wheat to county output at  $r = .598$ ; Republican county voting in 1856 correlated with percentage of new commercial crops to county output at  $r = .626$ . These correlations compare favorably to those reported by the ethnocultural school.<sup>45</sup>

Tables 2 and 3 also contain the relationship between farm size and political parties. Some of these correlations are quite hefty, especially between farm sizes 20-49 and 100-499 acres with Whig voting in 1852, Know Nothing voting in 1854 and 1856, and Republican voting in 1856.<sup>46</sup> Normally, farm size would be interpreted as a

<sup>44</sup> Price information was taken from Anne Bezanson, Robert D. Grey, and Miriam Hussey, *Wholesale Prices in Philadelphia, 1784-1861* (2 vols., Philadelphia, 1937), 2:13, 25, 31, 36, 62, 78, 79, 91, 96, 97, 148, 153, 155, 159, 184, 242, 248, 265, 228-29; Gates, *Farmer's Age*, 252; Bidwell and Falconer, *History of Agriculture in the Northern United States*, 378. An elaboration of the prices used will be given by the author upon request.

<sup>45</sup> Ratcliffe reports his highest correlation to be  $-.457$  for an economic variable and Democratic voting for 1832 Ohio, which he states is as good as those published by the ethnoculturalists: Ratcliffe, "Politics in Jacksonian Ohio," Table 2, p. 30, and comments, p. 30. Comparison with other studies is slightly more difficult because frequently other scholars have used fewer cases and applied a rank order correlation (Spearman's  $\rho$ ): Paul Kleppner, *The Cross of Culture: A Social Analysis of Midwestern Politics 1850-1900* (New York, 1970), notes 21 and 22, pp. 20-21, and 22, 42, 53, and passim; Richard Jensen, *The Winning of the Midwest: Social and Political Conflict, 1888-1896* (Chicago, 1971), 229; Formisano, *Birth of Mass Political Parties*, 292, 296-97. Michael Holt reports rather high correlations for Pittsburgh, but his findings are based on 9 city wards; Holt, *Forging a Majority*, 328-29, 336-38, 340-42, 356-60, 367-68.

<sup>46</sup> The farm size variable was created as a percentage of the number of farms in a county in the size category divided by the number of farms in the county. The calculation also was

wealth variable—the size of the farm reflecting the investment of the farmer. The correlations could be construed as meaning that Whig voting was a function of wealth as was Know Nothing voting, whereas Republican voting reflected middle-class wealth positions.<sup>47</sup> There are some complications. Farm size turns out in the cases of the 20-49 and 100-499 acre categories to be highly associated with crop production per white adult male (or output per capita or just output). Larger farms had a strong association with old Jacksonian crops, especially wheat ( $r$  between farm size 100-499 acres and value of wheat is .672), and negative with small farms ( $r$  between farms 20-49 acres and value of wheat is  $-.649$ ). On the other hand, farms in the 20-49 acre category correlated positively with new commercial crops ( $r = .674$ ) and negatively with farms 100-499 acres ( $r = -.545$ ). Size of farm, therefore, acts as much as an indicator of type of commercial activity as it does wealth-holding.<sup>48</sup>

Other economic variables were not nearly so strong in their relationships with political parties as were those measuring agricultural output. Most relationships between measures of industrial prowess and political parties were insignificant. Attempts to create variables that measured change over time also generally proved fruitless. Several variables were constructed which measured percentage change over

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made with farms divided by the number of white adult males; the latter results were generally stronger. However, when using agricultural output information, interpretation of the per adult male variable became more difficult and so it was discarded. The farm size variable exists only for 1860; farm size information was not published in the 1850 census. The distribution of the farm sizes for the state is as follows: 3-9 acres, 3.1 percent; 10-19 acres, 7.9 percent; 20-49 acres, 29.0 percent; 50-99 acres, 36.9 percent; 100-499 acres, 23.0 percent; and above 500 acres, 00.1 percent. William Gienapp reports a strong negative association between Republican voting in 1856 and farm size 10-100 acres; my results show a strong positive association: Gienapp, *Origins of the Republican Party*, Table 13.41, p. 548.

<sup>47</sup> See the interpretation of Baum, *Civil War Party System*, 85-86.

<sup>48</sup> Jeremy Atack and Fred Bateman, "Self-Sufficiency and the Marketable Surplus in the Rural North, 1860," *Agricultural History* 58 (1984), Table 3, p. 309; Fred Bateman, "The 'Marketable Surplus' in Northern Dairy Farming: New Evidence by Size of Farm in 1860," *ibid.*, 52 (1978), 350-55, Table 2, p. 351. Atack and Bateman indicate that butter production came from smaller farms, whereas cheese and milk output increased as farm size rose above 120 acres; overall, they conclude dairy production generally was a large farm enterprise: *To Their Own Soil*, 153-56. Clarence Danhof has written that in Massachusetts farms under 100 acres could be considered subsistence, and he indicates that only farms over 80 acres were likely to be involved in commercial enterprise; he derives these conclusions for the 1840s: Danhof, "Farm Enterprise," 132.

the decade (the 1860 per white adult male figure minus the 1850 figure, the difference divided by the 1850 figure); they were then correlated with party voting. The results were less than exhilarating and generally insignificant.<sup>49</sup>

Although the variables representing the commercial bias of the parties appear to be quite important, the potency of the variables can only be established by considering them in conjunction with other elements in the social environment. Research over the past two decades has established a number of variables that have proved significant in explaining the social basis of political parties: age, religion, nativity, ethnicity, geography, and foreign birth. Variables representing all these aspects could be devised except for ethnicity. The published census reports contain no information as to the ethnic origins of Pennsylvania's population.<sup>50</sup> Results of the bivariate correlations between political and social variables are presented in Table 9. In general, the findings are in accordance with most of the published work on the social attributes of the parties in the antebellum period. The Whigs tended to be Protestant, somewhat elderly, and native residents of the state. Democrats also were native residents of the state, but were non-evangelical and lacked a defining age characteristic. Know Nothings had a modest Protestant orientation (at least from the correlations in Table 9), were native citizens of the state, and distinctly youthful. The Republicans of 1856 were pietist in religion, strong among American citizens migrating to Pennsylvania from other states, and, if not exactly aged, then certainly not youthful.<sup>51</sup> The amalgam-

<sup>49</sup> A table presenting the correlations is omitted because the results were inconsequential. The variables for industrial activity were: industrial capital per white adult male, manufacturing employees as percent of total population, and value of home manufactures. A number of change variables were constructed: percentage change in wheat output, corn output, butter output, farm value, manufacturing employees, immigrants, county population, and white adult male population. Though some of these correlations had a significance at the .05 level, they usually failed to contribute to explanation of variance in a multiple regression.

<sup>50</sup> Nativity for all correlations came from the 1850 census and was divided into two groups, United States citizens born in Pennsylvania, and United States citizens born in other states (the data for these variables is found in DeBow, *Statistical View of the United States*, 297). The geographical variables were measures of the distance in miles of the county seat from the southern border of the state (distance south) and the distance in miles from the easternmost part of the state (distance east).

<sup>51</sup> For Pennsylvania, see Gienapp, "Nebraska, Nativism, and Rum," 459-69; and Petersen,

ation of the Know Nothings and Republicans by 1860 produced an obliteration of the distinguishing characteristics of the separate groups that had appeared in 1856. By 1860, the only attribute of the Republicans that is significant is the one so commonly seized upon by ethnocultural historians—a pietistic religious orientation.

The correlations of the social variables with the political parties in Table 9 exhibit a few oddities worth mentioning. It proved to be quite difficult to obtain religious denomination variables that related to any significant degree with political parties prior to 1856 except for the broadest kinds of measures (unchurched, Protestant). It is not until the election of 1856 that correlations appear that are interesting, when the pietist-liturgical split becomes much more evident.<sup>52</sup> The foreign-born measurement turned out to be void of importance in virtually every instance except Whig voting in 1852, and even then was very weak. Slightly more interesting were measures of total population change and foreign-born change between 1850 and 1860. The latter produced a significant positive correlation with Know Nothing voting in 1854, and the former exhibited a negative relationship with Whig voting in 1852. Thus, Know Nothings were seemingly influenced by the influx of immigrants: the greater the proportional change in the number of immigrants, the more Democratic vote totals rose and so Know Nothing vote totals fell. The negative relationship between the Whigs and population change illustrates an accepted aspect of Whiggery—residential stability. The meaning of the association is that in counties where population turn-

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"Reaction to a Heterogeneous Society," 38, 102-79, 243-54, 265-67. Jean H. Baker, *Ambivalent Americans: The Know Nothing Party in Maryland* (Baltimore, 1977), 129-47; Baum, *Civil War Party System*, 83-99; Kleppner, *Third Electoral System*, 55-61. For a different view concerning the Republican party's youthfulness, see the comment of Gienapp, *Origins of the Republican Party*, 436, 436n.

<sup>52</sup> Some of the correlations in Table 9 are disturbing. For example, Know Nothings in 1854 appear weak in terms of religious direction. In the Know Nothing correlations for the presidential election of 1856, both German Reformed and Lutheran denominations are significantly positive. It is not improbable that German Reformed members were attracted to the nativists, but normally the secondary literature posits a strong relationship between the Lutherans and the Democrats. This result may be an example of a relationship between two variables that is governed by an outside factor and should be read strictly in terms of association rather than causation. On the other hand, Gienapp provides a well-considered explanation for the apparent voting preferences of Lutherans: Gienapp, "Nebraska, Nativism, and Rum," 463.



over was small compared to other counties, the Whig party was strongest. Also impressive were the variables measuring distance from eastern and southern borders (e.g., Know Nothing voting 1856 and distance from the southern border,  $r = -.521$ ; Republican voting 1856 and distance from the southern border,  $r = .512$ ). The distance variables were something in the nature of catchall variables, seeking to capture if possible such influences as southern family connections, extensions of Yankee culture, or the effect of the frontier. In the case of the Republicans and Know Nothings of 1856, the interpretation is rather clear: the farther one travelled north in Pennsylvania (and entered more the northern/Yankee culture) the stronger the Republicans became, while in 1856 the Know Nothings had acquired a distinctly southern flavor to the party. Pennsylvania Democrats in 1852 and 1854 also exhibited this southern quality; the farther north the county, the weaker the county vote for the party.<sup>53</sup>

Perhaps the most intriguing variables in Table 9 are the ones indicative of nativity—United States citizen born in Pennsylvania or born in other states. These correlations are generally quite substantial. Somewhat interestingly, the variables show that Whigs, Democrats, and Know Nothings related significantly with percentage of residents born in Pennsylvania. The Republicans, in contrast, correlated highly with individuals who were American citizens born outside of the state.<sup>54</sup> Yet this association reinforces the interpretation that the Re-

<sup>53</sup> The religious variables were constructed both as percentages of total accommodations and percentages of total population. They failed, however, to correlate significantly with political variables prior to 1855. Combinations of different religious groups were tried in an attempt to formulate a variable that could produce a meaningful correlation, these attempts were unsuccessful. The change in foreign born variable (the number of foreign born in 1860 minus the number in 1850, the difference divided by the 1850 number) had a negative sign. This result makes sense when it is noted that the sign of this variable with the Democratic party in 1854 and 1856 is positive, which would be expected. On residency patterns, see Shade, "Society and Politics in Antebellum Virginia's Southside," 174-78, especially Table 4, on cultural differences, see James M. McPherson, *Ordeal By Fire: The Civil War and Reconstruction* (New York, 1982), 19-22. For the use of distance variables in regression analysis, see Thomas B. Alexander, "The Dimensions of Voter Partisan Constancy in Presidential Elections from 1840 to 1860," in Maizlish and Kushma, eds., *Essays on American Antebellum Politics, 1840-1860*, 70-121.

<sup>54</sup> A warning must be entered concerning the variables measuring percentage born in Pennsylvania versus those born in other states. The distributions of these two variables are highly skewed, and there is a considerable clustering of points at one end of the graph and only a few points dispersing beyond that. The graphs are obviously curvilinear.

publican party exhibited a favorable disposition to market activity. Several mobility studies of the western states and of certain eastern regions have established that migrants over long distances were acting primarily on economic impulses—that is, they were responding to market signals and incentives.<sup>55</sup> That the Republicans tended to correlate with percentage of Pennsylvanians born outside the state and with the new commercial crops as well underscores the market orientation of the party (at least in terms of county level voting).<sup>56</sup>

Multiple regressions were then performed to determine whether the associations found between party affiliation and market orientation would retain their potency in the presence of other facets of the social environment. The purpose of the exercise is correlation rather than regression as the objective is explanation of variance rather than prediction. The number of independent variables was limited to five (six in one instance) due to the small number of cases ( $N = 62$  or  $63$ ); the strongest variables in terms of bivariate relationships with political parties were taken from the categories of value of commercial crop, religious affiliation, nativity, age, and distance from either the eastern or southern border of the state. Farm size variables were not

<sup>55</sup> Richard A. Easterlin, George Alter, and Gretchen A. Condran, "Farm Families in Old and New Areas: The Northern States in 1860," in Tamara K. Hareven and Maris A. Vinovskis, eds., *Family and Population in Nineteenth-Century America* (Princeton, 1978), 42; Laurence Glasco, "Migration and Adjustment in the Nineteenth-Century City: Occupation, Property, and Household Structure of Native-born Whites, Buffalo, New York, 1855," in *ibid.*, 156, 161-63; John Modell, "The Peopling of a Working-Class Ward: Reading, Pennsylvania, 1850," *Journal of Social History* 5 (1971), 81-84; Richard K. Vedder and Lowell E. Gallaway, "Migration and the Old Northwest," in David C. Klingaman and Richard K. Vedder, eds., *Essays on Nineteenth-Century Economic History: The Old Northwest* (Athens, 1975), 167-69.

<sup>56</sup> The fact that Republicans seemed to be pietist, mobile, middle-class, and market-oriented may have some bearing on the slavery issue. Although it is almost impossible to devise a statistical test to capture past attitudes to issues, it may be permissible to offer a speculation. If in fact Republicans were mobile, middle-class, market-oriented people, then their fear of slavery's extension becomes more understandable. Middle-class moralists (the pietist factor) who exhibited a tendency to move geographically in order to improve their economic situation would be likely to see slavery's growth as a direct threat to their future opportunities; because they had moved before, they might seize the chance to relocate again when the proper occasion arose. Such individuals would not likely wish to compete with slave labor in the territories. Thus, the mobility factor in order to improve economic standing—if it was a characteristic of the Republicans throughout the North—might well explain the Republican apprehension over slavery's westward movement.

employed in this analysis, the rationale being that the strong relationships between certain farm size groupings and crop productions indicate that farm size largely reflects commercial orientation rather than wealth.<sup>57</sup> Only multiple regressions of Know Nothing voting in 1854, and Republican and Democratic voting in 1856, and Democratic voting in 1860 are presented. In general the regressions show that commercial orientation retained its explanatory power in the presence of other measurements of social attributes.<sup>58</sup>

<sup>57</sup> Independent variables that correlated at  $+/- .750$  were eliminated to avoid multicollinearity. The results given here were first screened for suppression among the independent variables. Suppression is an artifact of multicollinearity. The phenomenon occurs when two independent variables are correlated, and the partialling process "suppresses" unimportant variance in the independent variables and produces a greater correlation between the independent variables and dependent variable than is logically warranted. Suppression can be detected when the semi-partial correlation ( $sr$ ) has a different sign than the simple correlation and when semi-partial correlations are greater in magnitude than simple correlations. For further information on suppression, consult Jacob Cohen and Patricia Cohen, *Applied Multiple Regression / Correlation Analysis for the Behavioral Sciences* (New York, 1975), 73-102, especially the rule given on p. 102. See also Barbara G. Tabachnick and Linda S. Fidell, *Using Multivariate Statistics* (New York, 1983), 72-145.

<sup>58</sup> A number of trials were performed on different sets of independent variables, especially those representing religious categories. The regressions reported in Tables 5 through 8 are typical of these trials. In this study, the religious variables were almost always found to be redundant in explaining variance. Tables 5 through 8 could also have been presented by only reporting those variables which had significant  $t$ -statistics for the regression coefficients. For most of the regressions in this study, that would have reduced the important independent variables to two or three per regression with the exception of Republican voting in 1856. In all the regressions either a farm size or a crop variable proved to be the most significant of the independent variables. In Tables 4 through 8, several standard statistical descriptions are employed. The mean, standard deviation, and skewness is provided for each variable in the analysis; generally, any variable with a skewness greater than  $+/- .779$  is highly suspect for use in this exercise. The correlation matrix is provided so the reader can see relationships between the variables. In the regression tables, the  $b$ -coefficient is the change that would occur in the dependent variable given a unit change in the independent variable when all other variables are held constant. The standard error of the  $b$ -coefficient demonstrates whether the estimated  $b$ -coefficient is constrained within a wide or narrow interval. The beta coefficient is the regression coefficient standardized for units of measure so that comparisons can be made as to the importance of the independent variables in the equation. Generally, but with some reservations, the more important variables usually possess higher beta coefficients. Two other means are available for assessing the contributions of variables to a regression equation. The first is the use of semi-partial correlations squared ( $sr^2$ ); this statistic provides the unique explanation of variance this variable contributes to the equation. In Table 4, the  $sr^2$  of the value of wheat and corn variable indicates that 9.3 percent of the total variance explained (43.5 percent) is due to this variable. However, much of the explanation of variance is

Social factors appear to have greatly influenced Know Nothing voting in 1854. Measures of age (youth) and change in numbers of immigrants tend to dominate the equation in Table 5. However, these social attributes did not cancel out the impact of market orientation. The variable representing value of wheat and corn production was significant in contributing to explanation of variance: the semi-partial correlation reveals the unique contribution of a variable to the explanation of variance, and in the case of the value of wheat and corn production that value was 9.3 percent. The variable representing U.S. citizens born in Pennsylvania acts with other variables as a suppressor.

The multiple regression on Republican voting in 1856 produced the highest  $R^2$  in this study (.606; adjusted, .571; see Table 6). Several elements contributed to explanation of variance in Republican voting: a pietist grouping of religious categories, U.S. citizens born outside of Pennsylvania, and distance from the easternmost point of the state. But the greatest contribution to the equation came from the variable measuring value of new market crops ( $sr^2 = .108$ ).<sup>59</sup> Democratic voting in 1856 and 1860 appears to have been most affected by religious affiliation and nativity (see Tables 7 and 8). The variable chosen to represent commercial orientation, rye, con-

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shared between independent variables and is not partitioned to individual variables. In Table 4, total  $sr^2$  equals 27.2 percent, indicating that some 16.3 percent of the variance explained in the regression equation is shared among the independent variables (43.5 percent — 27.2 percent = 16.3 percent). One way to avoid the problem of shared variance is to enter the variables into the equation in a predetermined manner (called hierarchical regression) and calculate the change in the coefficient of determination ( $R^2$ , or the amount of variance explained in the dependent variable by the independent variables) and use it as a guide to determine which variables are more important to the equation. In these tables, the order of the variables entered into the equations was selected on the basis of the  $sr^2$ s from earlier regressions in which all the variables were entered at the same time. It should be noted that in the absence of strong theoretical reasons, the use of the change in  $R^2$  given in the tables will alter—sometimes dramatically—depending upon when a variable is entered into the equation.

<sup>59</sup> William Gienapp reports a multiple regression for Republican voting in 1856 Pennsylvania with an  $R^2$  of .79. His procedure utilizes weighting techniques while those in this paper do not; when the regression in Table 6 is weighted by the square root of the population, the  $R^2$  becomes .73. Gienapp, *Origins of the Republican Party*, Table 13.41, p. 548.

Table 2  
Bivariate Correlations Between Crop Outputs and Political Parties, 1852, 1854, 1856, 1860

| Crop                  | Whig    |        | Demo   |        | Demo   |         | Demo   |         | Know N  |         | Know N |      | Repub |      |
|-----------------------|---------|--------|--------|--------|--------|---------|--------|---------|---------|---------|--------|------|-------|------|
|                       | 1852    | 1854   | 1852   | 1854   | 1856   | 1860    | 1852   | 1854    | 1856    | 1860    | 1856   | 1860 | 1856  | 1860 |
|                       | P       | SCT    | P      | SCT    | P      | G       | P      | SCT     | P       | G       | P      | G    | P     | G    |
| Wheat                 | .463**  | .142   | -.090  | -.052  | -.048  | -.027   | .370*  | .472**  | -.411** | .095    |        |      |       |      |
| Corn                  | .259    | .088   | .030   | .016   | .065   | .140    | .121   | .336*   | -.353*  | -.057   |        |      |       |      |
| Slaughter             | .153    | .295   | .002   | .084   | -.051  | -.037   | -.210  | .063    | -.068   | .020    |        |      |       |      |
| Rye                   | -.090   | -.133  | .427** | .534** | .482** | .503**  | -.004  | .266    | -.469** | -.429** |        |      |       |      |
| Livestock             | .200    | .413** | -.079  | -.097  | -.229  | -.235   | -.151  | -.254   | .360*   | .156    |        |      |       |      |
| Oats                  | .367*   | .403** | -.290  | -.290  | -.273  | -.276   | .055   | -.185   | .284    | .197    |        |      |       |      |
| Butter                | .065    | .434** | -.127  | -.062  | -.376* | -.400** | -.373* | -.310*  | .460**  | .260    |        |      |       |      |
| Hay                   | -.120   | .445** | .109   | .190   | -.259  | -.264   | -.321* | -.203   | .254    | .083    |        |      |       |      |
| Farm Value            | .424**  | .389** | -.162  | -.042  | -.141  | -.111   | -.078  | .075    | -.018   | .144    |        |      |       |      |
| Farm Size, 3-9 Ac     | -.082   | -.044  | -.148  | -.045  | -.010  | .017    | -.092  | .073    | -.105   | -.014   |        |      |       |      |
| Farm Size, 10-19 Ac   | -.302*  | -.026  | .018   | .006   | .088   | .067    | .302*  | .159    | .014    | -.156   |        |      |       |      |
| Farm Size, 20-49 Ac   | -.562** | -.046  | .172   | -.004  | -.038  | -.100   | -.378* | -.550** | -.430** | -.164   |        |      |       |      |
| Farm Size, 50-99 Ac   | .125    | -.007  | -.029  | .001   | -.018  | -.038   | .152   | -.122   | .166    | .085    |        |      |       |      |
| Farm Size, 100-499 Ac | .526**  | .038   | -.092  | .018   | .015   | .023    | .358*  | .558**  | -.422** | .150    |        |      |       |      |
| Farm Size, 500+ Ac    | .239    | -.154  | -.050  | -.109  | -.054  | -.045   | .300   | .002    | .062    | .076    |        |      |       |      |

Notes Crop output done in terms of output per white adult male, farm size is percentage in category of all farms in the county, voting is in percent of estimated voters, P = presidential election, SCT = state supreme court judgeship election, G = gubernatorial election

N = 62 for the 1854 election

N = 63 for 1852 1856, and 1860 elections

\*p < .01 \*\*p < .001

Table 3  
Bivariate Correlations Between Crop Outputs and Republican Voting 1856-1860

| Crop                  | 1856<br>P | 1857<br>G | 1858<br>Con | 1859<br>Ccr | 1860<br>Con | 1860<br>G | 1860<br>P |
|-----------------------|-----------|-----------|-------------|-------------|-------------|-----------|-----------|
| Wheat                 | -.411**   | .082      | .067        | .387**      | .166        | .095      | -.045     |
| Corn                  | -.353*    | .009      | -.206       | .195        | -.065       | -.057     | -.177     |
| Slaughter             | -.068     | .167      | -.106       | .098        | .010        | .020      | -.080     |
| Rye                   | -.469**   | -.276     | -.182       | -.051       | -.237*      | -.429**   | -.413**   |
| Livestock             | .360*     | .472**    | -.115       | -.062       | .071        | .156      | .167      |
| Oats                  | .284      | .468**    | .070        | .057        | .161        | .197      | .167      |
| Butter                | .460**    | .498**    | .099        | -.000       | .189        | .260      | .327**    |
| Hay                   | .254      | .400**    | .020        | .022        | .089        | .083      | .138      |
| Farm Value            | -.018     | .248      | -.091       | .198        | .089        | .144      | .043      |
| Farm Size, 3-9 Ac     | -.105     | -.299*    | .015        | -.084       | -.022       | -.014     | -.047     |
| Farm Size, 10-19 Ac   | .014      | -.262     | .013        | -.100       | -.145       | -.156     | -.168     |
| Farm Size, 20-49 Ac   | .430**    | -.038     | -.043       | -.380**     | -.169       | -.164     | -.026     |
| Farm Size, 50-99 Ac   | .166      | .132      | -.117       | -.122       | .029        | .085      | .100      |
| Farm Size, 100-499 Ac | -.422**   | .132      | .084        | .432**      | .179        | .150      | .041      |
| Farm Size, 500+ Ac    | .062      | .046      | -.205       | -.032       | .033        | .076      | .089      |

Notes: Definition of variables provided in note to Table 2; P = presidential election; G = gubernatorial election; Con = congressional election; Ccr = canal commissioner election.

N = 63 except for Con 1860, N = 62

\* $p < .01$  \*\* $p < .001$

Table 4  
Bivariate Correlations Between Value of Crop Output and Political Parties, 1852, 1854, 1856, 1860

| Value of Crop Variable          | Whig   |        | Demo   |        | Demo   |         | Demo    |         | Know N  |         | Know N  |         | Repub   |         |
|---------------------------------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|                                 | 1852   | 1854   | 1852   | 1854   | 1856   | 1860    | 1856    | 1860    | 1854    | 1856    | 1856    | 1860    | 1856    | 1860    |
|                                 | P      | SCT    | P      | SCT    | P      | G       | P       | G       | P       | P       | P       | P       | P       | G       |
| Value Wheat                     | .456** | .000   | -.079  | -.077  | -.017  | .019    | .455**  | .598**  | .598**  | .598**  | .598**  | .598**  | .515**  | .099    |
| Value Wheat, Corn               | .445** | -.049  | -.052  | .009   | .128   | .173    | .451**  | .595**  | .595**  | .595**  | .595**  | .595**  | -.594** | -.020   |
| Slaughter                       |        |        |        |        |        |         |         |         |         |         |         |         |         |         |
| Value Wheat, Corn               | .462** | -.051  | -.057  | -.021  | .073   | .124    | .501**  | .583**  | .583**  | .583**  | .583**  | .583**  | -.549** | .014    |
| Value Rye                       | -.266  | -.333* | .463** | .591** | .474** | .512**  | -.009   | .254    | .254    | .254    | .254    | .254    | -.479** | -.402** |
| Value Butter                    | -.122  | .279   | -.074  | -.005  | -.326* | -.383** | -.485** | -.515** | -.515** | -.515** | -.515** | -.515** | .607**  | .200    |
| Value Butter, Cheese, Oats, Hay | -.156  | .304*  | -.141  | -.248  | -.300* | -.356** | -.480** | -.611*  | -.611*  | -.611*  | -.611*  | -.611*  | .626**  | .107    |

Notes Value of crop variables calculated as a percentage of value of total agricultural output, elections defined as in Table 2

N = 62 for elections in 1854

N = 63 for elections in 1852, 1856, 1860

\* $p < .01$  \*\* $p < .001$

**Table 5**  
**Multiple Regression: Explanatory Variables for**  
**Know Nothing Voting, State Supreme Court Judge, 1854**

**I. Descriptive Statistics and Variables**

| Variable                                       | Mean   | Standard<br>Deviation | Skewness |
|--|--------|-----------------------|----------|
| Know Nothing Vote (KN54)                       | 22.67  | 10.10                 | .341     |
| Age 20-29 years (AGE 20-29)                    | 35.18  | 2.68                  | 1.001    |
| Value of Wheat and Corn<br>(VAL WH & CN)       | 31.56  | 13.63                 | -.026    |
| Change in Immigrants 1850-60<br>(CH IMMIG)     | 56.68  | 69.94                 | 1.529    |
| Distance from Eastern Border<br>(DIST FR E)    | 153.24 | 90.29                 | .143     |
| Methodist Attendance<br>(METH)                 | 16.26  | 7.27                  | .000     |
| US Citizens, born in<br>Pennsylvania (PA BORN) | 82.44  | 14.74                 | -1.098   |

**II. Correlation Matrix**

|                | KN 54 | AGE<br>20-29 | VAL WH &<br>CN | CH<br>IMMIG | DIST<br>FR E | METH |
|----------------|-------|--------------|----------------|-------------|--------------|------|
| KN 54          |       |              |                |             |              |      |
| AGE 20-29      | .386  |              |                |             |              |      |
| VAL WH &<br>CN | .501  | .220         |                |             |              |      |
| CH IMMIG       | -.321 | .056         | -.136          |             |              |      |
| DIST FR E      | .244  | .005         | .115           | -.202       |              |      |
| METH           | .232  | .239         | .231           | -.176       | .182         |      |
| PA BORN        | .322  | .204         | .703           | -.125       | .016         | .093 |

**III. Regression Statistics: Dependent Variable = KN 54**

| Statistics of the Equation |       |                        |      |                 |                             |
|----------------------------|-------|------------------------|------|-----------------|-----------------------------|
|                            | b     | Standard<br>Error of b | Beta | sr <sup>2</sup> | Change<br>in R <sup>2</sup> |
| Explanatory Variables      |       |                        |      |                 |                             |
| AGE 20-29                  | 1.22  | .41                    | .32  | .093            | .149                        |
| VAL WH & CN                | .33   | .11                    | .44  | .093            | .182                        |
| CH IMMIG                   | -.04  | .02                    | -.26 | .064            | .080                        |
| DIST FR E                  | .02*  | .01                    | .14  | .018            | .020                        |
| METH                       | -.02* | .15                    | -.01 | .000            | .000                        |
| PA BORN                    | -.06* | .10                    | -.09 | .004            | .004                        |

Constant = - 25.6, Multiple R = .659, R<sup>2</sup> = .435, Adjusted R<sup>2</sup> = .373, Standard Error of Estimate = 8.00

\*b-coefficient not significant at .05 level



Table 6  
**Multiple Regression: Explanatory Variables for  
 Republican Party Voting, President 1856**

**I Descriptive Statistics and Variables**

| Variable   | Mean   | Standard<br>Deviation | Skewness |
|--|--------|-----------------------|----------|
| Republican Vote 1856<br>(REPUBLIC 56)                        | 29 92  | 17 16                 | 422      |
| Value of Butter, Oats, Hay, &<br>Cheese (NEWCROP)            | 39 91  | 8 43                  | 574      |
| US Citizens born Outside of<br>Pennsylvania (BORN OUT<br>PA) | 9 06   | 12 18                 | 2 126    |
| Pietist Group, 1860 (PIET)                                   | 49 41  | 18 73                 | - 122    |
| Distance from Eastern<br>Pennsylvania Border<br>(DIST FR E)  | 153 24 | 90 29                 | 143      |
| Age, 20-29 (AGE 20-29)                                       | 34 35  | 1 91                  | 167      |

**II Correlation Matrix**

|             | REPUBLIC 56 | NEW-<br>CROP | BORN<br>OUT<br>PA | PIET  | DIST<br>FR E |
|-------------|-------------|--------------|-------------------|-------|--------------|
| REPUBLIC 56 |             |              |                   |       |              |
| NEWCROP     | 626         |              |                   |       |              |
| BORN OUT PA | 572         | 599          |                   |       |              |
| PIET        | 293         | - 055        | - 074             |       |              |
| DIST FR E   | 389         | 119          | 086               | 423   |              |
| AGE 20-29   | - 283       | - 316        | - 265             | - 180 | 006          |

**III Regression Statistics Dependent Variable = REPUBLIC 56**

| Statistics of the Equation   |        |                        |       |                 |                             |
|------------------------------|--------|------------------------|-------|-----------------|-----------------------------|
|                              | b      | Standard<br>Error of b | Beta  | sr <sup>2</sup> | Change<br>in R <sup>2</sup> |
| <b>Explanatory Variables</b> |        |                        |       |                 |                             |
| NEWCROP                      | 857    | 217                    | 420   | 108             | 393                         |
| BORN OUT PA                  | 449    | 147                    | 319   | 065             | 063                         |
| PIET                         | 228    | 088                    | 249   | 046             | 117                         |
| DIST FR E                    | 039    | 018                    | 206   | 033             | 033                         |
| AGE 20-29                    | - 209* | 812                    | - 023 | 000             | 000                         |

Constant = 18 642 Multiple R = 778 R = 605 Adjusted R  
 = 570 Standard Error of Estimate = 11 25

\*b coefficient not significant at .05 level

Table 7  
**Multiple Regression: Explanatory Variables for  
 Democratic Voting, President 1856**

**I Descriptive Statistics and Variables**

| Variable   | Mean   | Standard<br>Deviation | Skewness |
|--|--------|-----------------------|----------|
| Democratic Vote 1856<br>(DEMO56)                             | 44.01  | 10.42                 | 102      |
| US Citizens born Outside of<br>Pennsylvania (BORN OUT<br>PA) | 9.06   | 12.18                 | 2.126    |
| Pietist Group, 1860 (PIET)                                   | 49.41  | 18.73                 | -.122    |
| Value of Rye (RYE)   | 3.77   | 3.67                  | 1.802    |
| Distance from Eastern<br>Pennsylvania Border<br>(DIST FR E)  | 153.24 | 90.29                 | 143      |
| Age, 50 and older (AGE 50+)                                  | 21.97  | 2.91                  | -.453    |

**II Correlation Matrix**

|             | DEMO 56 | BORN<br>OUT<br>PA | PIET  | RYE   | DIST<br>FR E |
|-------------|---------|-------------------|-------|-------|--------------|
| DEMO 56     |         |                   |       |       |              |
| BORN OUT PA | -.507   |                   |       |       |              |
| PIET        | -.413   | -.074             |       |       |              |
| RYE         | .479    | -.302             | -.305 |       |              |
| DIST FR E   | -.320   | .086              | .415  | -.415 |              |
| AGE 50+     | -.171   | -.052             | .499  | -.151 | .140         |

**III Regression Statistics**    Dependent Variable = DEMO 56

| Statistics of the Equation   |        |                        |       |                 |                             |
|------------------------------|--------|------------------------|-------|-----------------|-----------------------------|
|                              | b      | Standard<br>Error of b | Beta  | sr <sup>2</sup> | Change<br>in R <sup>2</sup> |
| <b>Explanatory Variables</b> |        |                        |       |                 |                             |
| BORN OUT PA                  | -.400  | .085                   | -.467 | .192            | .257                        |
| PIET                         | -.215  | .067                   | -.387 | .090            | .205                        |
| RYE                          | .601*  | .311                   | .212  | .032            | .039                        |
| DIST FR E                    | -.004* | .013                   | -.033 | .001            | .001                        |
| AGE 50+                      | .124*  | .387                   | .035  | .001            | .001                        |

Constant = 53.857    Multiple R = .709    R<sup>2</sup> = .503    Adjusted R<sup>2</sup> = .459    Standard Error of Estimate = 7.663

\*b coefficient not significant at .05 level

Table 8  
**Multiple Regression: Explanatory Variables for  
 Democratic Voting, Governor 1860**

**I. Descriptive Statistics and Variables**

| Variable   | Mean   | Standard<br>Deviation | Skewness |
|--|--------|-----------------------|----------|
| Democratic Vote 1860<br>(DEMO 60)                            | 40.10  | 9.65                  | -.487    |
| Distance from Southern<br>Pennsylvania Border<br>(DIST FR S) | 75.02  | 43.56                 | .268     |
| Home Manufacturing 1860<br>(HOME MANUF)                      | 112.44 | 129.58                | 1.942    |
| Pietist Group (PIET)   | 49.41  | 18.73                 | -.122    |
| Value of Rye (RYE)   | 3.77   | 3.67                  | 1.802    |
| US Citizens born Outside<br>of Pennsylvania (BORN<br>OUT PA) | 9.06   | 12.18                 | 2.126    |

**II. Correlation Matrix**

|             | DEMO 60 | DIST<br>FR S | HOME<br>MANUF | PIET  | RYE   |
|-------------|---------|--------------|---------------|-------|-------|
| DEMO 60     |         |              |               |       |       |
| DIST FR S   | -.280   |              |               |       |       |
| HOME MANUF  | -.242   | -.004        |               |       |       |
| PIET        | -.360   | -.130        | .114          |       |       |
| RYE         | .510    | -.043        | -.176         | -.305 |       |
| BORN OUT PA | -.518   | .674         | .146          | -.074 | -.302 |

**III. Regression Statistics: Dependent Variable = DEMO 56**

| Statistics of the Equation |        |                        |       |                 |                             |
|----------------------------|--------|------------------------|-------|-----------------|-----------------------------|
|                            | b      | Standard<br>Error of b | Beta  | sr <sup>2</sup> | Change<br>in R <sup>2</sup> |
| Explanatory Variables      |        |                        |       |                 |                             |
| BORN OUT PA                | -.345  | .110                   | -.435 | .086            | .268                        |
| PIET                       | -.155  | .052                   | -.301 | .079            | .160                        |
| RYE                        | .708   | .282                   | .269  | .055            | .062                        |
| HOME MANUF                 | -.007* | .007                   | -.094 | .009            | .009                        |
| DIST FR S                  | .003*  | .029                   | -.015 | .000            | .000                        |

Constant = 49.444, Multiple R = .709, R<sup>2</sup> = .503, Adjusted R<sup>2</sup> = .459, Standard Error of Estimate = 7.127

\*b-coefficient not significant at .05 level

Table 9  
Bivariate Correlations Between Social Variables and Political Parties, 1852, 1854, 1856, 1860

| Variables                  | Whig    |       | *Whig |     | Demo   |   | Demo  |         | Demo    |   | Know N |     | Know N  |   | Repub   |       |
|----------------------------|---------|-------|-------|-----|--------|---|-------|---------|---------|---|--------|-----|---------|---|---------|-------|
|                            | 1852    | 1854  | P     | SCT | 1852   | P | 1854  | P       | 1856    | P | 1860   | SCT | 1856    | P | 1856    | 1860  |
| Religion                   |         |       |       |     |        |   |       |         |         |   |        |     |         |   |         |       |
| Baptist                    | .095    | -.139 |       |     | .147   |   | -.047 | -.192   | -.148   |   | .128   |     | -.095   |   | .200    | .077  |
| Episcopal                  | .053    | -.037 |       |     | -.106  |   | -.066 | .020    | .027    |   | -.076  |     | -.003   |   | -.029   | .031  |
| German Reformed            | .342*   | .026  |       |     | -.030  |   | .084  | .223    | .223    |   | .168   |     | .366*   |   | -.461** | -.131 |
| Lutheran                   | .263    | .126  |       |     | -.099  |   | .195  | .218    | .214    |   | .014   |     | .456**  |   | -.500** | -.072 |
| Methodist                  | .091    | -.221 |       |     | -.004  |   | .014  | -.161   | -.128   |   | .232   |     | .064    |   | .033    | .075  |
| Presbyterian               | .059    | .193  |       |     | -.308* |   | -.277 | -.370*  | -.317*  |   | .133   |     | -.166   |   | .390*   | .353* |
| Catholic                   | -.001   | .004  |       |     | .012   |   | -.003 | .248    | .169    |   | -.037  |     | .011    |   | -.027   | -.006 |
| Pietist Grouping           | .261    | .126  |       |     | -.107  |   | .251  | -.413** | -.360*  |   | .163   |     | -.048   |   | .293    | .327* |
| Unchurched                 | -.472** | -.182 |       |     | .295   |   | .045  | .126    | .103    |   | -.140  |     | -.294   |   | .127    | -.225 |
| Protestant                 | .458**  | .168  |       |     | -.281  |   | -.040 | -.191   | -.146   |   | .157   |     | .254    |   | -.099   | .205  |
| Nativity                   |         |       |       |     |        |   |       |         |         |   |        |     |         |   |         |       |
| Foreign Born               | -.250   | -.170 |       |     | .001   |   | -.008 | .138    | .118    |   | -.090  |     | -.171   |   | .085    | -.022 |
| US citizen,<br>born in PA  | .403*   | .048  |       |     | .036   |   | .254  | .317*   | .329*   |   | .322*  |     | .475**  |   | -.503** | -.077 |
| US citizen,<br>born out PA | -.336*  | .044  |       |     | -.053  |   | -.297 | -.507** | -.519** |   | -.334* |     | -.482** |   | .572**  | .113  |

Table 9 Continued  
Bivariate Correlations Between Social Variables and Political Parties, 1852, 1854, 1856, 1860

| Variables        | Whig    |       | Demo  |        | Demo   |        | Demo   |         | Know N |        | Know N |      | Repub |      |
|------------------|---------|-------|-------|--------|--------|--------|--------|---------|--------|--------|--------|------|-------|------|
|                  | 1852    | 1854  | 1852  | 1854   | 1856   | 1854   | 1860   | 1856    | 1854   | 1856   | 1854   | 1856 | 1856  | 1860 |
|                  | P       | SCT   | P     | SCT    | P      | SCT    | G      | P       | SCT    | P      | SCT    | P    | P     | G    |
| Age              |         |       |       |        |        |        |        |         |        |        |        |      |       |      |
| 20-29            | -.036   | -.264 | .017  | -.074  | .119   | .130   | .386*  | .300*   |        | -.283  |        |      | .037  |      |
| 30-39            | -.321*  | -.230 | .008  | -.011  | .061   | .059   | -.030  | -.135   |        | .046   |        |      | -.044 |      |
| 40-49            | .121    | .181  | .044  | .182   | .061   | .045   | -.099  | -.205   |        | .171   |        |      | .039  |      |
| 50+              | .263    | .342* | -.156 | -.062  | -.171  | -.155  | -.172  | -.118   |        | .211   |        |      | .093  |      |
| Distance         |         |       |       |        |        |        |        |         |        |        |        |      |       |      |
| From Southern    |         |       |       |        |        |        |        |         |        |        |        |      |       |      |
| Border           | -.490** | -.090 | .188  | -.081  | -.220  | -.280  | -.190  | -.521** |        | .512** |        |      | .036  |      |
| From Eastern     |         |       |       |        |        |        |        |         |        |        |        |      |       |      |
| Border           | .208    | .130  | -.205 | -.315* | -.320* | -.327* | .244   | -.133   |        | .389*  |        |      | .346* |      |
| Change Variables |         |       |       |        |        |        |        |         |        |        |        |      |       |      |
| Immigration,     |         |       |       |        |        |        |        |         |        |        |        |      |       |      |
| 1850-60          | -.233   | .137  | .001  | .082   | .024   | -.066  | -.321* | -.059   |        | -.030  |        |      | -.124 |      |
| Total county     |         |       |       |        |        |        |        |         |        |        |        |      |       |      |
| population       |         |       |       |        |        |        |        |         |        |        |        |      |       |      |
| 1850-60          | -.401*  | -.095 | .152  | .067   | .084   | -.014  | -.147  | -.144   |        | .085   |        |      | -.077 |      |

Note Religious variables calculated on basis of accommodations divided by county population, nativity calculated as percentage of county population, age groups calculated as percentage of white adult males in category divided by total white adult male population, change variables are percentage changes 1850-1860 of numbers of foreign born and total county population, distances are miles of county seat of each county from the southern border of the state and the easternmost part of the state

N = 62 for 1854 election

N = 63 for 1852, 1856, 1860 elections

\*p < .01      \*\*p < .001

tributed significantly to explanation of variance but was largely overshadowed by the contributions of nativity and religion. Nevertheless, a persistent and important feature of Democratic county voting throughout the 1850s was a non-commercial market orientation.<sup>60</sup>

\*       \*       \*       \*

Disposition to the market appears in this study to be one of the strongest influences shaping the party system, but there are important limitations to this conclusion. Several scholars have probed Pennsylvania in the antebellum years by researching townships; their studies have uniformly found that ethnocultural forces more than any others determined political affiliations. They have furthermore discovered that at the local levels the matter of religion and ethnicity was complicated by unusual patterns of negative reference group relationships.<sup>61</sup> This study fails to handle the problem of ethnicity and negative reference groups; using counties as the units of analysis has probably reduced the importance of ethnocultural factors in Pennsylvania politics. Moreover, this investigation has left virtually untouched the question of the slavery-extension issue and its role in disrupting the second party system and in producing the third party system. To some extent this neglect arises from the purpose of the study: to detect the influence of economic change upon the parties during the realignment period.

<sup>60</sup> Part of the problem concerning multiple regressions in the case of Democratic voting arises from use of the variable of rye as a percentage of the value of total agricultural output. The variable has a small value and is not well distributed. When rye per white adult male is substituted, which is better distributed, the rye (non-commercial) variable becomes more potent. However, consistency with the regressions in the other tables dictates using the rye variable as a percent of total agricultural output. It is also worth noting that all of the associations with Democratic voting tend to be negative; only rye produced a substantial positive correlation.

<sup>61</sup> Petersen, "Reaction to a Heterogeneous Society," 102-79; Gudelunas, "Nativism and the Demise of Schuylkill County Whiggery," 225-36; William A. Gudelunas, Jr., and William G. Shade, *Before the Molly Maguires: The Emergence of the Ethno-Religious Factor in the Politics of the Lower Anthracite Region, 1844-1872* (New York, 1976); William G. Shade, "Pennsylvania Politics in the Jacksonian Period: A Case Study, Northampton County, 1824-1844," *Pennsylvania History* 39 (1972), 313-33; Shade, "Political Pluralism and Party Development: The Creation of a Modern Party System, 1815-1852," in Paul Kleppner, et al., eds., *The Evolution of American Electoral Systems* (Westport, 1981), 102; Gienapp, *Origins of the Republican Party*, 146-47, 162-63, 420, 428-39.

It would appear nonetheless that economic forces had more to do with the molding of Pennsylvania's political system than many historians have allowed. The probable reason for the difference is that many researchers have controlled for economic influences by developing measures of wealth, occupation, and income. But what they actually constructed was a variable that attempted to denote class, and within that restricted definition they found little or no relationship worth reporting. Yet all they were entitled to claim given the nature of their efforts was that the variables they had used for regression failed to produce significant results, or that their measures of class did not perform as well as did their ethnocultural measures. Economic change may affect the political system in highly varied ways. In order to detect such influences, it is prerequisite that pertinent variables be developed. Most studies of northern states in the antebellum period have not found strong relationships between economic activity and party preferences.<sup>62</sup> Part of the reason for this failure may be due to the design of variables which do not fully measure the impact of economic activity upon politics.<sup>63</sup>

There remains the very real possibility that the long scholarly struggle over the question of whether economic interests or social attachments determined political partisanship might ultimately be fallacious. One might readily assume that a group's cultural disposition

<sup>62</sup> State and local studies would include Holt, *Forging a Majority*; Formisano, *Birth of Mass Political Parties*; Hansen, *Making of the Third Party System*; Hendrik Booraem, V, *The Formation of the Republican Party in New York: Politics and Conscience in the Antebellum North* (New York, 1983); Baker, *Ambivalent Americans*; Mark L. Berger, *The Revolution in the New York Party Systems, 1840-1860* (Port Washington, 1973); Stephen E. Maizlish, *The Triumph of Sectionalism: The Transformation of Ohio Politics, 1844-1856* (Kent, Ohio, 1983). Baum, *Civil War Party System*, 83-89, finds economic factors more important in Massachusetts Republicanism than ethnocultural considerations. Gienapp, *Origins of the Republican Party*, 438-39, generally subscribes to a cultural interpretation of partisan affiliation.

<sup>63</sup> See the instructive comments of Michael F. Holt, "The Election of 1840, Voter Mobilization, and the Emergence of the Second American Party System: A Reappraisal of Jacksonian Voting Behavior," in William J. Cooper, Jr., Michael F. Holt, and John McCardell, eds., *A Master's Due: Essays in Honor of David Herbert Donald* (Baton Rouge, 1985), 25-27. Thomas B. Alexander, Peggy Duckworth Elmore, Frank M. Lowrey, and Mary Jane Pickens Skinner some two decades ago found that they could not locate economic influences in party affiliation when using variables measuring income, occupation, and wealth; however, their original interpretation of a commercial/non-commercial split between Whigs and Democrats emerged when they employed variables measuring agricultural output: "Basis of Alabama's Ante-Bellum Two-Party System," 243-77.

would define acceptable economic behavior. That Democrats preferred a more ritualistic religion and local governmental structures logically intimates that economically they should have preferred non-market activity. In the same vein, the Republicans' evangelistic outlook could easily have encouraged marketplace behavior.<sup>64</sup>

But in the case of Pennsylvania in the 1850s, it is highly probable that economic forces strongly shaped the state's politics. The realignment of the parties in the middle of the decade followed closely an alteration in market structure that the railroads created by extending the scope of economic competition.<sup>65</sup> During the Jacksonian period, the Whigs, at least in terms of county voting, exhibited an acceptance of commercial activity whereas the Democrats revealed an ambivalence. But commercial realities changed in the 1850s and to a considerable extent the parties changed with the market. Democratic county voting retained its non-market orientation. The Whigs seemingly disappeared when the old commercial basis of the Jacksonian period eroded in the face of western competition. In the transitional period from 1854 to 1858 the Know Nothings, besides acting as the vehicle of anti-Catholicism and anti-immigration, emerged as a party whose county vote demonstrated a difficulty in adapting to new market realities. Shortly after the nativist explosion in 1854, the Republican party formed. By 1856 Republican county voting unveiled a party that embraced Pennsylvania's economic transformation and that accepted the dictates of market change. Both Republicans and Know Nothings had a positive orientation to market forces, but for the Republicans the disposition was to the future rather than to the past. When the Republicans and Know Nothings merged in 1858 and maintained the coalition until 1860, the two types of commercial orientation tended to cancel each other out. Yet the economic essence of the Republican party was in fact an embrace of market activity. Thus, by 1860 the third party system had in a sense replicated the

<sup>64</sup> See McPherson, *Ordeal By Fire*, 19-22, 38-45. The correlations between parties and the geographical variables in Table 9 argue to some extent in favor of a cultural approach to Pennsylvania politics; see also Gienapp, *Origins of the Republican Party*, 428-31, 438-39.

<sup>65</sup> No claim is advanced as to other states. Considerably more research would have to be undertaken before any generalization could be made about economic transformation and the antebellum political system for the entire North.



second party system—one party representing commercial expansion, the other a localist, traditional economy.

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