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# Rethinking the Transition to Capitalism in the Early American Northeast

Naomi R. Lamoreaux

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When and how did the American economy acquire its capitalist character? During the late 1970s Michael Merrill, James A. Henretta, and Christopher Clark published influential articles challenging the notion “that Americans had been ‘capitalists’ since the first colonial settlements.” Using evidence from farmers’ account books as well as probate records and other sources documenting rural life, they argued that farmers’ economic behavior in the late eighteenth and early nineteenth centuries was not compatible with conventional notions of capitalist exchange—that the transactions farmers recorded in their account books were not mediated by money, that the credits rural producers granted each other did not circulate as means of exchange, that farmers typically did not charge each other interest on debts, that they engaged in a wide variety of cooperative activities, that they made decisions that put family and community before profit, and that their goal was to achieve a competence, rather than to accumulate capital.<sup>1</sup>

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<sup>1</sup> Michael Merrill, “Cash Is Good to Eat: Self-Sufficiency and Exchange in the Rural Economy of the United States,” *Radical History Review*, 3 (Fall 1976), 42–71; James A. Henretta, “Families and Farms: *Mentalité* in Pre-Industrial America,” *William and Mary Quarterly*, 35 (Jan. 1978), 3–32; Christopher Clark, “Household Economy, Market Exchange, and the Rise of Capitalism in the Connecticut Valley, 1800–1860,” *Journal of Social History*, 13 (Winter 1979), 169–89. See also Christopher Clark, *The Roots of Rural Capitalism: Western Massachusetts*,

In a study first published in the *Journal of Economic History* in 1981, Winifred B. Rothenberg mounted a powerful challenge to the claims of these “moral-economy historians.” Using econometric techniques to analyze entries in account books, she argued that farmers in late-eighteenth-century Massachusetts behaved just like rational economic actors. They sought out the highest prices for their crops. They adjusted their product mix to market prices. They also made incremental but steady improvements to their farming practices that substantially raised agricultural productivity.<sup>2</sup>

Although Rothenberg’s rejoinder touched off a heated debate that continued well into the 1990s, her work also provided the basis for the emergence of a new consensus.<sup>3</sup> Because her research suggested that farmers were more market oriented in the late eighteenth century than they had earlier been, it was embraced by the moral-economy historians as evidence for the timing of the transition to capitalism, effectively ending the debate. Most historians now agree that there was such a transition in the American countryside during the late eighteenth and early nineteenth centuries and that it was associated with the social and political upheaval of the American Revolution.<sup>4</sup>

This resolution of the debate is unsatisfactory because it glosses over the substantial disagreements that remain about the process of transformation itself. In Rothenberg’s view, farmers were agents of change. Released from the constraints that political and religious authorities had imposed on their behavior, they increasingly pursued their economic advantage, generating the productivity increases that allowed “a decreasing share of the labor force to feed an increasingly nonagricultural population” and delivering “savings accumulated in the rural economy to the burgeoning insurance, banking, manufacturing, and infrastructure sectors.” The moral-economy historians, in contrast, see farmers more as acted upon. According to Henretta, in New England it was primarily “merchants and entrepreneurs [who] had expanded their activities and devised new capitalist institutional structures.” Farmers participated in the ensuing changes but they did so willy-nilly, their lives “increasingly intertwined in a market system that altered their behavior and values.” Although Clark recognized that demographic pressures in the countryside played a crucial role

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1780–1860 (Ithaca, 1990), esp. 9.

<sup>2</sup> Winifred B. Rothenberg, “The Market and Massachusetts Farmers, 1750–1855,” *Journal of Economic History*, 41 (June 1981), 283–314. See also Winifred Barr Rothenberg, *From Market-Places to a Market Economy: The Transformation of Rural Massachusetts, 1750–1850* (Chicago, 1992), 214–40.

<sup>3</sup> The literature is vast, but for overviews of the debate, see Allan Kulikoff, “The Transition to Capitalism in Rural America,” *William and Mary Quarterly*, 46 (Jan. 1989), 120–44; Christopher Clark, “Economics and Culture: Opening Up the Rural History of the Early American Northeast,” *American Quarterly*, 43 (June 1991), 279–301; Michael Merrill, “Putting ‘Capitalism’ in Its Place: A Review of Recent Literature,” *William and Mary Quarterly*, 52 (April 1995), 315–26; and Gordon S. Wood, “The Enemy Is Us: Democratic Capitalism in the Early Republic,” *Journal of the Early Republic*, 16 (Summer 1996), 293–308.

<sup>4</sup> See Gordon S. Wood, “Was America Born Capitalist?,” *Wilson Quarterly*, 23 (Spring 1999), 36–46. The new synthesis owes much to Wood’s work. See especially Gordon S. Wood, *The Radicalism of the American Revolution* (New York, 1992). For examples of the new synthesis, see Clark, *Roots of Rural Capitalism*; James A. Henretta, *The Origins of American Capitalism: Collected Essays* (Boston, 1991); and Allan Kulikoff, *From British Peasants to Colonial American Farmers* (Chapel Hill, 2000). Merrill remains a dissenter. See Merrill, “Putting ‘Capitalism’ in Its Place”; and Michael Merrill, “The Anticapitalist Origins of the United States,” *Fernand Braudel Center Review*, 13 (Fall 1990), 465–97.

in initiating change, he argued that for a long time rural attitudes restrained “the emergence of capitalist production and labor relations.” Only when pressures on farmers forced them to place “greater reliance than they had before on securing necessities from distant markets” did merchants and entrepreneurs obtain the power to institute “capitalism in the countryside.” Merrill’s position was even more extreme. He maintained that anticapitalist majorities of farmers and small producers were behind the Democratic-Republican victories of the early 1800s. The Jeffersonians, however, were “bucking the tide of history”; they could not delay forever the rise to power of the “monied men and manufacturers” and hence “the development of capitalism in the United States.”<sup>5</sup>

What unites the work of the moral-economy historians and gives their writing its collective force is the conviction that farmers, on the one hand, and merchants and manufacturers, on the other, were located on opposite sides of a critical dividing line in early American society, so that conflicts between those groups were not simply disagreements over economic interests but rather reflected profoundly different world views or *mentalités*.<sup>6</sup> The validity of that argument thus hinged on their ability to demonstrate that farmers exhibited different values and behavior from those of merchants and manufacturers. Yet the moral-economy historians made surprisingly little effort to find out whether farmers were distinguishable from members of those other groups along the dimensions emphasized by this literature—whether the accounts kept by merchants and manufacturers were fundamentally different from those kept by farmers, whether merchants and manufacturers were more likely to charge interest on debts or put overdue notes into suit, whether they were less likely to engage in cooperative behavior, and whether they pursued the accumulation of capital to the detriment of family and community.

In the first half of this essay, I show that there is abundant evidence that early American merchants and manufacturers did not in fact differ very much from farmers in those ways. But though the result of this exercise is to show that farmers had more in common with merchants and manufacturers than scholars in the Merrill/Clark/Henretta tradition would like to admit, it does not necessarily follow that farmers, like merchants and manufacturers, were capitalist. We are forced to such a conclusion only if we confine ourselves to the traditional neoclassical economics that underpinned (sometimes explicitly, sometimes implicitly) both sides of this debate. Hence, in the second half of the essay, I show that recent developments in economic theory can help us move beyond such simple dichotomies. In particular, they can help us avoid the tendency to stereotype capitalists as “rational economic men” who

<sup>5</sup> Rothenberg, *From Market-Places to a Market Economy*, 244; Henretta, *Origins of American Capitalism*, 269–70; Clark, *Roots of Rural Capitalism*, 16–17; Merrill, “Anticapitalist Origins of the United States,” 493.

<sup>6</sup> In lumping together the contributions of Christopher Clark, James A. Henretta, Michael Merrill, and allied scholars under the rubric of the moral-economy school, I elide important differences of interpretation. Nonetheless, those scholars all rejected the “consensus” view that rural Americans were “prototypical capitalists, cultivating their own land for profit, attaching themselves to expanding national and international markets when technology and transportation permitted, and espousing the individualistic, enterprising values that would become associated with commercial and industrial capitalism.” Clark, “Economics and Culture,” 279–80. See also Henretta, *Origins of American Capitalism*, xviii–xxi; Clark, *Roots of Rural Capitalism*, 9–12.

are outside history and culture.<sup>7</sup> Economic actors never make decisions solely on the basis of prices and quantities in the market; their choices are always shaped by their preferences and their perceptions of available options, which in turn are largely structured by the cultural systems in which they operate. What is needed, then, is an understanding of how the economic cultures of merchants and manufacturers, as well as of farmers, changed during this period of transformation. Although such an analysis is beyond the scope of this essay, in the final section I use a model developed by the economic historian Peter Temin to sketch out the broad outlines of change.

A couple of caveats before plunging into the substance of the argument. Whenever one focuses attention on differences between groups, one inevitably downplays within-group variation. My justification is that I am simply trying to follow the literature. Thus Henretta has “acknowledged the existence of capitalist values and activities among a *portion* of the rural population,” but he used the numerical subordination of that portion to justify his emphasis on “a rather different worldview among the *majority* of farm families.”<sup>8</sup> It is important to note, however, that many historians do not accept this characterization for farmers in the middle Atlantic and southern regions, whom they regard as much more oriented toward market production than farmers elsewhere.<sup>9</sup> The category merchants and manufacturers also poses difficulties because it designates a heterogeneous group and because manufacturers increasingly differentiated themselves from merchants as the nineteenth century progressed. I use the phrase as a convenient shorthand for what Merrill has called the moneyed elite, but it is important to bear these complexities in mind and to recognize that Merrill and other moral-economy historians often treat small manufacturers/artisans as similar to farmers.<sup>10</sup>

### Evidence from Account Books

Account books required time and effort to maintain. As a result, they reveal a great deal about what people thought was worth recording. In the cash-poor economy of the late eighteenth and early nineteenth centuries, merchants and manufacturers kept track of much the same information as farmers did: who was indebted to them and to whom they were indebted. Although transactions typically were denominated in money, little currency changed hands. For example, the account books kept by members of the Hancock family of Boston merchants show that country shopkeepers obtained wares on credit by obligating themselves to forward to the Hancocks the

<sup>7</sup> Not all scholars displayed this tendency toward stereotype. For more nuanced views of economic behavior, see Christine Leigh Heyrman, *Commerce and Culture: The Maritime Communities of Colonial Massachusetts, 1690–1750* (New York, 1984); Daniel Vickers, *Farmers and Fishermen: Two Centuries of Work in Essex County, Massachusetts, 1630–1850* (Chapel Hill, 1994); and Margaret Ellen Newell, *From Dependency to Independence: Economic Revolution in Colonial New England* (Ithaca, 1998).

<sup>8</sup> Henretta, *Origins of American Capitalism*, xxii.

<sup>9</sup> See, especially, on the middle Atlantic region, James T. Lemon, *The Best Poor Man's Country: A Geographical Study of Early Southeastern Pennsylvania* (New York, 1972); and on the Chesapeake Bay region, Paul G. E. Clemens, *The Atlantic Economy and Colonial Maryland's Eastern Shore: From Tobacco to Grain* (Ithaca, 1980). On the geographic and temporal patterns in farmers' orientation toward markets, see Richard Lyman Bushman, “Markets and Composite Farms in Early America,” *William and Mary Quarterly*, 55 (July 1998), 351–74.

<sup>10</sup> Merrill, “Anticapitalist Origins of the United States,” 467–69.

grain or other commodities they received in payment from local customers. Conversely, the Hancocks obtained country produce to export or sell in their Boston store by promising country shopkeepers future payment in the form of imported merchandise. According to W. T. Baxter, the Hancocks' various trading partners (like those of the farmers studied by the moral-economy historians) could not easily be divided into debtors or creditors: goods in these exchanges tended to flow both ways, and balances alternatively swung in favor of one side or the other. Moreover, this system of book credit made possible more complex lateral exchanges similar to those in which farmers participated. Baxter called such exchanges "triangular barter": "A sells goods to B; if B does not have what A wants, but is owed a debt by C, he may send A to look for acceptable things in C's store; a purchase there will mean that C has paid B, and B has paid A, although the goods in fact move only across the base of this triangle of traders."<sup>11</sup>

Close study of the early-nineteenth-century ledgers of the gunpowder manufacturer E. I. Du Pont de Nemours and Company led Roxanne Therese Johnson to similar conclusions. "A merchant who sold supplies or raw materials to the gunpowder manufactory," she observed, might also interact "with the firm in another capacity as customer." Not only did little cash change hands, but "rarely [could] a relationship be established between a credit transaction and an associated collection." As in the case of farmers, "the only way to determine whether an account constituted a receivable or payable was to identify the balance in that account." Moreover, the direction of the balance in any given account might shift back and forth over time, so that individuals who were creditors at one point might be debtors at another.<sup>12</sup>

Although book debt predominated in local exchanges such as these, other transactions (particularly those involving parties residing some distance away) might take the form of bills of exchange or other types of promissory notes.<sup>13</sup> Regardless of the formality of the credit instrument, however, obligations undertaken in the normal course of trade rarely carried explicit interest charges. Such charges were restricted mainly to three situations. In the first, exasperated creditors might convert a debt (either a book debt or a promissory note) that had long remained unpaid into an

<sup>11</sup> See W. T. Baxter, "Credit, Bills, and Bookkeeping in a Simple Economy," *Accounting Review*, 21 (April 1946), 154–66, esp. 159. See also W. T. Baxter, "Accounting in Colonial America," in *Studies in the History of Accounting*, ed. A. C. Littleton and B. S. Yamey (Homewood, 1956), 272–87; and W. T. Baxter, *The House of Hancock: Business in Boston, 1724–1775* (Cambridge, Mass., 1945), 11–38. The extent of such barter probably varied over time in accordance with the amount of money in circulation (a function of the quantity of paper money emitted by colonial governments and of whether the money held its value). The middle colonies managed their issues of paper money better than the New England colonies, so it is perhaps not surprising that Deborah A. Rosen found that in New York more of both rural and urban accounts were settled by cash by the middle of the eighteenth century. See Deborah A. Rosen, *Courts and Commerce: Gender, Law, and the Market Economy in Colonial New York* (Columbus, 1997), 35–40.

<sup>12</sup> Roxanne Therese Johnson, *An Analysis of the Early Record Keeping in the Du Pont Company, 1800–1818* (New York, 1989), esp. 64, 66. For other examples, see Arthur Cecil Bining, *Pennsylvania Iron Manufacture in the Eighteenth Century* (Harrisburg, 1979), 156–57; Anthony F. C. Wallace, *Rockdale: The Growth of an American Village in the Early Industrial Revolution* (New York, 1972), 162–63; and Rosalind Remer, *Printers and Men of Capital: Philadelphia Book Publishers in the New Republic* (Philadelphia, 1996), 104–5.

<sup>13</sup> For examples, see Johnson, *Early Record Keeping in the Du Pont Company*, 62–64. Note, however, that such merchants as the Hancocks used book credit for their inland trade as well as for local exchanges. See Baxter, "Credit, Bills, and Bookkeeping in a Simple Economy."

interest-bearing obligation.<sup>14</sup> In the second, a merchant or manufacturer (or farmer, for that matter) who had received a promissory note in payment for goods might decide to convert the note into cash by discounting it at a bank or with a wealthy individual. Such an action would trigger interest in the form of an up-front charge for the discount, but this payment is probably more properly regarded as a premium for cash. Finally, interest was charged whenever merchants, manufacturers, or farmers borrowed money directly from some other individual or institution. Sometimes these charges took the form of discounts, and the promissory notes that recorded such debts look very similar to other credit instruments, but contemporaries regarded them differently and used the phrase “accommodation paper” to distinguish them from the commercial paper generated in the course of actual business transactions.<sup>15</sup>

Not only do the account books of merchants and manufacturers resemble those of farmers in the importance of book credit relative to cash transactions and in the absence of interest charges, they are remarkably similar overall. Most merchants and manufacturers, like most farmers, used crude single-entry methods, listing transactions with a particular individual in order of occurrence on the same page of a memorandum book, sometimes but not always dividing them into credits and debits.<sup>16</sup> Moreover, these records were rarely maintained with much care or accuracy. W. T. Baxter, the historian who has conducted the most serious study of eighteenth-century accounting practices, claimed he had never found a ledger that approached the standards of completeness preached by contemporary accounting texts: “In the great bulk of cases . . . most of the impersonal accounts are lacking, the personal accounts are not ruled off, and the work abounds in arithmetical slips and other blemishes.” To give an example, accounts from the Woodwell shipyard in Newbury, Massachusetts,

<sup>14</sup> Even in international trade, interest was rarely charged explicitly unless a debt ran longer than a year. Here Clark missed the import of his own evidence that the London firm of Thomas Corby and Company responded to the failure of Shepard and Hunt of Northampton, Massachusetts, to remit payment for past shipments by threatening to charge interest on debts running more than twelve months. (Clark never noted whether the penalty was actually imposed.) Clark claimed that merchants exacted higher prices for credit than for cash transactions but offered no evidence that farmers did not similarly reward buyers who offered to pay for crops in cash. In any event, the scarcity of money made such policies largely irrelevant. Clark, *Roots of Rural Capitalism*, 28–38. On the policies of British merchants, see Jacob M. Price, *Capital and Credit in British Overseas Trade: The View from the Chesapeake, 1700–1776* (Cambridge, Mass., 1980), 99–100. For examples of interest charges imposed on long-running debts, see Baxter, *House of Hancock*, 192.

<sup>15</sup> For evidence that such borrowing was increasing during the eighteenth century in rural, as well as urban, sectors of the economy, see Rosen, *Courts and Commerce*, 40–47. Even in bank lending, often the only way to distinguish accommodation notes from commercial paper is to look at who presented them for discount. In the case of commercial paper, the person who presented the note was the endorser; he or she had received the note in payment for goods but had to act as guarantor in order to receive the discount. In the case of accommodation paper, it was the maker of the note (the original debtor) who presented the note and received cash in exchange, the endorser merely acting as a guarantor. See Naomi R. Lamoreaux, *Insider Lending: Banks, Personal Connections, and Economic Development in Industrial New England* (New York, 1994), 2.

<sup>16</sup> See Baxter, “Accounting in Colonial America,” 278–80; and Judith A. McGaw, “Accounting for Innovation: Technological Change and Business Practice in the Berkshire County Paper Industry,” *Technology and Culture*, 26 (Oct. 1985), 711–15. It is likely that more merchants than farmers used double-entry methods. Rothenberg found only one example of double-entry bookkeeping among the farmers’ account books she collected. On the other hand, Matthew Roth has told me that all of the more than fifty account books from farmers, merchants, and manufacturers that he examined for 1790–1850 used crude double-entry methods. The Du Pont Company switched from single- to double-entry methods when a man with some bookkeeping knowledge joined the firm. Rothenberg, *From Market-Places to a Market Economy*, 57–78; Johnson, *Early Record Keeping in the Du Pont Company*, 21–23.

for the years 1755 to 1770 show that the proprietor, Gideon Woodwell, failed to record all the enterprise's transactions and added up the entries he did make incorrectly.<sup>17</sup>

Even if merchants and manufacturers had accurately maintained their account books and used double-entry methods, they still could not readily have extracted from the books the data necessary to calculate the profitability of their enterprises. To begin with, as Sidney Pollard long ago demonstrated, contemporary practice did not clearly distinguish between capital and profits. Although partnership agreements might require a firm to evaluate each member's share in the enterprise from time to time, the most common method was to balance the books and calculate the firm's net worth. Each partner would then be credited with the appropriate share of the total. Such a calculation, however, inevitably confounded profits with capital and therefore could not be used to calculate a rate of return. In theory, of course, an estimate of net profits could be obtained by comparing a firm's net worth with the equivalent figure obtained at the last reckoning, but according to Pollard, such comparisons were rarely made.<sup>18</sup> Moreover, calculating a rate of return also required an accurate measure of capital invested, something that this method was unable to yield. Nor was there any other way to get a good sense of the value of a firm's capital. Initial capitalization provided only a poor guide because earnings were subsequently plowed back into the enterprise and the resulting repairs, replacements, and improvements to buildings and machinery were typically recorded as current operating expenses rather than being charged to capital. To make matters worse, firms rarely made any formal allowance for the depreciation of their plant and equipment.<sup>19</sup>

There is, in fact, little evidence that merchants and manufacturers were much interested in using their account books to figure their rate of return or even the magnitude of their profits. Although contemporary accounting textbooks recommended that firms balance their books once a month, it was rare for businesses to do so even once a year. Indeed, extant records indicate that many businesses closed their books only when they ran out of space in one ledger and had to transfer accounts to a new book or, in the case of partnerships, when they had to settle the partners' accounts.<sup>20</sup> Baxter observed that merchants generally did not rule off their ledgers, a lapse he took as evidence that they did not balance their accounts informally on scraps of paper that have

<sup>17</sup> Baxter, "Accounting in Colonial America," 279; Anthony J. Gambino and John R. Palmer, *Management Accounting in Colonial America* (New York, 1976), 9–10, 19, 21. See also Stuart Bruchey, "Success and Failure Factors: American Merchants in Foreign Trade in the Eighteenth and Early Nineteenth Centuries," *Business History Review*, 32 (Autumn 1958), 276–79; and Remer, *Printers and Men of Capital*, 102–3. On contemporary English practice, see Sidney Pollard, "Capital Accounting in the Industrial Revolution," in *Contemporary Studies in the Evolution of Accounting Thought*, ed. Michael Chatfield (Belmont, 1968), 113–34.

<sup>18</sup> Pollard, "Capital Accounting in the Industrial Revolution." To calculate the change in net worth, one would have to revalue the firm's assets at current prices, a step that also was rarely taken. B. S. Yamey, "Scientific Book-keeping and the Rise of Capitalism," *Economic History Review*, 1 (nos. 2–3, 1949), 108.

<sup>19</sup> Pollard, "Capital Accounting in the Industrial Revolution"; McGaw, "Accounting for Innovation"; Richard P. Brief, *Nineteenth Century Capital Accounting and Business Investment* (New York, 1976). The Du Pont accounts that Roxanne Therese Johnson studied included a one-time-only allowance for depreciation—after an explosion destroyed part of the plant. Johnson, *Early Record Keeping in the Du Pont Company*, 72.

<sup>20</sup> The Du Ponts' partnership agreement required that the firm balance its accounts annually, but the firm closed its books only seven times over the period 1800 to 1818. Johnson, *Early Record Keeping in the Du Pont Company*, 72–73.



not survived. Moreover, as B. S. Yamey has shown, what business people called their “profit-and-loss account” commonly functioned as a catchall category that “served the purpose, at balancing time, of collecting all account balances not required in the new ledger.” In addition to gains and losses on business transactions, it might include “entries for money received as dowries, money lost (or won) in lotteries, household expenses, and personal drawings,” that is, withdrawals for personal use.<sup>21</sup>

Following the logic of the moral-economy historians, one might infer from this evidence that merchants and manufacturers were not interested in profits in the late eighteenth and early nineteenth centuries. That such an inference would be wrong can be seen by analyzing the statements that manufacturers submitted in response to the survey Secretary of the Treasury Louis McLane conducted during the 1830s on the extent and profitability of domestic manufacturing. As one might expect from the preceding analysis, the responses indicated that manufacturers, even in the most advanced industries, generally kept very poor accounts. For example, David Anthony, a cotton manufacturer from Fall River, Massachusetts, was asked to collect information from factory owners in his community. He submitted brief statements from six manufacturers, including himself, explaining that he had pressed the others but found that “they are unable to state any thing very definite.”

Very few of them have kept an expense account, for repairs, &c., and which has come out of the profits, and some new machines have been placed in lieu of old ones, alterations have been made to old machines; and without knowing the value of their machinery, they are unable to make an account of profit and loss.<sup>22</sup>

Similarly, of the 39 (out of a total of more than 250) manufacturers in nearby Rhode Island who sent in written answers, 15 failed to provide information about their rate of return (2 because they had recently started operations); another 4 stated explicitly they were unable to answer the question because their accounting practices did not permit such a calculation to be made. Thus Harris and Green, agents for the Green Manufacturing Company in Warwick, Rhode Island, wrote, “It would be very difficult for us to tell [our rate of profit] with any degree of accuracy, having begun with a small capital and expended our profits as fast as accumulated, and have no expense account of our buildings, &c.” The remaining 20 respondents gave widely

<sup>21</sup> Baxter, “Accounting in Colonial America,” 280–81; Yamey, “Scientific Bookkeeping and the Rise of Capitalism,” 109. See also McGaw, “Accounting for Innovation,” 713, 724. Another factor that made it difficult for firms to calculate profits and rates of return on investment was the intermixing of family and business transactions in their accounts. Proprietors withdrew earnings from their enterprises to pay for household expenses, and those payments were often recorded in the same books as expenditures for raw materials and labor. Even partnerships might follow this practice, though it made the members’ shares more difficult to figure. As late as 1857, for example, a Baltimore partnership agreement specified that “All Expenses of said Copartnership business including the rent, repairs, taxes and interest afore said, and all the family Expenses of said parties hereto are to be paid from the profits thereof, and then the balance of the profits of Said Copartnership business is to be divided equally between” the two men. “Article of Copartnership between Horace Abbott and John S. Gilman,” March 30, 1857, Horace Abbott Papers (Massachusetts Historical Society, Boston). Some partnership agreements explicitly limited the amount that each member of the firm was allowed to withdraw for personal and family expenses. For an example, see Kenneth Wiggins Porter, *The Jacksons and the Lees: Two Generations of Massachusetts Merchants, 1765–1844* (2 vols., Cambridge, Mass., 1937), I, 162.

<sup>22</sup> Louis McLane, *Documents Relative to the Manufactures in the United States* (2 vols., 1833; New York, 1969), I, 69–73, esp. 73. (This work is often listed as the McLane report.) For similar comments about other Massachusetts producers, see *ibid.*, I, 76, 80.

varying answers that ranged from negative returns to an annual rate of profit of 15 percent. These figures seem generally to have been estimates and were often qualified with words such as “about,” “less than,” “over,” and “will not exceed.” Moreover, there was considerable variation from one firm to the next in the method of estimation. Some made at least rough allowances for such costs as interest, insurance, and wear and tear on machinery; others apparently did not.<sup>23</sup>

Nonetheless, despite the generally primitive state of manufacturers’ accounts and their lack of consensus about how to figure a rate of return, it is evident that producers cared deeply about the magnitude of their earnings. Their replies to Secretary McLane’s inquiries were filled with passionate arguments in favor of maintaining protective duties on their products. More important, their replies contain abundant evidence that they attempted to improve the profitability of their enterprises by shifting to more profitable grades of output, investing in more efficient machinery, and expanding the scale of production. It is clear from their answers, furthermore, that manufacturers had an approximate idea of the relative contributions of labor, raw materials, and machinery to the cost of production, that they recognized that labor costs not only loomed large in total costs but were a major source of competitive disadvantage, and that they were taking steps to reduce production costs, especially their wage bill. Indeed, scholars who have made quantitative analyses of the McLane report and other manufacturing censuses from the first half of the nineteenth century have found that a broad range of manufacturers were implementing changes that significantly raised their productivity.<sup>24</sup>

The important lesson to draw from the responses, therefore, is that the primitive state of accounting practices at the time does not tell us much about the aspirations of the business people keeping the accounts. Just because merchants and manufacturers, as Baxter put it, “apparently felt that profit figures were not worth their keep” does not mean that they did not pursue strategies to increase the profitability of their enterprises. For similar reasons, we should be careful about the inferences we draw from the account books of farmers. Clark’s observation that farmers’ “accounting practices were devoted to keeping track of local debts and credits, not to calculating profits,” does not in fact tell us much about their attitudes toward making money.<sup>25</sup>

<sup>23</sup> *Ibid.*, esp. I, 942. Louis McLane gave Samuel Slater responsibility for collecting and compiling the information for Rhode Island. There is no way of knowing whether the respondents who provided no information on their rate of return did so because they lacked the information or because they thought it should be kept private. Nor can we make any inferences about manufacturers who failed to return the questionnaires. The Massachusetts section of the McLane report contained the quantitative parts of the manufacturers’ returns but very few of the written responses to the questionnaire. The returns for Pennsylvania were very similar to those for Rhode Island, except that proportionately about twice as many firms who submitted written responses failed to answer the questions about rate of return. A few firms gave a dollar figure for profits rather than a rate.

<sup>24</sup> See, especially, Kenneth L. Sokoloff, “Productivity Growth in Manufacturing during Early Industrialization: Evidence from the American Northeast, 1820–1860,” in *Long-Term Factors in American Economic Growth*, ed. Stanley L. Engerman and Robert E. Gallman (Chicago, 1986), 679–729; and Kenneth L. Sokoloff, “Was the Transition from the Artisanal Shop to the Nonmechanized Factory Associated with Gains in Efficiency? Evidence from the U.S. Manufacturing Censuses of 1820 and 1850,” *Explorations in Economic History*, 21 (Oct. 1984), 351–82. There is also evidence that accounting practices improved as manufacturers recognized the need for better information to guide their decisions. See Remer, *Printers and Men of Capital*, 103–4; McGaw, “Accounting for Innovation,” 713–14.

<sup>25</sup> Baxter, “Accounting in Colonial America,” 280; Christopher Clark, “Rural America and the Transition to Capitalism,” *Journal of the Early Republic*, 16 (Summer 1996), 227.

## Evidence on Family and Community

Of course, the moral-economy historians did not rely solely on account books for their assertions about farmers' values; they also looked at other aspects of their behavior. For example, in "Families and Farms: *Mentalité* in Pre-Industrial America," Henretta argued that concern for family welfare "shaped the character—and often confined the scope—of entrepreneurial activity and capitalist enterprise." He was writing about farmers here, but much the same claim could be made for early American merchants and manufacturers. Thus Kenneth Wiggins Porter observed that "a conspicuous feature" of business during the late eighteenth and early nineteenth centuries was "the dominating influence of family relationships." Merchants and manufacturers hired members of their own kinship groups as apprentices, employees, and clerks, gave them priority in business dealings, and took them in as partners after they gained experience. More important, they seem to have felt bound to give preference to family members even when doing so contravened their own interests. In overseas trade, for example, merchants often put their own agents, or supercargoes, on ships to oversee the commercial aspects of a voyage. Those positions seem to have been "specially reserved for relatives in need of employment." Thus the Boston merchant Henry Lee rebuffed a nonrelative who applied for such a job on the grounds that "I have several near relations who are in want, and whom I should be obliged to prefer." Yet at least some of the supercargoes hired for family reasons turned out to be disasters. Another Boston merchant, P. T. Jackson, thought his cousin had performed so poorly on a voyage to Madras as to ruin the entire venture. Henry Lee blamed his 1811 business failure on his cousin's poor performance: "it is impossible for you to imagine how totally he . . . wasted the property entrusted to his charge."<sup>26</sup>

Despite the damage wrought by incompetent relatives, it was difficult for merchants of this period to bypass kin and transact with people outside the family. To avoid complaints, Joseph Lee Jr. felt compelled in 1802 to discontinue trading with the New York merchant Andrew Smith after a "near relation" decided to establish himself in that city. As he explained to Smith, the change "makes it impossible for me to make any engagement as was proposed"; otherwise "I should have been a little embarrass'd by the circumstance, for I must have given him a reason for not endeavouring to benefit him." Henry Lee attempted to resist familial pressure in 1817 to trade through relatives in Philadelphia on the grounds that "I have made sacrifices en<sup>o</sup> in that way, & have no mind to be ruin'd a second time for the pleasure of serving my Cousins." Ultimately, however, he gave in.<sup>27</sup>

<sup>26</sup> Henretta, "Families and Farms," 26; Porter, *Jacksons and the Lees*, I, 88–92. Family relations had similar importance in the early textile industry; when Slater delegated authority over his factories, "it was to men he had chosen on the basis of friendship or kinship rather than ability." See Barbara M. Tucker, *Samuel Slater and the Origins of the American Textile Industry, 1790–1860* (Ithaca, 1984), 50–57, 103–7.

<sup>27</sup> Joseph Lee Jr. to Andrew Smith, Jan. 19, 1802, in *Jacksons and the Lees*, by Porter, I, 516. See also *ibid.*, I, 94. When merchants were forced by circumstances to form businesses with nonfamily members, the resulting lack of trust could threaten the profitability of the enterprise. See, for example, Tucker's account of Slater's difficult partnership with Moses Brown and Brown's son-in-law William Almy. Tucker, *Samuel Slater and the Origins of the American Textile Industry*, 47–64.

Early American businessmen felt bound not only to hire and do business with relatives but to endorse their debts as well. As a result, they sometimes got themselves into serious financial difficulties. Samuel Slater, a founder of the New England textile industry, was brought to the brink of ruin by notes totaling \$300,000 that he had endorsed for his brother-in-law and a close friend. When the two men failed in 1829, responsibility for the debts devolved on Slater, who only survived the crisis by selling off some of his factory holdings. Similarly, the Rhode Island textile manufacturer Isaac P. Hazard lost \$140,000 as a result of notes he had endorsed for his cousin when the latter's textile business failed in 1863.<sup>28</sup>

Like farmers, merchants and manufacturers were also constrained in their drive for profits by the communities in which they lived and worked. Rosalind Remer has portrayed the networks of credit and debt that linked early American publishers with their suppliers and customers much as Clark described those of farmers—as “organic” relationships in which both debtors and creditors owed each other reciprocal obligations and in which creditors hesitated to call in debts.<sup>29</sup> Clark, in contrast, has argued that merchants and manufacturers, though not insensitive to community feeling, were more likely than farmers to put unpaid debts into suit. Research by Thomas Stuart Allen indicates otherwise. Allen counted the number of debt cases brought by farmers, artisans, merchants, and gentlemen in Rhode Island during the 1780s. He found that, in the state as a whole, farmers and artisans took more debt cases to court than did merchants and gentlemen, accounting for 60 percent of the total. In rural Washington County they accounted for 71 percent of the complaints; in Newport and Providence counties, where the state's major ports were located, they accounted for 50 and 55 percent respectively. There are, of course, different ways to look at those numbers. If we compare them to each occupation's percentage of the state's population, farmers turn out to be somewhat underrepresented as plaintiffs. But Allen's numbers indicate that, in the state as a whole, farmers and artisans were slightly more than twice as likely to be sued by members of those same groups as they were by merchants or gentlemen. It is interesting to note, moreover, that there were many fewer debt cases over the course of the decade in commercial Newport County (113) than in agricultural Washington County (237).<sup>30</sup>

<sup>28</sup> Tucker, *Samuel Slater and the Origins of the American Textile Industry*, 107–9; Lamoreaux, *Insider Lending*, 27.

<sup>29</sup> Remer, *Printers and Men of Capital*, 105. As Rosen has pointed out, forbearance was regarded as good business practice, especially when debtors from one's own community were involved. See Rosen, *Courts and Commerce*, 47–51.

<sup>30</sup> Providence County had many cases, but it encompassed the rural northern half of the state as well as the city of Providence. Ideally, one would compare the ratio of plaintiffs to the total number of lenders for each occupational group, but the latter figure is unobtainable. Thomas Stuart Allen, “Commerce, Credit, and Community: The Transformation of Economic Relationships in Rhode Island, 1771–1850” (Ph.D. diss., Brown University, 1994), 101–2. To make his general point that suits were most likely to be instituted against people who resided in other communities, Clark analyzed debt cases for sample periods across the first six decades of the nineteenth century. He presented occupational breakdowns only for 1804–1809, when 44 percent of the plaintiffs were merchants and 23 percent gentlemen. Yet according to his narrative, during major crises the proportion of suits involving members of the same community increased sharply, raising the possibility that the proportion initiated by farmers also increased. See Clark, *Roots of Rural Capitalism*, 37–38, 46, 124–27, 166–67, 199–202, 225.

The relatively small number of debt cases in commercial areas such as Newport is itself worthy of note. Merchants had long been in the habit of turning to respected colleagues to settle disputes without the delay and expense associated with court cases; Quakers in particular relied on this method. During the last half of the eighteenth century, these practices attained new levels of organization as merchants in all the major port cities formed themselves into chambers of commerce that, among other things, provided arbitration services to settle contract disputes. Although arbitrators' decisions did not have the force of law behind them, they did have the force of the mercantile community. Merchants felt compelled to comply, even if they disagreed with the decisions, because ignoring the considered judgment of their peers would have damaged their reputations and consequently their ability to conduct business. Hence in 1804 the Philadelphia merchant Thomas Cope obeyed an order to pay one James Robinson \$325, even though he thought Robinson was a fraud and scoundrel who excelled "in the dextrous management of" arbitrators' sensibilities.<sup>31</sup>

As Morton J. Horwitz has shown, such informal institutions lost ground to the courts during the early nineteenth century. Even so, the norms of the mercantile community continued to play a powerful role in the conduct of trade and often found their way into judicial decisions. For example, in a whaling case in 1821, a Massachusetts appeals court displayed its willingness to enforce long-standing customs governing "mateship," an agreement that captains of whaling vessels sometimes entered into in order mutually to reduce their risk of returning home without oil. Over the years, an elaborate set of unwritten rules had grown up that defined the terms of such contracts—rules to which the court was willing to force parties to adhere, even though they were largely informal.<sup>32</sup>

That such practices could emerge over time and gain widespread and unambiguous acceptance is itself evidence that early American businessmen formed themselves into communities that regulated economic activity. In addition, there are abundant indications that members of these communities engaged in many other types of cooperative behavior. Just as farmers helped each other at barn raisings or at harvest-time, manufacturers often exchanged tools and skilled personnel needed to repair equipment and rushed to each other's assistance whenever fire or other disasters threatened. Merchants banded together to insure each other against the risk of losing ships at sea; manufacturers similarly organized themselves into mutual aid associations to protect each other from the financial consequences of fire. Book publishers

<sup>31</sup> Earl S. Wolaver, "The Historical Background of Commercial Arbitration," *University of Pennsylvania Law Review*, 83 (Dec. 1934), 132–46; "Early American Arbitration," *Arbitration Journal*, 1 (Spring 1946), 51–54; George S. Odiorne, "Arbitration and Mediation among Early Quakers," *ibid.*, 9 (no. 3, 1954), 161–66; Eliza Cope Harrison, ed., *Philadelphia Merchant: The Diary of Thomas P. Cope, 1800–1851* (South Bend, 1978), 151–52.

<sup>32</sup> Morton J. Horwitz, *The Transformation of American Law, 1780–1860* (Cambridge, Mass., 1977), 145–54. The mateship rules specified: "If the vessels cruise together, they divide equally the oil obtained by both, before they separate; or if they cruise separately, upon their first meeting afterwards they make an equal division, by the delivery of oil from the ship which has taken most to the ship which has taken least. If the vessels are then not full, they proceed again upon their business, either upon a new contract of mateship, or each acting independently. If the vessels, after an agreement to mate, accidentally separate, and do not meet again until the voyage is finished, neither can claim of the other, if either returns filled with oil. But when they do meet abroad after such mateship, the settlement and division of oil take place immediately, unless one has filled." *Baxter v. Rodman*, 3 Pick. 435 (1826).

developed their own peculiar form of mutual insurance: they bought shares in each other's publishing ventures, committing themselves in advance to purchase of copies of their colleagues' books, thus spreading the risk of unsold inventories.<sup>33</sup>

Early American businessmen also shared information with each other. As Stuart Bruchey has pointed out, merchants were dependent on colleagues in other parts of the world for data regarding market conditions. Although their primary sources of news were other traders (often relatives) with whom they were formally allied, they might exchange information with competitors as well. Thus in 1807 the Baltimore merchant Robert Oliver arranged with an English house "giving him keen competition in trade to Vera Cruz" to exchange data on the number and value of their shipments as well as market conditions generally. Judith McGaw has shown that paper manufacturers in the Berkshire region of Massachusetts provided each other with much highly specialized information about machinery, including which equipment to buy and how to modify it to meet specific production needs. So vital to the success of their enterprises was this exchange of information that she coined the phrase "mutually made men" to counter the myth that industrial development was the work of individually oriented self-made men. Textile producers similarly shared technological information and ultimately formalized the exchanges by presenting technical papers to each other at trade association meetings. Finally, Anthony F. C. Wallace has portrayed the men who built the machines of the industrial revolution as belonging to overlapping networks or fraternities of "mechanicians," whose members visited each other's shops to exchange information about new technological developments and gain assistance in solving knotty mechanical problems.<sup>34</sup>

### Beyond Textbook Economics

The point of this extended discussion is not to argue that early American farmers were capitalists. Nor is it to claim that early American merchants and manufacturers were not. We are forced to such conclusions only if we accept the following reasoning: capitalists are rational economic men; rational economic men maximize profits; men who are capitalists maximize profits; men who do not maximize profits are not capitalists. The problem is that the view of "rational economic man" underpinning this logic is a misapplication of elementary textbook economics. Although standard neoclassical theory treats *firms* as profit-maximizing entities, it holds that *individuals*

<sup>33</sup> Wallace, *Rockdale*, 48–50, 151; Matthew W. Roth, *Platt Brothers and Company: Small Business in American Manufacturing* (Hanover, 1994), 50–82; Peter J. Coleman, *The Transformation of Rhode Island, 1790–1860* (Providence, 1963), 208–9, 213–15; William J. Fowler Jr., "Marine Insurance in Boston: The Early Years of the Boston Marine Insurance Company, 1799–1807," in *Entrepreneurs: The Boston Business Community, 1700–1850*, ed. Conrad Edick Wright and Kathryn P. Viens (Boston, 1997), 151–63; Remer, *Printers and Men of Capital*, 55.

<sup>34</sup> Bruchey, "Success and Failure Factors," 279–80; Judith A. McGaw, *Most Wonderful Machine: Mechanization and Social Change in Berkshire Paper Making, 1801–1885* (Princeton, 1987), 117–57; Roth, *Platt Brothers*, 9; Rick Greenwood, "Scientific Engineering and Useful Improvements: The Manufacturing Career of Zachariah Allen" (Ph.D. diss., Brown University, 1996), 145–92; Paul F. McGouldrick, *New England Textiles in the Nineteenth Century: Profits and Investment* (Cambridge, Mass., 1968), 210; Wallace, *Rockdale*, 211–39; Nathan Rosenberg, "Technological Change in the Machine Tool Industry, 1840–1910," *Journal of Economic History*, 23 (Dec. 1963), 414–43. On the technological backwardness that could result from lack of access to such networks, see Merritt Roe Smith, *Harpers Ferry Armory and the New Technology: The Challenge of Change* (Ithaca, 1977).

maximize utility—not profits or income or wealth or any other purely economic magnitude. Thus Henretta's description of farmers as persons for whom "the maximization of profit was less important . . . than the meeting of household needs and the maintaining of social relationships within the community" is perfectly consistent with neoclassical theory; it is also the kind of statement that economists might make about any economic actor.<sup>35</sup> Whether an individual will choose to sacrifice income for the sake of relatives or members of the community depends on that individual's preferences. Moreover, it is possible to conceptualize preferences as structured by cultural norms. Indeed, it is precisely when preferences become culturally embedded that they are most likely to be economically salient. An individual producer whose idiosyncratic tastes result in decisions that raise his or her manufacturing costs above those of competitors may be forced out of business. If all producers share similar cost-increasing values, however, the problem disappears.<sup>36</sup>

Similarly, there is no necessary contradiction in the standard theory between profit maximization and the cooperative behavior that moral-economy historians attributed to farmers. Indeed, in a perfectly competitive world, firms in the same industry do not regard each other as rivals. Firms are small relative to the market; prices are set by the intersection of supply and demand; and, as a result, no single firm's decisions can affect the profitability of any other firm. Agriculture, with its long history of organized cooperation as well as informal mutual assistance, is of course the classic textbook illustration, but there were substantial segments of the early-nineteenth-century manufacturing sector (cotton textiles is a good example) where large numbers of small firms faced prices that were essentially given by the market. In such industries, as in farming, producers often thought of themselves as united by similar interests. Hence it is not surprising that they often cooperated with each other to better their common circumstances.

The more important point, however, is that over the last quarter century economic theory has moved beyond simple models based on perfect information and perfect competition. Indeed, at about the time when Merrill, Clark, and Henretta were firing their opening salvos, an influential group of theorists was beginning a major assault on the standard neoclassical theory of the firm. One of the first points to be challenged was the idea that firms necessarily maximize profits. As Michael C.

<sup>35</sup> Henretta, "Families and Farms," 16. On this point, see Winifred B. Rothenberg, "The Bound Prometheus," *Reviews in American History*, 15 (Dec. 1987), 633; and Stanley L. Engerman and Robert E. Gallman, "The Emergence of a Market Economy before 1860," in *A Companion to 19th-Century America*, ed. William L. Barney (Malden, 2001), 121–38. Allan Kulikoff acknowledged the distinction between profit and utility maximization, noting "the need to look beyond the obvious utility-maximizing behavior . . . of farmers to the familial goals that lay behind this behavior." One can only wish that he had pointed to the same need in studies of merchants and manufacturers. Kulikoff, "Transition to Capitalism in Rural America," 129.

<sup>36</sup> A good example is racial discrimination in hiring. Although racism typically raises labor costs, it nonetheless persists where all employers share racist values or where racist employees can penalize any employer who attempts to break ranks. See, for examples, Thomas N. Maloney and Warren Whatley, "Making the Effort: The Contours of Racial Discrimination in Detroit's Labor Markets, 1920–1940," *Journal of Economic History*, 55 (Sept. 1995), 465–93; and Richard J. Butler, James J. Heckman, and Brook Payner, "The Impact of the Economy and the State on the Economic Status of Blacks: A Study of South Carolina," in *Markets in History: Economic Studies of the Past*, ed. David W. Galenson (New York, 1989), 231–346. For a theoretical discussion of the role of culture in structuring preferences, see George A. Akerlof and Rachel E. Kranton, "Economics and Identity," 1998 (in Naomi R. Lamoreaux's possession).

Jensen and William H. Meckling pointed out, in the absence of perfect competition that idea was incompatible with the assumption that individuals maximize utility. If a business's owner and manager are one and the same, the owner will make decisions not only on the basis of profit but also "on the utility generated by various non-pecuniary aspects of his entrepreneurial activities such as the physical appointments of the office, . . . the kind and amount of charitable contributions, personal relations ('love', 'respect', etc.) with employees, . . . purchase of production inputs from friends, etc." This divergence from pure profit maximization is likely to be even greater where the manager's ownership stake is small or nonexistent, because the manager will "then bear only a fraction of the costs of any non-pecuniary benefits he takes out in maximizing his own utility." If owners have perfect information about what managers are doing, they can, of course, fire managers who pursue their own interests at the owners' expense. But in the real world, owners have far from perfect information.<sup>37</sup>

Jensen and Meckling's article was only one in a series of contributions in which economists gave up the unrealistic but tractable assumption of perfect information and began to reconceptualize the world as a place where information is scarce, imperfect, and costly, and where as a result human beings can be only "boundedly rational."<sup>38</sup> Because economic actors have only imperfect information to guide their behavior and because the information they possess is often asymmetric—that is, people know more about their own attributes and actions than they know about those of the people with whom they interact—they face difficult contracting problems that raise the costs of transacting. In particular, under conditions of imperfect information, economic actors can take advantage of one another when they exchange goods or services—can extract more income from a transaction than they would receive if each had the same information. Because the fear that one party might exploit his or her informational advantage could severely limit the scope of exchange, or even prevent people from entering into otherwise mutually advantageous economic relationships, economists have devoted considerable attention to identifying ways economic activity can be organized to mitigate such problems. They have also explored how the institutional context facilitates or inhibits such efforts. Following Douglass C. North, they define institutions broadly to include not only formal rules (such as laws) and the procedures used to enforce them (regulations) but also moral and ethical norms.<sup>39</sup>

In recent years, for example, economic theorists have shown great interest in understanding how family and kinship relationships can structure economic activ-

<sup>37</sup> Michael C. Jensen and William H. Meckling, "Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure," *Journal of Financial Economics*, 3 (Oct. 1976), 305–60, esp. 312.

<sup>38</sup> The literature is enormous, but see, by way of introduction, Daniel M. G. Raff and Peter Temin, "Business History and Recent Economic Theory: Imperfect Information, Incentives, and the Internal Organization of Firms," in *Inside the Business Enterprise: Historical Perspectives on the Use of Information*, ed. Peter Temin (Chicago, 1991), 7–35. See also Naomi R. Lamoreaux and Daniel M. G. Raff, "Introduction: History and Theory in Search of One Another," in *Coordination and Information: Historical Perspectives on the Organization of Enterprise*, ed. Naomi R. Lamoreaux and Daniel M. G. Raff (Chicago, 1995), 1–9; and Naomi R. Lamoreaux, Daniel M. G. Raff, and Peter Temin, "Introduction," in *Learning by Doing in Firms, Markets, and Countries*, ed. Naomi R. Lamoreaux, Daniel M. G. Raff, and Peter Temin (Chicago, 1999), 1–17.

<sup>39</sup> See Douglass C. North, *Structure and Change in Economic History* (New York, 1981); Oliver E. Williamson, *The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting* (New York, 1985); and Thráinn Eggertsson, *Economic Behavior and Institutions* (New York, 1990).



ity—particularly the incentives they offer individuals to elicit desired behavior and the protections they afford against those who might otherwise be tempted to exploit informational asymmetries. As Robert A. Pollak has pointed out, “the advantages of the family as a governance structure for organizing particular activities flow from its ability to integrate those activities with preexisting, ongoing, significant personal relationships.” The affection and loyalty that family members often feel for each other can constrain opportunistic behavior. To the extent that they do not, the intermixture of personal and economic relationships that characterizes family enterprise makes destructive behavior easier to detect. Moreover, families command “rewards and sanctions not open to other institutions,” because of both their bonds of affection and their control over access to economic resources. Thus “severe misconduct involves not simply the risk of dismissal from a job but also the risk of ostracism or expulsion from the family, a penalty drastic enough that it is likely to be an effective deterrent to serious malfeasance.”<sup>40</sup>

Family organization also entails disadvantages, however. For example, families may generate emotional conflicts that can spill over and damage business operations. Moreover, a family’s particular mix of talents and abilities may not mesh well with the needs of its business. Hence the extent to which family relationships are used to structure business activities depends on whether those and other disadvantages are outweighed by the advantages, which in turn depends on the social and economic context within which the business is operating. In general, one would expect families to play an important role in contexts where the quantity and quality of information available about associates’ activities were poor and where other enforcement mechanisms were either weak or unavailable. Thus Kenneth Wiggins Porter has argued that a merchant engaged in overseas trade during the early republic “may have preferred an occasional loss, due to the indolence or inexperience of a relative, to the danger of deliberate pillaging by an agent whose greater ability might find improper expression and who would not be inhibited by the fear of family ostracism which might check the potential dishonesty of one belonging to the principal’s kinship group.”<sup>41</sup>

Other kinds of close personal ties, such as those of religion or community, can similarly restrain opportunistic behavior. But economic actors can also create new kinds of associations to solve the problems they face. In his study of blast furnace owners in mid-nineteenth-century Britain, the economist Robert C. Allen showed how manufacturers fostered an ethic of “collective invention” to reduce their risk of failure. This was a period of rapid technological change, and iron manufacturers sought to lower their production costs by building larger, hotter furnaces. Although manufacturers with more efficient furnaces had important competitive advantages, producers nonetheless shared a great deal of technological information about furnace design. Allen modeled this willingness to exchange performance data by making ana-

<sup>40</sup> Robert A. Pollak, “A Transaction Cost Approach to Families and Households,” *Journal of Economic Literature*, 23 (June 1985), 581–608, esp. 585–86. See also Yoram Ben-Porath, “The F-Connection: Families, Friends, and Firms and the Organization of Exchange,” *Population and Development Review*, 6 (March 1980), 1–30.

<sup>41</sup> Pollak, “Transaction Cost Approach to Families and Households,” 593–94; Porter, *Jacksons and the Lees*, I, 92, 97–98, esp. 92.

lytical use of the concept of uncertainty. As he pointed out, “One might naïvely regard a blast furnace as a deterministic chemical system,” but in actuality its behavior has a large random component. Because many aspects of a furnace’s design (including the shape of its interior, the placement of the openings for the air blasts, and the amount of scaffolding) affected its performance, there was no predictable, systematic relationship between the dimensions of a furnace and its efficiency. Blast furnaces were such expensive items of capital equipment that a wrong technological decision had enormous consequences for the survival of a firm. A manufacturer undertaking to build a furnace could make an educated guess about the effect on efficiency of any particular combination of features only if he was able to draw on a broad range of past experiences, yet each individual producer built at most a very small number of furnaces over the course of his career. The obvious solution was to share information. Furnace owners could, and did, reduce their risks of making bad investment decisions by providing each other with detailed data on the design and performance of each new plant they built.<sup>42</sup>

Although McGaw framed her study differently, her analysis of early-nineteenth-century Berkshire papermakers is perfectly consistent with Allen’s model. Like Allen, McGaw emphasized the uncertainty that producers confronted when making new investments, describing the “men who mechanized Berkshire paper mills” as having to face “innumerable individual decisions . . . amidst the turbulence of a technologically and economically chaotic era.” Failure rates were high, and choice of the wrong technology could spell disaster for a firm. There were a confusing number and variety of machines on the market, and producers found it difficult to know in advance which devices were best suited to their particular mixes of materials and types of output. As British iron manufacturers did, papermakers solved this problem by sharing information. Thus when Byron Weston found himself unable in 1867 to choose among the various paper cutters on the market he consulted another manufacturer, R. W. Wilson, for advice. Wilson willingly provided Weston with an explanation of his own preferences but also advised him to visit additional mills in the area: “I think I would see the different cutters and you could then tell better what to do.”<sup>43</sup>

McGaw added another dimension to Allen’s approach by emphasizing the importance of family connections. Although all papermakers with technical experience in the industry could participate somewhat in the networks, she found that the flows of information were densest among papermakers linked by ties of kinship. Thus firms in which at least one partner had paper mill experience were significantly more likely to survive in business at least ten years than those that lacked such a partner, but firms that had both an experienced partner and one with relatives in the industry were even more likely to survive.<sup>44</sup>

The importance of family can also be seen in the information exchanges among machine builders during the early nineteenth century. On the one hand, those

<sup>42</sup> Robert C. Allen, “Collective Invention,” *Journal of Economic Behavior and Organization*, 4 (March 1983), 1–24, esp. 12.

<sup>43</sup> McGaw, *Most Wonderful Machine*, 117, 171.

<sup>44</sup> *Ibid.*, 127–47, esp. tables 5.1 and 5.2.

exchanges (like those of furnace owners and papermakers) had a rational basis. A mechanic who worked in isolation would probably be much less productive than one who swapped information with colleagues because he would be forced to solve each technical difficulty he encountered on his own. Because many of the machines of the industrial revolution were based on similar principles, mechanics who could visit each other's shops and trade ideas had a pronounced advantage. Such sharing posed risks for inventors—particularly the danger that ideas would be stolen before they could be patented—but as Wallace has shown, mechanics nonetheless “did not hesitate to show each other inventions in embryo, trusting their peers to honor their priority and the economic advantage it might mean.” Because the penalties associated with breaking this trust—ouster from the community and loss of access to information—imposed high costs on violators, it can be argued that rational self-interest encouraged adherence to the necessary ethical standards. But the mechanics relied on more than self-interest to enforce community norms; they also “reinforce[d] the solidarity” of their group and helped insure conformity to its rules by binding themselves together with “loosely overlapping networks of marriage and descent.”<sup>45</sup>

### Parsing the Transition to Capitalism

These examples should underscore the problematic nature of the view that strong family and community ties are antithetical to capitalist enterprise. They should also help us guard against a naïvely functionalist view of culture. If merchants and manufacturers were able to overcome problems of imperfect information by transacting as much as possible with relatives, it was only because they had been brought up to treat members of their kinship groups differently from those with whom they were not connected by blood or marriage. In other words, the very possibility of this solution presupposed the primacy of cultural norms.

Yet we also know that cultures evolve under pressure of economic change. Indeed, this idea more than any other lies at the heart of the literature on the transition to capitalism. The moral-economy historians postulated that early American farmers and their households were, to quote Henretta, “enmeshed . . . in a web of social relationships and cultural expectations that inhibited the free play of market forces” but that economic development subjected “these traditional notions . . . to considerable strain.” As farmers became “more deeply embedded in profit-oriented exchange relationships,” their lives came to be “increasingly intertwined in a market system that altered their behavior and values.”<sup>46</sup>

Peter Temin has developed a simple model that can help us think more clearly about the processes that might induce such cultural changes.<sup>47</sup> He began by postulating that human behavior can be classified into three ideal types: the customary mode,

<sup>45</sup> Wallace, *Rockdale*, 216, 220.

<sup>46</sup> Henretta, “Families and Farms,” 19, 29; Henretta, *Origins of American Capitalism*, 260, 269.

<sup>47</sup> Although developed to explain the growth of government regulation in the early twentieth century, the model can also be used to understand the transition to capitalism in the early nineteenth. Peter Temin, *Taking Your Medicine: Drug Regulation in the United States* (Cambridge, Mass., 1980), 162–92.

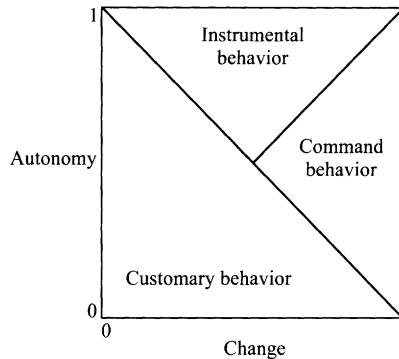


Figure 1 shows how the general level of societal change might interact with an important aspect of personality to shape behavior. At low levels of societal change, all personality types behave customarily, but as the level of change increases, people with more autonomous personalities increasingly behave instrumentally. *Adapted and reprinted by permission of the publisher from Taking Your Medicine: Drug Regulation in the United States by Peter Temin (Cambridge, Mass.: Harvard University Press). Copyright © 1979 by the President and Fellows of Harvard University.*

where people respond to problems according to tradition or past practice; the instrumental mode, essentially the standard neoclassical view of rational decision making; and the command mode, where individuals look to higher authorities for guidance. Temin further postulated that each mode was associated with a particular institutional structure: the customary mode with the community; the instrumental mode with the market, and the command mode with the hierarchy. Temin acknowledged that each type of behavior could occur in each institutional setting, but he suggested that any sustained mismatch between the dominant mode of behavior and the prevailing institutional structure would generate pressure on the latter to evolve. He further proposed that such disequilibria were most likely to be produced by changes in the surrounding environment.

The dynamics of Temin's model can be seen in figure 1. The variable on the vertical axis is a measure of individual personality—how autonomous or how socially oriented a person is. "Autonomous people," according to Temin,

are concerned with their individual position, with their possessions, and with other symbols of achievement. They are relatively unconnected emotionally with other people or with a group. They seek to get ahead, to change, to advance. . . . Social people, by contrast, . . . are concerned with their interpersonal relationships and desire above all to be located within a stable social framework. They are responsive to the needs of the group and even willing to sacrifice their own advancement for the progress of the group.<sup>48</sup>

The variable on the horizontal axis is a measure of the general rate and magnitude of change that society is undergoing. Temin argued that under circumstances of little or no change most people, regardless of their degree of autonomy, will behave customar-

<sup>48</sup> *Ibid.*, 167.

ily. Similarly, in periods of extremely rapid change, most people will look to higher authorities for guidance. In between, however, people of low autonomy will typically behave customarily, while individuals of high autonomy will act instrumentally, with the relative proportions of these two types of behavior generally varying with the rate of change. In his model, then, a rise in the prevailing level of change induces relatively autonomous individuals to behave more instrumentally. As the pace of change continues to increase, more and more individuals make this shift, in turn propelling a shift from communal to market-based institutions.

Temin's model is of course an abstraction, a simplification of reality, and as all models do, it must take some important variables to be exogenous—that is, outside the model. Changes in the exogenous variables then work through the model to cause changes in other variables assumed to be endogenous. In Temin's model, what is endogenous is human behavior. The most important exogenous variable determining how people behave is the general level of contextual change.<sup>49</sup> Thus the model embodies an important claim of the literature on the transition to capitalism: that the world farmers inhabited began to change significantly and rapidly during the late eighteenth and early nineteenth centuries, inducing changes in their behavior in turn. As Clark put it, “Change on the land and in the nonfarm economy together propelled farmers and their households into a new economic world. . . . As farmers became increasingly dependent on outside markets for their livelihoods,” they took steps that “helped bring into existence a rural capitalism in many ways antithetical to their own older values and practices.”<sup>50</sup>

Temin's model has implications that can lead to a better understanding of this period of transition. The first and most obvious is that the shift from customary to instrumental behavior induced by a general increase in the level of societal change should occur first among individuals with the most autonomous personalities. The important question therefore is whether farmers at this time had on average less autonomous personalities than merchants and manufacturers and thus were likely to make the shift toward instrumental behavior less rapidly and less completely than members of the other groups. In other words, should farmers be considered followers in the transition to capitalism, or was Rothenberg correct when she claimed that “the dynamism ran *from agriculture to industry*”?<sup>51</sup>

Although it is difficult to answer that question conclusively, there is plenty of evidence that many farmers responded to the changes of the revolutionary era by actively pursuing new opportunities. Until the late eighteenth century even the “liberal” market-oriented farmers whose activities James T. Lemon detailed in *The Best Poor Man's Country* failed to exploit techniques to improve productivity already in widespread use in England and showed little inclination to specialize in crops that

<sup>49</sup> The other exogenous variable, the distribution of personality types in society, is assumed to change too slowly to drive the shift in behavior. Changes in child-rearing practices in the late eighteenth and early nineteenth centuries may have increased the proportion of the population with relatively autonomous personalities and therefore encouraged a shift toward more instrumental behavior, but any such effect probably operated with a significant lag.

<sup>50</sup> Clark, *Roots of Rural Capitalism*, 273, 320.

<sup>51</sup> Rothenberg, *From Market-Places to a Market Economy*, 243.

could yield higher returns. After the Revolution, however, agricultural productivity rose as farmers throughout the Northeast began to shift their crop mix in response to patterns of demand, institute better rotation schemes, make greater use of fertilizer, and adopt superior livestock breeding practices. Farmers' willingness to experiment with new techniques seems, moreover, to have accelerated during the second decade of the nineteenth century, about the time when manufacturers were similarly trying out productivity-enhancing improvements. Implements whose design had undergone little change for hundreds of years suddenly underwent modifications that dramatically improved their efficiency, and new machines were invented that performed familiar tasks in entirely novel ways. In the case of reaping, Peter D. McClelland writes, "in the brief span of fifteen years not only were many innovations proposed that promptly failed . . . but others destined for success were tried and found to be superior to past practice, recognized as such, and accordingly adopted." For McClelland, the rash of innovations in agricultural implements and machines that occurred during this period was powerful evidence that farmers, as well as merchants and manufacturers, were now systematically asking the question, Is there a better way?<sup>52</sup>

Because opportunities for advancement were comparatively limited in many areas of northeastern agriculture, however, much instrumental behavior inevitably took the form of out-migration—either to richer farm lands farther west or to cities in search of prospects in commerce or industry. Lack of data makes the precise number of migrants difficult to gauge, but Randolph A. Roth has estimated that by the 1830s the net exodus of young men from the agricultural towns of Vermont's Connecticut River valley amounted to about a third of the cohort.<sup>53</sup> We can get at least a general sense of the destinations of those and other migrants from the 1850 census, which recorded each person's state of birth as well as residence. For example, approximately 323,000 people born in the states of Vermont, New Hampshire, and Maine lived outside the state of their birth in 1850. About 27 percent of the migrants resided in Massachusetts and 54 percent outside New England, figures that provide at least rough indicators of the proportions moving to nearby cities versus other agricultural regions.<sup>54</sup> Given the significant resources required to set up a homestead farther west,

<sup>52</sup> There is little disagreement about the basic trends. Lemon, *Best Poor Man's Country*, 150–217; Rothenberg, *From Market-Places to a Market Economy*, 167–74, 214–40; Clark, *Roots of Rural Capitalism*, 71–87; Vickers, *Farmers and Fishermen*, 289–97; Henretta, *Origins of American Capitalism*, 274–78; Peter D. McClelland, *Sowing Modernity: America's First Agricultural Revolution* (Ithaca, 1997), esp. ix, 164; Clarence H. Danhof, *Change in Agriculture: The Northern United States, 1820–1870* (Cambridge, Mass., 1969), 181–250.

<sup>53</sup> Randolph A. Roth, *The Democratic Dilemma: Religion, Reform, and the Social Order in the Connecticut River Valley of Vermont, 1791–1850* (New York, 1987), 127. Lucius M. Boltwood obtained a similar figure for people born in western Massachusetts in the 1780s; see Clark, *Roots of Rural Capitalism*, 63n10. Some of the most successful migrants wrote accounts of their lives. For a particularly vivid example, see Arthur Wallace Peach, ed., "From Tunbridge, Vermont, to London, England: The Journal of James Guild, Peddler, Tinker, Schoolmaster, Portrait Painter, from 1818 to 1824," *Proceedings of the Vermont Historical Society*, 5 (Sept. 1937), 249–314. See also Joyce Appleby, ed., *Recollections of the Early Republic: Selected Autobiographies* (Boston, 1997). The freedom young men of this period felt "to move up and out" marked "the creation of a popular culture of enterprise that supported the elaboration of American capitalism," according to Joyce Appleby, "The Popular Sources of American Capitalism," *Studies in American Political Development*, 9 (Fall 1995), 437–57, esp. 457. See also Joyce Appleby, *Inheriting the Revolution: The First Generation of Americans* (Cambridge, Mass., 2000), 56–89.

<sup>54</sup> Calculated from table 1 in Richard H. Steckel, "The Economic Foundations of East-West Migration during the Nineteenth Century," *Explorations in Economic History*, 20 (Jan. 1983), 14–36, esp. 15–17. The most careful student of migration in and out of Vermont used a boom/bust metaphor: Land-hungry settlers flooded into Ver-

the large numbers moving out of the region make it seem unlikely that farmers were generally more acted upon than acting during this period. It is possible, however, that one consequence of this migration was a relatively smaller proportion of individuals with autonomous personalities in the older farming regions of the Northeast. If so, then this period of transition was likely to result in a growing gulf between the region's rural population and its merchants and manufacturers.

A second important implication of Temin's model is that shifts in behavior are not unidirectional. Just as an increase in the rate of contextual change will cause people to move from customary to instrumental behavior, any slackening will tend to shift behavior back into customary mode.<sup>55</sup> In this case, the least autonomous people will be the ones most likely to be affected first, but again there is no reason to expect the shift to be limited to one occupational group. Although work in business history has long been biased toward study of the most innovative and successful, recent research offers a more complex view. For example, Robert F. Dalzell Jr. has shown that even the Boston merchants who created the Waltham-Lowell system of textile factories do not fit the stereotype of the capitalist entrepreneur. Their instrumental behavior was limited to a brief fifteen-year period following the War of 1812, when they built their initial mill complexes and developed their famous boardinghouse system to attract the labor of young New England women. By the 1830s, however, "a brake seems to have been put on departures of all kinds." "Far from the production of wealth in the usual sense," Dalzell argued, their "goal was the preservation of fortunes already made, positions already won." Although the Boston Associates built additional factories, and although they continued to increase the productivity of their enterprises (in part by managing production more efficiently, in part by "requiring higher levels of output from labor"), they showed little ongoing interest in fundamental innovation. To the contrary, in Dalzell's words, "a team of modern management consultants studying the Waltham-Lowell system would point out that the policies which appear to have governed it are not those generally associated with long-run profit maximization." John N. Ingham observed a similar shift away from instrumentalism among Pittsburgh iron manufacturers by the mid-nineteenth century. After building a prosperous industrial city in an area that had been still largely wilderness in 1750, they settled down to form a "stable, contented, almost smug" local elite whose dominance the innovator Andrew Carnegie would challenge later in the century.<sup>56</sup>

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mont in the decades following the Revolution, benefiting from the appreciation in land values that occurred during this period. The inflow turned into an outflow when better opportunities arose elsewhere, particularly with the building of the Erie Canal across New York State. See Lewis D. Stilwell, "Migration from Vermont (1776–1860)," *Proceedings of the Vermont Historical Society*, 5 (June 1937), 63–245.

<sup>55</sup> From this perspective, the farmers' world that the moral-economy historians describe as existing before the transition to capitalism can be viewed as the outcome of a period of relative stasis following the turbulence of settlement. For examples of instrumental behavior in the early colonial era, see Bernard Bailyn, *The New England Merchants in the Seventeenth Century* (Cambridge, Mass., 1955); Darrett B. Rutman, *Winthrop's Boston: Portrait of a Puritan Town, 1630–1649* (New York, 1965); Richard L. Bushman, *From Puritan to Yankee: Character and the Social Order in Connecticut, 1690–1765* (Cambridge, Mass., 1967); and Stephen Innes, *Labor in a New Land: Economy and Society in Seventeenth-Century Springfield* (Princeton, 1983).

<sup>56</sup> Robert F. Dalzell Jr., *Enterprising Elite: The Boston Associates and the World They Made* (Cambridge, Mass., 1987), 55, 61, 67; John N. Ingham, *Making Iron and Steel: Independent Mills in Pittsburgh, 1820–1920* (Columbus, 1991), 21–47, esp. 47. Such examples are not unique. As the evolutionary economists Richard R. Nelson and

Although it is likely that the general level of change and therefore the number of people behaving instrumentally was higher in the mid-nineteenth century than it had been a hundred years before, these examples suggest that it would be a mistake to conceive of the transition of this period as resulting in a permanent shift from customary to instrumental behavior. Rather, what changed was the content of the behavior considered customary. Institutions were likely to be different as well. The shift toward instrumental behavior that occurs during any period of rapid change, if sustained for a significant time, will force accommodating changes in the institutional structure in the form of a shift from community to market—that is, from a structure in which transactions are predominantly governed by custom to one in which they are mainly governed by price. Of course, a sustained deceleration of the pace of change will cause institutions to move back in the opposite direction, but the previous episode of change is likely to have ongoing permanent effects. In the case of agriculture, for example, one important consequence was that nineteenth-century farmers sold a much greater proportion of their output extralocally, a change that the moral-economy historians have rightly argued increased their vulnerability to changing conditions in distant parts of the world.<sup>57</sup>

A third implication of Temin's model, therefore, is that the communities to which people reverted after a period of significant transformation were likely to be very different from what they had been before. Although it is beyond the scope of this essay to analyze such changes in any detail, some intriguing hints can be obtained by returning to the subject of account books. As we have seen, firms' bookkeeping methods, including their inability to calculate a rate of profit, remained essentially unchanged in the early nineteenth century, but manufacturers did develop ways of keeping closer tabs on their costs, particularly their wage bill. For example, by the 1820s papermakers were recording their daily labor expenses in time books that, unlike their general accounts, were frequently totaled. Textile manufacturers similarly kept daily records of their labor costs. By the 1850s, these tabulations had evolved into a sophisticated costing system that allowed at least some mills to calculate the employee hours expended in every stage of manufacturing.<sup>58</sup>

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Sidney G. Winter have pointed out, business behavior typically has a large customary element. Because businesses operate in an uncertain world, choices that yield positive outcomes become precedents for future decisions. Thus past ways of doing things—what Nelson and Winter call “routines”—come to play an ever larger role in the operation of the enterprise. Richard R. Nelson and Sidney G. Winter, *An Evolutionary Theory of Economic Change* (Cambridge, Mass., 1982). For an overview of the argument, see Richard R. Nelson, *The Sources of Economic Growth* (Cambridge, Mass., 1996), 100–119. See also Lamoreaux, Raff, and Temin, “Introduction,” 7–8. There is a related literature on organizational, or “corporate,” culture. See Charles Delheim, “The Creation of a Company Culture: Cadburys, 1861–1931,” *American Historical Review*, 92 (Feb. 1987), 13–44; and Roy Church, “Deconstructing Nuffield: The Evolution of Managerial Culture in the British Motor Industry,” *Economic History Review*, 49 (Aug. 1996), 561–83.

<sup>57</sup> See, for example, Clark, *Roots of Rural Capitalism*, 273–313, 320. Bushman argues for a more gradual process of change but agrees that “the subsistence segment of farming diminished over time.” See Bushman, “Markets and Composite Farms in Early America,” 373. Conversely, if the pace of change continued to accelerate, it would ultimately induce a movement into command behavior. Something like this seems to have occurred in the late nineteenth century and resulted in an increased demand for government regulation. See Robert H. Wiebe, *The Search for Order, 1877–1920* (New York, 1967); Samuel P. Hays, *The Response to Industrialism, 1885–1914* (Chicago, 1957); and Temin, *Taking Your Medicine*.

<sup>58</sup> McGaw, “Accounting for Innovation”; McGaw, *Most Wonderful Machine*, 147–52; H. Thomas Johnson and Robert S. Kaplan, *Relevance Lost: The Rise and Fall of Management Accounting* (Boston, 1987), 21–30. There were



These accounting innovations, along with the piece rates that manufacturers introduced around the same time, were basically control devices—that is, ways of keeping track of the work force and making sure that employees worked diligently. The economic theory of principals and agents tells us that manufacturers would invest in such monitoring systems in order to solve problems of asymmetric information that arose when the principal (here the manufacturer) had only imperfect information about what the agent (the worker) was doing and when the interests of the two were not aligned—that is, when the agent could not be counted on to do what the principal wanted as a matter of course. The appearance of accounting innovations of this type is a good indication, therefore, that manufacturers were no longer able adequately to monitor their employees through firsthand observation, either because they employed too many workers, they could not always be on site, or they no longer had the requisite technological knowledge. It also signals an increasing consciousness on the part of manufacturers that the interests of owners and employees had diverged.

In contrast, farmers displayed less interest in formal record keeping as time went on. Account books from the antebellum decades recorded fewer transactions than account books from the late eighteenth century. Moreover, smaller numbers from the later period have survived, suggesting that fewer and fewer farmers were even bothering to keep them. The conventional explanation for this change is that the greater availability of cash made such bookkeeping less necessary. This explanation makes a great deal of sense. After all, the main purpose of these accounts had been to maintain a record of indebtedness in an economy where buyers typically were unable to pay for purchases in any currency other than a promise to provide goods or services at some future date. But it is intriguing that, at a time when farmers were more engaged in production for market than ever before, they showed little interest in figuring their costs more precisely or even keeping a record of their transactions.<sup>59</sup>

Eager to demonstrate the impact of capitalism on the New England countryside, Clark went to great lengths in *The Roots of Rural Capitalism* to document the increased presence of landless laborers in the agricultural population. Although his evidence for the growing numbers and decreasing prospects of such workers is convincing, it also suggests that the number of laborers employed on even the largest farms as late as the 1850s was still very, very small. In any event, the absence of accounting innovations similar to those spreading in manufacturing suggests that farmers were still able to monitor their hired hands personally. Undoubtedly, the social distance between farm owners and farm laborers was increasing during the first half of the nineteenth century

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often parallel efforts to improve control over inventories. On innovations in manufacturers' accounting practices during this period, see Margaret Levenstein, *Accounting for Growth: Information Systems and the Creation of the Large Corporation* (Stanford, 1998), 20–39; and Gary John Previts and Barbara Dubis Merino, *A History of Accountancy in the United States: The Cultural Significance of Accounting* (Columbus, 1998), 32–102.

<sup>59</sup> Rothenberg noted that “with the innovations of cash books and of double-entry bookkeeping, accounting could evolve beyond mere record keeping to become for modern farmers—as it became for modern firms—a tool,” but she provided no evidence that this progression occurred in the nineteenth century. Rothenberg, *From Market-Places to a Market Economy*, 64–66; Allen, “Commerce, Credit, and Community,” 210–13; Clark, *Roots of Rural Capitalism*, 224–27, 278.

(as Clark has shown, about half the farm laborers enumerated in western Massachusetts by the 1850 and 1860 censuses were immigrants), but the evidence from farmers' accounting practices suggests that the change was of a very different order of magnitude from that simultaneously occurring in manufacturing.<sup>60</sup>

Although in some ways, therefore, the economic worlds of farmers and merchants and manufacturers were undergoing similar transformations during the late eighteenth and early nineteenth centuries, in other ways their worlds were becoming increasingly different. Farmers continued to reside in communities where social differences were more a matter of degree than of kind. Although they were more involved in production for markets and in the cash economy than ever before, most found it not worth the bother to keep the records they would need in order systematically to reduce their costs of production. Manufacturers, in contrast, did keep such records, and the increased attention they paid to their labor expenses in particular suggests they felt a growing social distance from their workers. The problem was not that manufacturers were any less sensitive to community feeling than farmers were or than they themselves had been in an earlier period. As we have seen, there is abundant evidence that manufacturers continued to share information and to help each other out in times of need. But the communities that governed their behavior now increasingly excluded the workers who labored in their shops.

As I hope this essay has demonstrated, the explicit use of economic theory in historical writing does not inevitably lead to a consensus view of the American past. Although I have criticized the evidentiary basis for the claim that prior to the transition to capitalism, farmers had a world view fundamentally different from that of merchants and manufacturers, I am not ruling out the possibility that the moral-economy historians might be able to make their case using alternative sources. As an important first step, they need to abandon their simplistic notions of economic rationality. Although impersonal, market-driven labor relations did become a hallmark of capitalism in the nineteenth-century Northeast, the motives of the merchants and manufacturers who spearheaded that development cannot be reduced to the imperative of profit. Culture played an ongoing and powerful role in shaping their decisions; indeed, it is precisely this point that makes the transition to capitalism so important. As merchants and manufacturers came to inhabit a world that was both increasingly bounded by lines of class and increasingly dissimilar to the farmers' more homogeneous environment, the *mentalités* of the groups diverged in politically significant ways. As a result, their subsequent clashes were not merely expressions of interest group partisanship, but enduring struggles that gained force and emotional resonance from the cultural gulf that had opened up between them.

<sup>60</sup> Clark, *Roots of Rural Capitalism*, 304–9. See also Roth, *Democratic Dilemma*, 137–38, 273–76; and Hal S. Barron, *Those Who Stayed Behind: Rural Society in Nineteenth-Century New England* (New York, 1984), 63–68. Commenting on an earlier draft of this essay, Clark wrote that one of the farmers whose papers he studied had a separate account book for labor in the 1850s, but the very rarity of such a record underscores the growing differences between farmers and manufacturers during this period. Christopher Clark to Naomi R. Lamoreaux, July 30, 1999 (in Lamoreaux's possession).