Introduction

Markets are distinctive products of what Adam Smith called the human "propensity to truck, barter, and exchange one thing for another." After all, he noted: "Nobody ever saw a dog make a fair and deliberate exchange of one bone for another with another dog. Nobody ever saw one animal by its gestures and natural cries signify to another, this is mine, that yours; I am willing to give this for that."[1] In his examination of the human capacity to create markets, Smith took up the question of fairness when he argued that self-interest worked to the benefit of buyers and sellers – an insight that has since been captured in the phrase "mutually beneficial exchange." Yet Smith balanced his enthusiasm for markets with the concern that powerful interests would grab at whatever opportunities presented themselves to try to inflate their profits. Businesses, for instance, would readily exercise power through market relationships to enlarge their profits at consumers' expense.[2] Smith thus tempered his faith in the capacity of self-interest to foster trust in market relations with the explicit concern about the power firms exercised through market transactions.

This book examines a different economy, place, and time: it traces the evolution of a modern market, that for automobiles, in the United States during the twentieth century. But my approach follows Smith's study of political economy. For what was entailed in the process of exchange? Was it "fair and deliberate"? At the heart of my study is the premise that although in many industries managers wanted and indeed cultivated consumers' trust, in the automobile market this was not the case. Unable to coordinate consumers' buying habits with a firm's internal operations, managers sought to shape consumers' behavior and impose social costs on car buyers. From the market's start, private and public entities – the courts, insurance underwriters, engineering societies, state motor vehicle administrations, the Justice Department, the Federal Trade Commission (FTC), and the Board of Governors of the Federal Reserve System – regulated relations between buyers

[1] Adam Smith, *The Wealth of Nations*, ed. Edwin Cannan (1776; repr., New York: Modern Library Paperback, 2000), 14.
[2] Ibid., 148–49, 287–88, 715–17; and Amartya Sen, *Development as Freedom* (New York: Anchor Books, 1999), 271.

and sellers. The contests between consumers and corporations and the roles played by regulators meant that the development of this modern consumer market was almost at every turn a study in political economy.

I trace the market's evolution from a new market to a mass market and, finally, to a mature market.[3] The new market for automobiles emerged between the mid-1890s and the mid-1910s. In this era – prior to the market's consolidation around the "Big Three" automakers – numerous firms populated the field. It is conventional for business historians to focus on entrepreneurs who assumed considerable risks as they perfected a complex mechanical device. Without denying the roles of the early entrepreneurs, I posit that the market's first car buyers also assumed considerable risks. Innovation in a market context meant that firms initially sold crude machines even as they worked to better their products.[4] Car buyers thus incurred financial losses and physical injuries born out of technological defects inherent in these rudimentary rigs. In other words, they absorbed social costs as an inherent part of the process of market innovation. Although some consumers accepted the costs, others sued manufacturers. In the Progressive era, as Americans redefined the causes of accidents, the courts took up the question: Who should assume the risks of market innovation?[5] What was the corporation's responsibility to consumers for a new product's quality?

[3] As readers will see, my periodization follows from my focus on the market's evolution, but readers will find alternative frameworks among other automobile historians. See for example, James J. Flink, "Three Stages of American Automobile Consciousness," *American Quarterly* 24 (October 1972): 451–73; and John M. Staudenmaier, "The Politics of Successful Technologies," in *In Context: History and the History of Techonology: Essays in Honor of Melvin Kranzberg*, ed. Stephen H. Cutcliffe and Robert C. Post (Bethlehem, PA: Lehigh University Press, 1989), 150–71.

[4] In addition, products posed risks simply through their poor design. In the case of the bicycle, risks of accidents (such as tumbling head-first over the handlebars of a high-wheeler) followed from the design of the vehicle rather than from defects. In other cases aside from automobiles, defects also marred the product. In the mid-nineteenth century, boiler explosions on the nation's steamboats were frightening events, as Louis Hunter long ago explained to readers. On bicycles, see Wiebe E. Bijker, *Of Bicycles, Bakelites, and Bulbs: Toward a Theory of Sociotechnical Change* (Cambridge, MA: MIT Press, 1995), 37–41, 73–77, 97–100. On steamboats, see Louis C. Hunter, *Steamboats on the Western Rivers: An Economic and Technological History* (Cambridge, MA: Harvard University Press, 1949), 271–304.

[5] Arthur F. McEvoy, "The Triangle Shirtwaist Factory Fire of 1911: Social Change, Industrial Accidents, and the Evolution of Common-Sense Causality," *Law and Social Inquiry* 20 (Spring 1995): 621–51; Barbara Young Welke, *Recasting American Liberty: Gender, Race, Law, and the Railroad Revolution, 1865–1920* (New York: Cambridge University Press, 2001); John Fabian Witt, "Speedy Fred Taylor and the Ironies of Enterprise Liability," *Columbia Law Review* 103 (January 2003): 1–49; idem, *The Accidental Republic: Crippled Workmen, Destitute Widows, and the Remaking of American Law* (Cambridge, MA: Harvard University Press, 2004); Scott Gabriel Knowles, "Lessons in the Rubble: The World Trade Center and the History of Disaster Investigations in the United States," *History and Technology* 19 (2003): 9–28; and Sarah S. Lochlann Jain, "'Dangerous Instrumentalities': The Bystander as Subject in Automobility," *Cultural Anthropology* 19, no. 1 (2004): 61–94. On social costs, see R. H. Coase, "The Problem of Social Cost," *Journal of Law & Economics* 3 (October 1960): 1–44; and Cornelius W. Gillam, *Products Liability in the Automobile Industry: A Study in*

Between 1910 and 1930, cars became more reliable and car ownership increased from one percent of U.S. households to sixty percent (before slipping to fifty-five percent during the Great Depression).[6] Alfred P. Sloan, Jr., the president of General Motors (GM), outlined in his autobiography the steps the modern bureaucratic firm took to establish the institutions and policies needed to efficiently produce and effectively market automobiles on a mass scale.[7] The modern research laboratory, methods of mass production, the coordination of production and distribution, and bureaucratic measures of efficiency represented one side of a mass market. Sloan also called attention to innovations in marketing, such as installment credit and automobile styling (the annual model change).[8] GM managers combined these business institutions in their effort to secure loyal customers. In a mass market, a firm's success in sustaining a large market share required that it win and keep repeat car buyers. Yet this goal proved elusive, because managers could never chart a clear path for maintaining their profits and cultivating loyal consumers. Engineering safe vehicles, for instance, added manufacturing costs and slowed the introduction of new features used to market vehicles.[9] Aesthetic creativity in a car's design also threatened to drive up the cost of production.[10] Unable to synchronize production with consumers' tastes, managers confronted dealers and consumers in the market as they negotiated each transaction that set a car's price. Facing competing goals, managers sought to shift costs of

Strict Liability and Social Control (Minneapolis, MN: University of Minnesota Press, 1960), 196–210. See also Arthur F. McEvoy, *The Fisherman's Problem: Ecology and Law in the California Fisheries, 1850–1980* (New York: Cambridge University Press, 1986).

6 Stanley Lebergott, *Pursuing Happiness: American Consumers in the Twentieth Century* (Princeton, NJ: Princeton University Press, 1993), 130.

7 Alfred P. Sloan, Jr., *My Years with General Motors*, ed. John McDonald with Catherine Stevens (Garden City, NY: Doubleday & Company, Inc., 1964).

8 Stuart W. Leslie, *Boss Kettering: Wizard of General Motors* (New York: Columbia University Press, 1983); and David A. Hounshell, *From the American System to Mass Production, 1800-1932: The Development of Manufacturing Technology in the United States* (Baltimore: Johns Hopkins University Press, 1984). The literature about GM is extensive. See also Arthur J. Kuhn, *GM Passes Ford, 1918-1939: Designing the General Motors Performance-Control System* (University Park, PA: Pennsylvania State University Press, 1986); and Robert F. Freeland, *The Struggle for Control of the Modern Corporation: Organizational Change at General Motors, 1924-1970* (New York: Cambridge University Press, 2001).

9 For the tradeoffs engineers faced in designing vehicles, see in general Joel W. Eastman, *Styling vs. Safety: The American Automobile Industry and the Development of Automotive Safety, 1900-1966* (New York: University Press of America, 1984).

10 David Hounshell applied the notion of a "productivity dilemma" to his study of a series of markets as engineers and managers faced tradeoffs between increasing efficiency in the short term or pursuing long-term innovations. Hounshell followed the example of William Abernathy in referring to the "productivity dilemma," but he used the concept in a broader context to open the firm to various outside forces that might cause managers to face the tradeoff between short-term efficiency and long-term innovation. Hounshell, *From the American System to Mass Production*, 13; and William J. Abernathy, *The Productivity Dilemma: Roadblock to Innovation in the Automobile Industry* (Baltimore: Johns Hopkins University Press, 1978).

defective products or simply unpopular products to consumers; and during the 1920s and 1930s, several public and private agencies, including the courts, insurance underwriters, engineering societies, state regulatory agencies, the Justice Department, and the FTC, regulated market relations between buyers and sellers by asking what constituted fair market practices in terms of product quality and pricing policies.

By the time the United States entered World War II, leading automakers had formulated a set of institutions for a modern automobile market; however, the market matured in a different regard after the war's end. Whereas in 1945 nearly half of all U.S. families did not own an automobile, by the mid-1960s eight in ten families owned at least one car (nearly a quarter owned at least two cars).[11] The market's expansion meant selling vehicles to consumers further down the income ladder. This process posed a conflict between consumers and automakers in terms of the kind of car sold and its financing. One possible solution was the sale of small vehicles in keeping with consumers' smaller budgets – but this did not happen. Alternatively, it was possible that the postwar prosperity increased Americans' incomes enough to facilitate the market's growth. Yet although Americans prospered on average after World War II, the rising incomes did not by themselves support the market's development. Instead, auto manufacturers counted on generous finance terms. Liberalized credit financing allowed dealers to sell large, expensive cars to buyers further down the income ladder. Yet, during these same years, credit discrimination excluded many potential buyers from the market. Lenders acted as gatekeepers of the postwar world of consumption and filtered consumers through their prevailing notions of financial acceptability, but also through their social identity. Numerous groups of consumers, including women, persons over the age of sixty-five, and persons of color, were denied access to credit and thus to the purchase of what had become an essential item of daily life. In 1974, when Congress passed the Equal Credit Opportunity Act (ECOA), it called on the Board of Governors of the Federal Reserve System to establish fair lending guidelines and monitor lenders.[12]

Tracing the market's development, I pursue three interrelated themes. First, I examine how managers' efforts to develop the auto market resulted in contests over consumers' welfare in terms of personal injury, fair market practices, and credit discrimination. Second, I examine how conflicts between buyers and sellers affected the modern corporation in terms of the structure of the modern firm; its methods of research; its policies for efficiently coordinating production and distribution; and its marketing strategy for broadening the market. Third, I assess the state's varied roles in conditioning relations between buyers and sellers.

[11] Lebergott, *Pursuing Happiness*, 130.
[12] For a general review of credit discrimination, see National Consumer Law Center, *Credit Discrimination*, 3rd ed. (Boston: National Consumer Law Center, Inc., 2002).

My study necessarily differs from the market as it is pictured by one of the most influential intellectual traditions – neoclassical economics. That theory's primary goal has been to explain market outcomes: how supply intersects with demand to determine equilibrium prices and quantities.[13] To accomplish this goal, economists invoked a set of narrow behavioral assumptions about firms and consumers. All firms were said to maximize profits and have "perfect" information to respond to market signals. Moreover, assuming that their primary job was to produce goods most efficiently, firms were pictured, as one economic study reported, "as little more than equation-solving entities that, given market prices, determined output by equalizing marginal revenue and marginal costs."[14] On the demand side of the market, the theory assumed that all consumers varied as "individuals" in their "tastes" for goods. Although no one's tastes could be measured in a definitive way, each person was assumed to make tradeoffs among goods to maximize his or her utility. These assumptions enabled buyers and sellers to be expressed as abstractions; to create supply and demand curves, defined in mathematical terms; and to solve a market's equilibrium price and quantity.

This process of abstracting firms and consumers has been the basis of neoclassical theory's influence: its behavioral assumptions have permitted theoretical principles to be applied to most markets in many societies for various historical eras. But the neoclassical rendering of the market has had important shortcomings. It pictured the market as an ideal, and its assumptions about firms and consumers were unrealistic – that is, divorced from historically specific contexts. That is why many economists have found the theory inadequate. New institutional economists have replaced the image of the firm as a two-dimensional cost function with an appreciation of the modern corporation as a complex, as well as a porous, social organization. The new information economists began to emerge in the 1970s on the fringe of the economics profession. When Joseph E. Stiglitz, A. Michael Spence, and George A. Akerlof won the Nobel Memorial Prize in Economic Science in 2001, the award signaled the arrival of a new way of thinking about the

[13] Economic textbooks offer an introduction to the abstract concepts of supply and demand and the market's equilibrium. The shift from classical to neoclassical models is described in William Breit and Roger L. Ransom, *The Academic Scribblers*, 3rd ed. (Princeton, NJ: Princeton University Press, 1998), 7–11. The intellectual history of the economics profession in the United States is traced in Dorothy Ross, *The Origins of American Social Science* (New York: Cambridge University Press, 1991); and Michael A. Bernstein, *A Perilous Progress: Economists and Public Purpose in Twentieth-Century America* (Princeton, NJ: Princeton University Press, 2001). On the accomplishments and intellectual constraints characterizing the field of economic history, see Naomi R. Lamoreaux, "Economic History and the Cliometric Revolution," in *Imagined Histories: American Historians Interpret the Past*, ed. Anthony Molho and Gordon S. Wood (Princeton, NJ: Princeton University Press, 1998), 59–84.

[14] Naomi R. Lamoreaux, Daniel M. G. Raff, and Peter Temin, eds., *Learning by Doing in Markets, Firms, and Countries*, National Bureau of Economic Research (Chicago: University of Chicago Press, 1999), 6–7.

modern firm and markets, one in which universal notions of optimal efficiency proved false, and the existence of information problems called for state intervention in markets in a variety of roles: directly regulating product quality, requiring that firms disclose information about products, and providing medical insurance (among other activities).[15] Knowledge of information economics has helped me execute this study, because by offering a new conceptual portrait of the firm, this scholarship has opened the door to seeing the multiple ways actors on the market's demand side engaged managers in their primary tasks of engineering, producing, and selling goods. It has meant as well that I have found the history of technology, political and legal history, and social history essential for the study of a market's evolution.

In a series of essays and books, Naomi Lamoreaux, Daniel Raff, and Peter Temin chronicled the shift taking place among economists in their study of the modern corporation.[16] Three changes were critical in this regard. First, economists replaced the neoclassical assumption of perfect information with an appreciation that information was imperfect, costly, and subject to manipulation. It is hard to overstate the import of this one assumption. Stiglitz wrote: "The competitive paradigm is an artfully constructed structure: when one of the central pieces (the assumption of perfect information) is removed, the structure collapses."[17] Second, Lamoreaux, Raff, and Temin recognized that the interests of many different groups of people within firms differed: the concerns of stockholders differed from those of top managers, which in turn differed from those of middle managers, sales agents, foremen,

[15] The *New York Times* quoted the economist Alan Krueger as saying, "The three of them really pioneered the view that markets, when confronted with imperfections, may not be the best way to allocate resources." Louis Uchtelle, "3 Americans Awarded Nobel for Economics," *New York Times* (October 11, 2001): C1, C10. The literature about information economics is vast. For a review of the literature see John C. Riley, "Silver Signals: Twenty-five Years of Screening and Signaling," *Journal of Economic Literature* 39 (June 2001): 432–78. Pioneering works include George A. Akerlof, "The Market for 'Lemons': Quality Uncertainty and the Market Mechanism," *Quarterly Journal of Economics* 84 (August 1970): 488–500; Michael Spence, "Consumer Misperceptions, Product Failure and Producer Liability," *Review of Economic Studies* 44 (1977): 561–72; idem, "Information Aspects of Market Structure: An Introduction," *Quarterly Journal of Economics* 90 (November 1976): 591–97; and Joseph E. Stiglitz, "Information and Economic Analysis: A Perspective," *The Economic Journal* 95, Supplement: Conference Papers (1985): 21–41.

[16] The three authors have compiled a large collection of essays and books. See Peter Temin, ed., *Inside the Business Enterprise: Historical Perspectives on the Use of Information* (Chicago: University of Chicago Press, 1991); Naomi R. Lamoreaux and Daniel M. G. Raff, eds., *Coordination and Information: Historical Perspectives on the Organization of Enterprise* (Chicago: University of Chicago Press, 1995); Naomi R. Lamoreaux, Daniel M. G. Raff, and Peter Temin, "New Economic Approaches to the Study of Business History," *Business and Economic History* 26 (Fall 1997): 57–79; idem, *Learning by Doing in Markets, Firms, and Countries*; and idem, "Beyond Markets and Hierarchies: Toward a New Synthesis of American Business History," *American Historical Review* 108 (April 2003): 404–33.

[17] Stiglitz, "Information and Economic Analysis," 26.

and workers. Third, they shifted their focus from accounting for market outcomes to explaining managers' actions and, thus, to the inherently uncertain process of coordinating activities within small and large organizations. Depending on the task at hand, managers often confronted situations in which they needed to devise policies for their subordinates. In the language of this new institutional economics, superiors, known as principals, crafted rules or policies intended to induce the maximum effort of their subordinates or agents. Principals and agents changed depending on the particular relationship. Stockholders acted as principals when instructing top managers as their agents; top executives acted as principals in setting policies for managers, their agents, further down the corporate hierarchy.[18]

In their focus on social relationships within the firm, Lamoreaux, Raff, and Temin placed the firm's drive for efficiency in a much broader organizational environment.[19] Rather than a universal measure of optimal performance, they linked efficiency in coordinating activities in the modern firm to the power managers exercised through their policies, rules, and routines. The trio instructed: "To understand how decisions are made, one has to take into account the technology employed by the firm, the way in which power is distributed within the organization, the knowledge structures at the disposal of different groups within the enterprise, the goals and aspirations of these various economic actors, and the way in which their concerns link up with broad intellectual movements in the larger society."[20]

In moving away from neoclassical theory, this new conceptual portrait of the modern corporation invited questions about how managers translated the abstract concept of demand into information problems about

[18] Lamoreaux, Raff, and Temin, "New Economic Approaches to the Study of Business History," 62–64.

[19] In their 2003 article, Lamoreaux, Raff, and Temin "subsume" the model of Alfred Chandler within their own framework. Two critical premises are at stake. First, although Chandler recognized the importance of managers in coordinating mass production and mass distribution, he assumed managers acted rationally and thus failed to consider how the process of coordination was undertaken. Second, Lamoreaux, Raff, and Temin charge that Chandler offered no evidence to sustain the claim that large-scale corporations, thanks to their scale and scope, were more efficient than their smaller rivals. I find both complaints persuasive, and more importantly, I find the new institutional economics opens up the question of efficiency, because the problem managers faced in coordination could not be separated from the power they exercised in their policies intended to motivate and monitor subordinates. Lamoreaux, Raff, and Temin, "Beyond Markets and Hierarchies." Chandler's work dominated the study of business history, as reflected in his three monumental works. Alfred D. Chandler, Jr., *Strategy and Structure: Chapters in the History of the American Industrial Enterprise* (Cambridge, MA: MIT Press, 1962); idem, *The Visible Hand: The Managerial Revolution in American Business* (Cambridge, MA: Harvard University Press, 1977); and idem, *Scale and Scope: The Dynamics of Industrial Capitalism* (Cambridge, MA: Harvard University Press, 1990).

[20] Lamoreaux, Raff, and Temin, "New Economic Approaches to the Study of Business History," 68.

consumers. Business historians (often with no particular interest in economics) framed questions about consumers and the firm in novel ways. Historians of design and technology, including Adrian Forty, Jeffrey Meikle, Regina Lee Blaszczyk, and Glenn Porter, addressed the role industrial designers played in the cultural process of developing goods in business contexts.[21] Blaszczyk, in particular, cataloged numerous individuals, whom she collectively called "fashion intermediaries." Sales agents, home economists, and market researchers, as market intermediaries, offered cultural portraits of consumers that in turn shaped the design of goods.[22] Nancy F. Koehn addressed not mediators, but entrepreneurs. She emphasized that entrepreneurs, based on their "firsthand experience," processed information about the demand and supply sides of the market to identify opportunities – that is, ways to add value to goods to build consumers' trust and profit through a product's brand identity.[23] Glenn Porter singled out market research.[24] Industrial designers and marketing executives routinely surveyed consumers in an attempt to identify their living patterns and buying habits. The designer Raymond Loewy, for example, tried to entice consumers with something new – but not so new as to startle his clients' shoppers. Market research helped determine what consumers thought of as comfortable or conventional, and, given their conventions, Loewy claimed to design products in keeping with his principle of being "the Most Advanced Yet Acceptable."[25]

Although their particular analytical questions and techniques varied, these scholars documented numerous ways in which information problems about

[21] Regina Lee Blaszczyk, *Imagining Consumers: Design and Innovation from Wedgwood to Corning* (Baltimore: Johns Hopkins University Press, 2000). See also Adrian Forty, *Objects of Desire: Design and Society since 1750* (London: Thames and Hudson, 1986); Jeffrey L. Meikle, *American Plastic: A Cultural History* (New Brunswick, NJ: Rutgers University Press, 1995); Glenn Porter, "Cultural Forces and Commercial Constraints: Designing Packaging in the Twentieth-Century United States," *Journal of Design History* 12, no. 1 (1999): 25–44; and idem, *Raymond Loewy: Designs for a Consumer Culture* (Wilmington, DE: Hagley Museum & Library, 2002).

[22] Whereas Blaszczyk studied several mediators, Carolyn Goldstein examined in detail the ambiguities and nuances of one group of mediators, home economists. Blaszczyk, *Imagining Consumers*, especially 11–13; and Carolyn M. Goldstein, "Mediating Consumption: Home Economics and American Consumers, 1900–1940" (Ph.D. diss., University of Delaware, 1994).

[23] Nancy F. Koehn, *Brand New: How Entrepreneurs Earned Consumers' Trust from Wedgwood to Dell* (Boston: Harvard Business School Press, 2001).

[24] Porter, *Raymond Loewy*, 13, 24–25, 42, 69, 102, 111–13; and idem, "Cultural Forces and Commercial Constraints," 25–43. On the topic of market research, see also Daniel J. Robinson, *The Measure of Democracy: Polling, Market Research, and Public Life, 1930-1945* (Toronto: University of Toronto Press, 1999); and Gerben Bakker, "Building Knowledge about the Consumer: The Emergence of Market Research in the Motion Picture Industry," *Business History* 45 (January 2003): 101–27.

[25] Porter, *Raymond Loewy*, 7–8, 17, 42, 44, 114, 150.

consumers influenced activities inside the firm. It was not just that firms conducted consumer surveys for the purposes of marketing their products, but that information about consumers impinged on managers' pursuit of efficiency and innovation. Koehn, for instance, explained that Michael Dell tabulated consumers' complaints voiced through his toll-free hotline and used the data to monitor the quality of work on his production lines. Maintaining his products' high quality was critical to Dell's ability to convince consumers to purchase PCs by mail order.[26] Edwin Perkins argued that Charles Merrill's impression of consumers helped him rethink his stock brokerage business. Because consumers in a survey voiced distrust of brokers who bought and sold stocks to earn commissions from the trades ("churning accounts"), Merrill switched brokers from a payment system based on commissions to a fixed salary. He also redistributed clients among brokers to keep costs low while he overcame potential clients' distrust in the stock investment process. Whether the survey was accurate is impossible to ascertain. What was important was that his perception of consumers as being distrustful of a commission-based system prompted Merrill to redefine the method of rewarding and organizing his sales force.[27]

Although these scholars translated the abstract image of supply intersecting with demand into a body of scholarship about the ways that consumers intruded on managers' authority and a firm's operations, they did not pursue the reverse question: how have corporations exercised their authority in relationships with consumers? Economists traced the exercise of corporate power to two general conditions: first, as Smith already recognized, a violation of competitive markets in which firms were able to raise prices; and second, uncertainty surrounding product prices and quality, which permitted firms to exploit market situations in which they claimed information about products that consumers lacked. If business historians responded to any literature about corporate power, it was that of a distinctly different group of colleagues: historians intent on demonstrating corporate hegemony.[28] Blaszczyk, for example, argued against this perspective in framing

[26] Koehn, *Brand New*, 257–305, especially 288–90.

[27] Merrill undertook other changes in an effort to attract new accounts. For example, Perkins found that he advocated the diffusion of information about stocks to all clients. The intent was to build customers' confidence, but the reports also served to attract new customers. Edwin Perkins, *Wall Street to Main Street: Charles Merrill and Middle-Class Investors* (New York: Cambridge University Press, 1999), 144–80.

[28] T. J. Jackson Lears, "The Concept of Cultural Hegemony: Problems and Possibilities," *American Historical Review* 90 (June 1985): 567–93. See also idem, *Fables of Abundance: A Cultural History of Advertising in America* (New York: Basic Books, 1994). The literature concerning consumer culture is surveyed in my essay, "Consumer Negotiations," *Business and Economic History* 26 (Fall 1997): 101–22. See also Susan Strasser, "Making Consumption Conspicuous: Transgressive Topics Go Mainstream," *Technology and Culture* 43 (October 2002): 755–70.

her study of glass and ceramics markets. She also examined intensely competitive markets. As neoclassical economists would expect and she found, firms that failed to respond to consumers and to lower prices, maintain quality, and introduce attractive styles risked losing profits if not being driven out of business altogether. She declared: "Make no mistake: supply did not create demand in home furnishings, but demand determined supply."[29] Many markets, however, never passed for close approximations of perfect competition. What were the implications for relations between corporations and consumers in cases where firms subverted competitive pressures?

The uncertainty surrounding product prices and quality posed a second set of problems between a market's buyers and sellers. Akerlof noted that firms could take steps to "counteract the effects of quality uncertainty. One obvious institution is guarantees. Most consumer durables carry guarantees to ensure the buyer of some normal expected quality. . . . A second example of an institution which counteracts the effects of quality uncertainty is the brand-name good."[30] Both guarantees and brand names acted as "signals," according to economists, telling consumers about the product's quality.[31] Koehn both illustrated and developed Akerlof's insight in her study of entrepreneurs. These unusual men and women escaped the rigors of competition by building consumers' trust through the value they added to their products. Michael Dell, for example, offered money-back guarantees to help overcome consumers' distrust of buying computers by mail order; he also made certain that the technicians answering consumers' complaints were carefully trained to communicate quickly and effectively with computer users.[32] Koehn charted processes by which firms created successful brands, and, in doing so, dealt with an important subset of cases. But there were other markets in which uncertainty about products persisted. What happened in cases where the prices and quality of goods were difficult for consumers to assess? Porter hinted at this problem in his study of market research. As firms pursued more and more ways to track consumers, he mused that in "the whirling squirrel cage of capitalism," consumers "proved to be elusive, moving, mutating targets."[33] His point bears emphasis for the study of managers' efforts to coordinate activities efficiently. Because consumers were so hard to track, managers necessarily used inaccurate information about consumers to coordinate activities inside the firm. Those inaccuracies represented costs (unpopular products or goods of poor quality), and,

[29] Blaszczyk, *Imagining Consumers*, 353–55, quote 13.
[30] Akerlof, "The Market for 'Lemons,'" 499–500.
[31] Spence, "Information Aspects of Market Structure," 592; and Riley, "Silver Signals," 438.
[32] Koehn, *Brand New*, 286–96.
[33] An ad man made this point when he complained: "consumers 'are like roaches – you spray them and spray them and they get immune after a while.'" Glenn Porter, "Cultural Forces and Commercial Constraints," quote 27, 38 n.58, 42; and "Marketers Seek the 'Naked' Truth in Consumer Psyches," *Wall Street Journal* (May 30, 1997): B1.