POLITICAL ECONOMY
IN THE CAROLINAS

CLASSICAL LIBERALISM AND THE HISTORY OF ECONOMICS IN THE CAROLINAS

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Economists in the Carolinas have a long history of rigorous economic research and handing on economic insights to ensuing generations. Although marked by a wide diversity of approaches, economics in the Carolinas has demonstrated a strong classical liberal tradition. I begin by examining the first two prominent economists in the Carolinas, Thomas Cooper and Francis Lieber (both presidents of South Carolina College), who were strong proponents of free trade and economic liberty. Then I survey the history of economics in the Carolinas' five R1 (doctoral) universities – the University of South Carolina, Clemson, North Carolina State, UNC Chapel Hill, and Duke – with special attention to classical liberals in these departments. Economists discussed include George Hubert Aull, Martin Bronfenbrenner, Robert Clower, William Glasson, Earl Hamilton, Calvin Hoover, Harold Hotelling, Juanita Kreps, Stephen Margolis, Clarence Philbrook, Joseph Spengler, Robert Tollison, Bruce Yandle, and Erich Zimmerman.

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There has never been a Carolina school of economics. To the north, Virginia is the home of the Virginia school of political economy—known for its critical analysis of public sector institutions, its development of public choice theory, and its broad agreement with classical liberal principles. Further inland is another fairly classical liberal school, the Chicago school of economics—marked by an "uncompromising belief in the usefulness and insight of neoclassical price theory, and a normative position that favors and promotes economic liberalism and free markets" (Kaufman 2010, p. 133).

Like these schools, the Carolinas have a long history of rigorous economic research and handing on economic insights to ensuing generations. Although marked by a wide diversity of approaches, economics in the Carolinas has demonstrated a strong classical liberal tradition and a history of caring about history.

Economics departments in the Carolinas have had a disproportionate regional influence. For example, of the ninety-two presidents of the Southern Economic Association (SEA), twenty-three of them (25 percent) were affiliated with universities in North and South Carolina—noticeably higher than the two states' share of the region's population (15 percent).[2] All but one of those twenty-three SEA presidents hailed from the five R1 (doctoral) universities located in the Carolinas—Clemson University, Duke University, North Carolina State University (NC State), the University of North Carolina at Chapel Hill (UNC), and the University of South Carolina (USC)—which are the focus of this study.

Like the history of economics in the United States as a whole, the roots of economics in the Carolinas are in the early nineteenth century, when academic moral philosophers began to examine questions of political economy. Often these courses were taught by university presidents with training in theology, such as Francis Wayland (1796–1865), a Baptist pastor, who was president of Brown University. Wayland was the author of *Elements of Political Economy* (1837), which became the principal economics textbook in American colleges. His book "inveighed against the statism of the French Revolution . . . the 'tyranny' of labor unions, and the evils of helping the undeserving poor." He argued that "the most important obligations of the state were to foster education and promote morality." And he exhibited "unqualified support of free trade" (Cross 1999). Thomas Cooper and Francis Lieber—both presidents of South Carolina College—shared much of Wayland's economic outlook and are examined below.

Beginning in the late 1800s, the field of economics emerged out of these earlier traditions, with the establishment of doctoral training in economics, the formation of professional organizations, such as the American Economic Association (AEA, founded in 1885), and the emergence of

2. Those presidents are Albert S. Keister (Women's College of North Carolina, now UNC Greensboro, 1934–35), C. B. Hoover (Duke, 1936–37; he also served as president of the American Economic Association), John Woosley (UNC, 1939–40), Joseph Spengler (Duke, 1946–47), G. T. Schwenning (UNC, 1947–48), George Aull (Clemson, 1948–49), Ben Ratchford (Duke, 1952–53), Milton Heath (UNC, 1956–57), Frank Devyver (Duke, 1960–61), Ralph Pfouts (UNC, 1965–66), James Ingram (UNC, 1972–73), Juanita Kreps (Duke, 1975–76), Robert Gallman (UNC, 1977–78), Robert Tollison (Clemson, 1984–85), V. Kerry Smith (NC State, 1988–89), Charles Clotfelter (Duke, 1991–92), Robert Clower (USC, 1992–93), William "Sandy" Darity (UNC, 1996–97), Marjorie McElroy (Duke, 2000–2001), Bruce Caldwell (Duke, 2011–12), V. Joseph Hotz (Duke, 2013–14), and Donna Gilleski (UNC, 2018–19). The Carolinas currently make up 14.5 percent of the population of the eleven states that joined the Confederacy. They made up 15.4 percent of the area's population in 1970.

neoclassical economics. Although neoclassical economics focuses on the interactions of rational individuals aiming to maximize their utility or profits and demonstrates the remarkable success of free markets in efficiently allocating resources and generating wealth, many leading economists of this period actively sought to expand the role of government. Thomas Leonard (2016) shows that many of the reformers who professionalized American economics from the 1880s to the 1920s—men such as Richard Ely, Edward Ross, Simon Patten, John Commons, and Irving Fisher—descended from old New England families, had studied in Germany, and were sons of ministers and missionaries. They attacked individualism and were crucial in building the fourth branch of government: the vast administrative, bureaucratic, regulatory state. These men "combined their extravagant faith in science and the state with an outsized confidence in their own expertise" (p. 35) resulting in a "braiding together of the admirable and the reprehensible" (p. 189). Leonard shows that their thinking was pervaded by an elitist Lamarckian Darwinism that often viewed society as an organism that was being poisoned by unemployable parasites—including minorities, immigrants, and others from "the human rubbish heap"—who threatened their "betters." Many of them advocated "eugenic" sterilization of "defectives" and promoted high minimum wages so that "unemployables" would leave the country or be shunted aside. The professionalization of economics occurred fairly slowly in the Carolinas and in the South more generally. Only one founding member of the AEA was from below the Mason-Dixon Line, and almost thirty years later (1914), only eight Carolinians were members of the association. Economists in the Carolinas tended to take a less statist view than their "betters" during this period.

The Keynesian revolution swept through the economics profession during the Great Depression and World War II, a period that brought many economists (including many in the Carolinas) out of the academy and into government jobs that replaced the collective wisdom of the market with the dictates of bureaucrats. In this era, many economists turned to the state to help solve economic problems, although the Keynesian tide ebbed when it became unmistakably clear that interventions were causing inefficiency and inflation. Since the late 1970s, the American economics profession has regained a balance in which many economists reflexively look to government to solve problems while many others warn of and examine the pitfalls and shortcomings of government intervention. This national evolution is generally mirrored in the history of economics in the Carolinas, as will become apparent below as I examine economics at each of the five R1 institutions.

THE UNIVERSITY OF SOUTH CAROLINA

The first notable economists in the Carolinas were Thomas Cooper and Francis Lieber of South Carolina College (now USC). Cooper (1759–1839) studied law, medicine, and the natural sciences in England, before moving to the United States in 1794. He was a supporter of Thomas Jefferson and was even jailed for violating the Sedition Act with his attacks on President John Adams. When he became a professor of chemistry at South Carolina College in 1819, the state was "at the apex of its economic importance" (Bordo and Phillips [1988] 1993, p. 44) and was dominated by the outlook of the plantation-owning aristocracy. Cooper, who had previously taught at the University of Pennsylvania, was soon elevated to the college's presidency, which gave him the job of teaching moral-philosophy courses. The purpose of such classes was "to provide the soon-to-be-graduates with a generalized humanistic view of the state of knowledge and its application to the human condition. It not only provided basic prescriptions for the proper conduct of one's personal life but also presented the sound doctrine of the day regarding the proper relationship of man to society and thus the correct course of public policy" (p. 48).

Cooper developed his lecture notes into one of the first American political-economy textbooks, *Lectures on the Elements of Political Economy* (1826), which was widely praised but not widely adopted at other colleges, because of its materialistic (rather than religious) underpinnings. (Scottish economist John McCulloch praised it as "the best of the American works on political economy what we have met with" [Bordo and Phillips (1988) 1993, p. 50].) The textbook largely agreed with the positions of Adam Smith and David Ricardo, although it was critical of some of their positions. Most tellingly, Cooper—who published a pamphlet titled "On the Proposed Alteration of the Tariff" (1823) "in which he initiated the southern economic attack against northern tariff policy" (p. 50)—was a "militant free-trade advocate." His firm "laissez-faire principles" (p. 52) accorded well with the economic interests of South Carolina, which threatened to annul the Tariff of Abominations of 1828. The tariff worsened the terms of trade of South Carolina because reducing the exportation of British goods to the United States made it more difficult for the British to pay for the cotton they imported from the state, thus reducing the price of cotton while also making goods imported to the state more expensive. Michael Bordo and William Phillips conclude that it was the "forcefulness of Cooper's opinions, not their originality, that pushed them into public view" (p. 53). His students knew "that they were being taught by an extraordinary man. What his scholarship lacked in originality it made up in activity" (p. 54). In 1834, however, Cooper lost his position because of his unorthodox, outspoken religious positions, which triggered a boycott of the college and an enrollment collapse.

Francis Lieber (1798–1872), born in Prussia, edited the original *Encyclopaedia Americana* and later wrote the *Code for the Government of Armies in the Field* during the Civil War, which is considered to be the first document to comprehensively outline rules regulating the conduct of land war and which laid the foundation for the Geneva Conventions. Lieber taught at South Carolina College from 1835 to 1856. Like Cooper, Lieber was an "ardent free-trader" (Bordo and Phillips [1988] 1993, p. 60). He supplemented his teaching of Jean-Baptiste Say's *Treatise on Political Economy* with his own *Essays on Property and Law* (1842). His arguments and conclusions were in the classical liberal tradition. He rejected labor unions: "Wages . . . were determined by demand and supply, and just as attempts to regulated demand and supply in markets always failed, so too would policies designed to raise wages above their natural level of the value of labor. . . . If wages were forced up by combinations of labor, the return to capital would fall, factories would close, and labor's gains would disappear" (Bordo and Phillips [1988] 1993, pp. 61–62). Bordo and Phillips (p. 62) continue, "His faith in free trade was complete. . . . He continued to hold these opinions strongly, even after the Civil War, when he was a prominent official of the tariff-supporting Radical Republican party," and he published "Notes on the Fallacies of American Protectionists" (1869). While Cooper accommodated his ideas to the slavery of antebellum South Carolina (even becoming a slave owner), Lieber wrote an economic indictment of slavery, which caused him to lose his position at the college.

Cooper and Lieber were the preeminent scholars at South Carolina College during their respective eras. Bordo and Phillips ([1988] 1993, p. 67) lament the quality of economics at the college after the Civil War: "Some instructors were effective and dedicated teachers, and some were not. But in no sense were the college's post-bellum economics teachers scholars in the research sense." The advent of better times began with the hiring of George McCutchen (1876–1951) in 1899, the university's first teacher to specialize completely in economics. His classes ushered neoclassical economics into the university. He worked with the Federal Trade Commission on a meat-packing-monopoly case in 1917, taught a dizzying array of courses—money and banking, public finance, labor problems, corporation finance, business law, accounting, marketing, and insurance—and warned students that "I shall perform the office of a whetstone, which can make other things sharp though it is itself incapable of cutting" (Floyd 2019, p. 17).

USC's economics department was founded in 1910, became part of the School of Commerce in 1919, and is now housed in the Darla Moore School of Business. Heather Floyd's *100 Years of Business Education at the University of South Carolina*, published to celebrate the centennial of the school of business, makes it clear that the Moore School's goal is to educate students to participate in South Carolina's export-based international businesses and to aid businesses competing in the globalized economy. Further, "second only to providing a world-class business education, the Moore School's key priority is conducting world-class research to advance business knowledge and the economy of the state and nation" (Floyd 2019, p. 165). This tradition of working closely with local businesses goes back to the business school's founding of a research program in the 1920s designed "to do for the business men of the State what the extension service of the department of agriculture . . . has done for farmers" (p. 106).

The economics department is embedded in a school that embraces the capitalist system. Darla Moore, a 1975 graduate of USC, made a gift of $25 million to the business school in 1998 and another of $45 million in 2005. *Fortune* magazine dubbed her "the toughest babe in business" on its cover in 1997, while she was serving as president of private investment firm Rainwater. In making her gifts, Moore explained, "I have had the good fortune to benefit from the capitalist system. . . . Those of us who have been so fortunate are obligated to return some of the fruits of that system" (*Chronicle of Higher Education* 1998). Five of the seven academic departments in the Moore School rank in the top twenty-five worldwide for research productivity: human resources, international business, experimental accounting, supply chain management, and marketing. One of the two that are not internationally ranked is the Department of Economics, which ranks a respectable 108th in the United States (IDEAS/RePEc 2020b) and receives regrettably little attention in Floyd's book.

Probably the most influential modern economist at the university was Robert Clower (1926–2011), who was a Rhodes Scholar and served as president of the SEA. Clower became a distinguished professor at USC near the end of his career, after serving as editor of the *American Economic Review* and teaching at Northwestern and UCLA. Clower ranks among the most influential monetary economists of the second half of the twentieth century—along with figures such as Milton Friedman, Paul Samuelson, James Tobin, and Don Patinkin (Velupillai 2011, p. 22). He tellingly critiqued the proposed synthesis between neoclassical economics and Keynesian economics that had developed after World War II, arguing that it was wrong to regard established microeconomic theory as a suitable foundation for macroeconomic theory because microeconomic theory is incapable of understanding the short-run disequilibrium adjustment process of the macroeconomy (p. 27). Clower sought to make money play a realistic role in economic models. The Clower constraint is sometimes stated this way: one cannot spend without having some money to do the spending with.

CLEMSON UNIVERSITY

Clemson was founded in 1893 as an agricultural college—but it also was an all-male military school with students housed in barracks, eating in a mess hall, meeting in formations throughout the day, and subject to military discipline up until the 1950s. Its earliest catalogue lists economics as part of a history course. Beginning in 1902, the subject was listed as a separate course. Economics had a hard time gaining traction, but "while economics languished, agricultural economics was expanding" (Macaulay and Grecu 2002, p. 4, emphasis added).

Clemson's Division of Agricultural Economics was established within the Department of Agriculture in 1926 and soon began offering graduate classes. The head of the agricultural-economics program from 1936 to 1963 was George Hubert Aull (1899–1988), who became president of the SEA and of the American Farm Economics Association. Aull, who entered Clemson as an undergraduate at age fifteen, served as the senior administrative officer in South Carolina for the Land Policy Section of the Agricultural Adjustment Administration during the New Deal and on the regional National War Labor Board during World War II. A focus of his research was tax equalization in the state. Aull (1939) compared agricultural tax assessments across South Carolina with appraised market values and found important discrepancies, with the ratio of assessed to appraised values much higher for small farmers and those with low values per acre, which benefited the wealthy at the expense of the poor. He concluded that the "system of assessing property in South Carolina is such that equality of taxation is virtually impossible.

Based as it is upon the idea of self-assessment followed by 'equalization' at the hands of local boards (appointed by the Governor upon recommendation of the legislative delegations from the various counties) the entire system has degenerated into a farce and has been described as 'a classic example of wholesale public lying'" (p. 347). Accordingly, Aull led a push to depoliticize the process and was named Man of the Year by *Progressive Farmer* in 1945.

Aull's presidential address to the SEA is especially interesting. "The Economics of the Bible" (1950) notes that the Bible is not a text in economic theory yet is full of economic insights. Jesus condemned "the rich fool" not because he was rich but because he was so naive as to believe that his great wealth involved no social and economic responsibilities. Aull argued that the years immediately following World War I witnessed "a most ungodly display of national greed and selfishness, and nothing did [much] to hasten the concentration of wealth, the spread of poverty, [and] the disintegration of society" (p. 398) that led up to the Great Depression and World War II. He closed by observing that neither economists nor anyone else should simply take people as they are: "Economics is concerned with the satisfaction of human wants, whatever those wants may be. Christianity is concerned with the nature of human wants and can make its influence best felt not by changing economic systems but by changing human wants and human motives. Systems can never rise above those who create them and cause them to function. Therefore, even 'Bible Economics' will break down unless production and consumption are more and more brought under control of individuals who themselves measure up to the high standards of the Christian Ethic" (p. 399).[3]

While agricultural economics thrived, Clemson's current economics department—the John E. Walker Department of Economics—continued to languish: "The end of the Great Depression saw a faculty of three [in economics] teaching three truly economic courses" (Macaulay and Grecu 2002, p. 4).[4] After World War II, enrollments began to rise, but space was cramped: "When four instructors in economics were added in 1949 . . . [t]heir office was a long narrow room that had previously been used as a broom closet" (p. 5). Faculty members taught fifteen academic hours per week, and "research was not actively promoted" (p. 7) until the late 1950s.

After this slow start, economics began to flourish at Clemson. In 1967 Clemson's new Department of Economics moved out of the Department of Social Sciences. Dean Wallace Trevillian chose Harvey Wheeler (1930–70) to head the department, with the general policy that Wheeler should "recruit capable faculty members, and that the general orientation of the department should be toward teaching classical economics with an emphasis on the efficiencies of free markets" (Macaulay and Grecu 2002, p. 10). Clemson economist Hugh Macaulay, who did his graduate work with classical liberal Nobel laureate George Stigler, calls this "a brave new approach considering prevailing opinion among economists and the general public at that time. . . . There

3. Clemson's agricultural-economics department eventually became the Department of Applied Economics and Statistics, but it was disbanded in 2011.

4. The department resisted a move to the business school, fearing that it would "divert their research and teaching from classical economics to a business-oriented presentation of the subject" (Macaulay and Grecu 2002, p. 9).

was almost universal acceptance among economists that Keynesian intrusions were needed to stabilize the economy, that the Communist system as practiced in Russia was empirically superior in economic growth and a fair distribution of goods. . . . In addition, John Kenneth Galbraith was receiving wide acclaim for his books stressing the need for strong unions, business groups, and government to offset each other with countervailing power. . . . Fortunately, Dr. Wheeler understood classical economics and its efficient operation, and was committed to building a department that would test and teach these principles" (Macaulay and Grecu 2002, p. 10).

It did. Clemson hired a string of economists who embodied the classical liberal tradition. These include Daniel K. Benjamin, Gerald Dwyer, Donald Gordon (1923–2001), Robert Hébert, Cotton Lindsay (1940–2015), Hugh Macaulay (1924–2005), Robert McCormick, Richard McKenzie, Clark Nardinelli, Russell Shannon (1938–96), William F. Shughart II, Robert Staaf, Robert Tollison (1942–2016), John Warner, and Bruce Yandle.

Yandle, a prolific scholar in environmental economics, the economics of regulation, and public choice economics and dean emeritus of Clemson's College of Business and Behavioral Science, served as executive director of the Federal Trade Commission (FTC) during the Reagan administration. While in this position, he wrote a path-breaking analysis of what he had witnessed in Washington, DC, in doing so establishing the bootleggers-and-Baptists paradigm (Yandle 1983). After dealing with proposed regulations from agencies including the FTC, Environmental Protection Agency, and Department of Transportation, he had an epiphany: "Instead of assuming that regulators really intended to minimize costs but somehow proceeded to make crazy mistakes, I began to assume that they were not trying to minimize costs at all—at least not the costs I had been concerned with. They were trying to minimize *their* costs, just as most sensible people do" (p. 13, emphasis in the original). These costs include the costs of making a mistake, the costs of enforcement, and political costs. With this in mind, he realized that what industry and labor really want from the federal government is enduring "protection from competition, from technological change, and from losses that threaten profits and jobs" (p. 13).

His central insight was that "durable social regulation evolves when it is demanded by both of two distinctly different groups. 'Baptists' point to the moral high ground and give vital and vocal endorsement of laudable public benefits promised by a desired regulation. Baptists flourish when their moral message forms a visible foundation for political action. 'Bootleggers' are much less visible but no less vital. Bootleggers, who expect to profit from the very regulatory restrictions desired by Baptists, grease the political machinery with some of their expected proceeds. They are simply in it for the money" (Yandle 1999, p. 5). Prohibition, for example, combined the interests of anti-alcohol reformers (Baptists) and the lawbreakers (bootleggers) who earned above-normal profits in supplying the contraband product. But the idea can be—and has been—widely applied: "The infamous scrubber regulations in the 1977 Clean Air Act, which should win the bootlegger-Baptist award for the 1970s, offer the best illustration of bootleggers benefiting from Baptist-supported, technology-based standards. The statute required costly scrubbers to be installed at all newly constructed coal-fired electric plants, whether or not a particular plant burned dirty coal. Interest groups tied to high-sulfur coal production in the eastern United States celebrated the statute, as did most environmental groups. Miners of western low-sulfur coal, consumers of electricity, and (in some cases) lovers of clean air had no cause for celebration" (p. 6). Google Scholar lists over six thousand citations to Yandle's bootleggers-and-Baptists concept.

Another Clemson economist in the classical liberal tradition had a similar reaction after work in Washington. Robert Tollison was director of the Bureau of Economics in the FTC from 1981 to 1983, which prompted him to write "Antitrust in the Reagan Administration: A Report from the Belly of the Beast" (1983). He explained that the "Orwellian-named Bureau of Competition" and its sister the Bureau of Consumer Protection didn't accomplish their putative missions but tended to squelch competition and harm consumers (Shughart 2017, p. 154). Tollison examined merger guidelines, the general drift of antitrust policy, deregulatory initiatives, and consumer-protection policy. "The conclusions drawn," he reported, "are not very sanguine in a normative sense. Perhaps our solace lies in the positive study of why the antitrust bureaucracies behave as they do." In addition, Tollison coedited the first scholarly volume to examine rent-seeking, *Toward a Theory of the Rent-Seeking Society* (1980), and served as an expert witness in a case that awarded a $66 million judgment against the college football cartel's practice of limiting salaries of assistant football coaches (Shughart 2017).

Finally, the Clemson economics department has a history of outreach to the public, exemplified by a column in the *Greenville News*, written by faculty members and published every Monday morning for many years, largely under the leadership of Russell Shannon, who was also a frequent contributor to the classical liberal journal the *Freeman*. Another aspect of this outreach is that at one point around 1980, "five of the leading principles textbooks had been written by members of the Clemson faculty or by economists who had enjoyed [an] association with the department," including Roger Leroy Miller. In addition, the department developed a program to teach economic principles to high school teachers, as Holley Ulbrich organized the Center for Economic Education at Clemson.

NORTH CAROLINA STATE UNIVERSITY

Like Clemson, North Carolina State University is a land-grant college, with its roots in agricultural extension. Its first economics course, Agricultural Economics, was offered in 1897 (North Carolina State University 1974). Like Clemson, it has had two economics departments, although they were joined together before 1927 and between 1965 and 1990. As in other places, early economics courses were taught by members of other departments, such as Economics 130 in 1909, which was taught by an English professor (North Carolina State University 1965).

Leading economists in NC State's early

years include Reuben O. Moen (1892–1966), who served in the Office of Price Administration during World War II and published *The Federal Reserve System* (1922) and *Rural Credit Unions in the United States* (1931). Emol Atwood Fails did a great amount of consulting work and became director of research of the Heating and Air Conditioning Research and Development Association and received the Man of the Year Award from the National Warm Air Heating and Air Conditioning Association in 1965.

The agricultural-economics department, headed by Garnet Wolsey Forster from 1924 to 1950, focused its research on practical aspects of farm management and marketing: "We would select at random farms in various counties and with proper instruments . . . we made a careful survey of the farm, the size and shapes of the fields. We . . . checked the time required to plow or cultivate different shapes and sizes of fields—long narrow fields, square fields, rectangular fields—and computed the time saved in the various sizes and shapes of fields" (History of the Department of Economics and Business, p. 3). Throughout the 1920s and '30s, about two dozen of its research reports were published in the bulletin series of the Agricultural Experiment Station. Representative publications include *Profitable Farm Combinations Adapted to the Lower Coastal Plain of North Carolina, Farm Income and Taxation in North Carolina, and Migration of Sons and Daughters of White Farmers in Wake County, 1929*. In 1952 the department began publication of the *Tarheel Farm Economist*, and it soon became one of the major communication vehicles of the department. Beginning with four thousand copies, its circulation reached fourteen thousand in the mid-1970s, with most copies mailed in bulk from Raleigh to the one hundred county extension offices in the state. In 1960 the Agricultural Policy Institute opened. During the decade of its existence, the institute sponsored or cosponsored fifty-two conferences, fifteen workshops, and thirty-six seminars.

While the agricultural-economics program made strides, in the first couple decades after World War II the economics program at NC State struggled to attract and hold high-caliber faculty members because of low pay, inadequate research support, and the fact that there were few economics courses to teach above the sophomore level. Like their compatriots in agricultural economics, the department's faculty were active in extension teaching, which included courses at military bases, evening classes, and correspondence courses.

After the merger of the two economics departments in 1965, these programs were joined with the business and accounting programs in the 1970s, but the overall focus continued to be on agriculture. The department produced four presidents of the Agricultural and Applied Economics Association (C. E. Bishop, 1967–68; Richard King, 1979–80; Jon Brandt, 2003–4; and Barry Goodwin, 2014–15), and two presidents were former members of the department's faculty (Richard Shumway, 1998–99; and Bruce Gardner, 2000–2001).[5]

By 1980 the Department of Economics

5. Fourteen fellows of the Agricultural and Applied Economics Association were NC State faculty members or former members: Forster (1957), Bishop (1970), King (1978), Gardner (1989), Daniel Sumner (1999), Shumway and Michael Wohlgenant (2001), V. Kerry Smith (2002), Gerald Carlson (2004), Goodwin (2006), Matthew Holt (2009), Walter Thurman (2010), Bruce Babcock (2013), and John Beghin (2018).

and Business was the largest department on campus with almost one hundred tenure-track faculty members (Bishop and Hoover 2003) although the conglomeration came to an end in 1990. It was during this period that modern academic economic research began to flourish in Raleigh. Economic research at NC State has long had a noticeable empirical and statistical bent, and the economics and statistics departments maintained a close relationship over the years. This is shown in the work of Clifford Hildreth, developer of the Hildreth-Lu method for adjusting a linear model in response to the presence of serial correlation in the error term. David Dickey, whose Dickey-Fuller test tests the null hypothesis that a unit root is present in an autoregressive model, is a long-time member of NC State's Statistics Department with an associate appointment in economics since 1976. T. Dudley Wallace (now at Duke) taught at NC State for fifteen years and is the coauthor of a leading econometrics textbook. A. Ronald Gallant, who is a fellow of the Econometrics Society and co-developer of the efficient method of moments, spent much of his career at NC State.

This empirical bent can be seen in the research of the leading economists currently working at NC State, including Robert Clark (an expert on retirement and Social Security), Barry Goodwin (an expert on agricultural markets), economic historian Lee Craig, macroeconomists Douglas Pearce, John Seater, and James Nason, and natural resource and environmental economist Walter Thurman. Richard Stroup finished his long and distinguished career at NC State. Thurman and Stroup maintained long-term affiliations with the classical liberal Property and Environment Research Center (PERC). Michael Walden is another representative of NC State in the classical liberal tradition. Walden is the author of the biweekly You Decide newspaper column (carried by forty newspapers in the state), has daily radio programs aired on stations around North Carolina, and is a contributing editor to the classical liberal John Locke Foundation's Carolina Journal.

When the Department of Economics split from the Department of Agricultural Economics in 1990, economics at NC State was dominated by a connection to UCLA. About a quarter of the department's faculty had done graduate work at UCLA under Armen Alchian, Harold Demsetz, and Jack Hirschleifer, all of whom carried the Chicago school of economics' tradition of neoclassical economics and free markets to the West Coast. These economists include David Flath, Craig Newmark, Charles Knoeber, Stephen Margolis, and Stan Liebowitz. Perhaps the most prominent of this group were Margolis and Liebowitz, who were best known for their research challenging the QWERTY parable (Boettke 2019).

Supporters of the QWERTY parable argue that it is easy for inefficient systems—such as the standard QWERTY keyboard—to become locked in, damaging economic efficiency and suggesting that top-down economic planning is preferable. Margolis and Liebowitz demonstrated that much of the story as reported by economist Paul David and others is inaccurate. As Boettke (2019, p. 445) writes, "All the evidence that purported to show the superiority of the Dvorak keyboard was either of dubious origins or lacked any scientific rigor. For example, August Dvorak, the inventor behind the simplified keyboard and owner of its patent, was involved with the earliest 'experiments' aimed at establishing which of the alternative keyboard styles was truly superior." Margolis and Liebowitz conclude that "because real-world situations present opportunities for agents to profit from changing to a superior standard, we cannot simply rely on an abstract model to conclude that an inferior standard has persisted. Such a claim demands empirical examination" (Liebowitz and Margolis 1990, p. 21). Later empirical work debunked other QWERTY-like stories, such as Betamax versus VHS. Combining empirical and insightful theoretical work, Margolis and Liebowitz demonstrate that the "literature on network effects and increasing returns, rather than leading to a richer understanding of the ongoing market process of adaptation, adjustment, and amelioration, impoverished our understanding of the entrepreneurial dynamics at work" (Boettke 2019, p. 446).

DUKE UNIVERSITY

Duke has emerged as the top-rated economics department in the Carolinas in recent decades. IDEAS/RePEc (2020b), for example, lists Duke's economics department as the twenty-eighth-ranked program in the United States. IDEAS/RePEc (2020a) also ranks the top economists in the world. Of the forty highest-rated economists in the Carolinas, twenty-eight are in Duke's economics department, its Fuqua School of Business, or its Sanford School of Public Policy.

Duke University's economics department has had a history of caring about history. Fittingly, Duke is the only one of the five departments to include a history of its department online (History of the Duke Department of Economics n.d.).

The first notable economist at Duke was William H. Glasson (1874–1946), who came to Trinity College (before it became Duke University) in 1902, chaired the economics department until 1930, and served as the first dean of the Graduate School. Glasson was attracted to Trinity by its progressive reputation and led the effort to protect the academic freedom of a fellow faculty member who published a piece that called Booker T. Washington "the greatest man, save General Lee, born in the South in a hundred years" (Glasson 1938, p. 2). He played a leading role in Durham's adoption of the city-manager form of government, was advisory editor of the *National Municipal Review* for a decade, and led the effort to get North Carolina to adopt the secret ballot. Inside the classroom, he explained that he "endeavored to present . . . a fair-minded and just account of the many aspects" (Glasson 1938, p. 4) of economic questions such as prosecution of the trusts and monopolies, movements to forbid child labor, and efforts to limit the working hours of women, inspect working conditions in factories, and enact other types of labor legislation. He "felt that he could do more to aid right action . . . by calm discussion and teaching in the class room than by undertaking outside leadership or propaganda" (Glasson 1938, p. 4). His pioneering research focused on the history of military pensions in the United States, including *History of Military Pension Legislation in the United States* (1900) and *Federal Military Pensions in the United States* (1918). He noted that his three most successful hires as department chair were Earl Hamilton, Calvin Hoover, and Joseph Spengler.

Earl Hamilton (1899–1989) spent much of his career studying the impact of gold and silver from the Americas on prices, wages, and money in Spain in three books: *American Treasure and the Price Revolution in Spain, 1501–1650 (1934), Money, Prices and Wages in Valencia, Aragon and Navarre, 1351–1500 (1936), and War and Prices in Spain, 1651–1800* (1947). Emmett (1999) writes:

> One of the earliest quantitative studies in economic history, Hamilton's work showed economists how price data could be assembled from archival records; it also showed historians how the tools of economic analysis could be used to reconstruct that data in order to highlight certain key relationships. His conclusion was that the price level in Spain in the sixteenth century rose more than fourfold because of the importation of precious metals from the Americas (previous studies had estimated price increases of anywhere from twofold to tenfold). His study also showed that the importation of more silver than gold changed the bimetallic ratio of gold and silver, thereby making silver the monetary standard in most of western Europe.

Calvin Hoover (1897–1974) secured leaves of absence to hold research fellowships in Europe. After using a grant from the Social Science Research Fund to spend 1929–30 in Moscow, Hoover, who grew up in a working-class family and called himself as "primitive socialist" (Silk 1999), wrote "Some Economic and Social Consequences of Soviet Communism" (1930) and *The Economic Life of Soviet Russia* (1931). Severely hampered by the secrecy and lies of the USSR, Hoover nonetheless saw great achievements underway and hinted that central planning had great promise. He concluded that "unless the Capitalistic world can utilise the experimental data which are being worked out in Soviet Russia to strengthen itself against the day when Communism, supported materially and spiritually by success on the economic front, registers its first conquests outside of Russia, the only real question may be whether the World Revolution spreads first towards Berlin or towards Bombay. Communism strains every nerve to copy the enviable features of the productive technique of Capitalism. Capitalism may find itself forced to learn some lessons from the Soviet system if it is to be the conqueror in the coming world struggle" (Hoover 1930, p. 444). Subsequently, Hoover traveled to and researched the economies of Germany, Italy, France, Poland, Czechoslovakia, Denmark, Sweden, Norway, and Australia. In 1933 he published *Germany Enters the Third Reich*. Because of this body of work, he is considered to be the founder of the field of comparative economic systems and taught the first ever course on the subject.

Because of his knowledge of the Soviet Union and Nazi Germany, Hoover was called into service with the Office of Strategic Services (the predecessor of the Central Intelligence Agency) during World War II, eventually becoming head of Northern European operations in Sweden. His group was instrumental in finding German synthetic-oil plants, which led to their bombing and destruction. Immediately after the war concluded, Silk (1999) writes, "Hoover went to Berlin . . . to design a basic plan for reconstructing the devastated German economy." Silk continues:

> He designed a plan that called for restor-

ing German steel capacity to 7.8 million tons a year and other industries to a level that would allow Germany to support itself. The report produced a political storm in the United States and the Soviet Union, especially among those who urged that Germany should be reduced to a weak, rural economy to prevent it from ever waging war again. Though a powerful anti-Nazi himself, Hoover believed that peace would be more likely to be preserved by economic health and growth than by wrecking the German economy; the Versailles treaty and Allied efforts after World War I to cripple Germany had actually fed the rise of Hitler and bred World War II. Hoover's plan for rebuilding German industry prevailed . . . and the economic recovery of Germany furthered the unity of Western Europe and the Western defense against the Soviet Union in the Cold War.

President Harry Truman awarded him the Medal of Freedom in 1946.

Joseph Spengler (1902–91), who served as president of the SEA, the AEA, and the Population Association of America, combined interests in economic demography and the history of economics. Although, like many other prominent economists in the Carolinas, he worked for the federal government during World War II (in the Office of Price Administration, in his case), the experience "seems to have reinforced his aversion to governmental bureaucracy and to bureaucrats generally" (Brandis 1999). Spengler was a member of the Mont Pelerin Society and his classical liberal point of view shines forth in his SEA presidential address, "The Problem of Order in Economic Affairs" (1948):

> A centrally planned economy. . . almost certainly will neither maximize the rate of growth of per capita income nor bring about the particular kind of coordination that most men want. For the entrepreneurial state lacks and probably will continue to lack the know-how, the moral integrity, the inventiveness, the capacity to give incentive, and the flexibility of economic behavior requisite in a dynamic world. Moreover, because of the uncertainty inherent in human society and characteristic of human endeavor, the state is incapable of establishing for large numbers those complex arrangements which are presently brought about in the democratic world by continual mutual adjustments of the participating autonomous agent. (Spengler 1948, p. 26)

Combining his interests in demography and the history of economic thought, Spengler published *French Predecessors of Malthus* (1942). Toward the end of his career, he was instrumental in launching the journal History of Political Economy and helping to make Duke the international hub for the archiving of economists' papers and for research into the history of economic thought that it is today through its Center for the History of Political Economy.

The center is home to several internationally recognized historians of economic thought who are current or emeritus professors at Duke. These include Bruce Caldwell, Neil de Marchi, Kevin Hoover, Steven Medema, and E. Roy Weintraub.[6] Caldwell, who heads the center, is a classical liberal known for his work on

6. It is notable that ten of the forty-five presidents of the History of Economics Society have been in departments in the Carolinas. These include (in chronological order) Vincent Tarascio (UNC), Joseph Spengler, Craufurd Goodwin, Martin Bronfenbrenner, Robert Clower, Bruce Caldwell, J. Daniel Hammond (Wake Forest), Kevin Hoover, E. Roy Weintraub, and Steve Medema.

economist Friedrich Hayek and is the general editor of Hayek's *Collected Works*.

Martin Bronfenbrenner (1914–97), a genuine character, who served as vice president of the AEA and president of the SEA, completes the list of notable historians of economics at Duke. During World War II, Bronfenbrenner served in the Pacific, learned Japanese, and translated captured documents. After the surrender of Japan in 1945, he served in the Economic and Scientific Section, which presided over the dissolution of the huge zaibatsu holding companies that facilitated the prosecution of the Japanese war effort. He developed a deep interest and love for Japanese learning and culture and was a member of the Shoup Commission on the Japanese Tax System in 1949. He regularly taught courses on the Japanese economy and was a pioneer of Japanese studies in the United States. He held the Kenan Chair at Duke from 1971 until 1984, moved to Japan as a professor of international economics at the Aoyama Gakuin University in Tokyo for seven years, and finally returned to Duke, where he taught until his death.

When he was invited to serve as president of the History of Economics Society, Bronfenbrenner "insisted there must be some sort of mistake because . . . he was not a historian of economics" and explained that the association should "scout around to find the 'other' Martin Bronfenbrenner who, perhaps, better fit this description" (Moss 1999, pp. 493–94). In fact, it would be wrong to pigeonhole Bronfenbrenner into any subdiscipline of economics. A 1972 article in the *Journal of Political Economy* listed Bronfenbrenner as the sixth most prolific economist in the world. By the end of his career, he had published approximately 250 articles. Bronfenbrenner belonged to the "fast-disappearing class" of generalists in economics. He assessed his accomplishments by saying, "Doubtless I shall end, if I live long enough, 'knowing nothing about everything,' as against the specialist's "knowing everything about nothing'" (p. 492). He continued that the list of subjects about which he knew 'nothing' was vast and ranged "from income distribution theory, labor economics, Marxian economics, Japanese economics, and comparative economic systems, to radical economics, monetary theory, and the history of economic thought" (p. 492).

Colleagues, students, and collaborators noted "his unique personality. He was a specialist in self-effacement, peppered with liberal shakes of cynicism and sarcasm" (p. 492). Goodwin (1999, p. 511) writes, "It is not that he was unusually difficult or obstinate or ill-tempered; he was all of this and more. What you need to recall is that Martin was proud to have been simultaneously a member of the Mont Pelerin Society and the Union for Radical Political Economy."

The final Duke luminary is Juanita Kreps (1921–2010). Kreps earned her PhD in economics at Duke in 1948 and returned to Duke in 1955 after teaching at Denison University, Hofstra College, and Queens College and raising a family. At Duke she became the university's first female vice president. She was also the first woman director of the New York Stock Exchange (1972) and served on numerous corporate boards. A labor economist, her scholarship focused on women in the workforce and on aging and retirement. Her publications include *Sex in the Marketplace: American Women* *at Work* (1971) and *Sex, Age, and Work: The Changing Composition of the Labor Force* (1975).

In 1977, Kreps became secretary of commerce under President Jimmy Carter, the first woman to hold that position and fourth woman ever in the Cabinet. McFadden (2010) writes:

> Like her predecessors, Dr. Kreps was an advocate for the business community, promoting exports, international trade and domestic commerce amid rising inflation and unemployment. She became the nation's traveling saleswoman, taking trade missions to the Soviet Union, Europe, Africa and Asia. In 1979, she negotiated a historic trade agreement with China. While not in the inner circle of Carter advisers, she gave the president a crucial boost when his standing with business had ebbed, organizing meetings for him with corporate leaders in 1977 to map anti-inflation and economic strategies. . . . She . . . pressed business to look beyond profits and act with greater social responsibility toward employees, consumers and the public interest, with measures including affirmative-action programs and steps to protect the environment and strengthen corporate integrity. She was an advocate for women and older workers, the unemployed, minority-owned businesses, and development in depressed urban areas. (McFadden 2010)

THE UNIVERSITY OF NORTH CAROLINA

Throughout most of its history, UNC Chapel Hill's economics department has generally been ranked as the strongest in the Carolinas. Formal quantitative rankings, using measures based on criteria such as faculty publications and graduate student placements, began in the 1970s. In one well-known ranking (Graves, Marchand, and Thompson 1982), UNC's program ranked 16th in the United States and number one in the South. Duke ranked 40th, USC ranked 72nd, NC State ranked 83rd, and Clemson ranked 125th. However, its ranking has fallen since then.

UNC's economics department was established in 1901. Its first professor was Charles Lee Raper (1870–1951), whose graduate work at Columbia University was in history, rather than economics. Raper was the author of *Railway Transportation: A History of Its Economics and of Its Relations to the State* (1911). Fittingly, the program has been the home of some prominent economic historians throughout its history. These include the polymath Milton Heath (1928–2019), author of *Constructive Liberalism: The Role of the State in Economic Development in Georgia to 1860* (1954), James Ingram (1922–2011), author of *Economic Change in Thailand since 1850* (1955), and especially Robert Gallman. All three of these men served as presidents of the SEA.[7] Gallman (1926–98) may have done more to quantify the economic history of the United States than anyone else. Gallman was author, coauthor, and coeditor of numerous works. These include *Developing the American Colonies, 1607–1783* (1964), *Long-term Factors in American Economic Growth* (1992), *American Economic Growth and Standards of Living before*

7. One should not omit Gallman's long-time collaborator William Parker (1919–2000), who left UNC after six years for Yale in 1963. As editor of the *Journal of Economic History* in the early 1960s, Parker presided over the flowering of quantitative research in economic history—the cliometric revolution. Likewise, Paul Rhode, now at the University of Michigan, worked with Gallman in the 1990s and recently published Gallman's articles, worksheets, and partial and completed unpublished manuscripts as *Capital in the Nineteenth Century* (2019). Daniel Buchanan was a widely recognized economic historian of Asia and author of *The Development of Capitalist Enterprise in India* (1934).

the Civil War (1993), *In Pursuit of Leviathan: Technology, Institutions, Productivity, and Profits in American Whaling*, 1816–1906 (1997), the magisterial *Cambridge Economic History of the United States* (1996, 2000, 2000), and *Capital in the Nineteenth Century* (2019).

Perhaps the most influential economist at UNC Chapel Hill was Harold Hotelling (1895–1973). Hotelling was a distinguished professor in UNC's statistics department, although his courses in mathematical economics were cross-listed in the economics department. "As a scholar of international reputation, Professor Hotelling attended seminars and in others ways lent distinction" to UNC's economics department (UNC Economics Department 1991). Hotelling, who became president of the Econometrics Society and was named a distinguished fellow of the AEA, is known to statisticians because of Hotelling's T-squared distribution, a generalization of Student's t-distribution in a multivariate setting. He is especially well known among economists for two papers: "Stability in Competition" (*Economic Journal*, 1929), whose result came to be known as Hotelling's law; and "The Economics of Exhaustible Resources" (*Journal of Political Economy*, 1931), whose result is often called Hotelling's rule.

Hotelling's law is the finding that in some markets it is rational for producers to make their products as similar as possible—s also known as the principle of minimum differentiation. A textbook example is that two ice cream vendors will locate at the same spot on an evenly populated, linear beach—right in the middle. Any other location will leave an individual seller with fewer customers who are closer. Recently this law has been used to explain why specialized retailers often locate next to each other, with Lowe's and Home Depot locating close to each other in many cities, for example. In politics, this has been used to explain why presidential candidates run to the left (Democrats) or right (Republicans) during the primaries, aiming for the center of their party. But when the general election comes, they run closer to the center. Hotelling suggested that his finding implies that markets are inefficient because of this phenomenon.

Hotelling's rule begins by noting that profit maximization occurs when the marginal profit (price minus marginal cost) from selling a unit of a nonrenewable natural resource today is equal to the present value of the marginal profit from selling the unit next year. The model, which is a staple of natural resource economics textbooks, demonstrates that nonrenewable natural resource prices are expected to rise over time and output is expected to fall. Price rises at the discount rate. Thus, if the discount rate is 5 percent, prices rise at 5 percent per year; if the discount rate is higher, prices rise faster. While the model is a useful benchmark, it assumes that market participants are fully informed of future demand, marginal costs, and available supplies. In actual natural resource markets, these conditions don't hold: demand shifts in unknowable ways; and technology often changes, thereby increasing the supply of profitably extractable resources (for example, the recent development of fracking in oil and natural gas markets). Because shifts in demand and marginal costs are unpredictable, natural resource prices fluctuate over time (often quite dramatically since both supply and demand for many of them are very inelastic in the short run), rather than rising monotonically as the model suggests.

Unfortunately, some observers have overlooked the simplifying assumptions of the model and think of the supply of each natural resource as relentlessly diminishing over time. This thinking has led to doomsday predictions, such as those of biologist Paul Ehrlich, who lost a famous bet to economist Julian Simon in 1990 in which Simon correctly predicted that the real price of a basket of natural resources selected by Ehrlich would fall (Sabin 2013). Of the nineteen metals, precious metals, minerals, and fossil fuels examined by Jacks (2019), ten have seen their real prices fall since 1900, while nine have risen.

Another of UNC's most prominent economists, Erich Zimmerman (1888–1961), was also an internationally renowned expert on natural resources. Zimmerman's books include *World Resources and Industries* (1933, 1951) and *Conservation in the Production of Petroleum* (1957). Zimmerman rejected models such as Hotelling's that relied on the fixity of resources (Bradley 2004). Zimmermann (1951, pp. 814–15) writes, "Resources are highly dynamic functional concepts; they are *not*, they *become*, they evolve out of the triune interaction of nature, man, and culture, in which nature sets outer limits, but man and culture are largely responsible for the portion of physical totality that is made available for human use" (emphasis added). Zimmerman (1933, p. 3) also writes, "Previous to the emergence of man, the earth was replete with fertile soil, with trees and edible fruits, with rivers and waterfalls, with coal beds, oil pools, and mineral deposits; the forces of gravitation, of electro-magnetism, of radio-activity were there; the sun set forth its life-bringing rays, gathered the clouds, raised the winds; *but there were no resources*" (emphasis added). Human actions turn the things given by nature into resources: "Knowledge is truly the mother of all resources" (Zimmermann 1951, p. 10).

Zimmerman's approach is far more insightful than Hotelling's model of fixed resources that are depleted over time. It has far different implications as to what will produce human flourishing: "If petroleum resources are dynamic entities that are unfolded only gradually in response to human efforts and cultural impacts, it would seem that the living might do more for posterity by creating a climate in which these resource-making forces thrive and, thriving, permit the full unfolding of petroleum reserves than by urging premature restraint in use long before the resources have been fully developed" (Zimmerman 1957, pp. 8–9). His ideas accord well with the classical liberal understanding that flourishing requires self-direction and a culture that supports entrepreneurial discovery, and they accord well with historical developments in natural resource markets.

UNC has been the home of many other prominent economists, among them John Woosley (an expert on banking), G. T. Schwenning, Ralph Pfouts, William Darity (now at Duke), and Donna Gilleskie (all of whom have been elected president of the SEA). Others include Claudius Murchison (1889–1968; he became director of the US Bureau of Foreign and Domestic Commerce, served on the board of directors of the Export-Import Bank, and became president of the Cotton Textile Association), Corydon

Spruill (1899–1988; he consulted with the Office of Price Administration during World War II), Clarence Heer (1893–1987; he was appointed to Herbert Hoover's Research Commission in Social Trends and became director of the Interstate Commission on Conflicting Taxation under Franklin Roosevelt), and Edward Morris Bernstein (1904–96; he served as chief technical adviser and negotiator at the Bretton Woods Conference and participated in the formation of the International Monetary Fund).

Clarence Philbrook (1909–78) was another leading UNC economist and arguably the most prominent classical liberal at UNC, where he taught from 1947 until 1975. He is probably best known for "'Realism' in Policy Espousal" (*American Economic Review*, 1953) and a series of thoughtful articles published in the *Southern Economic Journal*. Philbrook was an active member of the Mont Pelerin Society and served as its treasurer from 1959 to 1969 (UNC Economics Department 1991, pp. 37–38). Philbrook enjoyed making rhetorical flourishes, as when he noted that "a crucial part of the populace, perhaps especially the intellectuals, tend to believe that we have won a victory for humanitarianism whenever we prevent a price from changing and thus performing its function" (Philbrook 1961, p. 210) and explained that unfettered economic forces are the surest route to prosperity: "It should be clear . . . that the hope of betterment of low-production areas rests exactly on the hope that on occasion new employers will come in to 'take advantage of low wage rates'" (Philbrook 1961, p. 212). Philbrook (1952, p. 21) defended "old-fashioned orthodoxy" against modern Keynesianism, seeing Keynesianism as a snake in the garden and rejecting its temptation of activist fiscal policy. He argued that "a sufficient reason for making public expenditure variation a device only of last resort is that no one . . . seriously means to *reduce* expenditures when aggregate demand needs reduction. A one-way control is no control" (p. 26, emphasis in the original). Philbrook concluded that "the reason for the policy of encouraging flexible wage rates is simply that a free-enterprise system cannot long function without it" (Philbrook, 1952, p. 27).

Philbrook's "Capitalism and the Rule of Love" (1953) is a true gem. It takes on those who aim to destroy capitalism out of a desire for universal human benevolence and brotherly love. His corrective explains that "capitalism does less violence to the rule of love than would any other system so far conceived," so the "destruction of capitalism would constitute a tragedy to the human species" (p. 459). He decries critics who want to compare actual capitalism, a "mangy beast" (p. 461), to a pig in a poke—a hypothetical system that bears little resemblance to alternative systems in practice. These critics have mutilated the best forms of capitalism, have attempted to politicize every price, have sought to put themselves into power, and have refused to let the impersonal market make "disagreeable but necessary adjustments" (p. 463). They cannot answer the most central question: "Once the market is repudiated, what principles—signals and incentives—are to perform the functions of prices—that is, the rationing of goods, the allocation of resources, and the distribution of incomes, in the light of the fact that the total product is drastically influenced by incentives to effort?" (p. 463).

Free enterprise, “bad as it is in comparison to our dreams, seems to offer possibilities of embodying more of the rule of love than we so far see how to embody in any different system” (p. 464). Because we are all sinful, we cannot use coercion or allow the state to use coercion to get our way: “The thing to be guarded, even at tremendous cost if necessary is freedom, in the common-sense meaning of freedom from arbitrary dictation of one soul by another” (p. 465). And “decisions must stem from the tastes and ideals of men, freely developed and freely expressed. . . . Moreover, fantastically more brotherly love than has ever been exercised can be given expression through individual attitude, decision and action in a capitalistic society” (p. 466).

This is a fitting note to end upon.

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