

Spring 3-1-2015

## Progressive Legal Thought

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### Recommended Citation

Herbert Hovenkamp, *Progressive Legal Thought*, 72 Wash. & Lee L. Rev. 653 (2015),  
<https://scholarlycommons.law.wlu.edu/wlulr/vol72/iss2/5>

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# Progressive Legal Thought

Herbert Hovenkamp\*

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## *I. Introduction*

A widely accepted model of American legal history is that “classical” legal thought, which dominated much of the nineteenth century, was displaced by “progressive” legal thought, which survived through the New Deal and in some form to this day. Within its domain, this was a revolution nearly on par with Copernicus or Newton. This paradigm has been adopted by both progressive liberals who defend this revolution<sup>1</sup> and by classical

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1. See generally BRUCE A. ACKERMAN, *WE THE PEOPLE: FOUNDATIONS* (1991); MORTON J. HORWITZ, *THE TRANSFORMATION OF AMERICAN LAW: 1870–1960 THE CRISIS OF LEGAL ORTHODOXY* 9–63 (1992); DUNCAN KENNEDY, *THE RISE AND FALL OF CLASSICAL LEGAL THOUGHT* (2006); SUSAN ROSE-ACKERMAN, *RETHINKING*

liberals who lament it.<sup>2</sup> Nevertheless, the model seriously misinterprets the legal revolution that occurred in the early twentieth century.

We identify classical legal thought with efforts to systematize legal rules along lines that had become familiar in the natural sciences in the early nineteenth century.<sup>3</sup> This methodology sought not only simplification and classification, but also “formalism,” in the sense that it presented the law as a complete system.<sup>4</sup> At the risk of some caricature, the “data” of this system were legal decisions—a model that reflected not only the penchant for classification but also commitment to law as essentially judge-made and evolving over long historical development. Historicism became an important attribute of legal classicism.<sup>5</sup> The authors who are held up as exemplars of classical legal thought include such people as Gilded Age Harvard Law Dean Christopher Columbus Langdell<sup>6</sup> and Francis Wharton, an Episcopal priest and prolific legal writer who produced

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THE PROGRESSIVE AGENDA: THE REFORM OF THE AMERICAN REGULATORY STATE (1992); WILLIAM M. WIECEK, *THE LOST WORLD OF CLASSICAL LEGAL THOUGHT: LAW AND IDEOLOGY IN AMERICA, 1886–1937* (1998); Duncan Kennedy, *Form and Substance in Private Law Adjudication*, 89 HARV. L. REV. 1685 (1976); Duncan Kennedy, *Toward an Historical Understanding of Legal Consciousness: The Case of Classical Legal Thought in America, 1850–1940*, 3 RES. L. & SOC. 3 (1980). See also Suzanna Sherry, *Property Is the New Privacy: The Coming Constitutional Revolution*, 128 HARV. L. REV. 1452 (2015) (reviewing RICHARD A. EPSTEIN, *THE CLASSICAL LIBERAL CONSTITUTION: THE UNCERTAIN QUEST FOR LIMITED GOVERNMENT* (2014)).

2. See generally RICHARD A. EPSTEIN, *THE CLASSICAL LIBERAL CONSTITUTION: THE UNCERTAIN QUEST FOR LIMITED GOVERNMENT* (2014); DAVID N. MAYER, *LIBERTY OF CONTRACT: REDISCOVERING A LOST CONSTITUTIONAL RIGHT* (2011); TIMOTHY SANDEFUR, *THE CONSCIENCE OF THE CONSTITUTION: THE DECLARATION OF INDEPENDENCE AND THE RIGHT TO LIBERTY* (2014).

3. See generally GEORGE H. DANIELS, *AMERICAN SCIENCE IN THE AGE OF JACKSON* 102–18 (1968); HERBERT HOVENKAMP, *SCIENCE AND RELIGION IN AMERICA, 1800–1860* (1978).

4. See DAVID M. RABBAN, *LAW’S HISTORY: AMERICAN LEGAL THOUGHT AND THE TRANSATLANTIC TURN TO HISTORY* 2 (2013) (discussing historicism in Gilded Age American legal thought).

5. See generally *id.*

6. See generally HERBERT HOVENKAMP, *THE OPENING OF AMERICAN LAW: NEOCLASSICAL LEGAL THOUGHT, 1870–1970*, at 114–16 (2015) [hereinafter HOVENKAMP, *OPENING*]; CHRISTOPHER C. LANGDELL, *SELECTION OF CASES ON THE LAW OF CONTRACTS* (1871).

commentaries on many legal subjects.<sup>7</sup> While classical legal thought was generally anti-statist on economic matters, it was not libertarian. In fact, it advocated heavy state regulation of morals even as it supported liberty of contract without state interference as a general matter.<sup>8</sup> The anti-legislative bias of legal classicism readily accommodated doctrines such as economic substantive due process, which originated in the state courts and was prominent in Supreme Court doctrine for the first four decades of the twentieth century.<sup>9</sup>

The classical-to-progressive model of historical explanation is far too narrow to account for the transformative, broadly supported changes in American law that occurred during the decades straddling 1900. A wide spectrum of jurists and legal thinkers, both liberal and conservative, embraced these changes. Classical legal thought would have collapsed even if progressives had never showed up.

This vision of a classical–progressive dichotomy persists, however, because it serves the interests of both the defenders and opponents of the institutions we associate with progressive legal thought—namely, state involvement in wealth distribution, increasing public involvement in economic development, the rise of regulatory agencies with broad quasi-judicial and quasi-legislative powers, deferential judicial review of economic legislation, and aggressive judicial review of government actions injuring discrete and insular minorities.

American law experienced important changes during the period from the Gilded Age through the New Deal. In piecemeal

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7. See Stephen A. Siegel, *Francis Wharton's Orthodoxy: God, Historical Jurisprudence, and Classical Legal Thought*, 46 AM. J. LEGAL HIST. 422, 422 (2004) (describing Wharton's legal scholarship). See generally FRANCIS WHARTON, A TREATISE ON THE CRIMINAL LAW OF THE UNITED STATES (1846); FRANCIS WHARTON, A COMMENTARY ON THE LAW OF EVIDENCE IN CIVIL ISSUES (1877); FRANCIS WHARTON, A TREATISE ON THE LAW OF NEGLIGENCE (1874); FRANCIS WHARTON, A COMMENTARY ON THE LAW OF CONTRACTS (1882); FRANCIS WHARTON, A TREATISE ON THE CONFLICT OF LAWS: OR, PRIVATE INTERNATIONAL LAW (1st ed. 1872).

8. See HOVENKAMP, OPENING, *supra* note 6, at 243–62 (discussing state regulation of morals as part of substantive due process).

9. See *id.* at 243–77 (discussing the development of substantive due process as part of legal classicism).

fashion, private law gradually shifted away from common law dominance and towards an age of statutes, which makes dating this change next to impossible. By contrast, the date for the revolution in public law is often conveniently stated as 1937, when the Supreme Court switched positions on both state<sup>10</sup> and federal<sup>11</sup> economic regulation. A year later, the Supreme Court announced that federal economic legislation would from that time be treated deferentially, although legislation that injured powerless minorities would be treated more harshly.<sup>12</sup> These views were cemented into constitutional law when President Roosevelt succeeded in filling nearly every seat on the Supreme Court with New Deal supporters.<sup>13</sup>

Setting 1937–1938 as the birth date for progressive public law is problematic, however. Important events occurred much earlier. Throughout the nineteenth century, state and local governments were actively involved in the regulation of health, safety, and morals.<sup>14</sup> In the late nineteenth century this regulation reached more expansively to purely economic labor protection and licensing.<sup>15</sup>

In 1905, Justice Holmes complained in his *Lochner v. New York*<sup>16</sup> dissent that the revolution had already occurred: the

10. See *W. Coast Hotel Co. v. Parrish*, 300 U.S. 379, 399–400 (1937) (“The community is not bound to provide what is in effect a subsidy for unconscionable employers.”).

11. See *NLRB v. Jones & Laughlin Steel Corp.*, 301 U.S. 1, 49 (1937) (noting that Congress had the power to pass the National Labor Relations Act and upholding a decision of the NLRB).

12. *United States v. Carolene Prods. Co.*, 304 U.S. 144, 152 n.4 (1938).

13. Hugo Black (August 1937), Stanley Reed (January 1938), Felix Frankfurter (January 1939), William O. Douglas (April 1939), Frank Murphy (January 1940), James F. Byrnes (June 1941, succeeded fifteen months later by Wiley B. Rutledge), Robert H. Jackson (July 1941), and Chief Justice Harlan Fisk Stone (July 1941).

14. See generally HOVENKAMP, *OPENING*, *supra* note 6, at 243–62; WILLIAM J. JERRY L. MASHAW, *CREATING THE ADMINISTRATIVE CONSTITUTION: THE LOST ONE HUNDRED YEARS OF AMERICAN ADMINISTRATIVE LAW* (2012); NOVAK, *THE PEOPLE’S WELFARE: LAW & REGULATION IN NINETEENTH-CENTURY AMERICA* (1996).

15. See HOVENKAMP, *OPENING*, *supra* note 6, at 243–77 (discussing the development of substantive due process and labor policy in the nineteenth century); MASHAW, *supra* note 14, at 227–51 (discussing the development of the administrative state during the Gilded Age).

16. 198 U.S. 45 (1905).

majority's decision striking down a ten-hour law for bakers "is decided upon an economic theory which a large part of the country does not entertain."<sup>17</sup> Further, Holmes acknowledged, he himself was uncertain about the theory. "I should desire to study it further and long before making up my mind."<sup>18</sup> However, accepting or rejecting the legitimacy of the underlying economic theory was not part of his role as a judge.<sup>19</sup> Over the next thirty years, the Supreme Court struck down several state statutes and some federal ones, implicitly rejecting this emergent economic theory, but many of the statutes were overturned by very narrow majorities, particularly those involving state law.<sup>20</sup>

The record on federal legislation also shows a much earlier evolution. First, the history of federal railroad regulation and the Interstate Commerce Commission stretches back to the 1880s,<sup>21</sup> and of antitrust enforcement to the 1890s.<sup>22</sup> In 1918, the Supreme Court struck down the first federal child labor statute under the Commerce Clause and Tenth Amendment, applying the well-developed distinction between "commerce" and "manufacturing."<sup>23</sup> The decision was 5–4, however, which was a different judicial split than the 8–1 decision that had applied that same rationale in an antitrust case twenty-three years earlier.<sup>24</sup>

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17. *Id.* at 75 (Holmes, J., dissenting).

18. *Id.*

19. *See id.* ("But I do not conceive that to be my duty, because I strongly believe that my agreement or disagreement has nothing to do with the right of a majority to embody their opinions in law.")

20. *See generally id.*; *Adkins v. Children's Hosp.*, 261 U.S. 525 (1923) (striking down a minimum wage statute for women); *Morehead v. New York ex rel. Tipaldo*, 298 U.S. 587 (1936) (striking down a minimum wage provision).

21. *See* Herbert Hovenkamp, *Regulatory Conflict in the Gilded Age: Federalism and the Railroad Problem*, 97 *YALE L.J.* 1017, 1017–20 (1988) [hereinafter Hovenkamp, *Regulatory Conflict*] (describing the development of railroad regulation during the Gilded Age); MASHAW, *supra* note 14, at 3–5, 189 (discussing the role of the Interstate Commerce Commission in developing the modern administrative state).

22. *See* HERBERT HOVENKAMP, *ENTERPRISE AND AMERICAN LAW, 1836–1937*, at 241–340 (1991) [hereinafter HOVENKAMP, *ENTERPRISE*] (discussing the origins of the antitrust movement).

23. *Hammer v. Dagenhart*, 247 U.S. 251 (1918).

24. *United States v. E.C. Knight Co.*, 156 U.S. 1, 12 (1895) ("Commerce succeeds to manufacture, and is not a part of it.")

Seven years before that, the Court was unanimous in applying that rationale to upset a federal statute that regulated both locally produced liquor and that shipped across state lines.<sup>25</sup> Other doctrines used to strike down federal legislation, such as limitations on congressional power to delegate authority to agencies, enjoyed more widespread support—such as the 8–1 decision in *Panama Refining Co. v. Ryan*<sup>26</sup> and the unanimous decision in *Schechter Poultry Co. v. United States*.<sup>27</sup>

Legal and constitutional history writing about the rise of progressive legal thought has tended to focus on the changing political environment, rather than nonlegal causes whose influence was much broader. Those historians who looked to nonlegal sources generally saw the most important as Darwinian evolutionary theory and the social science ideas that grew out of it—particularly reform Darwinist sociology, instrumentalism, Freudianism, and genetic determinism.<sup>28</sup>

But Darwinian ideas hardly serve to divide progressive from classical legal thought. Indeed, the conservatives who reacted against progressive economic legislation in the early twentieth century were often characterized as Social Darwinists—even by Justice Holmes. He quipped in his *Lochner* dissent that the Fourteenth Amendment did “not enact Mr. Herbert Spencer’s *Social Statics*.”<sup>29</sup> Beginning with Edward S. Corwin and Richard Hofstadter in the 1940s, historians from the mid-twentieth century saw economic substantive due process doctrine and the progressive reaction as a debate about Darwinism.<sup>30</sup> Henry Steele

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25. *Kidd v. Pearson*, 128 U.S. 1 (1888) (“Manufacture is transformation—the fashioning of raw materials into a change of form for use. The functions of commerce are different.”).

26. 293 U.S. 388 (1935).

27. 295 U.S. 495 (1935).

28. See HOVENKAMP, OPENING, *supra* note 6, at 53–74.

29. *Lochner v. New York*, 198 U.S. 45, 75 (1905) (Holmes, J., dissenting).

30. See *generally* EDWARD S. CORWIN, CONSTITUTIONAL REVOLUTION, LTD. 82–90 (1941); RICHARD HOFSTADTER, SOCIAL DARWINISM IN AMERICAN THOUGHT, 1860–1915 (1944) [hereinafter HOFSTADTER, SOCIAL DARWINISM]; HOVENKAMP, OPENING, *supra* note 6, at 23–24; ARNOLD M. PAUL, CONSERVATIVE CRISIS AND THE RULE OF LAW: ATTITUDES OF BAR AND BENCH, 1887–1895 (1960); HENRY STEELE COMMAGER, THE AMERICAN MIND: AN INTERPRETATION OF AMERICAN THOUGHT AND CHARACTER SINCE THE 1880’S, at 82–90, 372–73 (1950); BENJAMIN

Commager concluded that Holmes was “obviously wrong” and that the majority really did believe the Fourteenth Amendment enacted a form of Social Darwinism.<sup>31</sup> While I believe this characterization of substantive due process is incorrect,<sup>32</sup> the fact remains that it represents an important rejection of the idea that the resistance to the progressive revolution came mainly from “classical” legal thought. Darwin and its social science implications were just as inconsistent with and threatening to classical legal doctrine as progressive legal thought was.

Further, Darwin was hardly the only—or even the dominant—source of the revolution. Economic thought also went through a profound revolution in the late nineteenth and early twentieth centuries, and in ways that were to have a broad and lasting impact on legal policy. While the progressive direction of legal thought has produced plenty of critics, almost no one wants to roll the clock back on the marginalist revolution in economics. The impact of marginalism reached much more broadly than to self-styled progressives.<sup>33</sup> As a result, the classical–progressive dichotomy gets the distribution of legal views very wrong. Most legal conservatives or libertarians who were literate in economics also embraced the marginalist revolution.

Today the term “neoclassical” refers to economics since the rise of marginalism. The term is helpful because it realistically suggests a blending of old and new ideas rather than a complete rejection of everything that had gone before. For the most part, neoclassical economics preserved classicism’s preference for market exchange and private ownership. At the same time, however, the neoclassical conception of the market was far more complex than the classical conception, and the tools for market analysis became more technical.<sup>34</sup> In the process many of the

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TWISS, LAWYERS AND THE CONSTITUTION: HOW *Laissez Faire* CAME TO THE SUPREME COURT (1942).

31. COMMAGER, *supra* note 30, at 372–73.

32. See Herbert Hovenkamp, *The Political Economy of Substantive Due Process*, 40 STAN. L. REV. 379, 417–20 (1988) (discussing the limited influence of Social Darwinism on legal thought in the Gilded Age).

33. See HOVENKAMP, OPENING, *supra* note 6, at 13–35, 75–90.

34. See *id.* at 32–33, 96–97.



classical conclusions about the value of competition and the harm caused by monopoly were preserved but qualified.

The same thing is true of the largely simultaneous revolution in legal thought. For that reason the term “neoclassical” seems preferable to the term “progressive” here as well. Neoclassical legal thought included an expanded conception of market failure, a larger ratio of legislation to common law rules, and more regulation.<sup>35</sup> But these ideas hardly eliminated either markets or the common law.<sup>36</sup> The common law became less concerned with compensation for past harm done and more focused on risk management for the future, but most of it retained its character as judge-made law.<sup>37</sup> While Grant Gilmore proclaimed the “death of contract” in 1974, contract law hardly died.<sup>38</sup> Rather, it evolved into the great institutions of the First and Second Restatements and the Uniform Commercial Code.<sup>39</sup> Neoclassical criminal law incorporated both theories of genetic inheritance and of marginal deterrence, but it never abandoned its concerns with morality or even retribution.<sup>40</sup> Corporate law largely remained intact, even as it abandoned backward-looking theories of corporate finance expressed in the concept of par value shares and moved toward rational expectations models.<sup>41</sup> These views were clearly

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35. *See id.* at 2.

36. *See id.* (“Except at the far left, legal thinkers of this period believed that common law and capitalist legal institutions were worth preserving.”).

37. *See id.* at 123–58 (commenting on common law’s increasing orientation toward expectations and risk management).

38. *See* GRANT GILMORE, *THE DEATH OF CONTRACT* 3 (1974) (“We are told that Contract, like God, is dead. And so it is.”).

39. *See id.* at 67–69 (discussing the development of the Restatements and the Uniform Commercial Code). *See generally* RESTATEMENT (FIRST) OF THE LAW OF CONTRACTS (1931) (explaining general principles of contract law); RESTATEMENT (SECOND) OF THE LAW OF CONTRACTS (1975–1981) (same); U.C.C. (1942–1952) (providing a uniform model code for state laws regarding commercial transactions); ARTHUR LINTON CORBIN, *CORBIN ON CONTRACTS: A COMPREHENSIVE TREATISE ON THE WORKING RULES OF CONTRACT LAW* (1950) (analyzing the rules of contract law and commenting on the Restatement).

40. *See* HOVENKAMP, *OPENING*, *supra* note 6, at 36–52 (discussing progressive criminal theory, which was “a blend of biological determinism, marginal deterrence theory, and classical moralism”).

41. *See id.* at 159–83.

revisionist, but they were just as clearly not progressive.<sup>42</sup> Rather, they embraced changes in legal theory and doctrine that claimed much broader support than progressive legal thought ever did.<sup>43</sup>

## II. Neoclassical Economic Thought

“Marginalism” equates value with reasonable expectations about the next choice.<sup>44</sup> This was in sharp contrast to the classical political economists, who tended to see value as a consequence of previous decisions.<sup>45</sup> Marginalism completely upended classical political economy’s theory of value by changing the perspective from backward to forward looking.<sup>46</sup> For example, while classicists shared a strong belief that competition drives prices toward cost, the term “cost” usually meant an average of past expenses.<sup>47</sup> By contrast, marginalists were able to articulate a much more precise relationship between prices and cost, first by the concept of “marginal” cost, or the anticipated cost of making one further unit in the future, and somewhat later, marginal revenue.<sup>48</sup> Value became associated with marginal willingness-to-pay or marginal willingness-to-accept.<sup>49</sup> These tools enabled

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42. See *id.* at 3–4.

43. See *id.* at 4.

44. See George J. Stigler, *The Adoption of the Marginal Utility Theory*, 4 HIST. POL. ECON. 571, 572–75 (1972) (providing the history of marginalism). For a brief history, see HOVENKAMP, OPENING, *supra* note 6, at 27–35 (describing the development of marginalism). For a longer history focusing mainly on Britain and the European continent, see RICHARD S. HOWEY, *THE RISE OF THE MARGINAL UTILITY SCHOOL: 1870–1889* (1989).

45. See, e.g., David Ricardo, *Absolute Value and Exchangeable Value*, in 4 WORKS AND CORRESPONDENCE OF DAVID RICARDO 357, 361 (Piero Sraffa & Maurice Dobb eds., 1951) (discussing Ricardo’s perspective on the measurement of value). For a brief history of classical value theory, written by a qualified defender, see Klaus Hagendorf, *The Labor Theory of Value: A Marginal Analysis* (Soc. Sci. Research Network, Working Paper No. 1958566), available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1958566](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1958566).

46. See HOVENKAMP, OPENING, *supra* note 6, at 29.

47. See *id.* at 27–28.

48. See *id.* at 28.

49. See *id.* at 29.

marginalists to relate cost, value, and decision making with much greater clarity than the classicists had achieved.<sup>50</sup>

Prior to the 1870s, Anglo-American political economy largely developed its theory of value from the amount of labor that went into something.<sup>51</sup> In Adam Smith's words, "The real price of everything . . . is the toil and trouble of acquiring it."<sup>52</sup> The relevant queries were backward looking, and typically located "value" by dividing total past investment by the number of units produced.<sup>53</sup>

In sharp contrast, contemporary English political philosophy was increasingly utilitarian, particularly under the influence of Jeremy Bentham (1748–1832) and John Austin (1790–1859).<sup>54</sup> Bentham developed sophisticated, forward-looking concepts of marginal deterrence in criminal law<sup>55</sup> as well as declining marginal utility, or the idea that any good has less incremental value per unit as one acquires more of it.<sup>56</sup> He also had a conception of "equilibrium,"—or the idea that things move from

50. See *id.* ("Marginalism greatly facilitated the development of distinctions between investment (fixed) costs and operating (variable) costs, and of the effects of decisions over time.").

51. See MAURICE DOBB, THEORIES OF VALUE AND DISTRIBUTION SINCE ADAM SMITH: IDEOLOGY AND ECONOMIC THEORY 45 (1973) (discussing Adam Smith's theory of labor value).

52. ADAM SMITH, INQUIRY INTO THE NATURE AND CAUSES OF THE WEALTH OF NATIONS bk. I, at ch. 5.2 (1776).

53. See HOVENKAMP, OPENING, *supra* note 6, at 27–28.

54. See *id.* at 3 (noting Bentham and Austin's influence on British legal thinking).

55. See *id.* at 28–29 (explaining that despite developing "both the concepts of declining marginal utility and marginal deterrence in criminal law," Bentham neglected to develop marginalist theories of cost or value).

56. JEREMY BENTHAM, THE PHILOSOPHY OF ECONOMIC SCIENCE (c. 1793), reprinted in 1 WERNER STARK, JEREMY BENTHAM'S ECONOMIC WRITINGS: CRITICAL EDITION BASED ON HIS PRINTED WORKS AND UNPRINTED MANUSCRIPTS 113 (1952) ("[T]he quantity of happiness produced by a particle of wealth (each particle being of the same magnitude) will be less at every particle; the second will produce less than the first, the third less than the second, and so on."); see also JEREMY BENTHAM, PRINCIPLES OF THE CIVIL CODE, pt. 1, at ch. 6 (1802), reprinted in 1 THE WORKS OF JEREMY BENTHAM 304–07 (John Bowring ed., 1838) (discussing the effect of wealth on happiness). For Bentham's influence on thinking about marginal deterrence, see BERNARD E. HARCOURT, THE ILLUSION OF FREE MARKETS: PUNISHMENT AND THE MYTH OF NATURAL ORDER 36–37, 103–20 (2011).

lower to high utility and come to rest when utilities are equalized.<sup>57</sup>

One enigma in nineteenth century British thought is the extent to which classical political economy and utilitarianism in political philosophy existed side by side, all the while encompassing inconsistent theories about value.<sup>58</sup> The mystery is all the more perplexing because the French economist Augustin Cournot (1801–1877) had embraced marginalism much earlier and was known in England.<sup>59</sup> His work was more mathematical, however, than anything that the English political economists did prior to the late nineteenth century.<sup>60</sup>

Before economics could become marginalist, Bentham's ideas about expected utility had to migrate from criminal law and politics into a theory of market exchange. Late in his life, John Stuart Mill began toying with marginalist ideas, although even today the extent of Mill's marginalism is disputed.<sup>61</sup> The real task of rewriting British political economy along marginalist lines fell to William Stanley Jevons (1835–1882), F.Y. Edgeworth (1845–1926), and Alfred Marshall (1842–1924).<sup>62</sup> By common belief, John Bates Clark in the United States (1847–1938) arrived at marginalism simultaneously, independently, and radically.<sup>63</sup>

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57. See Werner Stark, *Jeremy Bentham as an Economist*, 56 *ECON. J.* 583, 583–84 (1946) (explaining Bentham's concept of equilibrium).

58. See HOVENKAMP, OPENING, *supra* note 6, at 27–28.

59. See MARK BLAUG, *ECONOMIC THEORY IN RETROSPECT* 299–300 (4th ed. 1985) (discussing Cournot's influence on marginalist thought).

60. See *id.* at 317–19.

61. See N.B. de Marchi, *Mill and Cairnes and the Emergence of Marginalism in England*, in *THE MARGINAL REVOLUTION IN ECONOMICS* 78–97 (R.D. Collison Black et al. eds., 1973) (discussing John Stuart Mill's treatment of marginalist theory); John Stuart Mill, *Notes on N.W. Senior's Political Economy*, reprinted in 12 *ECONOMICA* 134 (1945) (similar).

62. See BLAUG, *supra* note 59, at 300.

63. See JOHN BATES CLARK, *THE PHILOSOPHY OF WEALTH: ECONOMIC PRINCIPLES NEWLY FORMULATED* chs. 4–5 (1886) (analyzing production in marginalist terms); JOHN BATES CLARK, *THE DISTRIBUTION OF WEALTH: A THEORY OF WAGES, INTEREST, AND PROFITS* vi–vii (1899) (discussing marginal value and distribution); JOSEPH SCHUMPETER, *HISTORY OF ECONOMIC ANALYSIS* 870 (1950) (describing Clark as one of the “last of the claimants to independent discovery of the principle of marginal analysis”); Thomas Nixon Carver, *The Marginal Theory of Distribution*, 13 *J. POL. ECON.* 257, 260 (1905) (referencing Clark's work on wealth distribution).

For the marginalists, all value lay in anticipations about the future.<sup>64</sup> “Value depends entirely on utility,” Jevons wrote in the early 1870s, not on previous investment.<sup>65</sup> Jevons then developed simple models of exchange, in which people traded to increase their personal utility.<sup>66</sup> He showed that any individual would maximize value by trading up to the point that he had exactly the same marginal utility for everything.<sup>67</sup> If there was an imbalance, he would make further trades until utilities were equalized.<sup>68</sup> From these principles, marginalists developed what eventually became a powerful set of mathematical tools to describe how the economy moves toward equilibrium.<sup>69</sup> Alfred Marshall, who was obsessed with fluid mechanics, developed this idea much further.<sup>70</sup> Justice Holmes, who was not an economist, later recognized its importance.<sup>71</sup>

While the classical theory of value depended on purely material components relating to costs, marginalist value theory was behavioral, based on assumptions about how human beings make choices.<sup>72</sup> It is difficult to exaggerate the importance of this difference between classical and neoclassical value theory. While classicists tended to see political economy as part of the law of nature, neoclassicists increasingly saw economics as part of social

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64. See HOVENKAMP, OPENING, *supra* note 6, at 27.

65. See WILLIAM STANLEY JEVONS, THE THEORY OF POLITICAL ECONOMY 2, 59–60 (1871) (explaining degrees of utility from consumption).

66. See HOVENKAMP, OPENING, *supra* note 6, at 28–29 (discussing Jevons’s theories of exchange).

67. See *id.* (explaining Jevons’s concept of “equation of utilities”).

68. See *id.* at 29 (“When someone is satisfied with exactly what he has, ‘it follows that . . . an increment of commodity would yield exactly as much utility in one use as in another.’”).

69. See *id.* at 30–31 (discussing the marginalist understanding of equilibrium).

70. See *id.* at 31.

71. See *id.* (explaining Justice Holmes’s use of “equilibrium”); Stephen Diamond, *Citizenship, Civilization, and Coercion: Justice Holmes on the Tax Power*, in THE LEGACY OF OLIVER WENDELL HOLMES, JR. 115, 143 (Robert W. Gordon ed., 1992) (quoting Holmes’s letter of July 19, 1911, to Frank Taussig discussing Holmes’s perspective on wealth and equilibrium).

72. See HOVENKAMP, OPENING, *supra* note 6, at 29–30.

science.<sup>73</sup> The same thing occurred in elite legal theory, which moved from natural science to social science models as well.<sup>74</sup>

Marginalism spread very quickly and by the turn of the century claimed many of America's most prominent economists. These included John Bates Clark (Columbia),<sup>75</sup> Irving Fisher (Yale),<sup>76</sup> Francis Amasa Walker (Yale),<sup>77</sup> Arthur Twining Hadley (Yale),<sup>78</sup> Simon Newcomb (Johns Hopkins)<sup>79</sup> and Charles Sanders Peirce (mainly U.S. Government, philosophy of science).<sup>80</sup> It quickly became a staple in American economic treatises and texts.<sup>81</sup>

73. See *id.* at 16.

74. See *id.* at 7 (explaining that legal issues that had “been articulated in terms of natural law and morality were recast as problems of evolutionary social science and risk management”).

75. See *supra* note 63 and accompanying text (discussing John Bates Clark's opinions and scholarship on marginalism).

76. See, e.g., Irving Fisher, *Mathematical Investigations in the Theory of Value and Prices*, in 9 TRANSACTIONS OF THE CONNECTICUT ACADEMY 27, 38 (1892) (diagramming marginal utility).

77. See FRANCIS AMASA WALKER, *THE WAGES QUESTION: A TREATISE ON WAGES AND THE WAGES CLASS* 138–48 (1876) (rejecting the wage fund doctrine); FRANCIS AMASA WALKER, *POLITICAL ECONOMY* 99–105 (1883) (illustrating principles of final utility in market exchange).

78. See ARTHUR TWINING HADLEY, *ECONOMICS: AN ACCOUNT OF THE RELATIONS BETWEEN PRIVATE PROPERTY AND PUBLIC WELFARE* 78–79 (1898) (explaining marginal utility theory).

79. See, e.g., D.W. Goodwin, *Marginalism Moves to the New World*, 4 HIST. POL. ECON. 551, 558–59 (1972) (discussing Simon Newcomb's career and his development as a marginalist); Simon Newcomb, *On the Method and Province of Political Economy*, 121 N. AM. REV. 241 (1875) (analyzing principles of political economy pertaining to domestic industry); Simon Newcomb, *The Theory of Political Economy*, 114 N. AM. REV. 435 (1872) (reviewing WILLIAM STANLEY JEVONS, *THE THEORY OF POLITICAL ECONOMY* (1871) and analyzing Jevons's work on marginal utility).

80. See HOVENKAMP, *OPENING*, *supra* note 6, at 138–39 (discussing Peirce's contributions to marginalist economics).

81. See, e.g., CHARLES J. BULLOCK, *INTRODUCTION TO THE STUDY OF ECONOMICS* 91–97 (1897) (distinguishing between total and marginal utility); HERBERT J. DAVENPORT, *OUTLINES OF ELEMENTARY ECONOMICS* 62–66 (1897) (explaining the doctrine of “margins,” utility, and value); EDWARD T. DEVINE, *ECONOMICS* 189 (1898) (explaining marginal utility's relationship with a community's valuation of goods); RICHARD T. ELY, *OUTLINES OF ECONOMICS* 121–25 (1893) (exploring marginalist concepts of value and utility); FRANK A. FETTER, *PRINCIPLES OF ECONOMICS WITH APPLICATIONS TO PRACTICAL PROBLEMS* 23–27 (1904) (defining marginal utility and its relationship to value); IRVING FISHER,

At the same time, there were notable outliers on both the left and the right. Thorstein Veblen, the grandparent of left-leaning American institutionalism, opposed marginalism because in his mind its stripped-down theory of rational decision making was not sufficiently evolutionary and did not give an adequate account of human behavior.<sup>82</sup> On the far right was Yale's William Graham Sumner, a Social Darwinist and defender of classicism who wrote more as a public intellectual than an economist.<sup>83</sup>

By the turn of the century, marginalist ideas were attaining widespread acceptance in American universities, both inside and outside of formal economics.<sup>84</sup> Marginalism was also ideologically diverse, capturing both left-leaning as well as more conservative economists. On the left was institutionalist labor economist John R. Commons, who was an important American developer of marginalist theory before he identified himself with institutionalism and labor economics.<sup>85</sup> The same was true of tax

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ELEMENTARY PRINCIPLES OF ECONOMICS 286–95 (1911) (analyzing demand and its relationship to marginal desirability); HADLEY, *supra* note 78 and accompanying text (discussing marginal utility theory); HENRY R. SEAGER, INTRODUCTION TO ECONOMICS 89–92 (1904) (explaining valuation of goods and marginal utility both as a social process and in an industrial society); EDWIN R.A. SELIGMAN, PRINCIPLES OF ECONOMICS, WITH SPECIAL REFERENCE TO AMERICAN CONDITIONS 192 (1905) (explaining that the utility, or value, of a commodity is equivalent to the cost of the labor); FRANK W. TAUSSIG, PRINCIPLES OF ECONOMICS 120–37 (1911) (applying and analyzing marginal utility).

82. See HOVENKAMP, OPENING, *supra* note 6, at 34 (noting Veblen's criticisms of marginalist theories); Thorstein Veblen, *Why Is Economics Not an Evolutionary Science?*, 12 Q.J. ECON. 373, 384 (1898) (criticizing the lack of evolutionary understanding in marginalism); Thorstein Veblen, *The Limitations of Marginal Utility*, 17 J. POL. ECON. 620, 620–21 (1909) (criticizing marginal utility theory's failure to include a theory of growth and change).

83. See HOVENKAMP, OPENING, *supra* note 6, at 25–27 (discussing Sumner's perspective on social evolution); WILLIAM GRAHAM SUMNER, COLLECTED ESSAYS IN POLITICAL AND SOCIAL SCIENCE 16–17 (1885) (arguing against monopolies in favor of competition for supply and demand to achieve equilibrium).

84. See HOVENKAMP, OPENING, *supra* note 6, at 33 (“After 1900, both economic and legal thought were increasingly dominated by a mixture of Darwinian and marginalist principles, with marginalism taking an increasing role.”). On the use of marginalist analysis by non-economists, see DOROTHY ROSS, THE ORIGINS OF AMERICAN SOCIAL SCIENCE 389 (1991).

85. See, e.g., JOHN R. COMMONS, THE DISTRIBUTION OF WEALTH (London, Macmillan & Co., 1893) (developing theories of distribution and discussing marginal utility as it applies to the theories).

economist Edwin R.A. Seligman, who incorporated marginalist economics into his studies about the shifting and incidence of taxation as well as his advocacy of a graduated income tax.<sup>86</sup>

More conservative and laissez-faire economists who adopted marginalist analysis included John Bates Clark (Columbia),<sup>87</sup> J. Laurence Laughlin (University of Chicago),<sup>88</sup> Arthur Twining Hadley, who became a long-serving president of Yale University,<sup>89</sup> and later Harvard's Frank Taussig, who was more moderate.<sup>90</sup> Indeed, early criticism of American antitrust policy, a progressive innovation, came from marginalist economists such as Hadley, who believed that antitrust would interfere with firms' ability to reach efficient size through merger or collaboration.<sup>91</sup>

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86. See HOVENKAMP, OPENING, *supra* note 6, at 98–102 (discussing Seligman's work on progressive taxes and shifting tax burdens); EDWIN R.A. SELIGMAN, THE SHIFTING AND INCIDENCE OF TAXATION 165–76 (rev. ed. 1899) (discussing the “mathematical theory” of the incidence of taxation including the work of marginalists); Edwin R.A. Seligman, *On the Shifting and Incidence of Taxation*, 7 PUB. AM. ECON. ASS'N 7, 119–20 (1892) (discussing the relationship between taxation and the law of value); Edwin R.A. Seligman, *Progressive Taxation in Theory and Practice*, 9 PUB. AM. ECON. ASS'N 1, 132–33 (1894) (discussing theories of value in advocating for a progressive income tax); Edwin R.A. Seligman, *The Theory of Progressive Taxation*, 8 PUB. AM. ECON. ASS'N 52, 53 (1893) (“[T]he marginal utility theory of value was held to furnish an irrefragable proof of the necessity of progression.”). For an extended history of Progressive Era tax policy, including Seligman's role, see AJAY K. MEHROTRA, MAKING THE MODERN AMERICAN FISCAL STATE: LAW, POLITICS, AND THE RISE OF PROGRESSIVE TAXATION, 1877–1929 (2013).

87. See *supra* note 63 and accompanying text (discussing John Bates Clark's views on marginalism).

88. See ROSS, *supra* note 84, at 175–76 (discussing the gradual transition of classical economists to marginalist thought).

89. See HADLEY, *supra* note 78 and accompanying text (referencing marginal utility theory). See generally Arthur T. Hadley, *Economic Laws and Methods*, 8 SCI. 46 (1886) (analyzing and explaining the relationship between economics and jurisprudence).

90. See FRANK TAUSSIG, 2 PRINCIPLES OF ECONOMICS 153–63 (1913) (discussing the relationship between wages and value as well as how marginal utility governs value).

91. See THE MAKING OF COMPETITION POLICY: LEGAL AND ECONOMIC SOURCES 72 (Daniel A. Crane & Herbert Hovenkamp eds., 2012) (discussing Hadley's position that monopoly or collusion were essential for certain industries to avoid bankruptcy); Herbert Hovenkamp, *The Antitrust Movement and the Rise of Industrial Organization*, 68 TEX. L. REV. 105, 125–27 (1989) (explaining Hadley's theory that “competition would force capital-intensive industries to charge ruinous prices” that would ultimately end in bankruptcy).



The prominent Johns Hopkins public intellectual Simon Newcomb, who wrote in many areas of science and mathematics as well as economics, was both a marginalist and a staunch defender of laissez-faire economics.<sup>92</sup> Newcomb's fierce debates in the 1880s with progressive economist Richard T. Ely drew the battle lines over the future of the discipline. The debate focused on whether marginalism was consistent with laissez-faire political theory.<sup>93</sup>

During the decades following Reconstruction, both Darwinian and marginalist ideas went from controversial to mainstream, with dissenters increasingly shunted to the sidelines.<sup>94</sup> These ideas eventually captured virtually all the American academy in their respective fields. By the 1920s, pretty much everyone with a thoughtful opinion had embraced both biological evolution and marginalist economics.<sup>95</sup>

In that case, just how much of the contemporaneous revolution in legal thought was really progressive, and how much reflected a much broader revolution that accommodated these disruptive ideas in different ways? By and large, those who lament the progressive revolution in legal thought today would not turn the clock back on marginalist economics and, for the most part, not on Darwinian evolution either. But accommodating the theory of evolution and marginalist analysis required so much revision of classical legal thought that it could no longer be called "classical." Further, legal progressivism by

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92. See HOVENKAMP, OPENING, *supra* note 6, at 86.

93. See Richard T. Ely, *The Past and the Present of Political Economy*, in 2 JOHNS HOPKINS UNIVERSITY STUDIES IN HISTORY AND POLITICAL SCIENCE 143, 151–52 (1884) (opposing laissez-faire); Simon Newcomb, *The Two Schools of Political Economy*, 14 PRINCETON REV. 291, 291–92 (1884) (criticizing Ely). The debate was originally published in *Science* magazine and later collected as *Science Economic Discussion* (1886). See ALBERT E. MOYER, A SCIENTIST'S VOICE IN AMERICAN CULTURE: SIMON NEWCOMB AND THE RHETORIC OF SCIENTIFIC METHOD 108–26 (1992) (providing a detailed discussion of debates between Newcomb and Ely and their respective positions).

94. See HOFSTADTER, SOCIAL DARWINISM, *supra* note 30, at 4–7 (discussing Darwinism's effect and reception in the United States).

95. See HOVENKAMP, OPENING, *supra* note 6, at 33 (discussing the institutional and political support for both Darwinism and marginalism).

and large did not carry these ideas any further, although it did spin them in different directions.

Darwinism and marginalism both had profound and simultaneous influences on American legal thought.<sup>96</sup> Ironically, however, they were built on fiercely inconsistent assumptions about human nature.<sup>97</sup> Their preferred methodologies of social control were very different as well.<sup>98</sup> They managed to occupy common intellectual turf principally among the early progressives, as well as legal scholars, who used ideas more promiscuously than most scientists and social scientists did.<sup>99</sup>

Darwinians believed that human beings, like all organisms including plants, had an instinct for survival that dominated everything else, even conscious choice.<sup>100</sup> Further, this instinct was forever and relentlessly reactionary against the environment, making the concept of free choice almost meaningless.<sup>101</sup> For the Darwinian social scientist, the human being was a body, and the mind merely one of its many organs seeking survival.<sup>102</sup> Speaking of Darwinian instrumentalist John B. Watson, Justice Holmes wrote Harold Laski in 1928 that Watson was “so preoccupied with resolving all our conduct into reflex reactions to stimuli, that he almost denies that consciousness means anything and that memory is more than a useless and misleading word.”<sup>103</sup>

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96. *See id.* at 3.

97. *See id.* at 15–16 (explaining that Darwinians believed that choices were based on survival instincts, whereas marginalists believed that decision making was an autonomous event).

98. *See id.* at 16–17 (noting that marginalists believed social control was incentive based, while Darwinists believed that the individual was fixed at birth).

99. *See id.* at 33–34.

100. *See* HOFSTADTER, SOCIAL DARWINISM, *supra* note 30, at 6 (“The most popular catchwords of Darwinism ‘struggle for existence’ and ‘survival of the fittest,’ when applied to the life of man in society, suggested that nature would provide that the best competitors in a competitive situation would win.”).

101. *See id.* at 164 (discussing Darwinian beliefs that “social hindrances’ cannot prevent men of high ability from becoming eminent, and . . . ‘social advantages are incompetent to give that status to a man of moderate ability’”).

102. *See* HOVENKAMP, OPENING, *supra* note 6, at 15.

103. Letter from Oliver Wendell Holmes, Jr. to Harold Laski (Nov. 23, 1928), *in* 2 HOLMES-LASKI LETTERS: THE CORRESPONDENCE OF MR. JUSTICE HOLMES AND HAROLD J. LASKI: 1916–1935, at 1113 (Mark DeWolfe Howe ed., 1953).

In sharp contrast, marginalism was built on a rational-expectations model that saw the human being entirely as a mind, whose choices might or might not benefit the body.<sup>104</sup> The marginalist mind, in sharp distinction from that of the Darwinian, was rational and autonomous, developing and asserting preferences to maximize its position within its environment.<sup>105</sup> Further, as marginalist economics became more rigorous in the 1930s, it virtually ruled out all inquiry into the biological or other external sources of preference.<sup>106</sup> Such investigations were not within the boundaries of economic science.<sup>107</sup>

Followed to their logical conclusions, these inconsistent views about human nature led to completely incompatible philosophies of social control. For the Darwinian, any particular individual's deviant harmful conduct could not be controlled except by incarceration.<sup>108</sup> The only way to address the problem over the longer run was through sterilization or sexual isolation—a proposition that many American progressives embraced.<sup>109</sup> By contrast, the marginalist believed that persons would respond rationally to rewards and penalties.<sup>110</sup> As a result, punishment could be metered to the offense. In *The Path of the Law*, as observed below, Holmes categorically aligned himself with the marginalists.<sup>111</sup>

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104. See HOVENKAMP, OPENING, *supra* note 6, at 15 (“By contrast, marginalism saw the human being as a highly rational mind, controlling a body that would prosper or not from the mind’s choices.”).

105. *See id.*

106. *See id.* at 16 (“Marginalist economists increasingly came to think that human preferences are autonomous, or at least that science could not uncover their origins.”).

107. *See id.* (“[T]he enterprise of searching for a common biological or social structure that linked the preferences of different individuals was ostracized from economic science.”).

108. *See id.* at 36 (noting that many Darwinists believed that criminal behavior was an inherited quality and that individuals were not responsible for their behavior).

109. *See id.* at 42–47 (discussing theories of criminality and compulsory sterilizations).

110. *See id.* (“[M]arginalism saw criminal and other antisocial conduct mainly as a problem in metering sanctions.”).

111. *See* Oliver Wendell Holmes, Jr., *The Path of the Law*, 10 HARV. L. REV.

### III. Neoclassical Legal Policy

Marginalism's forward-looking theory of value was a revolution in human perspective about choice and decision making. It also posed formidable administrative difficulties. Either Yogi Berra or physics Nobel laureate Niels Bohr once observed that "prediction is very difficult, especially if it's about the future."<sup>112</sup> No matter the author, the point is important. The forward looking view of the world opened up by marginalist thought involved much more uncertainty than anything that economic classicists had considered. To be useful for policy and prediction, both economics and legal theory developed an idea of rational expectations, or the reasonable foresight of an average person, to manage decision making about value.<sup>113</sup> His ability to capture this insight made Holmes America's greatest marginalist in turn-of-the-century legal policy.<sup>114</sup>

One important result, strongly influenced by Holmes, was a revolution in the common law of contracts, property, and tort: changing their focus from compensation for past harm done toward management of risks and ongoing relationships.<sup>115</sup> The law of commercial contracts abandoned its strict requirements of previously agreed upon price, quantity, product, and terms of delivery.<sup>116</sup> Instead, neoclassical contract law evolved toward increasing acceptance of open-ended arrangements that looked to the furtherance of future relationships, requiring business firms

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457, 458, 461, 471, 473–74 (1897) (espousing marginalist theories such as forward-looking views of legal duties and value, the circumstances of crimes, and the perspective that a criminal's character is not dispositive); *infra* notes 167–185 and accompanying text (providing a more detailed discussion of Holmes as a marginalist).

112. ARTHUR K. ELLIS, *TEACHING AND LEARNING ELEMENTARY SOCIAL STUDIES* 431 (3d ed. 1986); *see also* Ronald J. Allen, *Complexity, the Generation of Legal Knowledge, and the Future of Litigation*, 60 *UCLA L. REV.* 1384, 1386 n.1 (2013) (noting that authorship of the statement is in doubt).

113. *See* HOVENKAMP, *OPENING*, *supra* note 6, at 151.

114. *See infra* notes 257–268 and accompanying text.

115. *See* HOVENKAMP, *OPENING*, *supra* note 6, at 122.

116. *See id.* at 126 (stating that changes in contract law "undermined the traditional rule that a contract was not 'complete' unless it contained a specified price, a specified quantity and a specified good or service").

to behave within rationally expected parameters but not necessarily specifying price, quantity, or other specific terms.<sup>117</sup> These developments were aided by the creation of neoclassical profit-maximization models that made it possible to predict objectively rational business decisions, although not necessarily noncommercial behavior.<sup>118</sup> Aided by the rise of actuarial science, tort law adopted probabilistic theories of causation, shared liability, and risk management.<sup>119</sup> Included was a growing appreciation of strict liability as a device for forcing manufacturers to internalize the social cost of defective products.<sup>120</sup>

Marginalism's reorientation of decision theory toward future expectations was much more realistic about the way people behave.<sup>121</sup> At the same time, however, incorporating these forward-looking conceptions of human behavior destabilized legal policy.<sup>122</sup> The range of predicted values is much larger than the range of averaged values taken from the past. Marx aside, classical political economy never developed pronounced interventionist views in distinction from accepted laissez-faire alternatives.<sup>123</sup> Marginalism, by contrast, broke down quickly into left- and right-leaning views, both of which were generally consistent with the marginalist assumptions of the day.<sup>124</sup>

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117. *See id.* (noting increased enforcement of "output" or "requirement" contracts for unspecified quantities).

118. *See* HOVENKAMP, OPENING, *supra* note 6, at 123–29 (discussing the growing divide between commercial and noncommercial contracts).

119. *See id.* at 144–45 (describing changes in the tort system, including the development of risk analysis, actuarial science, and industrial developments that made negligence more common, and causation more complex).

120. *See id.* at 148–50 (discussing the development of strict liability theory through the doctrine of *res ipsa loquitur* and its application to the Coca-Cola bottle cases).

121. *See id.* at 129.

122. *See id.* at 129–50.

123. *See id.* at 6 ("Classical economic thought was unified by a historical theory of value and a deep hostility toward State interference in private arrangements.").

124. *See id.* at 7 (explaining that marginalism has "gyrated among political ideologies" and "breaks apart into radically different views").

*A. Market Diversity and Failure: Antitrust and Regulation*

As marginalist economics became formalized, particularly in the writings of F.Y. Edgeworth and Alfred Marshall, economists and later lawyers increasingly came to believe two things. First, markets differ from one another.<sup>125</sup> Second, the conditions for robust competition are met less often than the classical political economists had assumed, making markets more prone to failure.<sup>126</sup> Marginalist economists of every political stripe accepted these propositions, although they differed as to the amount as well as about policy implications.<sup>127</sup> Further, their views changed over time.

Notwithstanding his near-socialism on questions of wealth redistribution, the great Cambridge University economist Alfred Marshall managed to produce the most important industrial economics book of his era, and it was largely committed to determining the conditions of competition, with monopoly as an occasional exception.<sup>128</sup> However, certain problems emerged in Marshall's formulation of competition theory.<sup>129</sup> Under his model of marginal-cost pricing, competitive firms with fixed costs would end up cutting prices to the point that they could not recover their capital investment.<sup>130</sup> The result was "ruinous competition" that would work itself out until only one firm remained in the market.<sup>131</sup> For this reason a significant group of economists

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125. See *id.* at 35.

126. See George J. Stigler, *Perfect Competition, Historically Contemplated*, 65 J. POL. ECON. 1 (1957).

127. See HOVENKAMP, OPENING, *supra* note 6, at 82 (describing the range of beliefs among marginalists over market failure and other economic theories).

128. See ALFRED MARSHALL, PRINCIPLES OF ECONOMICS 5–6 (1890).

129. See HOVENKAMP, OPENING, *supra* note 6, at 206 (explaining that "marginalist analysis and even Marshall's own work threw the economic study of industry into division and disarray" because of its issues with competition).

130. See *id.* ("[C]ompetition forces prices towards immediate costs without leaving enough to cover capital costs. . . . [T]his 'ruinous competition' problem was generalized to all industries with significant fixed costs.").

131. See Herbert Hovenkamp, *Coase, Institutionalism, and the Origins of Law and Economics*, 86 IND. L.J. 499, 533 (2011) ("[C]ompetition was thought to become 'ruinous' as each firm cut its price to marginal cost without having enough left over to pay off fixed costs. Firms would either go out of business until only a single monopoly firm remained or else they would be forced to

opposed the newly enacted Sherman Act,<sup>132</sup> while progressives tended to favor it.<sup>133</sup> The mainstream marginalist view was mainly premised on the idea that fixed costs and economies of scale dictated large firm size and that any attempt to intervene would be counterproductive.<sup>134</sup> For example, the “ruinous competition” antitrust defense was presented to the courts as a justification for railroad price fixing.<sup>135</sup>

Marshall himself was never able to solve the problem of fixed costs satisfactorily.<sup>136</sup> The problem was perceived most strongly in the railroads, the large industry with the highest proportion of

collude.”); Herbert Hovenkamp, *United States Competition Policy in Crisis, 1890–1955*, 94 MINN. L. REV. 311, 320–22 (2009) (explaining the marginalist disfavor of antitrust policy).

132. 15 U.S.C. §§ 1–7 (enacted 1890); *see also* Henry Rand Hatfield, *The Chicago Trust Conference*, 8 J. POL. ECON. 1, 6 (1899) (noting that the majority of the economists present at the conference favored consolidation of large businesses). The proceedings of this meeting were published as *Chicago Conference on Trusts: Speeches, Debates, Resolutions* (1900). *See* MAKING OF COMPETITION POLICY, *supra* note 91, at 72 (noting the difference in marginalist and progressive perspectives of the Sherman Act).

133. *See, e.g.*, RICHARD T. ELY, MONOPOLIES AND TRUSTS 240–41 (1912) (noting methods used to counteract monopolies); CHARLES R. VAN HISE, CONCENTRATION AND CONTROL 174–92 (1912) (discussing the Sherman Act and its effectiveness); TRUSTS, POOLS AND CORPORATIONS (William Z. Ripley ed., rev. ed. 1916) (noting the need for the Sherman Act to address “unfair practices” in business).

134. *See* HOVENKAMP, OPENING, *supra* note 6, at 206 (explaining that the concern over ruinous competition led many economists to believe that the only solution was “monopoly or collusion” and that the government could not resolve the problem).

135. *See* *United States v. Joint Traffic Ass’n*, 171 U.S. 505, 576 (1898) (“[T]he only resort open to railroads to save themselves from the effects of a ruinous competition is that of agreements among themselves to check and control it. A ruinous competition is, as they say, apt to be carried on until the weakest of the combatants goes to destruction.”); *United States v. Addyston Pipe & Steel Co.*, 85 F. 271, 279 (6th Cir. 1898) (noting that defendants argued that “each member would be subjected to ruinous competition by the other” without an internal agreement); HOVENKAMP, ENTERPRISE, *supra* note 22, at 312–13 (noting that the “ruinous competition” defense had been accepted by courts in price-fixing cases); Ann Mayhew, *How American Economists Came to Love the Sherman Antitrust Act*, 30 HIST. POL. ECON. 179, 191–92 (Supp. 1998) (discussing economists’ defense of trusts to prevent “cut-throat competition” and “ruinous losses”).

136. *See* HOVENKAMP, OPENING, *supra* note 6, at 207–09.

fixed costs.<sup>137</sup> Within that environment, price regulation emerged as a defensible, if imperfect, solution.<sup>138</sup> Eventually economists began to develop more complex models of competitive behavior taking price discrimination<sup>139</sup> and product differentiation into account.<sup>140</sup> These largely brought the fixed controversy to an end.

Historians writing about regulation have tended to emphasize political over economic and technical issues.<sup>141</sup> Initially most of them saw regulation as the outcome of a war between capitalist defenders of laissez-faire economics and new progressive ideas.<sup>142</sup> Later, the dominant view came to be that

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137. See HOVENKAMP, ENTERPRISE, *supra* note 22, at 311.

138. See, e.g., ISAIAH L. SHARFMAN, RAILWAY REGULATION: AN ANALYSIS OF THE UNDERLYING PROBLEMS IN RAILWAY ECONOMICS FROM THE STANDPOINT OF GOVERNMENT REGULATION 19 (1918)

Railway rivalry tends to be abnormally keen and competition ruinous. This in turn, leads to co-operation in various forms. . . . Competing railway companies . . . either consent to a truce whereby competition between them is abolished and arrive at an agreement for the maintenance of rates, or continue their warfare until one of the roads is driven to insolvency.

Sharfman was a professor of political economy at the University of Michigan. See also WILLIAM Z. RIPLEY, RAILROADS: RATES AND REGULATION 259, 293 (1912) (describing how railroads acting in competition might either set rates or establish agreements to avoid waste in transportation). Ripley was a Harvard University professor of economics. See HOVENKAMP, ENTERPRISE, *supra* note 22, at 311–12 (explaining Hadley's theory of ruinous competition and noting that the combination appeared to be the only solution).

139. See generally JOHN MAURICE CLARK, STUDIES IN THE ECONOMICS OF OVERHEAD COSTS 35–69 (1923) (discussing differential costs and price discrimination).

140. See EDWARD CHAMBERLIN, THE THEORY OF MONOPOLISTIC COMPETITION 71–73 (1933) (explaining product differentiation under monopolistic competition); JOAN ROBINSON, THE ECONOMICS OF IMPERFECT COMPETITION 4–5 (1933) (discussing product differentiation and monopoly).

141. See Hovenkamp, *Regulatory Conflict*, *supra* note 21, at 1018 (noting that historical studies of regulation focus more on politics and less on regulatory theories developed by economists of that time).

142. See, e.g., HAROLD U. FAULKNER, THE DECLINE OF LAISSEZ FAIRE: 1897–1917, at 368–79 (1977) (discussing the impact of progressive ideologies on government regulation); RICHARD HOFSTADTER, THE AGE OF REFORM 228–29 (1955) (discussing the conflict over regulation between large corporate businesses and progressive ideals); EDWARD C. KIRKLAND, A HISTORY OF AMERICAN ECONOMIC LIFE 613 (1932) (discussing the growing opposition to “big business”).



most regulation was actually passed at the behest of regulated firms who wanted to relieve themselves from the rigors of competition.<sup>143</sup>

In retrospect, it seems clear that the railroad industry was threatened with *both* ruinous competition and monopoly, depending on the circumstances.<sup>144</sup> Among historians, both sides of the regulation story give short shrift to the significant amount of technical economic work that sought to define when regulatory intervention was appropriate and what were its proper boundaries.<sup>145</sup> That debate was heavily driven by differing conceptions about the nature and ubiquity of market failure.<sup>146</sup>

Writing in the first half of the twentieth century, progressive historians painted a picture of the nineteenth century as a laissez-faire state until progressive government regulation developed as a response to late nineteenth century abuses as well as the labor movement.<sup>147</sup> The critique created a seriously exaggerated image of hostility toward government regulation.<sup>148</sup>

At the same time, the domain of nineteenth century regulation was significantly narrower than it became after the Progressive Era.<sup>149</sup> Earlier regulation fell mainly within the

143. See KOLKO, *infra* note 164 and accompanying text (discussing the capture theory of regulation).

144. See Hovenkamp, *Regulatory Conflict*, *supra* note 21, at 1044

If the railroads were permitted to have unregulated monopolies, rate gouging and large monopoly profits at the expense of carriers were sure to result. . . . [I]f the railroads were forced to compete with each other . . . railroad rates would almost certainly be driven to a level too low to cover fixed costs, eventually forcing railroads into bankruptcy.

145. See *id.* at 1021.

146. See *id.* at 1017.

147. See HOVENKAMP, OPENING, *supra* note 6, at 159 (arguing that Progressive-Era historians tended to favor the narrative which presented the development of business policy as part of a “survival of the fittest,” in which the government favored big business and disfavored the labor movement).

148. See *id.* at 278 (“The United States had a strong tradition of regulation at every governmental level that stretched back to the commonwealth ideal of Revolutionary times and maintained a growing presence throughout the nineteenth century.”); WILLIAM J. NOVAK, *THE PEOPLE’S WELFARE: LAW & REGULATION IN NINETEENTH CENTURY AMERICA* ix (1996) (arguing that the idealized laissez-faire state never existed and that nineteenth century America was actually a well-regulated state).

149. See HOVENKAMP, OPENING, *supra* note 6, at 243 (describing the

triumvirate of “health, safety, or morals” that was clearly recognized in Gilded Age case law as well as the contemporary constitutional treatise writers.<sup>150</sup> Under this view, which came to define the boundaries of substantive due process constitutional analysis, the state had authority to intervene to protect the morals of everyone from their own degenerate inclinations.<sup>151</sup> By contrast, health or safety concerns justified regulation when the feared injury was on third parties who were not in a position to bargain over an issue.<sup>152</sup> For example, in *Lochner*, Justice Peckham condemned the bakers’ ten-hour provision because he could not find a relationship between the ten-hour rule and the “healthful quality of the bread” that the bakers produced.<sup>153</sup> As adult individuals with contractual capacity, the bakers could bargain about their own personal health and well-being, but bread consumers were not participants in that bargain.<sup>154</sup> Three years later, attorney Louis Dembitz Brandeis was able to turn the Court on this issue by writing a “social science” brief whose argument was divided into three parts, dealing with the effect of long working hours on women’s “health, safety, and morals.”<sup>155</sup>

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substantive due process era and the Court’s reluctance to interfere with contract or property rights).

150. See *id.* at ch. 13 (listing “health, safety, and morals” triumvirate as qualifications on economic substantive due process).

151. See *id.* at 256.

152. See *Lochner v. New York*, 198 U.S. 45, 61 (1905) (explaining that statutes limiting work hours are not within a state’s police power unless reasonable grounds exist to indicate “some material danger to the public health or to the health of the employees”).

153. See *id.* at 62 (explaining that any connection between work hours and bread quality is “too shadowy and thin to build any argument for the interference of the legislature”).

154. See *id.* (“There is no contention that bakers as a class are not equal in intelligence and capacity to men in other trades . . . or that they are not able to assert their rights and care for themselves without the protecting arm of the State”); HOVENKAMP, OPENING, *supra* note 6, at 250 (noting that Justice Peckham rejected the notion that regulation was needed to protect consumer interests, and found that the bakers were capable of making contracts).

155. See Brief for Defendant in Error at 28–46, *Muller v. Oregon*, 208 U.S. 412 (1908) (No. 107) (focusing on the harm to women’s health, safety and morals); HOVENKAMP, OPENING, *supra* note 6, at 249–51 (discussing the importance and influence of this aspect of Brandeis Brief).

The health, safety, and morals triumvirate dominated constitutional discussion about the limits of economic regulation during the Gilded Age.<sup>156</sup> The phrase was used in forty-four published judicial opinions prior to 1890, an additional 100 cases between 1890 and 1900, and in another 1,100 cases between 1900 and 1930. After the *United States v. Carolene Products Co.*<sup>157</sup> decision announced the end of close federal judicial scrutiny of economic regulation, the health, safety, and morals triumvirate became relatively unimportant.<sup>158</sup> It gave way to more secular theories of market failure that justified regulation on economic grounds.<sup>159</sup>

While the economic theory of regulation since *Carolene Products* has divided into differing opinions about its social value and harm, the dominant ones are all marginalist and all center on two questions. The first concerns the pervasiveness of market failure. The second concerns the ability of the political system to recognize market failure and do something constructive about it.<sup>160</sup> Any divide between conservatives and progressives showed up mainly in issues of degree. Further, to the extent that the political case against regulation is libertarian,<sup>161</sup> those views are not classical either. The classical theory opposing regulation in the United States included a strongly moral and thus anti-libertarian set of exceptions—even permitting such things as the uncompensated shutdown of distilleries that had been legal when they were built, Sunday work, or commercial transactions.<sup>162</sup>

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156. See HOVENKAMP, OPENING, *supra* note 6, at 251.

157. 304 U.S. 144 (1938).

158. See HOVENKAMP, OPENING, *supra* note 6, at 262.

159. See *id.* (explaining that regulation based on purely economic considerations was an “important consequence of the marginalist revolution”).

160. See *id.* (describing the differing approaches to market failure).

161. See, e.g., JAMES M. BUCHANAN & GORDON TULLOCK, *THE CALCULUS OF CONSENT: LOGICAL FOUNDATIONS OF CONSTITUTIONAL DEMOCRACY* 55–56 (1962) (arguing that regulations such as zoning are unnecessary because it is in private parties’ greater interest to reach private contractual arrangements); RICHARD A. EPSTEIN, *THE CLASSICAL LIBERAL CONSTITUTION: THE UNCERTAIN QUEST FOR LIMITED GOVERNMENT* ix (2014) (arguing that “classical liberal theory” encompasses libertarian ideals such as “private property” and “limited government”).

162. See HOVENKAMP, OPENING, *supra* note 6, at 255–62 (describing

The progressive critique of regulation argued that regulation was in the public interest and intended to bring monopoly under control.<sup>163</sup> The rejection of that position came from both political sides. New Left historian Gabriel Kolko argued that, far from reflecting progressive concerns to control monopoly, railroad regulation was actually instigated by the railroads themselves as protection from excessive competition and bankruptcy.<sup>164</sup>

This regulatory capture thesis also became a staple of more right-leaning libertarians and the Chicago School, all driven by marginalist conceptions.<sup>165</sup> For example, Buchanan and Tullock's *Calculus of Consent* conducted an extensive marginalist analysis of individual rational decision making and its relationship to social choice.<sup>166</sup> Mancur Olson, whose influential book *The Logic*

regulations based on "moral" campaigns, including lotteries, alcohol, and "Sunday laws," which prohibited work or contract enforcement on Sundays).

163. See, e.g., 2 CHARLES BEARD & MARY BEARD, *THE RISE OF AMERICAN CIVILIZATION* 166–210 (1928) (discussing the rise of "economic barons" and legislative attempts to control monopolies); EMORY RICHARD JOHNSON & THURMAN WILLIAM VAN METRE, *PRINCIPLES OF RAILROAD TRANSPORTATION* 499–508 (1926) (discussing the need for railroad regulation and the effect of that regulation); WILLIAM Z. RIPLEY, *RAILROADS: RATES AND REGULATION*, *supra* note 138, at 467–73 (discussing the effect of legal cases that limited rate-making power and the harm caused by those limitations); 1 ISIAH LEO SHARFMAN, *THE INTERSTATE COMMERCE COMMISSION: A STUDY IN ADMINISTRATIVE LAW AND PROCEDURE* 17–19 (1931) (discussing the background of the demand for federal regulation to control railroad monopolies); Martin Knapp, *The Regulation of Railway Rates*, 6 *PUB. AM. ECON. ASS'N* 20, 20 (1905) (advocating for regulation of railroads by "public authority"); Hugo R. Meyer, *Government Regulation of Railway Rates*, 7 *PUB. AM. ECON. ASS'N* 61, 61–62 (1906) (discussing federal railroad regulation); William Z. Ripley, *Public Regulation of Railroad Issues*, 4 *AM. ECON. REV.* 541, 541 (1914) (arguing for railroad regulations to benefit the public interest). The most influential defense of regulation in the public interest was JAMES LANDIS, *THE ADMINISTRATIVE PROCESS* (1938).

164. See GABRIEL KOLKO, *RAILROADS AND REGULATION: 1877–1916*, at 3 (1965); Hovenkamp, *Regulatory Conflict*, *supra* note 21, at 1020 (explaining that federal regulation of railroads was supported by the railroads).

165. See, e.g., Richard A. Posner, *Theories of Economic Regulation*, 5 *BELL J. ECON. MGM'T SCI.* 335, 335–36 (1974) (explaining regulatory capture theory); George J. Stigler, *The Theory of Economic Regulation*, 2 *BELL J. ECON.* 3, 4 (1971) (understanding that regulation is a "problem of discovering when and why an industry . . . is able to use the state for its purposes").

166. See BUCHANAN & TULLOCK, *supra* note 161, at vi (explaining that the goal of the book is to "analyze the calculus of the rational individual" in regard to decisions about constitutional issues).

of *Collective Action* became among the most popular defenses of the regulatory capture theory,<sup>167</sup> developed it entirely out of the neoclassical theory of how cartels discipline themselves.<sup>168</sup> He borrowed heavily from his thesis advisor Edward Chamberlin, whose *Theory of Monopolistic Competition* had been published thirty years earlier.<sup>169</sup>

The regulatory capture argument picked up one important theme from substantive due process analysis. In *Lochner*, Justice Peckham had professed suspicion that legislation such as the ten-hour law was in fact passed for “other motives” than the justifications offered for it.<sup>170</sup> He did not identify the interest groups behind the law, however, although they were already well known at the time.<sup>171</sup> Peckham suggested that a proffered motive was to assure the “healthful quality of the bread,” but then added that in the Court’s judgment it was “not possible in fact” to discover that connection.<sup>172</sup>

Justice Peckham’s empirical conclusion is odd; not only had no one shown a relationship between workers’ hours and the

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167. See TUCK, *infra* note 169, at 3 (stating the importance of *The Logic of Collective Action*).

168. See MANCUR OLSON, JR., THE LOGIC OF COLLECTIVE ACTION: PUBLIC GOODS AND THE THEORY OF GROUPS 6–7 (1965) (challenging traditional view that organizations further members’ interests).

169. See *id.* at 9–24 (relying on EDWARD CHAMBERLIN, THEORY OF MONOPOLISTIC COMPETITION (1933)); RICHARD TUCK, FREE RIDING 3 (2008) (noting Chamberlin’s influence on Olson’s work). Chamberlin had been Olson’s thesis advisor but died before it was finished. See J. Barkley Rosser, Jr., *The Rise and Decline of Mancur Olson’s View of the Rise and Decline of Nations*, 74 SO. ECON. J. 4, 4 n.2 (2007) (noting that Thomas C. Schelling finished supervising Olson’s thesis after Chamberlin died in 1962).

170. See *Lochner v. New York*, 198 U.S. 45, 64 (1905) (“It is impossible for us to shut our eyes to the fact that many of the laws of this character, while passed under what is claimed to be the police power for the purpose of protecting the public health or welfare, are, in reality, passed from other motives.”).

171. See DAVID E. BERNSTEIN, REHABILITATING *LOCHNER*: DEFENDING INDIVIDUAL RIGHTS AGAINST PROGRESSIVE REFORM 26–28 (2011) (discussing the role that the bakers’ union and other groups played in passing and enforcing the Bakeshop Act); HOVENKAMP, OPENING, *supra* note 6, at 247–48, 271–73 (discussing the impact and influence of labor unions and women’s public action groups, especially in the Bakeshop Act).

172. *Lochner*, 198 U.S. at 63.

quality of the product, but it was impossible to do so.<sup>173</sup> Whether or not that was true in 1905, the fact is that economic substantive due process analysis was never good at identifying special interest capture because it never developed any empirical or other litigation tools for doing so.<sup>174</sup> The case law either assumed capture or else was indifferent to the question, concluding that liberty of contract outweighed any market failure effects, whether present or not.<sup>175</sup> One defeated this premise not by showing an absence of capture, but rather by showing that the regulation in question pertained to health, safety, or morals.<sup>176</sup>

But *Carolene Products*, which completely rejected *Lochner's* approach to economic regulation, did not do any better. Its highly deferential standard made legislative capture irrelevant to constitutional analysis unless the regulation in question invaded some explicit constitutional right or was so biased that it violated even rational basis Equal Protection analysis.<sup>177</sup> *Carolene Products* itself illustrates the problem. The federal regulation at issue prohibited "filled milk," which consisted of milk to which a small amount of oil had been added that enabled it to whip.<sup>178</sup> It was cheaper than dairy cream, healthier by today's standards, and performed better.<sup>179</sup> *Carolene* produced it under the name

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173. See *id.* at 62 ("In our judgment it is not possible in fact to discover the connection between the number of hours a baker may work in the bakery and the healthful quality of the bread made by the workman.").

174. See HOVENKAMP, OPENING, *supra* note 6, at 305 ("In retrospect, neither *Lochner*-style economic due process nor *Carolene Products'* extreme deference was a good vehicle for ferreting out the harmful effects of special interest control of legislation.").

175. See *Lochner*, 198 U.S. at 63–64 (noting several state supreme courts that upheld the right of freedom to contract over legislative attempts to regulate various professions through licensing or certification).

176. See *id.* at 53 (explaining that legislative interference with the freedom to contract is constitutional, provided that the law is a legitimate exercise of police power because it relates to "safety, health, morals and general welfare of the public").

177. See *United States v. Carolene Prods. Co.*, 304 U.S. 144, 152 n.4 (1938) (explaining that the presumption of constitutionality may be challenged when legislation appears "on its face to be within a specific prohibition of the Constitution").

178. See *id.* at 145 (describing the Filled Milk Act).

179. See Geoffrey P. Miller, *The True Story of Carolene Products*, 1987 SUP. CT. REV. 397, 402.

“Milnut.”<sup>180</sup> It is produced to this day by Smucker’s, Inc., but renamed “Milnot” a year after the decision.<sup>181</sup> Far from being progressive regulation in the public interest, *Carolene Products* actually represented an instance of special interest capture by the dairy industry, attempting to protect itself from an inexpensive alternative.<sup>182</sup> Just prior to the Supreme Court decision, several state courts had struck down similar state law provisions because they had not been shown to relate reasonably to health, safety, or morals.<sup>183</sup>

*B. The Neoclassical Market: The Commerce Clause and Interstate Production*

Gilded Age and early twentieth century markets were larger than they had been previously, and in two different senses. The first was technological, resulting from the revolution in transportation and manufacturing.<sup>184</sup> The railroad greatly decreased the cost and increased the speed of interstate shipments, and mass production required firms to seek out wider markets for their goods.<sup>185</sup>

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180. See *Carolene Prods.*, 304 U.S. at 146.

181. See HOVENKAMP, OPENING, *supra* note 6, at 306 (explaining that “Milnot” is for sale today and owned by Smucker’s); Miller, *supra* note 179, at 399 (similar).

182. See HOVENKAMP, OPENING, *supra* note 6, at 305–06 (explaining that *Carolene Products* “undermined the Supreme Court’s ability to limit ‘capture’ by special interest groups”); Miller, *supra* note 179, at 398–99 (explaining that the statute at issue was an extreme example of special interest legislation).

183. See, e.g., *Carolene Prods. Co. v. McLaughlin*, 5 N.E.2d 447, 449–50 (Ill. 1936) (concluding that the act in question was not enacted based on concern for the public health); *Carolene Prods. Co. v. Thomson*, 267 N.W. 608, 611 (Mich. 1935) (concluding that prohibiting manufacture of filled milk, which is “harmless to public health,” cannot be justified under the police power); *Carolene Prods. Co. v. Banning*, 268 N.W. 313, 315 (Neb. 1936) (concluding that a state statute banning filled milk is unrelated to “health, safety, morals or general welfare”).

184. See HOVENKAMP, OPENING, *supra* note 6, at 189 (noting that the technological revolution in the late 1800s was due to “railroad expansion, electricity, the internal combustion engine, and machine production”).

185. See *id.* at 295–96.

Second was the changing economic conception of the market. Historically the “market” had been viewed as a setting where buyers and sellers make exchanges, a metaphor that was both personal and local.<sup>186</sup> For neoclassical economists such as Alfred Marshall, however, the market was an area over which prices moved toward equilibrium.<sup>187</sup> The market became depicted by demand and supply curves that did not distinguish individual production activities.<sup>188</sup> Acquisition of raw materials, processing, distribution, and delivery all became part of an undifferentiated production function.<sup>189</sup> Further, a bottleneck at any stage could affect all other stages. Recognition of this principle made the manufacturing–commerce distinction untenable for situations where a significant portion of a production-distribution chain was interstate.<sup>190</sup>

Increasingly after the Civil War, important production decisions were made in contemplation of interstate transactions, mainly by rail.<sup>191</sup> A New York producer of beet sugar might grow and pack it for shipment to Boston or New York. A farmer’s decision about what to plant and how much to grow depended critically on his anticipation about the size of the market.<sup>192</sup> These queries collapsed decisions about production and shipment into one.<sup>193</sup> They obliterated any usefulness that the distinction

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186. See *id.* at 295 (stating that economists no longer viewed the market as “a place where traders meet to exchange goods and haggle over prices”).

187. See *id.* (explaining Marshall viewed markets a “geographic area over which prices tend to move toward an equilibrium”).

188. See Lawrence A. Boland, *Difficulties with the Element of Time and the Principles of Economics or Some Lies My Teachers Told Me*, 8 E. ECON. J. 47, 52 (1982) (noting that one problem with Marshall’s definition is the assumption that all quantities are fixed—except price).

189. See HOVENKAMP, OPENING, *supra* note 6, at 295.

190. See *id.* at 296–97 (discussing the impact of wider manufacturing on the manufacturing–commerce distinction).

191. See *id.* at 295.

192. See *id.*

193. See *id.* (“Neoclassical economics collapsed questions about how much to grow, how much to manufacture, and how much to ship into a single one defined by the anticipated size of the market.”).



between “manufacturing” and “commerce” under dual federalism might ever have had.<sup>194</sup>

In 1895, the Supreme Court ruled 8–1 that manufacturing is not commerce.<sup>195</sup> As a result, the Sherman Act could not reach a trust of sugar manufacturers located in a single state even if the shipments were designated at production for interstate shipment.<sup>196</sup> The acknowledged object of the trust, as Justice Harlan observed in his dissent, was “to obtain a [great] influence or more perfect control over the business of refining and selling sugar in this country.”<sup>197</sup> To the extent the trust exported its product, the state where the production plants were located was the beneficiary rather than the victim of its monopoly.<sup>198</sup> As a result, Chief Justice Fuller and the majority stated the concern backwards when they opined that the “relief of the citizens of each state from the burden of monopoly and the evils resulting from the restraint of trade among such citizens was left with the states to deal with.”<sup>199</sup> Insofar as this was a monopoly issue, the state’s interest was aligned with the sellers’ rather than the buyers’. The victims were elsewhere.

In 1918, the Supreme Court followed the sugar trust reasoning in striking down the first federal child labor law.<sup>200</sup>

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194. *See id.* at 295–96.

195. *See* *United States v. E.C. Knight Co.*, 156 U.S. 1, 12 (1895) (“Commerce succeeds to manufacture, and is not a part of it.”).

196. *See* OWEN M. FISS, *TROUBLED BEGINNINGS OF THE MODERN STATE*, 1888–1910, at 114 (1993) (explaining how the Court found that sugar refining was manufacturing and that “monopolization of that economic activity . . . was a proper subject of concern for the states, but not for the federal government”).

197. *E.C. Knight*, 156 U.S. at 18 (Harlan, J., dissenting); *see also* FISS, *supra* note 196, at 114–15 (discussing Harlan’s opinion that the Sugar Trust had created a monopoly to control the price of refined sugar in the United States); Charles W. McCurdy, *American Law and the Marketing Structure of the Large Corporation, 1875–1890*, 38 J. ECON. HIST. 631, 648 (1978) (explaining the significance of the Court’s Commerce Clause decisions for companies seeking to manufacture on a large scale).

198. *See E.C. Knight*, 156 U.S. at 17 (explaining that defendants’ actions were limited to Pennsylvania and initial sales were made in Philadelphia and Pennsylvania).

199. *Id.* at 11.

200. *See* *Hammer v. Dagenhart*, 247 U.S. 251, 277 (1918).

Now the margin was 5–4, however.<sup>201</sup> The statute prohibited the use of child labor to produce goods that were shipped interstate within thirty days of their manufacture.<sup>202</sup> The thirty-day limitation is telling because it indicates that interstate shipment for the goods in question was planned.<sup>203</sup> They were being manufactured in fulfillment of orders from out of state.

Justice Holmes's dissent made two eminently sensible points. The first was that Congress was in fact regulating what could be transported across a state line.<sup>204</sup> It was not regulating child labor for purely intrastate production and sale.<sup>205</sup> His other point was this:

The Act does not meddle with anything belonging to the States. They may regulate their internal affairs and their domestic commerce as they like. But when they seek to send their products across the State line they are no longer within their rights. If there were no Constitution and no Congress their power to cross the line would depend upon their neighbors. Under the Constitution such commerce belongs not to the States but to Congress to regulate. It may carry out its views of public policy whatever indirect effect they may have upon the activities of the States. Instead of being encountered by a prohibitive tariff at her boundaries the State encounters the public policy of the United States which it is for Congress to express.<sup>206</sup>

The sugar trust and child labor decisions raised important issues about market size and regulatory sovereigns. By the time *Hammer v. Dagenhart*<sup>207</sup> was decided, many states had enacted child labor laws, and the Supreme Court had already held that a

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201. *See id.* at 281.

202. *See id.* at 277 (“The single question in this case is whether Congress has power to prohibit the shipment in interstate or foreign commerce of any product . . . in which within thirty days before the removal of the product children . . . have been employed.”).

203. *See id.* at 268 (noting that the Act was “intended to prevent interstate commerce in the products of child labor”).

204. *See id.* at 277.

205. *See id.* at 277–78 (Holmes, J., dissenting) (“The statute confines itself to prohibiting the carriage of certain goods in interstate or foreign commerce.”).

206. *Id.* at 281.

207. 247 U.S. 251 (1918).

state child labor provision did not violate the Equal Protection Clause.<sup>208</sup> But while states limited the use of child labor within their own borders, they did not limit the importation of goods from other states that employed child labor.<sup>209</sup> Thomas Reed Powell and Edward Corwin independently complained that in a market dominated by interstate shipment and individual state child labor laws, there would be a race to the bottom to the extent that manufacturers could employ child labor freely for interstate shipments.<sup>210</sup>

Both *United States v. E.C. Knight Co.*<sup>211</sup> and *Hammer* illustrated what came to be a central proposition of neoclassical theory: regulators who are smaller than the markets that they are regulating produce self-dealing. States would benefit by limiting monopolies for domestic consumption, but by encouraging them for exported goods, which produced high domestic returns and visited their harm elsewhere. The much later decision in *Parker v. Brown*<sup>212</sup> illustrated the problem. The Supreme Court upheld a state-administered raisin allocation program, a leftover of the first New Deal, which effectively cartelized raisin production in California.<sup>213</sup> Ninety-five percent

208. See *Sturges & Burn Mfg. Co. v. Beauchamp*, 231 U.S. 320, 325 (1913) (“It is . . . contended that the statute denied to the plaintiff in error the equal protection of the laws; but the classification it established was clearly within the legislative power.”).

209. See *id.* at 271–72 (“The act in its effect does not regulate transportation among the States, but aims to standardize the ages at which children may be employed in mining and manufacturing within the States.”).

210. See Edward S. Corwin, *Congress’s Power to Prohibit Commerce a Crucial Constitutional Issue*, 18 CORNELL L. REV. 477, 487 (1933) (“If . . . programs of social reform . . . are rendered abortive in any state in consequence of the flow of commerce into it from other states holding less advanced views, then it becomes the duty . . . to supply the required relief.”); Thomas Reed Powell, *Child Labor, Congress and the Constitution*, 1 N.C. L. REV. 61, 67 (1922) (“Thus the beneficent operation of the commerce clause includes a license to what humanitarians unkindly call the ‘backward states’ to sacrifice the health and strength of future citizens and soldiers of the nation to the domestication of gainful industry within their borders.”).

211. 156 U.S. 1 (1895).

212. 317 U.S. 341 (1943).

213. See *id.* at 350–68 (upholding the validity of the California Agricultural Prorate Act); VICTORIA SAKER WOESTE, *THE FARMER’S BENEVOLENT TRUST: LAW AND AGRICULTURAL COOPERATION IN INDUSTRIAL AMERICA 1865–1945*, at 229–31

of the raisins grown under the arrangement were shipped outside of the state, making California an enormous beneficiary of the cartel and the other states its victims.<sup>214</sup> Neoclassical conceptions of market failure and market size necessitated the conclusion that efficient regulatory sovereigns must be large enough to encompass the markets that they are regulating—a point that Holmes realized full well in his *Hammer* dissent.<sup>215</sup>

The final Supreme Court decision relying on the manufacturing–commerce distinction was *Carter*, which overturned a federal statute that regulated working conditions and production standards in the bituminous coal industry.<sup>216</sup> A few years later, the Supreme Court reversed course in *United States v. Darby*,<sup>217</sup> which overruled *Hammer* and upheld the Fair Labor Standards Act, forbidding the interstate shipment of goods in violation of its wage and hours provisions.<sup>218</sup> *Wickard v. Filburn*<sup>219</sup> a year later created modern “affecting commerce” jurisdiction.<sup>220</sup>

When it later applied *Wickard* to the Sherman Act, the Supreme Court reflected a thoroughly neoclassical view of markets, merging production and distribution into a single function. The Court condemned an intrastate cartel among stitching contractors for women’s clothing.<sup>221</sup> The stitching cartel

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(1998) (describing the effect of *Parker* on the California raisin industry).

214. See *Parker*, 317 U.S. at 345 (“Between 90 and 95 percent of the raisins grown in California are ultimately shipped in interstate or foreign commerce.”).

215. See *Hammer v. Dagenhart* 247 U.S. 251, 281 (1918) (Holmes, J., dissenting) (discussing the ability of Congress to regulate commerce versus the ability of the states).

216. See *Carter v. Carter Coal Co.*, 298 U.S. 238, 310 (1936) (“[T]he want of power on the part of the federal government is the same whether the wages, hours of service, and working conditions, and the bargaining about them, are related to production before interstate commerce has begun, or to sale and distribution after it has ended.”).

217. 312 U.S. 100 (1941).

218. See *id.* at 115–16, 124 (“[T]he power of Congress under the Commerce Clause is plenary to exclude any article from interstate commerce subject only to the specific prohibitions of the Constitution.”).

219. 317 U.S. 111 (1942).

220. See *id.* at 124 (stating that the commerce power extends to activities intrastate that substantially affect interstate commerce).

221. See *United States v. Women’s Sportswear Mfg. Ass’n*, 336 U.S. 460, 463

was located in Boston, but its members purchased cloth from outside the state and also sold locally to distributors who then shipped more than eighty percent of their product into other states.<sup>222</sup> The Court brushed aside the defense that the price fix was for stitching, all of which occurred within a single state:

The trial court appears to have dismissed the case chiefly on the ground that the accused Association and its members were not themselves engaged in interstate commerce. This may or may not be the nature of their operation considered alone, but it does not matter. Restraints, to be effective, do not have to be applied all along the line of movement of interstate commerce. The source of the restraint may be intrastate, as the making of a contract or combination usually is; the application of the restraint may be intrastate, as it often is; but neither matters if the necessary effect is to stifle or restrain commerce among the states. If it is interstate commerce that feels the pinch, it does not matter how local the operation which applies the squeeze.<sup>223</sup>

The Court was stating what came to be a bedrock principle of the theory of vertical integration and price, embraced by every ideology: a monopoly or cartel at any stage of a production chain is able to capture the full monopoly profit available for that product, even if prior and subsequent stages are competitive.<sup>224</sup> A cartel on purely intrastate stitching could have exactly the same price effect on the final product as a cartel governing interstate clothing production or, for that matter, even interstate railroad transportation.

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(1949) (“That such a contract restrains trade in violation of the Sherman Act is obvious . . .”).

222. *Id.* at 461–62.

223. *Id.* at 464.

224. *See, e.g.*, ROBERT H. BORK, *THE ANTITRUST PARADOX* 372–75, 380–81 (1978) (discussing how tying arrangements can permit a monopolist to maximize his gains); HERBERT HOVENKAMP, *FEDERAL ANTITRUST POLICY: THE LAW OF COMPETITION AND ITS PRACTICE* § 10.6a (5th ed. 2015) (forthcoming); RICHARD A. POSNER, *ANTITRUST LAW* 197–99 (2d ed. 2001) (discussing the effects of tying arrangements); Ward S. Bowman, Jr., *Tying Arrangements and the Leverage Problem*, 67 *YALE L.J.* 19, 20–23 (1957) (similar).

*C. Holmes's Marginalism: Deterrence and Risk Management*

One noteworthy problem with the classical–progressive dichotomy theory is the omnipresence of Holmes, whose career stretched over a relatively brief Harvard faculty post, twenty years as a state Justice on the Supreme Judicial Court of Massachusetts, and then thirty years on the United States Supreme Court. On both federal and state law issues, he often appeared to take the progressive side, leading some writers to misinterpret his personal views quite seriously.<sup>225</sup> For example, he dissented from the *Lochner* decision striking down a ten-hour law,<sup>226</sup> the *Hammer* decision striking down a federal child labor statute,<sup>227</sup> and the *Adkins v. Children's Hospital*<sup>228</sup> decision striking down a minimum wage statute for women workers.<sup>229</sup>

Nonetheless, while Holmes was clearly not classical, neither was he progressive. He was conservative by nature and very suspicious of economic tinkering by legislation.<sup>230</sup> At the same time, he shared many progressive views about race and genetics.<sup>231</sup> Holmes may or may not have been sincere in *Lochner*, when he said he would need long study before determining his position on the economic theory underlying labor protection statutes.<sup>232</sup> But just as certainly as Holmes was not a progressive, he was an economic marginalist, and this made all the difference.

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225. See, e.g., CATHERINE DRINKER BOWEN, *YANKEE FROM OLYMPUS: JUSTICE HOLMES AND HIS FAMILY* 366–99 (1944) (emphasizing Holmes's dissents); Walton H. Hamilton, *On Dating Mr. Justice Holmes*, 9 *UNIV. CHI. L. REV.* 1, 19 (1941) (“If the net result seemed to be liberalism, it was because his stay on the bench coincided with an era of reform.”).

226. *Lochner v. New York*, 198 U.S. 45, 75–76 (1905) (Holmes, J., dissenting).

227. *Hammer v. Dagenhart* 247 U.S. 251, 277–81 (1918) (Holmes, J., dissenting).

228. 261 U.S. 525 (1923).

229. *Id.* at 567–71 (Holmes, J., dissenting).

230. Irving Bernstein, *The Conservative Mr. Justice Holmes*, 23 *NEW ENG. Q.* 435, 435 (1950) (“Holmes, in fact, was as profound, as civilized, and as articulate a conservative as the United States has produced.”)

231. See HOVENKAMP, *OPENING*, *supra* note 6, at 38–42, 67 (discussing Holmes's views on Darwinism and the “science” of race).

232. See *supra* notes 14–18 and accompanying text (discussing Holmes's *Lochner* dissent).

Scholarship about Holmes has tended to emphasize the role of Darwinian evolution in his thought, particularly its evolutionary historicism.<sup>233</sup> Holmes's interest in evolution is clear. For example, *The Common Law* cites the British Darwinian anthropologist Edward Tylor several times for points about the cultural evolution of legal norms.<sup>234</sup>

While these influences are undeniable, it is equally clear that Holmes's approach to legal policy was utilitarian and marginalist, driven by concerns about deterrence and risk management.<sup>235</sup> A theme that dominates *The Common Law* is the appropriate legal standards for managing risk and minimizing expected losses. "[T]he safest way to secure care is to throw the risk upon the person who decides what precautions shall be taken," stated his chapter on trespass and negligence, giving several examples.<sup>236</sup> The legal risk must be borne by the one with superior control of the circumstances, he wrote in his introductory chapter on torts, speaking of the person who rides an unbroken horse on a crowded way.<sup>237</sup> He defended aggressive rules for highly dangerous conduct that "throw the risk upon the party pursuing it."<sup>238</sup> He famously argued that contracts involved "the taking of a risk" and a set of

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233. See, e.g., 2 MARK DEWOLFE HOWE, JUSTICE OLIVER WENDELL HOLMES: THE PROVING YEARS, 1870–1882, at 44–49 (1963) (arguing Holmes's acceptance of Darwin); LOUIS MENAND, THE METAPHYSICAL CLUB 49–69 (2001) (describing Holmes's scholarship as an evolution); DAVID M. RABBAN, LAW'S HISTORY: AMERICAN LEGAL THOUGHT AND THE TRANSATLANTIC TURN TO HISTORY 230–31, 240 (2013) (describing the influence of evolutionary social thought on Holmes's views); G. EDWARD WHITE, JUSTICE OLIVER WENDELL HOLMES: LAW AND THE INNER SELF 41, 148–52 (1993) (discussing Holmes's views on science, Darwinism, and evolutionary historicism); E. Donald Elliott, *Holmes and Evolution: Legal Process as Artificial Intelligence*, 13 J. LEGAL STUD. 113, 126–40 (1984) (describing the influence of Darwin and Spencer on Holmes's views); Jan Vetter, *The Evolution of Holmes, Holmes and Evolution*, 72 CALIF. L. REV. 343, 363 (1984) (arguing that natural selection was the largest single influence on *The Common Law*).

234. OLIVER WENDELL HOLMES, JR., THE COMMON LAW 11, 19, 34 (1881) (citing EDWARD TYLOR, PRIMITIVE CULTURE: RESEARCHES INTO THE DEVELOPMENT OF MYTHOLOGY, PHILOSOPHY, RELIGION, ART, AND CUSTOM (1871)).

235. See HOVENKAMP, OPENING, *supra* note 6, at 38–42 (discussing Holmes's marginalism).

236. HOLMES, *supra* note 234, at 117.

237. *Id.* at 157–58.

238. *Id.* at 149.

bets about the future.<sup>239</sup> Consequential damages were not appropriate “unless the assumption of that risk is to be taken as having fairly entered into the contract.”<sup>240</sup>

Holmes’s belief that we can never examine the internal workings of the minds of others became a staple of legal thought in the early twentieth century. His external standard began with the hypothesis of the “average man,” considering “what would be blameworthy in the . . . man of ordinary intelligence and prudence.”<sup>241</sup>

Whether or not Holmes appreciated it, the substitution of the hypothetical average person for inquiries about subjective state of mind turned the law into a social control device for managing risk. The average person did not really exist; he had to be reconstructed. Harvard Law Professor and Holmes disciple Warren A. Seavey wrote later of Holmes’s insights that “[t]he standard man evaluates interests in accordance with the valuation placed upon them by the community sentiment crystallized into law.”<sup>242</sup>

Holmes’s famous, widely reprinted commencement speech entitled *The Path of the Law* (1897) was even clearer that the whole point of law was marginal deterrence and that economics was essential to its study.<sup>243</sup> For example, the purpose of damages was to give people a motive for good behavior. Holmes made this powerful argument for marginal deterrence as the goal of criminal punishment, categorically rejecting more Darwinian approaches:

If the typical criminal is a degenerate, bound to swindle or to murder by as deep seated an organic necessity as that which makes the rattlesnake bite, it is idle to talk of deterring him by the classical method of imprisonment. He must be got rid of; he cannot be improved, or frightened out of his structural reaction. If, on the other hand, crime, like normal human conduct, is mainly a matter of imitation, punishment fairly

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239. *Id.* at 300–02.

240. *Id.* at 301.

241. *Id.* at 108.

242. Warren A. Seavey, *Negligence—Subjective or Objective*, 41 HARV. L. REV. 1, 10, 27 (1927); see also Warren A. Seavey, *Principles of Torts*, 56 HARV. L. REV. 72 (1942).

243. Oliver Wendell Holmes, *The Path of the Law*, 10 HARV. L. REV. 457 (1897).



may be expected to help to keep it out of fashion. The study of criminals has been thought by some well known men of science to sustain the former hypothesis . . . . But there is weighty authority for the belief that, however this may be, “not the nature of the crime, but the dangerousness of the criminal, constitutes the only reasonable legal criterion to guide the inevitable social reaction against the criminal.”<sup>244</sup>

No single individual did more than Holmes to reorient American legal thinking in the late nineteenth century, switching its emphasis from morality and redress for the past to a concern with appropriate incentives and management of risk. But these were hardly exclusively progressive concerns. To the contrary, they cut across all of elite legal thought, from commercial law and contracts to corporate law to tort theory.

#### *D. Corporate Finance, Structure, and Governance*

Another area that was powerfully affected by the marginalist revolution was the legal theory of the corporation, particularly corporate finance. Ideology is powerful, however, and what makes corporate law so interesting is the way that the doctrine “flipped.” In this case, the progressives clung to traditional, classical theories of value, while more conservative corporate scholars turned to forward-looking reasonable expectations theories.

Under classical corporate finance theory, the legal value of a firm was a function of its paid-in capital, which was the amount of cash or other property that had been placed into the corporation at the time of its formation, plus subsequent contributions.<sup>245</sup> Corporate shares were issued at “par,” which was predicated on this stated value.<sup>246</sup> For example, if a firm had \$1,000 of paid-in capital, it could issue 100 shares of stock with a stated par value of \$10 per share, typically printed on each stock certificate. As the Pennsylvania Supreme Court stated, this

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244. *Id.* at 458, 461, 471, 473–74.

245. See HOVENKAMP, OPENING, *supra* note 6, at 160 (“The value of a corporation was its paid-in capital, a backward-looking amount declared by the stated ‘par’ value of shares.”).

246. *Id.* at 160.

classical view in 1889, the stock certificate “stands in the hands of the subscriber for so much as, and no more than, the amount actually paid upon it.”<sup>247</sup>

Stock was said to be “watered” when the stated par value, or par multiplied by the number of shares, was greater than the actual paid-in capital.<sup>248</sup> This could occur because stated capital had simply not been paid in or—more commonly—because noncash assets had been contributed at exaggerated evaluations. For example, a 1907 decision by the Illinois Supreme Court held that a penniless promoter’s unwritten play and unpatented inventions were not worth the \$2 million that the promoter declared but were “wholly unpaid.”<sup>249</sup> A great deal of Gilded Age and Progressive Era literature as well as many court decisions were concerned with claims of stock “watering.”<sup>250</sup> The watering metaphor was a reference to ranchers who sometimes forced cattle to drink large amounts of water in order to inflate their weight before auction.<sup>251</sup> Beginning during Reconstruction and stretching through the Gilded Age, progressive writers such as Charles Francis Adams, persistently identified and attacked corporate abuses that took the form of stock watering.<sup>252</sup>

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247. *Commonwealth v. Lehigh Ave. Rwy. Co.*, 129 Pa. 405, 499 (1889).

248. *Id.* at 161.

249. *Gillett v. Chi. Title & Trust Co.*, 82 N.E. 891, 904–05 (Ill. 1907).

250. *See, e.g.*, WILLIAM W. COOK, A TREATISE ON STOCK AND STOCKHOLDERS AND GENERAL CORPORATION LAW §§ 21, 22, 28, 29 (2d ed. 1889) (describing “watered” stock); 4 SEYMOUR D. THOMPSON, COMMENTARIES ON THE LAW OF CORPORATIONS § 3903 (2d ed. 1910) (discussing provisions against issuance of stock at less than par value).

251. LAWRENCE E. MITCHELL, THE SPECULATION ECONOMY: HOW FINANCE TRIUMPHED OVER INDUSTRY 59 (2007).

252. *See, e.g.*, Charles Francis Adams, *Railroad Inflation*, 108 N. AM. REV. 130, 130–31 (1869) (attacking stock watering); Charles Francis Adams, *The Railroad System*, 104 N. AM. REV. 476 (1867) (same); Charles Francis Adams, *Legislative Control over Railway Charters*, 1 AM. L. REV. 451 (1867) (same); Charles Francis Adams, *The Erie Railroad Row*, 3 AM. L. REV. 41 (1868) (same); Charles Francis Adams, *A Chapter of Erie*, 109 N. AM. REV. 30–106 (1870) (same); Charles Francis Adams, *Railway Problems in 1869*, 110 N. AM. REV. 116 (1870) (same); Charles Francis Adams, *Railway Commissions*, 2 J. SOC. SCI. 233–36 (1870) (same); Charles Francis Adams, *The Government and the Railroad Corporations*, 112 N. AM. REV. 31 (1871) (same). On Adams’s career in railroad regulation, see THOMAS K. McCRAW, *PROPHETS OF REGULATION* ch. 1 (1984).

To marginalist eyes, the classical theory of corporate finance made little sense and certainly did not reflect how investors assessed value. A corporation's value might be close to its paid-in capital on the day it commenced business, but soon after, it could be worth either much more or much less, depending on how it fared in business. In sharp contrast to the classical theory, marginalists argued that the value of a corporation is a set of judgments about its reasonable prospects in the market. As a result the concept of "par" as historical paid-in capital became meaningless. Around 1910, states began to approve the issuance of "no-par" shares.<sup>253</sup>

One interesting thing about the marginalist thinking that swept classical finance theory under the rug is that it came from the political right—not from progressives, but largely from financial interests generally aligned with large business. The principal instigator of the new valuation methodologies was the New York Bar, which by the Gilded Age was becoming the hub of United States corporate finance.<sup>254</sup> By contrast, the marginal contribution theory of wages, discussed below, that undermined the wage-fund doctrine came mainly from progressive or more left leaning economists or lawyers who saw in it a rationale for either unionization or minimum wage laws. These same progressives resisted marginal value theories of corporate finance. Rather, they clung to classical value theories, which enabled them to develop their arguments against watered stock.

Although the new theory of corporate finance was far more realistic about the determinants of corporate value, it was also

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253. See James Bonbright, *No-Par Stock: Its Economics and Legal Aspect*, 38 Q.J. ECON. 440, 447–48 (1924) (assessing arguments in support of no-par shares); James Bonbright, *Earning Power as a Basis of Corporate Capitalization*, 35 Q.J. ECON. 482, 482–90 (1921) (criticizing the earning power basis of capitalization). For a similar criticism, see WILLIAM Z. RIPLEY, *RAILROADS: FINANCE AND ORGANIZATION* 90–91 (1915); Edward H. Warren, *Safeguarding the Creditors of Corporations*, 36 HARV. L. REV. 509 (1923). For additional discussion, see HOVENKAMP, *OPENING*, *supra* note 6, at 166–67.

254. See MORTON J. HORWITZ, *THE TRANSFORMATION OF AMERICAN LAW, 1870–1960: THE CRISIS OF LEGAL ORTHODOXY* 78–97 (1992) (describing the development of corporate theory); Robert Gordon, *Legal Thought and Legal Practice in the Age of American Enterprise, 1870–1920*, in *PROFESSIONS AND PROFESSIONAL IDEOLOGIES IN AMERICA, 1730–1940*, at 70–81 (Gerald L. Geison ed. 1983) (discussing the role of lawyers in American enterprise from 1870 to 1920).

more difficult for the law to control. Under the classical theory, corporate finance could be managed by any commercially literate judge. Whether capital had been paid in was largely a matter of accounting. The most difficult questions concerned valuation of paid-in noncash assets, but most judges had experience doing this as well. By contrast, the rational expectations theory required predictions about future performance, and the relevant variables included the market as well as the particular firm. As a result, along with the change from backward-looking to forward-looking theories of corporate finance came increased calls for regulatory control, first in the form of state “Blue Sky” laws<sup>255</sup> and later through federal securities regulation.<sup>256</sup> The perceived need for regulation of corporate financial disclosure actually emanated from developments that occurred within the corporate bar as much as progressive reformers.

These same forward-looking rational expectations models also led to changing ideas about the relationship between corporate management and shareholders. Once again, the idea came from two different ideological directions. On the left, progressives Adolf A. Berle, Jr. and Gardiner C. Means wrote *The Modern Corporation and Private Property*, a book that today is identified with the theory that the modern large corporation is characterized by separation of stock ownership and managerial control.<sup>257</sup> Berle and Means saw this separation as the source of improper corporate power and waste.

But economists who stood much more centrally in the neoclassical tradition also embraced separation of ownership and

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255. See Jonathan R. Macey & Geoffrey P. Miller, *Origin of the Blue Sky Laws*, 70 TEX. L. REV. 347, 365 (1991) (describing the campaign for blue sky legislation and its support from smaller banks and state bank regulators); Paul G. Mahoney, *The Origins of the Blue-Sky Laws: A Test of Competing Hypotheses*, 46 J.L. ECON. 229, 230–32 (2003) (arguing that blue sky laws set the stage for federal securities regulation).

256. See HOVENKAMP, OPENING, *supra* note 6, at 168–71 (discussing the rise of no-par stocks and the problems it posed for corporate valuation).

257. See ADOLF A. BERLE, JR. & GARDINER C. MEANS, *THE MODERN CORPORATION AND PRIVATE PROPERTY* 127–52 (1932). On the writing of *The Modern Corporation*, see Thomas K. McCraw, *In Retrospect: Berle and Means*, 18 REV. AM. HIST. 578, 585–90 (1990) (analyzing the influence of Berle and Means).

control.<sup>258</sup> The neoclassical theory of corporate finance and management predicated the firm as a single, rational economic actor intent on maximizing its value. Neoclassical economic scholarship treated the corporation as a unitary maximizing entity. The possibly separate wishes of shareholders were either disparaged or ignored. This line of thought began with Yale economist Irving Fisher's "separation theorem," first articulated early in the twentieth century, that the profit function of a corporation could not be derived from the individual utility functions of its shareholders.<sup>259</sup> In the late 1930s, Ronald Coase's *Nature of the Firm*, written before Coase moved to the United States, developed a complete theory of firm structure from which the shareholder was entirely absent.<sup>260</sup> Coase argued that a firm's managers decide whether to make something internally or procure it from outside by comparing the costs of internal production against the costs of using the market.<sup>261</sup> The aggregate of these decisions determines the firm's boundaries. Coase's article never mentioned shareholders, who were irrelevant to the maximizing, explicitly marginalist decisions that Coase contemplated.<sup>262</sup>

The final elimination of the shareholder as an important element in corporate finance and management came in the 1950s and after, first with the development of the Modigliani-Miller Theorem, for which its authors Franco Modigliani of MIT and Merton Miller at the University of Chicago won the Nobel prize.<sup>263</sup> The theorem states that in a perfectly functioning

258. See HOVENKAMP, OPENING, *supra* note 6, at 172–83.

259. IRVING FISHER, THE NATURE OF CAPITAL AND INCOME (1906); IRVING FISHER, THE RATE OF INTEREST: ITS NATURE, DETERMINATION AND RELATION TO ECONOMIC PHENOMENA (1907). He presented the mature theorem in IRVING FISHER, THE THEORY OF INTEREST AS DETERMINED BY IMPATIENCE TO SPEND INCOME AND OPPORTUNITY TO INVEST IT (1930).

260. Ronald H. Coase, *The Nature of the Firm*, 4 *ECONOMICA* (N.S.) 386 (1937).

261. See Herbert Hovenkamp, *Coase, Institutionalism, and the Origins of Law and Economics*, *supra* note 131, at 539 (“[Coase] assumed that the firm seeks to maximize its value and that both internal production and markets impose costs, but that these costs are not necessarily the same.”).

262. See *id.* at 514.

263. FRANCO MODIGLIANI, 3 THE COLLECTED PAPERS OF FRANCO MODIGLIANI

market for corporate finance the value of the firm is invariant to its ratio of equity to debt.<sup>264</sup> The implication was that stock “ownership” was really nothing more than an alternative way of supplying capital to the corporation.

The nineteenth century idea of the shareholder as actively involved in corporate decision making had lost its vitality except as to very large shareholders. The development of the Efficient Capital Market Hypothesis (ECMH) in subsequent years further diminished the role of the shareholder as active and interested investor. Under rational expectations theory, random choice works just as well as extensive research, for the result of the research would be reflected in the stock price already.<sup>265</sup> The extreme result today is the index fund, in which the average shareholder knows almost nothing about the corporations whose shares he owns—cannot name their CEOs or perhaps even identify the products that they manufacture.<sup>266</sup> This neoclassical vision of separation of ownership and control was far more extreme than anything that Berle and Means had ever contemplated. It was also just as clearly not a part of classical legal thought.

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xiii (Andrew Abel ed., 1980); *see also* Franco Modigliani & Merton H. Miller, *The Cost of Capital, Corporation Finance and the Theory of Investment*, 48 AM. ECON. REV. 261, 264, 295–96 (1958) (providing the theorem that suggests that there is a remarkably small difference between the cost of equity funds and debt funds); Franco Modigliani & Merton H. Miller, *Dividend Policy, Growth, and the Valuation of Shares*, 34 J. BUS. 411, 411–15 (1961) (examining the effect of dividend policy on a firm’s share price).

264. *See* MODIGLIANI, *supra* note 140, at xiii (“[T]he market value of the firm—debt plus equity—depends *only* on the income stream generated by its assets.”).

265. *See* Eugene F. Fama, *The Behavior of Stock-Market Prices*, 38 J. BUS. 34, 39 (1965) (“[I]f there are many astute traders in the market, on the average the full effects of new information on intrinsic values will be reflected nearly instantaneously in actual prices.”). On the history, *see* MICHAEL C. JENSEN & CLIFFORD W. SMITH, JR., *THE MODERN THEORY OF CORPORATE FINANCE* 2–20 (1984); Eugene F. Fama, *Efficient Capital Markets: A Review of Theory and Empirical Work*, 25 J. FIN. 383, 388 (1970). Fama won the Nobel Prize in 2013.

266. HOVENKAMP, *OPENING*, *supra* note 6, at 183.

*E. The Labor Problem*

In labor law, by contrast to corporate finance, progressive reformers took up the marginalist position, while traditionalists clung to classical views. The classical theory of wages was expressed in the “wage-fund doctrine,” developed most extensively in the work of David Ricardo and culminating in the writing of John Stuart Mill until he abruptly rejected it late in life.<sup>267</sup> Under the wage-fund theory the rate of wages was thought to be a function of the surplus remaining from production and sale during the previous business period. During each business cycle, a firm produced, sold, and paid wages and return on capital. The surplus that remained after these payments were made was a “fund” that could be used to pay wages during the subsequent period.<sup>268</sup> This surplus had to be divided among the workers and thus determined both the number that could be hired and the rate they could be paid.<sup>269</sup> A firm could pay more only by exhausting the surplus and borrowing against the future. This would produce business distress, failure, and unemployment and starvation for the workers. As a result, everyone, including the workers themselves, had an interest in ensuring that the aggregate amount of wages paid in a second period did not exceed the surplus left over from the previous period.

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267. See John S. Mill, *Book Review*, in 5 COLLECTED WORKS 680 (J. Robson ed., 1967) (reviewing W. T. THORNTON, ON LABOUR, ITS WRONGFUL CLAIMS AND RIGHTFUL DUES, ITS ACTUAL PRESENT AND POSSIBLE FUTURE (1869)); Robert B. Ekelund, Jr., *A Short-Run Classical Model of Capital and Wages: Mill's Recantation of the Wages Fund*, 28 OXFORD ECON. PAPERS 66, 79–84 (1976) (examining Mill's recantation of the wage-fund doctrine); Edwin G. West & Rik W. Hafer, *J.S. Mill, Unions, and the Wages Fund Recantation: A Reinterpretation*, 92 Q.J. ECON. 603 (1978) (arguing that Mill changed his view on the wages fund). For more on this subject, see the book by British feminist and suffrage advocate MILLICENT GARRETT FAWCETT, POLITICAL ECONOMY FOR BEGINNERS 113 (1876) (“Wages depend on the proportion between the wages-fund and the number of the labouring population. If this proportion remains unchanged, the average rate of wages cannot be raised.”).

268. See ANTONELLA STIRATI, THE THEORY OF WAGES IN CLASSICAL ECONOMICS: A STUDY OF ADAM SMITH, DAVID RICARDO, AND THEIR CONTEMPORARIES 177–79 (Joan Hall trans., 1994) (detailing the development of wage-fund theory).

269. See *id.* at 178 (“The real wage is flexible and is equal to the wage fund divided by the active working population.”).

American political economists in the classical tradition generally supported the wage-fund theory.<sup>270</sup> Arthur Latham Perry, an American economist at Williams College, explained the theory in the mid-nineteenth century, calling attention to its anti-statist and anti-union implications:

That which pays for labor in every country, is a certain portion of actually accumulated capital, which cannot be increased by the proposed action of government, nor by the influence of public opinion, nor by combinations among the workmen themselves. There is also in every country a certain number of laborers, and this number cannot be diminished by the proposed action of government, nor by public opinion, nor by combinations among themselves. There is to be a division now among all these laborers of the portion of capital actually there present.<sup>271</sup>

Perry's vision of the "iron law of wages," as it was sometimes called, confirmed that both government minimum wage laws and union activity would be useless and affirmatively harmful. Neither could raise wages beyond the amount that the fund made available. If they attempted to do so, the result would be firm bankruptcy and unemployment.

By the Gilded Age, however, some American political economists were seeing important qualifications. The history of Brown University President Francis Wayland's highly influential textbook in political economy illustrates the changes. It was originally published in 1837 and stated an orthodox version of the wage-fund theory, very likely taken from David Ricardo.<sup>272</sup> Wayland's book went through many editions and was continued after his death in 1865 by Aaron L. Chapin, an important economist in his own right and also the founding President of Beloit College. Chapin acknowledged in his preface to the 1879

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270. See, e.g., HENRY CAREY, *ESSAY ON THE RATE OF WAGES* 30–32 (1835) ("The division of produce is . . . regulated by the supply of labour in the market . . ."); SAMUEL NEWMAN, *ELEMENTS OF POLITICAL ECONOMY* 254 (1835) ("The tendency then of an excess of population, must be to diminish the rate of wages . . .").

271. ARTHUR LATHAM PERRY, *ELEMENTS OF POLITICAL ECONOMY* 122 (1866).

272. See FRANCIS WAYLAND, *THE ELEMENTS OF POLITICAL ECONOMY* 142 (1837) ("But then, just as we increase the proportion of labor to capital, we diminish the wages of labor.").



edition of Wayland's *Political Economy* that he had read Jevons, the English marginalist.<sup>273</sup> He then proceeded to develop an early marginal utility theory of wages. The real value of wages, he wrote, was anticipated production—"a hopeful opportunity for increasing wealth by the profits of production."<sup>274</sup> To that end, the employer did not actually draw money out of any previously accumulated fund. "More likely what is needed for wages will be borrowed from the bank, in anticipation of coming sales."<sup>275</sup> In his 1881 lectures on political economy, prepared for his classes at Johns Hopkins and Michigan, Henry Carter Adams took the same position,<sup>276</sup> as did Francis Amasa Walker of MIT.<sup>277</sup>

Some American traditionalists such as Yale's William Graham Sumner defended the wage-fund theory right through the Gilded Age by mocking emergent marginalism's expected value theories. The marginal productivity theory of wages, he scoffed, imagined "that a man who was tilling the ground in June could eat the crop he expected to have in September, or that a tailor could be wearing the coat which he was making."<sup>278</sup>

Of course, Sumner was missing the point. The fact that the rate of wages depends on expected marginal contribution of the laborer did not mean that the contribution must already be in the bank before a salary check could be written. It was not the existence of the money but the rational expectation that it would come that drove the marginal contribution theory of wages. Sumner's objection only served to illustrate classical political economy's inability to see value as capitalization of future expectations.

273. FRANCIS WAYLAND, *THE ELEMENTS OF POLITICAL ECONOMY* iii (1879).

274. *Id.* at 170.

275. *Id.*

276. See HENRY CARTER ADAMS, *OUTLINES OF LECTURES ON POLITICAL ECONOMY* 61–62 (1881) (criticizing wage-fund doctrine).

277. See Francis A. Walker, *The Doctrine of Rent, and the Residual Claimant Theory of Wages*, 5 Q.J. ECON. 417, 421 (1891) ("[I]f [the laborer] vigorously asserts his interests, he can continuously raise his stipulated wages to the full height of his increased efficiency in production."); Francis A. Walker, *The Source of Business Profits*, 1 Q.J. ECON. 265 (1887) (rejecting wage-fund theory in favor of marginalism).

278. William G. Sumner, *Wages*, in *COLLECTED ESSAYS IN POLITICAL AND SOCIAL SCIENCE* 36, 50 (1885).

By the turn of the century, marginalist economists were uniformly seeing wages as determined by rational expectations concerning employee contribution. John Bates Clark wrote a highly generalized argument that in a competitive market, the value of every factor of production, including labor, would be its marginal productivity.<sup>279</sup> For each worker, wages were limited by that worker's marginal contribution to the employer. If a worker's labor promised to increase firm value by twenty-five cents per hour, then the employer would pay any wage up to that amount. If it paid less, it could retain the excess as a surplus, but it would stop hiring rather than pay more.

This "marginal productivity" theory of wages completely upended the classical wage-fund theory, and many young marginalist economists in the United States cut their teeth developing its various implications, including criticism of Supreme Court decisions that struck down minimum wage laws.<sup>280</sup> For example, George G. Groat, an economist from the University of Vermont, attacked the Supreme Court's 1923 *Adkins* decision in the *Yale Law Journal*. He contrasted the "legal wage" theory, which he identified with the wages fund and economic substantive due process, with the "economic wage," which he identified with the marginal utility theory.<sup>281</sup> Under that theory "marginal men get what they produce."<sup>282</sup>

The wage-fund theory very likely explained both the *Lochner* era judicial hostility toward statutory wage and hours regulation, but also the commonly recognized exception for public employees.<sup>283</sup> Public employers did not pay wages out of

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279. John Bates Clark, *Wages and Interest as Determined by Marginal Productivity*, 10 J. POL. ECON. 105 (1901).

280. See HOVENKAMP, ENTERPRISE, *supra* note 22, at 193–98.

281. See George G. Groat, *Economic Wage and Legal Wage*, 33 YALE L.J. 489, 494 (1924) (discussing *Adkins v. Children's Hospital*, 261 U.S. 525 (1923)). For a good contemporary account of the passing of the doctrine, see LEWIS HENRY HANEY, HISTORY OF ECONOMIC THOUGHT 516–24 (rev. ed. 1920). Haney was a conservative, and at the time was an economist at NYU.

282. Groat, *supra* note 281, at 491 (relying on JOHN BATES CLARK, THE DISTRIBUTION OF WEALTH, chs. 7, 8 (1899)).

283. See, e.g., *Atkin v. Kansas*, 191 U.S. 207 (1903) (upholding eight-hour law for state employees); *Sweeten v. State*, 122 Md. 634, 90 A. 180 (1914) (upholding hours regulation of state employees); *Elkan v. State*, 122 Md. 642, 90

accumulated earnings but rather out of government appropriations, financed by tax dollars rather than earnings. As a result the wage-fund doctrine did not apply to them.

As Groat's essay reflected, for more progressive leaning marginalists an important corollary of the new marginal productivity theory was that labor, particularly unskilled labor, was not getting its fair share of production. Under perfect competition every factor of production, including labor, would earn its "marginal net product." But that was where the rub came in. A broad consensus believed that most employer markets were much less competitive than most labor markets. As a result, wages tend to be lower than marginal productivity and often were driven to subsistence levels. These effects were most severe among labor unions that served unskilled workers, who were both plentiful and mobile. They were less severe in more specialized trades.<sup>284</sup>

Not everyone shared these policy views, however. Some believed that both production and labor were competitive, and wages should be wherever free market bargaining placed them.<sup>285</sup> Further, the free flow of labor would incline it to move to its highest value level. But the important point is that the battle line was drawn in a very different place than the classical–progressive dichotomy would suggest. Even among those who opposed minimum wage law and unions, the wage-fund doctrine had no place.

#### *F. Social Policy and the Distribution of Wealth*

Between roughly 1880 and 1940, marginalist social (welfare) economics moved from the political left to the right. The early marginalists believed that interpersonal comparisons of utility were possible. Because wealth has declining marginal utility,

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A. 183 (Md. 1914), *aff'd*, 239 U.S. 634 (1915) (following *Sweeten*); *Malette v. City of Spokane*, 1 P. 496 (Wash. 1913) (same).

284. HOVENKAMP, OPENING, *supra* note 6, at 269–70.

285. See DANIEL R. ERNST, *LAWYERS AGAINST LABOR: FROM INDIVIDUAL RIGHTS TO CORPORATE LIBERALISM* 32–33 (1995) (providing Williams Graham Sumner's view of wages).

total welfare would be greater as wealth was more evenly distributed. Redistribution entailed that wealthier persons, who valued the marginal dollar by less because they already had so many, would give up much less in welfare than the poor recipients, for whom each dollar provided much more utility. These ideas were accepted, although sometimes qualified, by British marginalists William Stanley Jevons, Alfred Marshall,<sup>286</sup> and Arthur Cecil Pigou.<sup>287</sup> They were also embraced by mainstream American economists, including Frank Taussig (Harvard), John Bates Clark (Columbia), Simon Patten (Penn. Wharton Business School), Jacob Viner (Chicago), Irving Fisher (Yale), and Edwin R.A. Seligman (Columbia).<sup>288</sup> They obtained more limited traction in legal policy making, but are strongly reflected in the debates leading to the modern progressive income tax.<sup>289</sup>

For most mainstream neoclassicists, the “ordinalist revolution” of the mid-thirties changed these views rather decisively. British economists Lionel Robbins and later John Hicks argued that interpersonal comparison of utilities was a

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286. See ALFRED MARSHALL, *PRINCIPLES OF ECONOMICS* 206 (3d ed. 1895) (“[A] pound’s worth of satisfaction to an ordinary poor man is a much greater thing than a pound’s worth of satisfaction to an ordinary rich man.”). Marshall did not make the same claim in his first edition.

287. See ARTHUR C. PIGOU, *THE ECONOMICS OF WELFARE* 89 (4th ed. 1932) (“[T]ransference of income from a relatively rich man to a relatively poor man of similar temperament, since it enables more intense wants to be satisfied at the expense of less intense wants, must increase the aggregate sum of satisfaction.”).

288. See 1 FRANK WILLIAM TAUSSIG, *PRINCIPLES OF ECONOMICS* 132 (3d ed. 1921) (“[I]nequality of incomes brings a less sum of human happiness than equality of incomes.”); John Bates Clark, *The Ultimate Standard of Value*, 1 *YALE REV.* 258, 258 (1893) (discussing the social nature of value); Simon N. Patten, *The Scope of Political Economy*, 2 *YALE REV.* 264, 265 (1894) (discussing the theory of marginal utility); Jacob Viner, *The Utility Concept in Value Theory and Its Critics (pts. 1 & 2)*, 33 *J. POL. ECON.* 369, 638, 644 (1925) (“Changes in the relative distribution of income as between different classes will bring about changes in the amount of welfare, even though the aggregate real income of the community remains the same.”); Irving Fisher, *A Statistical Method for Measuring “Marginal Utility” and Testing the Justice of a Progressive Income Tax*, in *ECONOMIC ESSAYS CONTRIBUTED IN HONOR OF JOHN BATES CLARK* 157–93 (J.H. Hollander ed., 1927); Edwin R.A. Seligman, *Progressive Taxation in Theory and Practice*, 9 *PUB. AM. ECON. ASS’N* 1, 132–33 (1894).

289. See HOVENKAMP, *OPENING*, *supra* note 6, at 98–103 (describing the influence of marginalist theory on early progressive taxation debates).

scientific impossibility. Doing them required cardinal assessment of states of mind, which are fundamentally noncomparable. As a result, any statement about the welfare effects of an involuntary wealth transfer was purely “normative,” not scientific.<sup>290</sup> From that point on, neoclassical welfare economics developed its ideas of efficiency mainly from Pareto, which eliminated the need for interpersonal utility comparisons. In the process, however, the new welfare economics very largely removed questions about the distribution of wealth from economic science.<sup>291</sup>

While the ordinalist revolution deeply affected mainstream economics, it never produced complete consensus. More left-leaning economists in particular have resisted the implication that questions about the distribution of wealth are purely normative, particularly as they relate to productivity rather than consumption.<sup>292</sup> In addition, American institutionalist economists largely ignored the ordinalist revolution. By the mid-1930s when Robbins wrote, institutionalism was being expelled from mainstream economics. Its mantle was picked up by the Legal Realists, however, who effectively became the “legal division” of institutionalism. The result was a sharp division between legal policy and neoclassical welfare economics that dominated government welfare policy through the 1970s.<sup>293</sup>

Today, the economic battle over the role of the state in wealth distribution has very little to do with the division between

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290. LIONEL ROBBINS, AN ESSAY ON THE NATURE & SIGNIFICANCE OF ECONOMIC SCIENCE (2d ed. 1935); JOHN HICKS, VALUE AND CAPITAL (1939); see also HOVENKAMP, OPENING, *supra* note 6, at 111–13 (discussing Robbins’s and Hicks’s views that interpersonal comparisons of utility were impossible).

291. *E.g.*, I.M.D. LITTLE, A CRITIQUE OF WELFARE ECONOMICS (1950); see Kenneth Arrow, *Little’s Critique of Welfare Economics*, 41 AM. ECON. REV. 923 (1951) (providing a review of Little). Under the Pareto principle, a policy is efficient only if no one opposes it; as a result interpersonal utility comparisons are unnecessary; under a “potential Pareto” potential (Kaldor-Hicks efficiency) a policy is efficient if the gainers gain enough to compensate the losers fully—thus in effect creating a Pareto improvement if compensation were to occur. Once again, interpersonal comparisons of utility are not necessary.

292. *E.g.*, THOMAS PIKETTY, CAPITAL IN THE TWENTY-FIRST CENTURY (2014); JOSEPH STIGLITZ, THE PRICE OF INEQUALITY: HOW TODAY’S DIVIDED SOCIETY ENDANGERS OUR FUTURE (2012).

293. HOVENKAMP, OPENING, *supra* note 6, at 110–22 (examining the relationship between institutional economics and legal realism).

classical and progressive legal thought and not much to do with Social Darwinism either. Rather, within economic and policy circles, it divides economists who are all marginalist but who nevertheless have very different views about the relationship of incentive, public support, wealth distribution, consumption, and productivity.

#### *IV. Conclusion*

With its forward-looking theories of value and rational decision making, economic marginalism was a world-changing idea. So was Darwin in the biological and social sciences. By the 1920s these ideas had overrun Western thought, including American legal thought. Progressives were an important part of those who experienced and embraced these changes, but they were only a part. Our legal and policy past was not so much a conflict between classical and progressive legal thought, as a debate about how to accommodate important changes in scientific and economic world view that nearly every educated person accepted. Classical legal thought vanished in the process, never to return.