

# THE RISE AND RISE OF THE ONE PERCENT: CONSIDERING LEGAL CAUSES OF WEALTH INEQUALITY

*Shi-Ling Hsu\**

## ABSTRACT

*Thomas Piketty's Capital in the Twenty-First Century, which is surely one of the very few economics treatises ever to be a best-seller, has parachuted into an intensely emotional and deeply divisive American debate: the problem of inequality in the United States. Piketty's core argument is that throughout history, the rate of return on private capital has usually exceeded the rate of economic growth, expressed by Piketty as the relation  $r > g$ . If true, this relation means that the wealthy class—who are the predominant owners of capital—will grow their wealth faster than economies grow, which means that relatively speaking, the nonwealthy will fall behind.*

*But even if we accept Piketty's assertion that this has been a "historical fact," why is  $r > g$  most of the time? Piketty offers a few economic factors and a few legal rules, but mostly demurs as to why the "forces of [wealth] divergence" generally overwhelm the "forces of [wealth] convergence." This Essay argues that legal rules and institutions exhibit an inherent bias toward some forms of private capital and serve to inflate returns to private capital—Piketty's  $r$ . Meanwhile, not only is it more difficult to make economic growth—Piketty's  $g$ —keep pace, but it is more contentious. The result is that returns to private capital have indeed commonly exceeded the rate of economic growth. This historical truism can be traceable to a capital-friendly bias that inheres in legal rules and institutions. The bias is particularly pronounced in several areas of law in which law and policy have inflated returns to private capital and driven it well above the rate of economic growth, exacerbating economic inequality. This Essay closes by arguing for a greater attention paid to*

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\* Larson Professor, Florida State University College of Law. The author thanks and acknowledges the help and comments of Thomas Piketty, Richard McAdams, Barak Orbach, Jay Kesten, Emily Hammond, Jonathan Nash, Nicholas Georgakopoulos, Daniel Cole, Sidney Shapiro, Michael Hoover, Steve Johnson, and Bruce Markell, and also workshop participants at the Emory University School of Law and participants at the 2014 Midwestern Law and Economics Association Annual Meeting. The author would also like to thank Mary McCormick, Kat Klepfer, and the outstanding library staff at the Florida State University College of Law for their assistance. Of course, the remaining shortcomings are the sole responsibility of the author.

*education funding, which is not only an equalizing “force of convergence” but also a predicate to economic growth.*

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## INTRODUCTION

It is fantastic to believe that a dry, 577-page economics treatise with ninety-seven graphs could rocket to the top of best seller lists and sit for weeks alongside popular blockbusters such as Hilary Rodham Clinton's autobiography *Hard Choices*, Maya Angelou's masterpiece *I Know Why the Caged Bird Sings* (in the immediate wake of her May 28 passing), and the boxed set of George R.R. Martin's *Game of Thrones* books.<sup>1</sup> But that is what Thomas Piketty's *Capital in the Twenty-First Century*<sup>2</sup> has done, elevating the French economist to a public status never attained by Adam Smith or Karl Marx. In the United States, where his book sales have done particularly well, Piketty finds himself in such an intense spotlight because he has waded into an emotional and divisive debate on the problem of inequality. But his book also attracts readers because his empirical approach stands in fresh contrast with the predominating bombast and hand-wringing about either the "one percent"<sup>3</sup> or of "class warfare."<sup>4</sup> The inequality debate has become too coarse, and a public need for cooler, more analytical voices has emerged. Still loved or hated at the ideological poles,<sup>5</sup> Thomas Piketty has become an important, cooler voice, one that seeks to recast the inequality debate in more empirical terms.

Piketty's argument—that without intervention wealth will unavoidably concentrate in the hands of the few—has attracted both praise<sup>6</sup> and criticism,<sup>7</sup>

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<sup>1</sup> *Amazon Past Best Sellers*, AMAZON (June 16, 2014), [http://www.amazon.com/gp/bestsellers/2014-06-16/books/ref=zg\\_bsar\\_nav\\_vg\\_0\\_vg#2](http://www.amazon.com/gp/bestsellers/2014-06-16/books/ref=zg_bsar_nav_vg_0_vg#2); *New York Times Best Sellers, Hardcover Nonfiction*, N.Y. TIMES (July 20, 2014), <http://www.nytimes.com/best-sellers-books/2014-07-20/hardcover-nonfiction/list.html>.

<sup>2</sup> THOMAS PIKETTY, *CAPITAL IN THE TWENTY-FIRST CENTURY* (Arthur Goldhammer trans., 2014). The book was originally published as *LE CAPITAL AU XXI<sup>e</sup> SIÈCLE* (2013).

<sup>3</sup> See, e.g., Annie Lowrey, *The Economics of Occupy Wall Street*, SLATE (Oct. 5, 2011, 5:32 PM), [http://www.slate.com/articles/business/moneybox/2011/10/occupy\\_wall\\_street\\_says\\_the\\_top\\_one\\_percent\\_of\\_americans\\_have\\_.html](http://www.slate.com/articles/business/moneybox/2011/10/occupy_wall_street_says_the_top_one_percent_of_americans_have_.html).

<sup>4</sup> E.g., *Republicans Accuse Obama of Waging 'Class Warfare' with Millionaire Tax Plan*, FOX NEWS (Sept. 18, 2011), <http://www.foxnews.com/politics/2011/09/18/rep-ryan-accuses-obama-waging-class-warfare-with-millionaire-tax-plan/>.

<sup>5</sup> See, e.g., Paul Krugman, Op-Ed., *The Piketty Panic*, N.Y. TIMES, Apr. 25, 2014, at A25, available at <http://www.nytimes.com/2014/04/25/opinion/krugman-the-piketty-panic.html>; Alan Reynolds, *Why Piketty's Wealth Data Are Worthless*, WALL ST. J., July 9, 2014, at A11, available at <http://www.wsj.com/articles/alan-reynolds-why-pikettrys-wealth-data-are-worthless-1404945590>.

<sup>6</sup> See, e.g., Lawrence H. Summers, *The Inequality Puzzle*, DEMOCRACY, Summer 2014, at 91, available at <http://www.democracyjournal.org/33/the-inequality-puzzle.php>; Robert M. Solow, *The Rich-Get-Richer Dynamic*, NEW REPUBLIC, May 12, 2014, at 50, available at <http://www.newrepublic.com/article/117429/capital-twenty-first-century-thomas-piketty-reviewed>.

<sup>7</sup> N. Gregory Mankiw, *Why Inheritance Is Not a Problem*, N.Y. TIMES, June 22, 2014, at BU4, available at <http://www.nytimes.com/2014/06/22/upshot/how-inherited-wealth-helps-the-economy.html>; see also Martin Feldstein, *Piketty's Numbers Don't Add Up*, WALL ST. J., May 14, 2014, at A15, available at

but most credible economists respect his data-driven endeavor.<sup>8</sup> Piketty's main observation is that historically, the rate of return on capital has usually been greater than the rate of growth, expressed as the relation  $r > g$ ,<sup>9</sup> in which  $r$  is the rate of return on private capital and  $g$  is the economic growth rate. Piketty equates wealth with capital<sup>10</sup> (a move meeting with some objection),<sup>11</sup> so that  $r > g$  implies that the wealthy class—who are the predominant owners of capital—will grow their wealth faster than economies grow. That means that relatively speaking, the nonwealthy will fall behind. The neoclassicist economic response is factually accurate: poverty worldwide has fallen and in general the wealth pie has grown.<sup>12</sup> And yet, even if the poor are better off in absolute terms, it has remained a source of discontent that they are poorer in relative terms. The continuing political salience of the inequality issue suggests that while a robust discussion can be had on the normative implications of inequality, a parallel discussion on the causes of inequality is still well worth having.

Piketty marshals vast amounts of data that span long periods of time and several countries. Between 1976 and 2007, the top one percent of all wage-earners garnered nearly sixty percent of the income growth in the United

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<http://www.wsj.com/articles/SB10001424052702304081804579557664176917086>; *Piketty vs. Mankiw on Economic Challenges and Inequality*, WBUR (Apr. 29, 2014), <http://onpoint.wbur.org/2014/04/29/piketty-mankiw-inequality-america-middle-class>.

<sup>8</sup> See, e.g., N. Gregory Mankiw, *First Thoughts on Piketty*, GREG MANKIW'S BLOG (Apr. 25, 2014), <http://gregmankiw.blogspot.com/2014/04/first-thoughts-on-piketty.html>; Kenneth Rogoff, *Where is the Inequality Problem?*, PROJECT SYNDICATE (May 8, 2014), <http://www.project-syndicate.org/commentary/kenneth-rogoff-says-that-thomas-piketty-is-right-about-rich-countries--but-wrong-about-the-world>; see also Bradford DeLong, *Eleven (so far) Worthwhile Reviews of and Reflections on Thomas Piketty's "Capital in the Twenty-first Century"*, WASH. CENTER FOR EQUITABLE GROWTH (Mar. 25, 2014, 5:48 PM), <http://equitablegrowth.org/2014/03/25/dialogue-ten-so-far-worthwhile-reviews-of-and-reflections-on-thomas-piketys-capital-in-the-twenty-first-century-wednesday-focus-march-26-2014/>; Bradford DeLong, *Over at the Washington Center for Equitable Growth: Piketty Day Here at Berkeley*, BRAD DELONG'S GRASPING REALITY (Apr. 23, 2014, 11:02 AM), <http://delong.typepad.com/sdj/2014/04/piketty-day-here-at-berkeley-the-honest-broker-for-the-week-of-april-26-2014.html>.

<sup>9</sup> PIKETTY, *supra* note 2, at 25.

<sup>10</sup> *Id.* at 47.

<sup>11</sup> One could imagine that some forms of wealth, such as gold, could be in forms that do not generate a return, as capital must, by definition. But as a prophylactic move, the conflation seems reasonable, as any pair of definitions is unlikely to show that wealth and capital are uncorrelated concepts, and it avoids the difficulty of defining "capital," explored in Shi-Ling Hsu, *Capital Rigidities, Latent Externalities*, 51 HOUS. L. REV. 719, 727–29 (2014).

<sup>12</sup> See, e.g., ANGUS DEATON, *THE GREAT ESCAPE: HEALTH, WEALTH, AND THE ORIGINS OF INEQUALITY* 1 (2013) ("Life is better now than at almost any time in history. More people are richer and fewer people live in dire poverty. Lives are longer and parents no longer routinely watch a quarter of their children die.").

States.<sup>13</sup> Over the past thirty years in the United States, a transfer of income amounting to fifteen percent of national income—a little more than \$2 trillion per year<sup>14</sup>—has shifted from the bottom ninety percent to the top ten percent.<sup>15</sup> A battery of other similar statistics leaves the reader with confidence that Piketty is not, as some critics claim, merely cherry-picking.<sup>16</sup> But a critical question looms: why has  $r > g$  been true for most of history? How does it actually happen that wealth concentrates so inexorably, interrupted only by world wars and the Great Depression? How is it that the rich get richer and richer and richer?

On this central question, Piketty, his supporters, and his critics are all missing a *huge* piece of the puzzle: the role of law in distributing wealth. The legal mechanisms by which the rich accumulate, consolidate, and increase their wealth remains a black box in this discussion. On one level, if one accepts Piketty's thesis, then the assertion that law is at work in causing wealth inequality is banal. Obviously, every economy is defined by the rules by which market participants abide; there is no such thing as an economy unmoored from law. But which laws, and exactly how do they lead to wealth inequality? Piketty tosses out some snippets of law and policy that concentrate wealth, such as trusts and estates law,<sup>17</sup> and the lowering of marginal tax rates for high-income earners.<sup>18</sup> But these snippets do not explain the staggering shift in wealth, suggesting that there is something more at work.

That something is a system of lawmaking that, with good economic intentions, is biased towards the formation of certain forms of capital. This capital bias has produced a set of legal rules and institutions that has increased returns on certain forms of private capital without inducing a concomitant increase in economic growth, and in some cases retarded economic growth. In the parlance of Piketty's  $r > g$  relation, the law has been much more effective

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<sup>13</sup> Thomas Piketty & Emmanuel Saez, *Top Incomes and the Great Recession: Recent Evolutions and Policy Implications*, 61 IMF ECON. REV. 456, 458 (2013), available at <http://www.palgrave-journals.com/imfer/journal/v61/n3/pdf/imfer201314a.pdf>.

<sup>14</sup> The U.S. Gross National Product in 2013 was \$16.99 trillion. *GNI*, WORLD BANK, <http://data.worldbank.org/indicator/NY.GNP.MKTP.CD> (last visited Jan. 26, 2015); see also *Adjusted Net National Income*, WORLD BANK, <http://data.worldbank.org/indicator/NY.ADJ.NNTY.CD> (last visited Jan. 26, 2015) (noting a net national income of approximately \$14 trillion for the United States in 2012).

<sup>15</sup> Piketty & Saez, *supra* note 13, at 473.

<sup>16</sup> Chris Giles, *Piketty Did His Sums Wrong in Bestseller that Tapped into Inequality Zeitgeist*, FIN. TIMES, May 24, 2014, at 01, available at <http://www.ft.com/cms/s/2/e1f343ca-e281-11e3-89fd-00144feabdc0.html>.

<sup>17</sup> PIKETTY, *supra* note 2, at 362 (discussing trusts and estates law); *id.* at 451 (discussing dynastic trusts).

<sup>18</sup> *Id.* at 513 (explaining the lowering marginal income tax rates).

in boosting  $r$  than it has been in boosting  $g$ . This is understandable, because inflating and propping up  $r$  is easy—government subsidies, favorable tax treatment, and legal protections from regulatory interference are just a few of many ways that lawmakers have boosted or propped up returns to certain owners of private capital—the ones powerful enough to ask for them. It is not nearly as easy to figure out how to make economic growth keep pace. Inducing economic growth is a matter on which leading economists differ sharply,<sup>19</sup> to say nothing of an ideologically divided Congress. The world is an extremely complicated place, made more so by globalization, and ensuring economic growth has been much more art than science. Moreover, in modern times, the political salience of “trickle-down” theories of economics<sup>20</sup> have held enormous influence over American policymaking, such that many lawmakers are strongly inclined to believe that boosting private returns to capital (Piketty’s  $r$ ) is tantamount to boosting economic growth generally (Piketty’s  $g$ ).<sup>21</sup> Taken together, these factors have caused lawmakers to mostly take comfort in boosting returns to private capital and rationalize their indifference to economic growth by throwing up their hands and just hoping that private wealth will somehow also stimulate economic growth.

This Essay focuses on legal provisions and their impacts on returns to capital, providing a policy concreteness that is a bit scarce in both Piketty’s exposition and its critics. Perhaps more importantly, if some laws can be demonstrated to artificially inflate returns on private capital and effectively transfer wealth from the poorer to the richer, then these laws can be the focus of reform. This would obviate the need for Piketty’s proposed reform, a global wealth tax,<sup>22</sup> which he acknowledges faces very high political obstacles in the near term.<sup>23</sup>

## I. THE LEGAL ENRICHMENT OF THE ONE PERCENT

Most microeconomic theory would appear to cut against Piketty’s thesis. The most basic microeconomic concepts contemplate the ironing out of market

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<sup>19</sup> See, e.g., Victor R. Fuchs, Alan B. Krueger & James M. Poterba, *Economists’ Views About Parameters, Values, and Policies: Survey Results in Labor and Public Economics*, 36 J. ECON. LITERATURE 1387, 1391 (1998).

<sup>20</sup> For a relatively sophisticated, modern approach to trickle-down economics, see Philippe Aghion & Patrick Bolton, *A Theory of Trickle-Down Growth and Development*, 64 REV. ECON. STUD. 151 (1997).

<sup>21</sup> Robert H. Frank, *In the Real World of Work and Wages, Trickle-Down Economics Doesn’t Hold Up*, N.Y. TIMES, Apr. 12, 2007, at C3, available at <http://www.nytimes.com/2007/04/12/business/12scene.html>.

<sup>22</sup> PIKETTY, *supra* note 2, at 515–39.

<sup>23</sup> *Id.* at 515.

imperfections by gradually moving resources to their highest and best use. Vast wealth inequalities seem anomalous in such a world, as one would expect that relative poverty creates market opportunities for arbitrage. In *theory*, mobile capital should flow to poorer countries because a higher rate of return can be obtained where labor and other costs are lower; this would tend to equalize wealth globally.<sup>24</sup> And historically, advances in technology, provided that they have been broadly shared, tended to compress wealth gaps.<sup>25</sup> These are what Piketty calls “forces of convergence,” tending to bring rich and poor closer together. How is it that these forces of convergence are rarely able to overcome the forces for divergence?

The answer is a mixed question of law and economics. There are, to be sure, a number of economic mechanisms that contribute to inequality. Inflation is generally regressive, as those owning real estate enjoy some hedge against rising prices, while renters, who tend to be less wealthy, are buffeted by market volatility.<sup>26</sup> It is also the case that there are economies of scale to investing, so that the wealthier are generally able to earn higher returns. It is a market truism that risk and return are positively correlated,<sup>27</sup> so that the wealthier, having greater freedom to take risks, can garner higher returns.<sup>28</sup> But such purely economic phenomena are rare. Almost always, an economic effect can be traced to some conscious policy decision, which in turn can be traced to a legal rule or institution. As between legal and economic explanations for inequality, it is almost surely a greater question of law than economics.

Piketty takes a stab at identifying some of the legal causes of inequality. He devotes considerable attention to the emergence of exorbitant “supersalaries” paid to some executives.<sup>29</sup> A corporation shopping for a CEO faces a great deal of uncertainty in future managerial performance, and given what is at stake, it may well be rational for a corporation to seek out CEOs with a history of high salaries as a signal of quality. This argument, a slight refinement to arguments

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<sup>24</sup> *Id.* at 69–71. Piketty acknowledges and extensively discusses why the global trade picture is much more complicated. Nobel Laureate Joseph Stiglitz has written about the complicated effects of globalization and how it has mostly exacerbated wealth inequalities. *See, e.g.*, JOSEPH E. STIGLITZ, GLOBALIZATION AND ITS DISCONTENTS (2002); JOSEPH E. STIGLITZ, THE PRICE OF INEQUALITY (2012).

<sup>25</sup> *See, e.g.*, PIKETTY, *supra* note 2, at 21. *But see* Paul Beaudry, David A. Green & Benjamin M. Sand, *The Great Reversal in the Demand for Skill and Cognitive Tasks* (Nat’l Bureau of Econ. Research, Working Paper No. 18,901, 2013), available at <http://www.nber.org/papers/w18901.pdf>.

<sup>26</sup> PIKETTY, *supra* note 2, at 455.

<sup>27</sup> *See, e.g.*, John C. Coffee, Jr., *Systemic Risk After Dodd-Frank: Contingent Capital and the Need for Regulatory Strategies Beyond Oversight*, 111 COLUM. L. REV. 795 (2011).

<sup>28</sup> PIKETTY, *supra* note 2, at 430–31.

<sup>29</sup> *Id.* at 298–302.

put forth by Lucian Bebchuk and Jesse Fried a decade ago,<sup>30</sup> is more of a matter of corporate law than of economics. Corporate law could require broader and deeper disclosures for high executive pay packages,<sup>31</sup> or could more strongly support shareholder proposals that seek to control executive compensation.<sup>32</sup> But the supersalary phenomenon is limited in its ability to explain growing inequality. Not only is the Bebchuk and Fried thesis disputed,<sup>33</sup> it is not clear that this phenomenon has effected a very large wealth transfer from poor to rich.<sup>34</sup> Piketty himself shows that the rise of the supersalary has been limited to the United States, the United Kingdom, Australia, and Canada, while absent in continental Europe and Japan.<sup>35</sup> But continental Europe and Japan have also trended toward greater inequality.<sup>36</sup> So executive supersalaries may be unjust and perhaps even distortionary, but in terms of inequality, is unlikely to be doing much of the heavy lifting.

So clearly, there is something broader and more fundamental at work. The origins of the answer to this question must lie in an examination of the effects of certain legal rules and institutions on inequality. What Piketty provides is, if not an empirical agenda, two factors to focus on: the effects on rates of return to private capital and the contribution to economic growth.

The thesis of this Essay is that legal rules and institutions are biased in such a way as to over-promote the formation of capital by enhancing returns to private capital. This Essay does not attempt to provide a comprehensive review or evidence of which legal mechanisms contribute to wealth or income inequality. Rather, the goal is to highlight a few areas of U.S. federal and state

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<sup>30</sup> Bebchuk and Fried postulated that the structure of executive compensation boards in corporations had provided opportunities and incentives for the issuance of gargantuan pay packages decoupled from any merit considerations. LUCIAN BEBCHUK & JESSE FRIED, *PAY WITHOUT PERFORMANCE: THE UNFULFILLED PROMISE OF EXECUTIVE COMPENSATION* 23–44 (2004).

<sup>31</sup> See, e.g., *id.* at 192–93; Edward M. Iacobucci, *The Effects of Disclosure on Executive Compensation*, 48 U. TORONTO L.J. 489, 504–10 (1998) (arguing that disclosure laws could increase executive compensation).

<sup>32</sup> See, e.g., Randall S. Thomas & Kenneth J. Martin, *The Effect of Shareholder Proposals on Executive Compensation*, 67 U. CIN. L. REV. 1021, 1022 (1998).

<sup>33</sup> See, e.g., Stephen M. Bainbridge, *Executive Compensation: Who Decides?*, 83 TEX. L. REV. 1615, 1619–41 (2005) (reviewing BEBCHUK & FRIED, *supra* note 30); see also *infra* note 62 and accompanying text.

<sup>34</sup> Piketty concedes so much: just looking at the top five corporate executives (whose salaries are required to be made public) of top publicly-traded firms does not, by itself, illustrate how the advent of highly-paid “supermanagers” accounts for the increasing wealth gap. PIKETTY, *supra* note 2, at 302.

<sup>35</sup> *Id.* at 316–17.

<sup>36</sup> For example, Piketty takes pains to note inequality is on the rise in his home country of France, *id.* at 271–81, as well as in Germany, *id.* at 323, and in Sweden, *id.* at 344–47.



law that warrant special attention because they have inflated returns to private capital without obviously contributing to economic growth.

This Essay will mostly avoid discussing how legal rules and institutions affect economic growth, the other key parameter to Piketty's  $r > g$  relation. That is a morass of economic and legal policy, and the source of too much partisan bickering. It is impossible to completely avoid discussion about economic growth, as the vast majority of ill-advised economic policies that inflate private returns to capital can also be putatively justified by their capacity to spur economic growth. I will only make, when necessary, informal comparisons between the effects of a legal rule on the rate of return on capital with its effects on economic growth. To keep this discussion tractable, this Essay focuses only on American law and American impacts. It is clear that Piketty's thesis has special relevance for the American experience.

### A. *Financial Regulation*

The causes of the financial crisis are complex and still imperfectly understood, but there is wide agreement that a number of deregulatory legal moves were primarily responsible for the crisis.<sup>37</sup> The Commodity Futures Modernization Act of 2000,<sup>38</sup> which deregulated a number of derivative financial products,<sup>39</sup> the 2004 adoption of the Consolidated Supervised Entity program by the U.S. Securities and Exchange Commission (SEC),<sup>40</sup> which relaxed capital retention requirements for investment banks, the SEC's Regulation AB in 2005, which relaxed (and standardized) disclosure requirements for asset-backed securitizations,<sup>41</sup> and changes to the U.S. Bankruptcy Code that enhanced the investment value of repurchase agreements are legal changes among many that are offered as proximate causes of the

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<sup>37</sup> Stephen L. Schwarcz, *Regulating Shadows: Financial Regulation and Responsibility Failure*, 70 WASH. & LEE L. REV. 1781, 1785 (2013); Lynn A. Stout, *Derivatives and the Legal Origin of the 2008 Credit Crisis*, 1 HARV. BUS. L. REV. 1, 3–4 (2011); see also Coffee, *supra* note 27, at 818; Steven M. Davidoff & David Zaring, *Regulation by Deal: The Government's Response to the Financial Crisis*, 61 ADMIN. L. REV. 463 (2009).

<sup>38</sup> Pub. L. No. 106-554, app. E, 114 Stat. 2763, 2763A-365 to 2763A-461 (codified as amended in scattered sections of the U.S. Code).

<sup>39</sup> Stout, *supra* note 37, at 3–4; see also Coffee, *supra* note 27, at 818 & n.69 (citing, *inter alia*, Thomas Lee Hazen, *Filling a Regulatory Gap: It Is Time to Regulate Over-the-Counter Derivatives*, 13 N.C. BANKING INST. 123, 128 (2009)).

<sup>40</sup> Alternative Net Capital Requirements for Broker-Dealers that Are Part of Consolidated Supervised Entities, Exchange Act Release No. 49,830, 69 Fed. Reg. 34,428 (June 21, 2004).

<sup>41</sup> Asset-Backed Securities, Securities Act Release No. 8518, Exchange Act Release No. 50,905, 70 Fed. Reg. 1506 (Jan. 7, 2005).

crisis.<sup>42</sup> In Piketty's world, a recession, like a depression, should depress returns to capital and act as a wealth equalizer.<sup>43</sup> This recent crisis, however, seems to have exacerbated wealth inequality. Why?

Fundamentally, the financial crisis occurred because the massive withdrawal of credit was the reaction to the realization of widespread, *systemic* risk.<sup>44</sup> In significant part, the financial crisis was the suffering of self-inflicted wounds by risk-takers who simply failed to understand the nature of the risk they were assuming.<sup>45</sup> Managers at AIG, in particular, utterly failed to comprehend the inter-relatedness of all the risk they took in the form of credit default swaps.<sup>46</sup> But this assumption of *private* risk is not problematic. Indeed, risk is usually (obviously not always) good for the wealthy who can afford it, and over the long run, obtain the higher returns that derive from risky portfolios.<sup>47</sup> Enabling risk-taking is the law's way of inflating the returns to capital—Piketty's *r*.

It is the *public* nature of systemic risk that is problematic and made this last crisis a force of wealth divergence. The instability of banks created a credit crisis that threatened not just a handful of wealthy investors and managers but a much wider circle of borrowers, including the vast majority of American businesses that depend on credit for cash flow to conduct their business and employ workers. With the sharp contraction in credit availability, businesses suffered and unemployment soared, reducing consumer spending just when the economy needed it most, and further pushing the economy into a nasty spiral of business failures leading to more unemployment, leading to even less spending. All of this occurred because some legal rules enabled or encouraged risky behavior by some managers that generated systemic risk, which imposed losses on those that took no part in the assumption of risk, and were least able to absorb the loss. That widespread risk is an externality. As others have pointed out, systemic risk that poses a threat to the entire economy imposes

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<sup>42</sup> See Stout, *supra* note 37, at 3–4; Gary Gorton & Andrew Metrick, *Regulating the Shadow Banking System*, BROOKINGS PAPERS ON ECON. ACTIVITY, Fall 2010, at 261, available at [http://www.brookings.edu/~media/projects/bpea/fall%202010/2010b\\_bpea\\_gorton](http://www.brookings.edu/~media/projects/bpea/fall%202010/2010b_bpea_gorton).

<sup>43</sup> PIKETTY, *supra* note 2, at 275.

<sup>44</sup> Steven L. Schwarcz, *Systemic Risk*, 97 GEO. L.J. 193, 198 (2008).

<sup>45</sup> Coffee, *supra* note 39, at 822–23.

<sup>46</sup> *Id.* at 822; René M. Stulz, *Credit Default Swaps and the Credit Crisis*, J. ECON. PERSP., Winter 2010, at 73, 79–83.

<sup>47</sup> PIKETTY, *supra* note 2, at 430–31.

social costs well in excess of the market punishments meted out to managers responsible for creating that risk.<sup>48</sup>

And yet, the focus of finance and corporations law is to regulate relations among private parties—investors, directors, managers, and perhaps, under the guise of bankruptcy law, creditors.<sup>49</sup> Securities laws are concerned with protecting the integrity of the market, lest there arise some concern that would cause investors to lose confidence and withdraw from the market.<sup>50</sup> But there is little sense in the law that the finance industry and corporations impose externalities upon a broader society, despite their capacity to redirect the flow of trillions of dollars. Normative and positive research into the functioning of business organizations as an actor in a broader societal fabric have been largely cabined to the area of scholarly research known as “Corporate Social Responsibility.”<sup>51</sup> Otherwise, lawmaking and legal scholarship in the areas of finance and corporations law seem to be based predominantly on the notion that the only truly interested parties are private ones.<sup>52</sup>

Take for example, two competing accounts of culpability for the excessive risk-taking leading up to the financial crisis. Over the past decade, Lucian Bebchuk and several coauthors have argued that executive compensation has become completely disconnected from performance.<sup>53</sup> Stock options were supposed to give managers incentives to improve their firms and increase

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<sup>48</sup> See, e.g., Coffee, *supra* note 39, at 809; David Min, *Understanding the Failures of Market Discipline*, 92 WASH. U. L. REV. (forthcoming 2015) (manuscript at 62–63), available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2403988](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2403988); Schwarcz *supra* note 44, at 207.

<sup>49</sup> See, e.g., Henry N. Butler, *The Contractual Theory of the Corporation*, GEO. MASON U. L. REV., Summer 1989, at 99, 100 (“The contractual theory views the corporation as founded in private contract, where the role of the state is limited to enforcing contracts.”).

<sup>50</sup> *The Investor’s Advocate: How the SEC Protects Investors, Maintains Market Integrity, and Facilitates Capital Formation*, U.S. SEC, <http://www.sec.gov/about/whatwedo.shtml> (last modified June 10, 2013).

<sup>51</sup> See, e.g., Paul R. Portney, *Corporate Social Responsibility: An Economic and Public Policy Perspective*, in ENVIRONMENTAL PROTECTION AND SOCIAL RESPONSIBILITY OF FIRMS 107 (Bruce L. Hay, Robert N. Stavins & Richard H.K. Vietor eds., 2005).

<sup>52</sup> See, e.g., Andrei Shleifer & Robert W. Vishny, *A Survey of Corporate Governance*, 52 J. FIN. 737, 738 (1997) (“Our perspective on corporate governance is a straightforward agency perspective, sometimes referred to as separation of ownership and control. We want to know how investors get the managers to give them back their money.”); see also Butler, *supra* note 49.

<sup>53</sup> BEBCHUK & FRIED, *supra* note 30; Lucian Arye Bebchuk & Jesse M. Fried, *Executive Compensation as an Agency Problem*, J. ECON. PERSP., Summer 2003, at 71, 82; Lucian A. Bebchuk, Alma Cohen & Holger Spamann, *The Wages of Failure: Executive Compensation at Bear Stearns and Lehman 2000–2008*, 27 YALE J. ON REG. 257, 273 (2010); Lucian A. Bebchuk & Holger Spamann, *Regulating Bankers’ Pay*, 98 GEO. L.J. 247 (2010).

shareholder value,<sup>54</sup> but in practice managers have taken risky, highly-leveraged bets for short-term gains, cashed out their options, and left their companies in a long-term mess.<sup>55</sup> In this recent financial crisis, senior managers at Bear Stearns and Lehman Brothers, the two most leveraged and vulnerable of the independent investment banks, received lavish pay packages even as they left their firms in tatters.<sup>56</sup> In this “managerial power” view, managers have incentives to take excessive risks because they share in the upsides but are insulated by their compensation packages from the downsides.<sup>57</sup> How might one remedy this? One might mandate that executive pay packages replace options with subordinated debt, so that if long-term risks materialize, executives lose.<sup>58</sup> That is an example of a legal fix for a quasi-economic problem.

But a competing explanation for risk-taking is that it is the shareholders driving the risk, not the managers.<sup>59</sup> A number of studies have found that financial institutions with greater shareholder control were more exposed to risk and ultimately suffered greater losses than those with weaker shareholder control.<sup>60</sup> In this “shareholder power” view, it is the shareholders, being broadly diversified, that are tolerant of risk and are in fact driving the risk-taking.<sup>61</sup> How might one remedy this? One proposal is to require firms to offer “contingent capital” that converts into preferred stock and takes priority

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<sup>54</sup> Bebchuk & Fried, *supra* note 53, at 72 (“[B]oards are assumed to design compensation schemes to provide managers with efficient incentives to maximize shareholder value.”).

<sup>55</sup> Bebchuk & Spamann, *supra* note 53, at 271.

<sup>56</sup> Bebchuk, Cohen & Spamann, *supra* note 53, at 262–63, 270–71. A recent unreported decision by arbitrators found that Lehman Brothers’s accounting firm, Ernst & Young, was not to blame for an accounting maneuver that allowed Lehman to conceal from investors billions of dollars of debt and seemed to imply that Lehman’s executives bore most of the culpability. Matthew Goldstein, *Arbitrators Ease Blame on Auditors of Lehman*, N.Y. TIMES, Aug. 12, 2014, at B1, available at <http://dealbook.nytimes.com/2014/08/11/arbitrators-ease-blame-on-auditors-of-lehman/>.

<sup>57</sup> See Bebchuk & Spamann, *supra* note 53, at 252; see also Lucian Arye Bebchuk, Jesse M. Freid & David I. Walker, *Managerial Power and Rent Extraction in the Design of Executive Compensation*, 69 U. CHI. L. REV. 751 (2002).

<sup>58</sup> Frederick Tung, *Pay for Banker Performance: Structuring Executive Compensation for Risk Regulation*, 105 NW. U. L. REV. 1205, 1227–29 (2011).

<sup>59</sup> Coffee, *supra* note 39, at 812.

<sup>60</sup> Andrea Beltratti & René M. Stulz, *Why Did Some Banks Perform Better During the Credit Crisis? A Cross-Country Study of the Impact of Governance and Regulation* (Nat’l Bureau of Econ. Research, Working Paper No. 15,180, 2009), available at <http://www.nber.org/papers/w15180.pdf>; Reint Gropp & Matthias Kohler, *Bank Owners or Managers: Who is Keen on Risk?* (European Bus. Sch. Research Paper Series No. 10-02, 2010), available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1555663](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1555663).

<sup>61</sup> See Coffee, *supra* note 39, at 812.

over common stock, so that if long-term risks materialize, shareholders lose.<sup>62</sup> That is also an example of a legal fix for a quasi-economic problem.

What is worth noticing about this disagreement is that both sides agree that there was too much risk-taking and that it was at least a proximate cause of the financial crisis. Both argue that the structure of corporate ownership—a product of corporations law and of other legal rules—encourages the excessive risk-taking.<sup>63</sup> For our purposes, it does not truly matter whether it is the shareholder or the manager that is driving the risk—all would agree that existing corporate laws, coupled with the light regulation of financial institutions, have given rise to too much risk. It would stand to reason that remedies to address these risk incentives are legal in nature and would disincentivize risk-taking, whether it is by the managers or the shareholders.

It seems doubtful that the financial industry would knowingly, by rent-seeking through deregulation, create such an implosive economic atmosphere. But recent research suggests exactly that. Carmen Reinhart and Kenneth Rogoff have studied not only business cycles but also the political pressures preceding and succeeding them.<sup>64</sup> We should not be surprised that their title, *This Time is Different*, is ironic in that financial catastrophes have occurred repeatedly throughout history and that financial regulation tightens after each crash, only to gradually erode over time to political pressures to deregulate.<sup>65</sup> Along similar lines, Thomas Philippon and Ariel Reshef argue that a huge wage premium for finance executives—250%—was in large part driven by financial deregulation.<sup>66</sup> So although a colossal crash like the recent financial crisis does create winners and losers within the financial industry, on the whole, a deregulated environment seems to be a more favorable one for the finance industry. Reinhart, Rogoff, Philippon and Reshef, all economists, raise a problem with the lawmaking of financial regulation.

What *was* different this time around, it appears to be, was the extent to which risk became such a deadly social cost. Financial regulation and other laws governing business entities qua business entities has, in turning attention

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<sup>62</sup> *Id.* at 825–46.

<sup>63</sup> Mara Faccio, Maria-Teresa Marchica & Roberto Mura, *Large Shareholder Diversification and Corporate Risk-Taking*, 24 REV. FIN. STUD. 3601, 3603 (2011).

<sup>64</sup> CARMEN M. REINHART & KENNETH S. ROGOFF, *THIS TIME IS DIFFERENT: EIGHT CENTURIES OF FINANCIAL FOLLY* (2009).

<sup>65</sup> *Id.* at 223–39.

<sup>66</sup> Thomas Philippon & Ariel Reshef, *Wages and Human Capital in the U.S. Finance Industry: 1909–2006*, 127 Q.J. ECON. 1551, 1605 (2012).

away from social costs, allowed a huge body of law to develop in a social vacuum. Other substantive areas of law such as antitrust law or environmental law may seek to internalize certain kinds of externalities, but it is clear that financial regulation and corporations law has, by focusing so intently on the private parties to transactions, played a key role in allowing the one percent to separate themselves from the ninety-nine percent.

### *B. Oil and Gas Subsidies*

For just over a century, the Internal Revenue Code has contained tax benefits for capital projects undertaken for the purposes of exploration and extraction of oil and natural gas.<sup>67</sup> The most generous of these are the ability to expense “intangible drilling costs,” ancillary costs that have no salvage value and are “incident to and necessary for the drilling of wells and the preparation of wells for the production of oil and gas.”<sup>68</sup> These include surveying, ground-clearing, and other site-preparation costs, as well as costs for chemicals, cement, and other supplies necessary to prepare for exploration or extraction.<sup>69</sup> These expenses may be deducted from income as ordinary expenses in the year they were incurred, rather than over a period of years under normal cost recovery accounting procedures,<sup>70</sup> a significant benefit in the form of deferred tax liability.<sup>71</sup> The Congressional Research Service reports that “[t]he purpose of allowing current-year expensing of these costs is to attract capital to what has historically been a highly risky investment.”<sup>72</sup>

Another tax benefit is the allowance of oil companies to take a deduction of fifteen percent of gross income, against gross income, as a proxy for the fictional depletion of their oil deposits.<sup>73</sup> The United States is unusual among energy-producing countries in that oil and gas resources are generally owned by the surface landowner, not the government.<sup>74</sup> This means that oil deposits are assets. Oil companies sought and obtained recognition that their oil

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<sup>67</sup> The expensing of intangible drilling and exploration costs for independent oil and gas producers has been allowed since 1913. ROBERT PIROG, CONG. RESEARCH SERV., R42374, OIL AND NATURAL GAS INDUSTRY TAX ISSUES IN THE FY2013 BUDGET PROPOSAL 3 (2012), available at <http://budget.house.gov/uploadedfiles/crsr42374.pdf>.

<sup>68</sup> Treas. Reg. § 1.612-4(a) (2014).

<sup>69</sup> *Id.* § 1.612-4(a)(2), (3); PIROG, *supra* note 67, at 3.

<sup>70</sup> See I.R.C. § 263(c) (2012); PIROG, *supra* note 67, at 3.

<sup>71</sup> See PIROG, *supra* note 67, at 3.

<sup>72</sup> *Id.*

<sup>73</sup> *Id.* at 2.

<sup>74</sup> Thomas W. Merrill, *Four Questions About Fracking*, 63 CASE W. RES. L. REV. 971, 977 (2013).

deposits should be depreciable just like bricks and mortar and other productive capital in other manufacturing industries.<sup>75</sup> Rather than try to estimate the value of their deposit and deduct from their annual income taxes, owners of oil deposits may simply deduct fifteen percent of their gross income as a generous estimate for the depreciated value of their oil and gas deposits.<sup>76</sup>

These subsidies, dating back to 1913, succeeded in reducing the risk associated with oil and gas exploration and caused much capital to flow into the oil and gas industries.<sup>77</sup> One hundred two years ago, these would have been justifiable on the grounds that they boosted economic growth. Subsidized oil and gas extraction in 1913 dramatically lowered energy prices, spurring the growth of new industries and new transportation opportunities.<sup>78</sup> Were Thomas Piketty writing in 1913, he would have had to concede that the economic effects of these projects were very high, and moreover that  $\Delta r < \Delta g$ .

However, that was then and this is now. New technologies such as three-dimensional seismic analysis and horizontal drilling techniques have greatly reduced the risk of exploration.<sup>79</sup> These tax benefits almost certainly do not stimulate any significant amount of extra oil or gas production.<sup>80</sup> Moreover, renewable substitutes for fossil fuels abound, some of them rivaling fossils in cost.<sup>81</sup> Even if renewable energies do not supplant fossil fuels, they introduce an alternative that is in most cases less costly when taking into account the external costs of fossil fuel combustion.<sup>82</sup> Thus, while these oil and

<sup>75</sup> PIROG, *supra* note 67, at 5.

<sup>76</sup> *Id.*

<sup>77</sup> See James C. Cox & Arthur W. Wright, *The Cost-Effectiveness of Federal Tax Subsidies for Petroleum Reserves: Some Empirical Results and Their Implications*, in *STUDIES IN ENERGY TAX POLICY* 177, 188–89 (Gerard M. Brannon ed., 1975) (finding that special tax provisions induced the petroleum industry to maintain larger investments in proved reserves); Walter J. Mead, *The Performance of Government in Energy Regulations*, 69 *AM. ECON. REV. (PAPERS & PROC.)* 352, 352 (1979) (“These tax subsidies [percentage depletion allowance and expensing of intangible drilling costs] led to increased capital flows into exploration.”).

<sup>78</sup> Mead, *supra* note 77, at 352.

<sup>79</sup> PIROG, *supra* note 67, at 3.

<sup>80</sup> See, e.g., Paul Davidson, *Public Policy Problems of the Domestic Crude Oil Industry*, 53 *AM. ECON. REV.* 85, 107 (1963) (“The depletion allowance is primarily an ad valorem subsidy to mineral rights owners.”).

<sup>81</sup> U.S. ENERGY INFO. ADMIN., *LEVELIZED COST AND LEVELIZED AVOIDED COST OF NEW GENERATION RESOURCES IN THE ANNUAL ENERGY OUTLOOK 2014* (2014), [http://www.eia.gov/forecasts/aeo/pdf/electricity\\_generation.pdf](http://www.eia.gov/forecasts/aeo/pdf/electricity_generation.pdf).

<sup>82</sup> Fossil fuels impose costs on others that are not fully taken into account by the fossil fuel industry or by consumers of fossil fuels, and are thus “external” to both. These costs can outweigh, sometimes very greatly, the pecuniary costs of producing energy. See, e.g., TOM TIETENBERG & LYNNE LEWIS, *ENVIRONMENTAL & NATURAL RESOURCE ECONOMICS* 25–26 (10th ed. 2015); Anthony D. Owen, *Renewable Energy: Externality Costs as Market Barriers*, 34 *ENERGY POL’Y* 632, 632–34 (2006).

gas tax benefits boost returns to private capital, their contribution to economic growth is minimal, and they likely subsidize behavior that is, net of external costs, less desirable than alternatives.

The cost to American taxpayers of these oil and gas subsidies is not very high: about \$4.8 billion per year.<sup>83</sup> But it is important to remember that these subsidies have existed for more than 100 years and have cumulated a large amount of wealth over that time. Moreover, these subsidies stand as stark testimony of the willingness of lawmakers to suspend disbelief and cling to implausible claims of economic growth as a justification for conferring benefits to capital owners. It is as if policymakers will endorse any proposal that purports, however speculatively, to boost economic growth. If a proponent says with a straight face that a proposal will boost economic growth— $\Delta g > 0$  in Piketty-speak—then private investors are given the blessings of enjoying fabulously high rates of return on their capital. That is the crux of the Piketty problem: as long as an argument is made that  $\Delta g > 0$ , then very high rates of return to private capital go unquestioned. There is often really no assurance that  $\Delta g > 0$ , or that policy will really pay for itself by inducing economic growth.

### C. Grandfathering

There is perhaps no more pervasive subsidy propping up returns to capital than the common practice of grandfathering, or more generally “transition relief.” New regulations often exempt existing regulatory targets in a variety of ways and to varying degrees. In environmental law, pollution sources or land uses may have a grace period from application of a new regulation, be subjected to a lower standard of compliance, offered some compensation for new regulation, be exempted altogether or indefinitely, or any combination of these techniques.<sup>84</sup> It seems that it has especially been the case in

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<sup>83</sup> See PIROG, *supra* note 67, at 2.

<sup>84</sup> Bruce R. Huber, *Transition Policy in Environmental Law*, 35 HARV. ENVTL. L. REV. 91, 92 (2011) (“This distinction reflects a recurring political problem faced by makers of environmental policy.”); Jonathan Remy Nash, *Allocation and Uncertainty: Strategic Responses to Environmental Grandfathering*, 36 ECOL. L.Q. 809, 811 (2009) (“Such systems have become increasingly common in the context of environmental and natural resource regulation.”); Jonathan Remy Nash & Richard L. Revesz, *Grandfathering and Environmental Regulation: The Law and Economics of New Source Review*, 101 NW. U. L. REV. 1677, 1680 (2007) (“The problem of whether and how to extend favorable treatment to existing sources is a recurring issue in environmental law.”); *see also, e.g.*, Robert N. Stavins, *Vintage-Differentiated Environmental Regulation*, 25 STAN. ENVTL. L.J. 29, 31–32 (2006).



environmental law that lawmakers worry about negative impacts on capital and have tried to avoid reducing returns to private capital.<sup>85</sup>

The normative discussion on grandfathering has been largely efficiency-oriented, centering on a discussion of how to allocate the “costs of legal transitions.”<sup>86</sup> A variety of concerns over grandfathering suggest that it introduces inefficient distortions,<sup>87</sup> reducing economic growth by implication. Grandfathered status also represents an asset to incumbents holding them and a barrier to entry for new entrants.<sup>88</sup> This would have the ironic effect of slowing capital turnover, delaying the achievement of the policy goals.<sup>89</sup> Such a dynamic effect has the dual effect of boosting returns to private capital and, by rewarding inefficient incumbents and penalizing efficient new entrants, reducing economic growth. Finally, grandfathering has an ex ante effect of inefficiently stimulating the formation of capital by insuring against regulatory interference or obsolescence. An important component of risk facing new capital is the risk of premature obsolescence, due to regulatory action, to the emergence of superior alternatives, or to some other unexpected shock. By insuring capital investors against this risk, even partially, grandfathering inefficiently inflates returns to private capital and induces overinvestment in capital.<sup>90</sup>

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<sup>85</sup> Huber, *supra* note 84, at 127 (“Both state and federal lawmakers have shied away from imposing the enormous costs associated with the mandatory retrofit, upgrade, or retirement of in-use diesel trucks . . .”).

<sup>86</sup> *Id.* at 92; *see also* DANIEL SHAVIRO, WHEN RULES CHANGE: AN ECONOMIC AND POLITICAL ANALYSIS OF TRANSITION RELIEF AND RETROACTIVITY 218–20 (2000); Louis Kaplow, *An Economic Analysis of Legal Transitions*, 99 HARV. L. REV. 509 (1986).

<sup>87</sup> *See* Shi-Ling Hsu & James E. Wilen, *Ecosystem Management and the 1996 Sustainable Fisheries Act*, 24 ECOL. L.Q. 799, 810 (1997) (noting that if transition relief is pegged to historical baselines, the anticipation of new regulation may cause regulatory targets to boost their baselines in the hopes of securing a larger share of the impending transition relief); Saul Levmore, *Changes, Anticipations, and Reparations*, 99 COLUM. L. REV. 1657, 1661–65 (1999) (arguing that it usually the private regulated party that is better able to anticipate change, and that grandfathering therefore represents a distorting subsidy); Nash, *supra* note 84, at 811 (“The allocation of resource access [using a grandfathering-based system] creates an incentive for societal actors to engage in a race to capture future resource access, on top of the then-existing race to capture the resource itself.”); Nash & Revesz, *supra* note 84, at 1725 (noting that regulatory targets might, in anticipation of transition relief, have less incentive to anticipate foreseeable legal changes, for example, as a result of emerging public health or safety concerns).

<sup>88</sup> Shi-Ling Hsu, *The Real Problem with New Source Review*, 36 ENVTL. L. REP. 10,095, 10,096 (2006).

<sup>89</sup> *See, e.g., id.* at 10,096; John A. List, Daniel L. Millimet & Warren McHone, *The Unintended Disincentive in the Clean Air Act*, ADVANCES ECON. ANALYSIS & POL’Y, Feb. 2004, art no. 2, at 1, 12–14; Randy A. Nelson, Tom Tietenberg & Michael R. Donihue, *Differential Environmental Regulation: Effects of Electric Utility Capital Turnover and Emissions*, 75 REV. ECON. & STAT. 368, 373 (1993).

<sup>90</sup> Hsu, *supra* note 11, at 760–64.

And yet, grandfathering is ubiquitous. Zoning laws commonly allow existing “nonconforming uses” to persist through a zoning change rendering it illegal, at least until there is some significant change to the property, such as a fire.<sup>91</sup> Emissions standards for passenger vehicles are periodically tightened to require lower tailpipe emissions, but existing vehicles are only required to be inspected periodically for the worst emissions, and even then owners are only required to expend fairly minor sums of money to alleviate their vehicle emissions.<sup>92</sup> Heavy-duty diesel engines, which are far more harmful and durable than passenger vehicle engines, are not required by federal law to comply with 2001 emissions standards if they were in use when the new regulation was promulgated.<sup>93</sup> When Congress first required the registration of pesticides in 1972,<sup>94</sup> it required that compensation, at fair market value, be paid to manufacturers of existing pesticides if those pesticides were cancelled or suspended under the new standards.<sup>95</sup> Most Western states have a “prior appropriation” means of distributing water rights that allocates water rights to first-users.<sup>96</sup> In times of water scarcity, prior appropriation rights exclude all others, including conservation uses.<sup>97</sup> In all of these cases, very significant social harms could have been avoided by denying transition relief, and yet in all of these cases, transition relief was granted. More importantly, for our purposes, transition relief was made to mimic the expectations of capital owners in the form of their hoped-for stream of benefits, with the effect of propping up returns to private capital (Piketty’s *r*). So common is the provision of at least some transition relief<sup>98</sup> that potential regulatory targets (such as polluters) can confidently count on it to partially insure against changes in

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<sup>91</sup> 2 PATRICIA E. SALKIN, AMERICAN LAW OF ZONING § 12.20 (5th ed. 2014).

<sup>92</sup> Huber, *supra* note 84, at 127.

<sup>93</sup> Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements, 66 Fed. Reg. 5002 (Jan. 18, 2001); *see also* 40 C.F.R. §§ 69.52, 86.004-11, 86.007-11, 86.009-11 (2014).

<sup>94</sup> Federal Environmental Pesticide Control Act of 1972, Pub. L. No. 92-516, sec. 2, § 3, 86 Stat. 973, 979–82 (codified as amended at 7 U.S.C. § 136a (2012)).

<sup>95</sup> *Id.* at sec. 2, § 15, 86 Stat. at 993–94 (codified as amended at 7 U.S.C. § 136m (2012)).

<sup>96</sup> *See* Robin Kundis Craig, *A Comparative Guide to the Western States’ Public Trust Doctrines: Public Values, Private Rights, and the Evolution Toward an Ecological Public Trust*, 37 *ECOL. L.Q.* 53, 93–194 (2010).

<sup>97</sup> *See id.*

<sup>98</sup> *See generally* Maria Damon et. al, *Grandfathering* (Indiana Univ., Bloomington Sch. of Pub. & Env’tl Affairs Research Paper No. 2012-11-03, 2012), *available at* <http://ssrn.com/abstract=2182573> (providing a holistic overview of grandfathering in multiple contexts).

legal rules that might jeopardize their capital.<sup>99</sup> Transition relief has made the obsolescence and external costs of capital everybody's problem except the owners of that capital.

Why do we grandfather? In large part, an intuition about fairness makes it discomfiting to change the rules of the game on someone making a large investment in capital. The instinct to grandfather also hearkens back to concerns of regulatory uncertainty inefficiently stifling capital investment. The regular practice of grandfathering is an assurance that rules governing the operation of capital will not change arbitrarily. It has been argued in favor of grandfathering that regulatory bodies, not capital investors, are in a better position to anticipate new regulation.<sup>100</sup> But to the extent that new regulation is meant to address changing market conditions and emergent harms of some product or process, it would seem to be the capital investors themselves that have the best information about their products or practices. It does not seem onerous for capital investors to undertake the due diligence of vetting the soundness of their investment on many dimensions, including its social costs. For example, as many chemicals used in hydraulic fracturing are known only to the oil or gas company using them,<sup>101</sup> it would seem anomalous to require some assurance from a regulatory body that there will be no interference with their use.

Grandfathering represents perhaps the starkest and most pervasive example of how legal rules and institutions have implicitly assumed the role of promoting and protecting capital. Small wonder that  $r > g$ ; the ubiquity of grandfathering has elevated it to near norm status. A misguided instinct for fairness towards capital owners has diverted attention not only from other stakeholders impacted by capital but from the larger question of the role of capital in a competitive economy.

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<sup>99</sup> Nash & Revesz, *supra* note 84, at 1726 (“[W]hen the government enacts a new legal regime with transition relief, it sends a signal to society at large that, in general, changes in legal standards will not govern existing actors.”).

<sup>100</sup> See, e.g., W. Kip Viscusi, *The Dangers of Unbounded Commitments to Regulate Risk*, in RISKS, COSTS, AND LIVES SAVED: GETTING BETTER RESULTS FROM REGULATION 135, 135–40 (Robert W. Hahn ed., 1996).

<sup>101</sup> Hannah J. Wiseman, *Risk and Response in Fracturing Policy*, 84 U. COLO. L. REV. 729, 763–64 (2013).

#### D. *Electric Utility Regulation*

There is an area of American law that comes close to undertaking the dual analyses of returns to private capital and economic growth that I advocate in this Essay. Electric utility regulation in the United States (in the states where electricity generation remains regulated, which is most of them) treats electricity generation as a “natural monopoly”<sup>102</sup> and grants generators the sole right to generate and sell electricity within a specified territory.<sup>103</sup> However, the nature of utility regulation is that these sanctioned monopolists can only charge rates approved by a state commission or the Federal Energy Regulatory Commission (FERC), in the case of interstate or wholesale electricity sales.<sup>104</sup> Generally, rates are permitted in accordance with the formula

$$R = O + (B \times r)$$

where  $R$  is the total allowed revenues (to be divided up among ratepayers),  $O$  is the allowed operating expenses,  $B$  is the company’s “rate base,” all those capital assets from which the company is permitted to earn a return, and  $r$  is the permitted rate of return.<sup>105</sup> What is allowed to be included in the rate base is also a matter of commission adjudication, which must strike a balance between customers’ interests in minimizing electricity rates (and therefore minimizing the rate base) and the utility’s interest in passing through as much cost as possible to customers (and therefore maximizing the rate base). Commissions are guided by standards for when an asset such as a generating station can be included in the rate base: investments must be “prudently incurred”<sup>106</sup> and must be “used and useful.”<sup>107</sup> It is expected that commissions will allow utilities a return on capital that is less than what a monopolist would earn, but more than the average cost of capital.<sup>108</sup>

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<sup>102</sup> FRED BOSSELMAN ET AL., *ENERGY, ECONOMICS, AND THE ENVIRONMENT* 53 (3d ed. 2010).

<sup>103</sup> *Id.*

<sup>104</sup> *Id.*

<sup>105</sup> See, e.g., *id.* at 65; MARLA E. MANSFIELD, *ENERGY POLICY: THE REEL WORLD* 129 (2001).

<sup>106</sup> See *Duquesne Light Co. v. Barasch*, 488 U.S. 299, 305 (1989).

<sup>107</sup> See *id.* at 308–09. For further analysis and illustrations of how Commissions assess whether an investment is “prudentially incurred” and “used and useful,” see *Fed. Power Comm’n v. Hope Natural Gas Co.*, 320 U.S. 591 (1944); *Missouri ex rel. Sw. Bell Tel. Co. v. Pub. Serv. Comm’n*, 262 U.S. 276, 289 (1923) (Brandeis, J., concurring); *Pa. Pub. Util. Comm’n v. Phila. Elec. Co.*, 31 P.U.R.4th 15 (Pa. Pub. Util. Comm’n Dec. 28, 1978); Richard A. Posner, *Natural Monopoly and Its Regulation*, 21 STAN. L. REV. 548 (1969).

<sup>108</sup> Paul L. Joskow & Roger G. Noll, *Regulation in Theory and Practice: An Overview*, in *STUDIES IN PUBLIC REGULATION* 1, 10–11 (Gary Fromm ed., 1981), available at <http://www.nber.org/chapters/c11429.pdf>.

This process is admirably explicit in its consideration of two competing concerns: consumer welfare and returns to private capital (for the utility). However, there is good reason to suspect that utilities have held an advantage in being able to “stuff” excess capital into their rate bases and pass costs through to rate paying customers. The “Averch-Johnson effect”<sup>109</sup> posits that regulated utilities will utilize more capital (as opposed to labor, which cannot be included in the rate base) than a cost-minimizing firm would utilize.<sup>110</sup> This is a less efficient allocation of inputs than a cost-minimizing firm would make and passes that inefficiency along to ratepayers in the form of higher rates. But it results in higher returns to private capital for shareholders of the utility (assuming it is an investor-owned utility). Empirical studies have generally confirmed this result, though not unambiguously.<sup>111</sup>

It could be that as a matter of administrative law, there exists an inherent bias predicted by Averch and Johnson. However, for purposes of this Essay, it is more important to notice that the administrative lawmaking surrounding rate base cases seems to tilt towards concern with returns to private capital and away from concern with ratepayer welfare. Several cases arose in the 1980s in which utilities sought to include in their rate base nuclear power plants that, while “prudent” at the time of investment, had become unnecessary in light of conservation measures that had sharply reduced electricity demand. In *Jersey Central Power & Light Co. v. FERC*, the court held that the FERC was required to make a finding as to whether it was “just and reasonable” to exclude the unamortized portion of a nuclear power plant from the rate base if it caused the utility to become financially distressed.<sup>112</sup> The majority opinion, parenthetically, was delivered by none other than Judge Robert Bork, who had already made his mark on antitrust law in arguing for a “total efficiency” test for anticompetitive conduct. But the more illuminating opinion was authored by Judge Starr, in concurrence, in which he tracked a body of jurisprudence and documented its departure from the “used and useful” standard which served for decades to discipline utilities and regulatory commissions against an

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<sup>109</sup> Harvey Averch & Leland L. Johnson, *Behavior of the Firm under Regulatory Constraint*, 52 AM. ECON. REV. 1052 (1962).

<sup>110</sup> Alvin K. Klevorick, *The Behavior of a Firm Subject to Stochastic Regulatory Review*, 4 BELL J. ECON. & MGMT. SCI. 57, 57–58 (1973).

<sup>111</sup> See, e.g., Léon Courville, *Regulation and Efficiency in the Electric Utility Industry*, 5 BELL J. ECON. & MGMT. SCI. 53 (1974); H. Craig Peterson, *An Empirical Test of Regulatory Effects*, 6 BELL J. ECON. & MGMT. SCI. 111 (1975); Robert M. Spann, *Rate of Return Regulation and Efficiency in Production: An Empirical Test of the Averch-Johnson Thesis*, 5 BELL J. ECON. & MGMT. SCI. 38 (1974).

<sup>112</sup> *Jersey Cent. Power & Light Co. v. FERC*, 810 F.2d 1168, 1207 (D.C. Cir. 1987).

Averch-Johnson bias.<sup>113</sup> In counseling against the “ill-conceived and overly broad attack on the ‘used and useful’ principle,”<sup>114</sup> Judge Starr nevertheless emphasized the need for balancing the interests of ratepayers and of investors<sup>115</sup> and concluded that this case called for greater attention to investor interests.<sup>116</sup>

On a similar set of facts, in *In re Limerick Nuclear Generating Station*,<sup>117</sup> the Pennsylvania Public Utility Commission similarly allowed the inclusion of an extraneous nuclear power plant into its rate base even though it was not “used and useful,” because it was, at the time of investment, prudently incurred. The case, one of only a few cases that even mentions the Averch-Johnson effect, seemed utterly dismissive of a fairly developed and sophisticated body of research:

This concept, developed in the early 1960s, maintains that the utilities will invariably seek to overbuild their systems. . . . The Averch-Johnson phenomenon is no longer applicable—Even if it did apply in the early 1960s, there is little current credibility to the A-J phenomenon given the current depressed financial condition of the industry.<sup>118</sup>

It is not my contention that as a jurisprudential matter, these cases are wrongly decided. However, I do contend that the administrative lawmaking of utility regulation has gravitated toward a greater concern for rates of return on private capital, in large part through the erosion of the “used and useful” test.<sup>119</sup> Over time, it seems that returns to private capital receive greater consideration than more general concerns of consumer welfare, capital productivity, or economic well-being. Utilities law, as an example of this bias, has thus paid far more attention to the owners of capital than to the welfare of its ratepayers or any other broader public interest.

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<sup>113</sup> *Id.* at 1188–94 (Starr, J., concurring).

<sup>114</sup> *Id.* at 1188.

<sup>115</sup> *Id.* at 1191.

<sup>116</sup> *Id.* at 1193.

<sup>117</sup> 48 P.U.R.4th 190 (Pa. Pub. Util. Comm’n May 7, 1982).

<sup>118</sup> *Id.* at 211–12.

<sup>119</sup> See, e.g., James J. Hoecker, “Used and Useful”: Autopsy of a Ratemaking Policy, 8 ENERGY L.J. 303 (1987).

## II. ZOOMING OUT: WHY DO THESE LAWS PERSIST?

Why do these legal rules and institutions arise and persist? Why don't the ninety-nine percent rise up in electoral anger and smite down the one percent? The answer has to do with the capital itself. Theories of rent-seeking are nothing new, but the nature of the rents sought (and obtained) have not received much scrutiny. Legal rules and institutions most commonly distribute rents by promoting the formation of private capital or by boosting returns to private capital. While capital is essential to economic growth, the long-term nature of capital is such that it creates an incentive for owners of that capital to resist change. It is thus the very nature of capital, which in Piketty's account is responsible for creating inequality that also sustains inequality. The law thus acts as a force of divergence in two stages: first, by directly contributing to the formation of private capital (predominantly to the benefit of the one percent) and second, by protecting that capital from regulation or competition that might devalue that capital.

Promoting the formation of private capital—boosting Piketty's  $r$ —might not contribute to wealth inequality if it also contributes to economic growth. Done properly, private capital should sustain economic growth. However, the legal rules and institutions that affect the formation of capital have not always produced capital that contributes to economic growth. Too often, they reduce economic growth. But as a matter of political economy, legal preferences for capital are easy to obtain. Boris Bittker predicted in 1955 the emergence of “a trend that, though leaderless and planless, may become an almost irresistible movement for a taxpayer's option to deduct capital investments, either in the form of a deduction when the costs are incurred or as an allowance for amortization over a very short period.”<sup>120</sup>

Governments at all levels have demonstrated an inclination to use “carrots” instead of “sticks” to achieve policy goals,<sup>121</sup> and the carrots frequently take the form of some capital promotion or protection. Scattered throughout the Internal Revenue Code are carrot-like provisions that lower the cost of private capital or increase the returns to private capital.<sup>122</sup>

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<sup>120</sup> Boris I. Bittker, *Tax Policy Aspects of the Code*, 30 N.Y.U. L. REV. 227, 230 (1955).

<sup>121</sup> Gerrit De Geest & Giuseppe Dari-Mattiacci, *The Rise of Carrots and the Decline of Sticks*, 80 U. CHI. L. REV. 341 (2013).

<sup>122</sup> See Brian Galle, *The Tragedy of the Carrots; Economics and Politics in the Choice of Price Instruments*, 64 STAN. L. REV. 797 (2012).

Financial regulation, electric utility regulation, and oil and gas subsidies are areas that have played a critical role in economic growth and development, and therefore benefitted from this capital bias. Promoting the formation of capital in these industries is viewed as promoting economic growth and development. On the merits, this is sometimes true, but sometimes not. As argued above, 102 years ago, when the oil industry was a nascent industry with high capital costs, one could readily make the argument that a small subsidy could unlock important markets with high consumer surplus; low energy prices played a critical part in creating wealth and several expensive and important war efforts. But there is no real dispute that in the modern energy era continuing subsidization of these industries is wasteful.<sup>123</sup> Nevertheless, oil and gas subsidies persist and have augmented returns to private capital without making much difference in economic growth. Under these circumstances, subsidized capital boosts returns to private capital without contributing to economic growth, and in fact derogates from economic growth.

But apart from its spotty record on the formation of capital that is economically useful, the greater force of divergence is the propensity of law to protect that capital even when it suffers from inefficiencies. As I have argued in another article, the downside of capital is that it creates a policy inertia that may interfere with welfare-increasing reform, including that which would improve economic growth.<sup>124</sup> Capital is acquired to obtain a future stream of benefits. Once acquired, the owners of that capital will oppose any policy changes that threaten that future stream of benefits. Fortunately for owners of capital, lawmakers are downright obsequious in making sure that returns to private capital are protected from legislative or regulatory avarice. Lawmakers have, as discussed above, been overwhelmingly disposed toward grandfathering existing capital into older, weaker regulations. Thus, even if capital is inefficient and fails to contribute to economic growth (or reduces welfare by, among other things, imposing environmental externalities), the political economy of capital ensures that a stream of benefits flowing from capital will be interrupted only at great political cost. Moreover, with legal rules and institutions promoting capital formation and implicitly subsidizing it, capital has gotten bigger and has therefore enlarged the incentives to resist reform. This resistance to reform is the reason that wealth inequality persists.

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<sup>123</sup> See *supra* note 77 and accompanying text.

<sup>124</sup> Hsu, *supra* note 11, at 722–27.



Of course, capital is not always just a vehicle for private greed and public inefficiency. There are many legitimate, welfare-enhancing reasons for boosting returns to private capital. First, capital and labor are almost always complementary to some extent.<sup>125</sup> Activating capital usually creates jobs. Second, political and regulatory uncertainty can inefficiently suppress capital formation, so that protecting capital from the whims and caprices of regulators and politicians can be economically efficient.<sup>126</sup> Finally, as was true in the oil and gas industries 102 years ago, unlocking critical markets may generate consumer surplus well in excess of a capital-promoting government expenditure. These policy considerations in favor of promoting capital are valid but are commonly over-emphasized relative to the downsides of capital.<sup>127</sup> The operation of capital may have latent externalities (for example, adverse environmental effects) that may not be fully appreciated by either capital investors or regulators at the time of capital acquisition. Capital could also have a latent inefficiency; some capital becomes obsolete quickly. But the potential for these latent downsides are rarely scrutinized carefully and receive much less attention than the alleged upsides. This asymmetry in attention has created a built-in bias in legal rules and institutions favoring the formation and protection of capital, leading to an overabundance of capital in some markets.<sup>128</sup>

This two-staged exploitation of the legal system for promoting and protecting capital has the dual effects of exacerbating wealth inequalities *and* grinding legal and economic reform to a halt. Rents are extracted, and because capital formation policy is haphazard in terms of economic growth, capital is formed in ways that create high returns to private capital but do not contribute to economic growth. Once capital is formed, it creates a strong incentive to resist reform that threatens the value of that capital.

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<sup>125</sup> The Cobb-Douglas production function, which every economics student learns about in undergraduate economics, posits production as a function of the quantity and productivity of just two types of inputs: labor and capital. See Charles W. Cobb & Paul H. Douglas, *A Theory of Production*, 18 AM. ECON. REV. (PAPERS & PROC.) 139 (1928). The now-familiar Cobb-Douglas formulation,  $Y = AL^{\alpha}K^{\beta}$ , with  $Y$  representing output,  $L$  representing labor, and  $K$  representing capital, is a foundational relation in economic theory. See *id.* at 151–52.

<sup>126</sup> AVINASH K. DIXIT & ROBERT S. PINDYCK, *INVESTMENT UNDER UNCERTAINTY* (1994); Ben S. Bernanke, *Irreversibility, Uncertainty, and Cyclical Investment*, 98 Q.J. ECON. 85, 103 (1983).

<sup>127</sup> Hsu, *supra* note 11, at 720–22.

<sup>128</sup> *Id.* at 744–60 (describing overabundance of capital in oil and gas, mining, and electricity industries).

## III. A FORCE OF CONVERGENCE: EDUCATION

“Capital” is such a broad term that it is hard to generalize about its contribution to economic growth. Policies that can serve as a force of convergence are rarely clear-cut, but there is at least one form of capital that everyone agrees is a vital ingredient to economic growth: “human capital,” or education.<sup>129</sup> Economic productivity is observed to be clearly, consistently, and significantly greater in the presence of human capital.<sup>130</sup> A central recommendation of Piketty is to increase spending on education,<sup>131</sup> even though he acknowledges that educational systems are in need of reform.<sup>132</sup>

An adequate supply of human capital is a necessary, but not a sufficient, condition for economic growth to occur. Fundamentally, economic growth occurs because either latent markets are opened up or because innovation expands an economy’s production possibility frontier.<sup>133</sup> Human capital drives innovation, which is itself an engine for economic growth, but also facilitates the adoption of new technologies, as higher-skilled workers with richer human capital are more able to adapt to changes in technology.<sup>134</sup> Better still, human capital produces knowledge spillovers, as interactions among skilled individuals generate mutually beneficial enhancements to human capital.<sup>135</sup>

And yet, human capital tends to be undersupplied relative to physical capital for two reasons. First, from an individual viewpoint, human capital is a riskier investment than an investment in physical capital. If an expected return on physical capital, such as a hot dog stand, is equal to the expected return on

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<sup>129</sup> GARY S. BECKER, HUMAN CAPITAL: A THEORETICAL AND EMPIRICAL ANALYSIS, WITH SPECIAL REFERENCE TO EDUCATION 17 (3d ed. 1993).

<sup>130</sup> *Id.* at 59–131; Theodore W. Schultz, *Investment in Human Capital*, 51 AM. ECON. REV. 1 (1961).

<sup>131</sup> PIKETTY, *supra* note 2, at 313.

<sup>132</sup> *Id.* at 483–84.

<sup>133</sup> N. Gregory Mankiw, David Romer & David N. Weil, *A Contribution to the Empirics of Economic Growth*, 107 Q.J. ECON. 407, 408 (1992).

<sup>134</sup> Daron Acemoglu & Joshua Angrist, *How Large are Human-Capital Externalities? Evidence from Compulsory Schooling Laws*, in 15 NBER MACROECONOMICS ANNUAL 2000, at 9, 9 (Ben S. Bernanke & Kenneth Rogoff eds., 2001), available at <http://www.nber.org/chapters/c11054.pdf>; see Paul M. Romer, *Endogenous Technological Change*, 98 J. POL. ECON. (SPECIAL ISSUE) 71, 99 (1990).

<sup>135</sup> This idea derives in part from the work of Jane Jacobs, who theorized that cities are places for the exchange of ideas. JANE JACOBS, THE ECONOMY OF CITIES 3–4 (1969). This was more theoretically formalized by economist Robert Lucas. See Robert E. Lucas, Jr., *On the Mechanics of Economic Development*, 22 J. MONETARY ECON. 3 (1988). Empirically, the results have been inconclusive. See Acemoglu & Angrist, *supra* note 134, at 10–11; James E. Rauch, *Productivity Gains from Geographic Concentration of Human Capital: Evidence from the Cities*, 34 J. URB. ECON. 380 (1993). But see James J. Heckman, *Policies to Foster Human Capital*, 54 RES. ECON. 3 (2000) (concluding that American society underinvests in children).

human capital, such as a bachelor's degree in English, a risk-averse individual would be more inclined to invest in the hot dog stand. That is because human capital cannot be bought or sold like physical capital can, so diversifying a capital stock requires more time and resources normally available to an individual.<sup>136</sup> By contrast, the transferability of physical capital means that an individual does not need to diversify.<sup>137</sup> A hot dog stand in a diversified economy has a positive salvage value; it can always be sold. But an education cannot; it is "stuck" to the individual having it. All other things being equal, individuals would choose the less risky physical capital. Second, human capital is undersupplied because it confers positive externalities in a way that physical capital generally does not: human capital is knowledge, and the greater the stock of knowledge, the greater the knowledge spillovers, and the higher the rate of accumulation of more knowledge. Knowledge begets more knowledge, and does so more easily if there is more knowledge to begin with.<sup>138</sup> Unfortunately, the political economy of human capital development is generally not favorable.

Economists Claudia Goldin and Lawrence Katz argue in their book, *The Race Between Education and Technology*<sup>139</sup> (which Piketty cites with approval),<sup>140</sup> that American economic dominance of most of the twentieth century was a product of its extraordinarily egalitarian and compulsory public schooling, which created a broadly educated work force that was able to adapt to a changing technological environment.<sup>141</sup> Apart from generating outsized returns for female students<sup>142</sup> and African-American students,<sup>143</sup> compulsory, free public schooling generated positive network effects by lifting up an entire populace.<sup>144</sup> The failure of the United States to replicate this educational boost for the latter part of the twentieth century is, as Goldin and Katz argue, a large part of the country's relative underperformance over this same period.<sup>145</sup>

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<sup>136</sup> David Levhari & Yoram Weiss, *The Effect of Risk on the Investment in Human Capital*, 64 AM. ECON. REV. 950, 950 (1974).

<sup>137</sup> *Id.*

<sup>138</sup> Heckman, *supra* note 135, at 5 ("Early learning begets later learning . . ."); see Acemoglu & Angrist, *supra* note 134, at 10–11.

<sup>139</sup> CLAUDIA GOLDIN & LAWRENCE F. KATZ, *THE RACE BETWEEN EDUCATION AND TECHNOLOGY* (2008).

<sup>140</sup> PIKETTY, *supra* note 2, at 306.

<sup>141</sup> GOLDIN & KATZ, *supra* note 139, at 29; see also Acemoglu & Angrist, *supra* note 134, at 9.

<sup>142</sup> GOLDIN & KATZ, *supra* note 139, at 78 tbl.2.5 (showing higher returns for education for women for college and business school, but not high school).

<sup>143</sup> *Id.* at 21–22.

<sup>144</sup> *Id.* at 29.

<sup>145</sup> *Id.* at 320–23.

Tax laws work to the disadvantage of higher education, vis-à-vis physical capital. Tuition is not deductible, but cost of acquisition of physical capital is.<sup>146</sup> Several tax credits and deductions were made available as part of the American Recovery and Reinvestment Act of 2009<sup>147</sup> but amount to no more than \$2,500 per student from qualifying families, or a similarly modest tax deduction for nonqualifying families.<sup>148</sup> The late economist and human capital pioneer Theodore Schultz complained, “Our tax laws everywhere discriminate against human capital. Although the stock of such capital has become large and even though it is obvious that human capital, like other forms of reproducible capital, depreciates, becomes obsolete, and entails maintenance, our tax laws are all but blind on these matters.”<sup>149</sup>

Fundamentally, the Internal Revenue Code simply does not recognize human capital as capital. In part, it may be because of a prosaic problem: what would be the amortization period for a college degree? Still, even an implausibly long amortization period, say the average lifetime of a taxpayer obtaining a college degree, is better than no deduction at all. As opposed to routine deduction of the costs of acquiring physical capital, educational expenses are deductible in only some very narrow circumstances.

Tellingly, educational expenses are deductible if incurred under circumstances in which the education is likely to enhance private returns. Treasury Regulation 1.162-5 allows educational expenses to be deducted if the education “[m]aintains or improves skills required by the individual in his employment or other trade or business.” But if it is general learning or education, then it is a non-deductible personal expense.<sup>150</sup> Nor are educational expenses deductible if the education is required to meet the minimum educational requirements of a business or trade. So the expenses of a J.D. degree are not deductible, but for a practicing tax lawyer that has already

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<sup>146</sup> Philip A. Trostrel, *The Effect of Taxation on Human Capital*, 101 J. POL. ECON. 327, 328 (1993).

<sup>147</sup> Pub. L. No. 111-5, 123 Stat. 115.

<sup>148</sup> Press Release, IRS, Special IRS Web Section Highlights Back-to-School Tax Breaks; Popular 529 Plans Expanded, New \$2,500 College Credit Available (Sept. 9, 2009), available at [http://www.irs.gov/uac/Special-IRS-Web-Section-Highlights-Back-to-School-Tax-Breaks;-Popular-529-Plans-Expanded,-New-\\$2,500-College-Credit-Available](http://www.irs.gov/uac/Special-IRS-Web-Section-Highlights-Back-to-School-Tax-Breaks;-Popular-529-Plans-Expanded,-New-$2,500-College-Credit-Available).

<sup>149</sup> Schultz, *supra* note 131, at 13. It is true that higher education is financed by foregone earnings, which are not taxed, suggesting that perhaps acquiring human capital should not enjoy a tax benefit. Michael J. Boskin, *Notes on the Treatment of Human Capital* 4 (Nat'l Bureau of Econ. Research, Working Paper No. 116, 1975), available at <http://www.nber.org/papers/w0116.pdf>. However, especially in this era of high tuition, tuition is likely to be a larger cost than foregone earnings.

<sup>150</sup> Treas. Reg. § 1.162-5(a)(1) (2014).

passed the bar exam, an L.L.M. degree in tax is deductible.<sup>151</sup> Similarly, education to qualify for a new trade or business is nondeductible. So persons finding themselves in an obsolete trade or business are discouraged from retooling and shifting into a new trade or business. One would think that it would be desirable to incentivize a labor force to be adaptive to new developments, but the tax law is evidently not the vehicle for doing so. It does the opposite.

Certainly, greater education funding is not by any stretch of the imagination a panacea for addressing inequality. It has hardly gone unnoticed that the political economy of education spending tends to perpetuate wealth inequalities by skewing expenditures to favor wealthier populations.<sup>152</sup> This pathology likely extends to the reforms that have been put forth to improve educational outcomes.<sup>153</sup> To be sure, educational funding and policy is a complex matter. Care must be taken in the apportionment of public education dollars and in the actual delivery of public education.

Thus, while this Essay does not purport to be a manifesto or a treatise on educational reform, it highlights the reasons for prioritizing funding for education at all levels. Human capital is generally undersupplied in any case. But more pertinent to this Essay, if one shares Piketty's concern over inequality, then it is clear that the development of human capital is critical. It is difficult to figure out how to boost economic growth, but it is clear that an educational system that does not offer an education to a sufficiently broad segment of the population will *both* undermine economic growth and exacerbate inequality. In an era of scarce resources, then, spending government resources to boost returns to private capital in the wishful thinking that there will also be resultant economic growth will generally be a more fanciful proposition than funding education.

## CONCLUSION

The problem with the inequality debate is that arguments advocating or opposing wealth redistribution usually take on the nature of an accounting

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<sup>151</sup> I am indebted to my colleague Steve R. Johnson for this example.

<sup>152</sup> See, e.g., Mark Gradstein, *The Political Economy of Public Spending on Education, Inequality, and Growth* (World Bank Policy Research Working Paper No. 3162, 2003), available at <http://elibrary.worldbank.org/doi/pdf/10.1596/1813-9450-3162>.

<sup>153</sup> See, e.g., PAULINE LIPMAN, HIGH STAKES EDUCATION: INEQUALITY, GLOBALIZATION, AND URBAN SCHOOL REFORM (2004).

dispute. If redistributionists argue that the top one percent earn almost twenty percent of the country's taxable income, the top one percent can counter that they also pay thirty-five percent of the country's income taxes.<sup>154</sup> The point isn't whether the rich are "paying their fair share" of taxes. There *is* no fair share. There are only value choices about wealth distribution.

Piketty's proposed global wealth tax is a responsive and efficient way of combating the forces of divergence, but there are a number of political predicates and obstacles that render such a proposal improbable for the near-term. This Essay offers an alternative. I urge a closer examination of legal rules and institutions for their separate effects on returns to private capital and their contribution to economic growth. It seems that up to this point, a legal rule is considered desirable if it is believed to contribute positively to economic growth. If so, the returns to private capital are not questioned. This approach suffers from two problems. First, it runs the substantial risk of producing false positives. There are strong incentives for rent-seekers to present a very optimistic projection for economic growth under the proffered rule or policy. Second, if exorbitantly high returns to private capital are tolerated, then it becomes a nearly insurmountable challenge to reform governance of that capital, as it will have become larger and more important to its owner. Thus, for a new policy proposal, separate evaluations should be made of its effect on returns to private capital and its effect on economic growth. The latter determination is very challenging, but some attempt would be superior to the current approach of essentially trusting private businesses to make that determination or that private wealth inevitably trickles down to the less wealthy. In addition to applying a new test to prospective changes in law, it seems desirable to revisit some past changes, comparing them against prior rules as a baseline. In particular, revisiting financial sector deregulations and laws in the energy field might be fruitful.

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<sup>154</sup> Kevin McCormally, *Where Do You Rank as a Taxpayer?*, KIPLINGER (Jan. 17, 2014), <http://www.kiplinger.com/article/taxes/T054-C000-S001-where-do-you-rank-as-a-taxpayer.html>.