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New Economic Analysis of Law: Beyond Technocracy and Market Design

Frank Pasquale*

Abstract

This special issue on New Economic Analysis of Law features illuminating syntheses of social science and law. What would law and economics look like if macroeconomics were a concern of scholars now focused entirely on microeconomics? Do emerging online phenomena, such as algorithmic pricing and platform capitalism, promise to perfect economic theories of market equilibrium, or challenge their foundations? How did simplified economic models gain ideological power in policy circles, and how can they be improved or replaced? This issue highlights scholars whose work has made the legal academy more than an “importer” of ideas from other disciplines—and who have, instead, shown that rigorous legal analysis is fundamental to understanding economic affairs.

The essays in this issue should help ensure that policymakers’ turn to new economic thinking promotes inclusive prosperity. Listokin, Bayern, and Kwak have identified major aporias in popular applications of law and economics methods. Ranchordás, Stucke, and Ezrachi have demonstrated that technological fixes, ranging from digital ranking and rating systems to artificial intelligence-driven personal assistants, are unlikely to improve matters unless they are wisely regulated. McCluskey and Rahman offer a blueprint for democratic regulation, which shapes the economy in productive ways and alleviates structural inequalities. Taken as a whole, this issue of *Critical Analysis of Law* shows that legal thinkers are not merely importers of ideas and models from economics, but also active participants, with a great deal to contribute to social science research.

* * *

In the film *Lost in Translation*, actor Bob Harris (played by Bill Murray) travels to Tokyo to film a commercial for Suntory whiskey.¹ After Murray’s first, weak delivery of the ad’s key line (“For a relaxing time, make it Suntory Time”), the director dramatically interrupts the filming. Speaking in Japanese, he exhorts Harris to imagine he is at rest in his study. The director demands that Harris say the line “slowly, with intense feeling,” looking at the camera like it’s an old friend—like Bogart in *Casablanca* uttering the classic: “Here’s looking at you, kid.” Harris, who speaks no Japanese, asks a translator what the director said. “He wants you to turn, [and] look at the camera,” the translator replies. “That’s all he

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¹ *Lost in Translation* (Focus Features 2003). Of course, the scene is not merely a commentary on an inadequate translation function, but also a satire of the clueless privilege of an actor lucky enough to be paid so much for a brief endorsement.

said?” Bob asks, quizzically. “With intensity,” the translator replies, after a quick consultation with the frustrated director.

One of the legal academy’s important roles is to act as a translator, taking the best of social science and developing reasoned arguments about the meaning of such findings for students, regulators, and judges. Sadly, in the context of law and economics, powerful voices in the legal academy and key think tanks have all too often engaged with only a subsection of the relevant scholarship. Like Bob Harris’s hapless translator, unable to convey the richness of the director’s vision, they offer an impoverished picture of the current intellectual landscape. Increasingly data-driven and empirical research is presented at conferences, while casebooks on property, torts, and contracts remain mired in toy models and simplistic accounts of economic life. Some think tanks present supply and demand curves as if they settled important issues. The dominant pedagogy and political advocacy identified with mainstream law and economics needs a paradigm shift, or at least a shift in focus.²

Over the past few decades, critical legal scholars have assiduously detailed the problems caused by popularizations of dominant law and economics paradigms. Reza Dibadj observed in 2003 that “three of the most basic assumptions to the popular law and economics enterprise—that people are rational, that ability to pay determines value, and that the common law is efficient—while couched in the metaphors of science, remain unsubstantiated.”³ In the past fifteen years, conferences run by the American Law & Economics Association and the Canadian Law & Economics Association, among other entities, have showcased work that tests (and adds nuance) to such assumptions. However, in casebooks and classrooms (including ones designed for policymakers and judges), simplified versions of economic reality persist.

Fortunately, many researchers are now correcting this partial vision of the role of social science in informing the regulation of commercial life. This special issue on New Economic Analysis of Law features illuminating syntheses of social science and law.⁴ What would law and economics look like if macroeconomics were a primary concern of scholars now focused entirely on microeconomics? Do emerging online phenomena, such as algorithmic pricing and platform capitalism, promise to perfect economic theories of market equilibrium, or challenge their foundations? How did simplified economic models gain ideological power in policy circles, and how can they be improved or replaced? This issue highlights scholars whose work has made the legal academy more than an

² Similar calls have been directed at economics itself. See Alexander Rosenberg, *Economics: Mathematical Politics or Science of Diminishing Returns?* (1992); Alan Jay Levinovitz, *The New Astrology*, *Aeon* (Apr. 4, 2016) (<https://aeon.co/essays/how-economists-rode-maths-to-become-our-era-s-astrologers>).

³ Reza Dibadj, *Beyond Facile Assumptions and Radical Assertions: A Case for Critical Legal Economics*, 2003 *Utah L. Rev.* 1155.

⁴ The term “new economic thinking” owes some currency to the success of the Institute for New Economic Thinking (INET) in updating and improving economic discourse.

“importer” of ideas from other disciplines—and who have, instead, shown that rigorous legal analysis is fundamental to understanding economic affairs.

This issue of *Critical Analysis of Law* features leading scholars who have corrected for various shortcomings in the mainstream of legal economic pedagogy and policy analysis. Professors Bayern, Kwak, and Listokin offer creative critiques of mainstream paradigms. In terms familiar from the philosophy of social science, they complement parsimony and methodological individualism with a recognition of the importance of scope and holism. There are now many computational efforts to use big data and predictive analytics to rehabilitate old paradigms of rational consumers and efficient markets; Professors Ranchordás, Stucke, and Ezrachi show that the digital world may be susceptible to even more extreme distortion than the types of “real-space” transactions it is rapidly displacing. Finally, Professors McCluskey and Rahman offer an alternative to mainstream law and economics: a political economy perspective which emphasizes the role of legal rules in shaping and even determining economic realities. This introduction describes their contributions.

I. Failures of the Mainstream

Numerous movements have criticized the mainstream economics curriculum taught at most large universities in the United States, Canada, and United Kingdom. For example, students at Harvard protested Professor N. Gregory Mankiw’s course (colloquially called Ec 10) for biased presentation of a particular ideology as unquestionable economic reality. There was a citywide, student-led effort to “demystify, diversify, and invigorate” economics in New York City in 2014.⁵ Numerous organizations have also criticized mainstream orthodoxies about topics ranging from trade policy to government deficit spending. Core-Econ has produced a new casebook on the economics of inequality, sustainability, and innovation. Dozens of books written in the wake of the Global Financial Crisis of 2008 raised fundamental questions about the nature of economic analysis, and whether it was fit for purpose in an era of extraordinary power inequalities, systemic risk in finance, and dangerous climate change.

James Kwak’s 2017 book, *Economism*, was a notable addition to this literature, since it so clearly and compellingly showed how failures of mainstream economics undermined the well-being of ordinary consumers and citizens.⁶ Kwak defines economism as a misguided belief that simple concepts from introductory economics courses explain and describe commercial life so well that they should provide models for reasoning about all policy decisions. For example, consider the role of economics in health care policy. A simple supply and demand model would predict that licensure

⁵ Anisha Datta, Columbia Students Help Organize City-Wide Economics Conference, *Columbia Spectator* (Sept. 14, 2014) (<http://spc.columbiaspectator.com/news/2014/09/14/columbia-students-help-organize-city-wide-economics-conference>).

⁶ James Kwak, *Economism: Bad Economics and the Rise of Inequality* (2017).

requirements would suppress the supply of health care professionals (like doctors and nurses). So economists like Milton Friedman counseled policymakers to review such requirements with a gimlet eye. Relaxing them could increase the supply of doctors, thereby reducing the price of care, so that it is more accessible. Of course, such a policy move could also reduce the quality of the care provided: it would permit some unqualified practitioners to enter the field. But assessing the quality of health care is hard—it requires data on the structure, process, and/or outcomes of care provided. It is much easier to simply focus on classic supply and demand curves, mesmerizingly simple depictions of actions and reactions upon price and quantity.

Economism all too often entails failures of scope, in the name of parsimonious theory. To fairly assess health policy, we need to think clearly about quality. Like scientism, economism also tends to assume that further simple concepts can solve whatever shortcomings arise out of a supply and demand framework. So, in our medical example, the hope is that patients will carefully review the quality of their doctor's or hospital's work.

Of course, the problem of credence goods undermines economism's simple narratives about markets. It is very hard for someone without a medical degree to assess whether his or her doctor has actually lived up to the standard of care in any given situation. And there are other discontinuities between the medical market, such as it is, and other markets for goods and services. A bad meal may be unpleasant, but a bad surgery can be life-threatening.

In his contribution to this symposium, Kwak explores how lawyers and law professors have recapitulated the errors of the popularizers of economics, plying “just-so” stories while ignoring evidence contrary to their points of view. Richard Posner, for instance, said that a progressive tax would reduce risk-taking; Kwak shows that there was readily available counter-evidence even at the time Posner was doing his pioneering work. Sadly, this is not an isolated error, nor one Posner eventually stopped making. He has, more recently, ignored obvious evidence on how inequality harms society.⁷ At a conference last year, he expressed exasperation at recent efforts to apply antitrust law to Google.⁸ When I asked him if any articles or books written from 2007 to 2017 influenced his position on this dimension of digital antitrust, he replied “No—I have judged entirely from my use of Google.”⁹ Economism means never having to be sorry you failed to read key literature.

⁷ Frank Pasquale, *Fisking Posner on Inequality, Concurring Opinions* (Dec. 16, 2006) (https://concurringopinions.com/archives/2006/12/fisking_posner.html).

⁸ Stigler Center for the Study of the Economy and the State, *Is There a Concentration Problem in America?*, Mar. 27-29, 2017 (<https://research.chicagobooth.edu/stigler/events/single-events/march-27-2017>).

⁹ Stigler Center, *Judge Richard A. Posner in Conversation with Professor Luigi Zingales*, YouTube (Mar. 30, 2017) (https://youtu.be/JRCm_gJ2EOK?t=38m54s).

Shawn Bayern shares Kwak's concern about the scope of economic analysis, as well as the partial ways in which it tends to comprehend litigation or transactions. He finds that law and economics scholars will often seize upon one consideration in a scenario as very important to the proper resolution of a dispute, while downplaying other, equally important considerations. For instance, Posner and Rosenfield purport to apply economics to the vexing problem of resolving contract disputes when unexpected changes in circumstances occur.¹⁰ For Posner and Rosenfield, courts should carefully consider which party to litigation could have prevented or insured against such risks more cheaply than the other, and then, as "an aid to interpretation,"¹¹ read the contract as if it assigned this duty to the least-cost-avoider. Of course, that principle immediately runs into difficulties with respect to its scope and force: what if very poor people are very frequently least-cost-avoiders, because the marginal product of their labor is so low that their spending days to prepare for changes in circumstances is less "costly" than better-paid counterparties' diversion of effort to such tasks? What if the least-cost-avoider has lower costs of preparation that are only an infinitesimal fraction of the amount in dispute? In neither case would it seem fair or wise to spend much time at all considering who is the least-cost-avoider as a guiding principle in the case.

Bayern suggests even more problems with the least-cost-avoider principle here, including issues of administrability. But his primary challenge is more fundamental. Contract law is not primarily about making transactions maximally efficient. It is about respecting the preferences of the contractors, consistent with any number of other societal goals that may statutorily or via common law restrict the prerogatives of contracting parties. That requires courts to examine the entire situation of the contract, rather than engaging in premature heuristic shortcuts like the one proposed by Posner and Rosenfield.

Similarly, much of law and economics' touted parsimony may be due to simply running roughshod over rival ways of conceptualizing a dispute. Bayern reconsiders the problem of a land buyer who "develops a well-informed hunch that a particular block of farmland may have serious potential as a mineral reserve or an oil-drilling site, and does not disclose this fact to the incumbent farmer before purchasing the land at a price that reflects only agricultural uses."¹² Michael J. Trebilcock presents the issue from both utilitarian and deontological perspectives, richly describing an array of moral and economic considerations that should inform legal determinations here. By contrast, mainstream law and economics has focused on how the legal system can incentivize and reward the production of information. Since requiring disclosure would reduce the incentive to gather the information in the first place, the mainstream reasoning goes, the

¹⁰ Richard A. Posner & Andrew M. Rosenfield, *Impossibility and Related Doctrines in Contract Law: An Economic Analysis*, 6 *J. Legal Stud.* 83 (1977).

¹¹ *Id.* at 90.

¹² Michael J. Trebilcock, *The Limits of Freedom of Contract* 107-08 (1993).

buyer should not be under an obligation to disclose it before purchase. Bayern demonstrates that, even if we assume that narrow goal, there are many ways to achieve it other than by endorsing a legal rule that the buyer is under no obligation to disclose his or her research before buying the plot of land.

Moreover, there are many other considerations that should enter the analysis here. What are the effects on trust levels in a society once other landowners learn that they missed an opportunity?¹³ Given what we now know about climate change, it is more than evident that any valuation of oil here must include not only a market price, but a full social accounting of the damage caused by greenhouse gases.¹⁴ For mainstream legal economists, that may seem an inappropriately imponderable aspect of the problem to feature in ordinary legal reasoning. The siren song of parsimony counsels against its consideration. However, simplification of legal rules and predictability are only two of the many goals of a legal system. Even if wise judges were to decide that climate effects of carbon extraction were too remote to be fairly considered in a case concerning duties to disclose research on land value, the very fact that such a decision should be made (one way or another), suggests the limits of any simple focus on one facet of the problem.¹⁵

Yair Listokin's article in this issue acutely marks this partiality by demonstrating that mainstream law and economics has systematically downplayed the importance of an entire branch of economics—macroeconomics—for decades. By focusing on dyadic interactions between plaintiffs and defendants, the doctrine has failed to take into account the ways in which incentives at the micro-level can lead to unexpected effects at the societal level.

John Maynard Keynes offered a classic example of this kind of reasoning when he analyzed the simultaneous individual rationality, and collective irrationality, of individuals saving money during a depression. Keynes recognized the “paradox of thrift” in the early twentieth century, and it is a counter-narrative to the usual technocratic story of virtuous austerity.¹⁶ Spending cuts play into the liquidationist illogic of the Ourobours: those who benefit in their role as consumers end up losing out as producers. Governments may save budget expenditures by slashing spending, but then undercut the future economic activity that generates taxes.¹⁷ Austerity threatens to condemn struggling economies to a

¹³ Stephen Marglin, *The Dismal Science: How Thinking Like an Economist Undermines Community* (2008).

¹⁴ Nicholas Stern, *Stern Review: The Economics of Climate Change* (2006) (http://mudancasclimaticas.cptec.inpe.br/~rmclima/pdfs/destaques/sternreview_report_complete.pdf).

¹⁵ Ironically, perhaps only certain very strong versions of natural law theory could support an idea of the pursuit of knowledge as a trump card. Consider, for instance, Finnis's designation of knowledge as an intrinsic good in *Natural Law and Natural Rights*.

¹⁶ On the importance of counternarrative, see Frank Pasquale, *Two Narratives of Platform Capitalism*, 35 *Yale L. & Pol'y Rev.* 309 (2016).

¹⁷ A similar problem can occur when vast sums of money in an economy accumulate in, and only circulate between members of, a tiny elite. Frank Pasquale, *Closed-Circuit Economics, Concurring Opinions* (Nov. 26, 2010) (<https://concurringopinions.com/archives/2010/11/closed-circuit-economics.html>); Frank

downward spiral of deflation: lower prices, lower pay, and consequent unwillingness of consumers to spend even on low-priced goods—leading to even cheaper prices, and a reinforcement of the same disastrous dynamic.¹⁸ From the United States in the 1930s to the Japan of the 2000s, this paradox of thrift has afflicted real economies. And it is clearly one of the biggest problems arising out of a future of mass automation, where tens of millions of workers may be replaced by machines. A retailer may be thrilled to see self-driving cars break a taxi drivers' union (anticipating lower ride costs)—only to find that drivers no longer have the money to shop at his store. Moreover, as I pointed out in a discussion of “health care macroeconomics” in 2014, microeconomic experts intent on cutting health care costs may ultimately undermine larger societal goals of growth and inclusion.¹⁹ They can be penny wise, but pound foolish. Understandably focused on short-term cost reduction, they miss opportunities for long-term investment in healthier populations, meaningful work, and medical innovation.

The genius of Keynes's “paradox of thrift” is that it so clearly encapsulates a story about the economy counter to our usual way of thinking. The conventional wisdom is that a poor country has to “live within its means”—but maybe efforts to cut back will only harm their intended beneficiaries. Listokin follows in this tradition by arguing that context matters in legal-economic determination—particularly, whether they are being made in a time of deep recession (when interest rates are near zero and unemployment is high). A more demanding standard of care in such times may fruitfully incentivize firms and individuals to do the type of investment that will otherwise be neglected in lean times. Left unchecked by the state, that neglect would, in turn, feed back into the very economic conditions that caused it, leading to a vicious circle. Listokin creatively applies Keynesian thinking here in order to demonstrate that the judiciary can join the legislative and executive branches to fight unemployment and other forms of economic stagnation.

II. Questioning the Computationalist Project in Contemporary Law and Economics

Kwak, Bayern, and Listokin identify deep problems in popular law and economics that can all too often seem blinkered, partial, and simplistic. Perhaps recognizing such infirmities, some leading scholars in law and economics have begun to turn to big data, algorithms, and other technological advances in order to rescue paradigms of efficient markets and rational consumers. But several contributors to this issue question whether technology is a panacea for unequal power relations and sharp dealing by powerful market

Pasquale, *Capital's Offense*, *Boundary2* (Oct. 1, 2014) (<https://www.boundary2.org/2014/10/capitals-offense-laws-entrenchment-of-inequality>) (reviewing Thomas Piketty, *Capital in the Twenty-First Century* (2014)).

¹⁸ Frank Pasquale, *Dystopia Is to Apocalypse as Deflation Is to Hyperinflation*, *Concurring Opinions* (Dec. 21, 2008) (https://concurringopinions.com/archives/2008/12/dystopia_apocal.html).

¹⁹ Frank Pasquale, *The Hidden Costs of Health Care Cost Cutting*, *77 Law & Contemp. Probs.* 171 (2014).

participants. They show that increases in the amount of information available about products, services, firms, and consumers are not necessarily good in themselves. Rather, *who controls this information*, and how they use such control, matters vitally to both the efficiency and fairness of markets.

Information is critical to market design.²⁰ In some models, “perfect information” can be a theoretical precondition for the efficient functioning of a market. Less heroically, rules of reporting and disclosure are supposed to help consumers understand the relative value of a good or service. Persistent surveillance of transactions (and many other dimensions of life) promises a wealth of information to guide both businesses and policymakers.²¹ We see this daily online with the personalization of advertising and content, which has been optimized for our “data double”—some spectral ensemble of past recorded actions that predicts a positive response (such as continued viewing, or clicking an ad) from the stimulus provided.²²

Just as physicians advance personalized medicine to better cure diseases, advocates of personalized law believe that the high technology tailoring that has been a hallmark of digital behemoths (such as Amazon, Apple, Google, and Facebook) can apply to regulation.²³ Many of Kwak’s, Bayern’s, and Listokin’s concerns focus on failures of scope in law and economics—how the right decision in one stylized situation, at one given time, would not be efficient in many others (Kwak and Bayern), or even the same one at a different time (Listokin). Personalized law aspires to avoid unfairly or inefficiently lumping together dissimilar persons or entities.²⁴ Advocates of this approach, including Omri Ben-Shahar, Ariel Porat, Lior J. Strahilevitz, Anthony J. Casey, Philipp Hacker, and Anthony Niblett, have developed bold, big-data-driven proposals for more precise categories aimed at optimal law enforcement.²⁵ Such personalization aims to permit governments to fine-tune regulation to enhance the granularity of legal norms. Administrability concerns have hampered the application of dynamically tailored legal

²⁰ Philip Mirowski & Edward Nik-Khah, *The Knowledge We Have Lost in Information: The History of Information in Modern Economics* (2017).

²¹ Frank Pasquale, *Grand Bargains for Big Data: The Emerging Law of Health Information*, 72 *Md. L. Rev.* 682 (2013).

²² Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power* (forthcoming 2018).

²³ A draft of this and the next few paragraphs were composed with Julia Powles, for a proposal we plan to pursue in future work.

²⁴ Adam J. Kolber, *Smooth and Bumpy Laws*, 102 *Calif. L. Rev.* 655 (2014).

²⁵ Anthony J. Casey & Anthony Niblett, *The Death of Rules and Standards*, 92 *Ind. L.J.* 1401 (2017); Ariel Porat & Lior J. Strahilevitz, *Personalizing Default Rules and Disclosure with Big Data*, 112 *Mich. L. Rev.* 1417 (2014); Omri Ben-Shahar & Ariel Porat, *Personalizing Negligence Law*, 91 *N.Y.U. L. Rev.* 627 (2016); Phillip Hacker, *Personalizing EU Private Law: From Disclosures to Nudges and Mandates*, 25 *Eur. Rev. Priv. L.* 651 (2017).

categories, including even the targeting of nudges.²⁶ Big-data-driven approaches are, it is projected, a way to solve these concerns.

Personalized law is an offshoot of behavioral economics and law,²⁷ powered by large-scale personal data capture.²⁸ However, personalized law will only be as good as the data it is based upon. One of the principal challenges for big data approaches is that data sources are prone to inaccuracy. As Rob Kitchin has argued in *The Data Revolution*, there are often inaccuracies in databases that can undermine even well-intentioned personalizers.²⁹

Sofia Ranchordás exposes many potential problems with a key source of information for those legal economists who would use rankings and ratings to substitute for (or even inform) legal determinations. Her deeply researched perspective on the role of reputation in market transactions roots current debates about online rating and ranking sites in categories and models developed decades ago. She canvasses a great deal of empirical research to weigh the costs and benefits of reputational mechanisms. She raises deep concerns about their objectivity and vulnerability to manipulation.

Ranchordás's results are in accord with more general problems in information markets. Many firms have an interest in manipulating data, and policymakers have not adequately monitored the types of high technology firms that provide information to consumers or businesses on a mass scale, in vital contexts.³⁰ The market in personal information offers little incentive for high levels of accuracy.³¹ It matters little to purchasers of lists containing detailed personal information whether every entry is accurate—they need only a certain threshold percentage of “hits” across the population to make a measurable improvement in targeting.³² But to individuals wrongly included on derogatory lists, the harm to their reputation and opportunities is great.³³

Both government classification processes, and the data they rely upon, need to be improved if they are to realize the promise of personalized law. In the governmental realm, enhanced due process protections are needed for victims of suspect

²⁶ See, e.g., Shawn J. Bayern & Melvin E. Eisenberg, *The Expectation Measure and its Discontents*, 2013 Mich. St. L. Rev. 1.

²⁷ Avishalom Tor, *The Next Generation of Behavioral Law and Economics*, in *European Perspectives on Behavioral Law and Economics* 17 (Klaus Mathis ed., 2015).

²⁸ Philipp Hacker & Bilyana Petkova, *Reining in the Big Promise of Big Data: Transparency, Inequality, and New Regulatory Frontiers*, 15 Nw. J. Tech. & Intell. Prop. 1 (2017); Philipp Hacker, *Overcoming the Knowledge Problem—Uncertainty, Decision Theory, and Maximin Analysis* (Apr. 21, 2017) (https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2632022).

²⁹ Rob Kitchin, *The Data Revolution: Big Data, Open Data, Data Infrastructures and Their Consequences* (2014).

³⁰ Mark Patterson, *Antitrust Law in the New Economy* (2017).

³¹ Frank Pasquale, *Reputation Regulation: Disclosure and the Challenge of Clandestinely Commensurating Computing*, in *The Offensive Internet: Privacy, Speech, and Reputation* 107 (Saul Levmore & Martha C. Nussbaum eds., 2010).

³² Frank Pasquale, *The Black Box Society: The Secret Algorithms That Control Money and Information* (2015).

³³ Frank Pasquale, *Reforming the Law of Reputation*, 47 Loyola L. Rev. 515 (2016).

personalization. Ranchordás also demonstrates that European regulators are taking important steps to rectify this problem, by advancing transparency. Both the UK Competition & Market Authority and the Dutch Authority for Consumers and Markets have called the issue a serious problem.

During the Bush and Obama administrations, United States regulators also took the problem seriously, requiring disclosures from sponsored reviews and other manipulations of the information environment. Precedents set then remain the law today. However, there is a great danger that the Trump Administration will embrace online ratings and rankings not merely as a source of information, but as a replacement for licensing and regulatory regimes. Who needs to know if their plumber has a license, so the logic goes, if the plumber has many five star reviews online? The Trump Federal Trade Commission's Economic Liberty Task Force has eyed such a transition (from licensure to online status) as a way to end many occupations' licensing, displacing extant legal structures. According to the usual economic logic, such tiered rating (rather than all-or-nothing licensure) of workers would expand access to employment and services. Rather than having "no plumber at all," so the logic goes, the poor could now afford to hire a 1-star or 2-star rated plumber who, while not licensed, could at least perform basic work.

However, as Ranchordás shows, this perspective ignores the serious limitations of these reputational systems, especially in the context of products and services with externalities. Widespread reliance on reputational screening without funding extensive monitoring and regulation of such screening is an open invitation to abuse, as Google found recently when fraudulent addiction rehabilitation centers started hijacking its "user-generated" rankings in location searches. Policymakers should take Ranchordás's recommendations very seriously, since it is easy to game rating and ranking systems.

Ariel Ezrachi and Maurice Stucke take on a related problem in the new digital economy: how new digital assistants can manipulate those who use them. There is an enormous and growing literature in "critical algorithm studies," which examines the biases encoded in algorithms, training data, and other critical components of computational or quantitative evaluation.³⁴ Thanks to the movement for algorithmic accountability (#algacc), we know that algorithmic corporate decisionmaking is frequently deployed to arbitrage around extant anti-discrimination, due process, and media law. Stucke and Ezrachi have demonstrated its import for both consumer protection law and competition law.

In their notable book, *Virtual Competition*, Stucke and Ezrachi demonstrated that a) no intent to evade competition law needs to exist among top executives for their firms' algorithmic pricing strategies to, nevertheless, eviscerate its purposes and policy goals, and b) such algorithmic arrangements of information endanger the very foundations of market

³⁴ Tarleton Gillespie & Nick Seaver, Critical Algorithm Studies: A Reading List, SMC Research Blog (updated Dec. 16, 2016) (<https://socialmediacollective.org/reading-lists/critical-algorithm-studies/>).

competition.³⁵ Computational power endangers the legitimacy of “free market capitalism” by concentrating the very information that market stalwarts like Friedrich von Hayek claimed was naturally decentralized and unavailable to any single firm. The extreme centralization of knowledge in firms like Google, Amazon, and Facebook could lead to a “planned economy,” albeit one planned by CEOs, not government bureaucrats. Critics of data brokers have also noted the extreme vulnerability of consumers in an era where the firms hide their full data troves from regulators, while sharing them among one another.

In their essay “Alexa et al., What Are You Doing With My Data?,” Stucke and Ezrachi raise fascinating questions about what rational consumers, or efficient markets, will look like in a plausible world in which individuals outsource more of their decisions to digital assistants like Amazon’s Alexa, Google Home, Apple’s Siri, or others. As faithful agents of consumer interests, they might be expected to find consumers ever cheaper flights, better routes to get to work, more affordable insurance or groceries. But is that trust really warranted? As mentioned above, Google’s search results disserved many addicts in search of a reputable rehab center. The commercial relationships between Amazon and many of its suppliers are opaque, leading some critics to question whether the tens of millions of American citizens who are now Amazon Prime subscribers are actually obtaining optimal deals, or are, instead, being shaped into customers who best serve the long term interests of the company. For example, once Amazon decided to make a big move into groceries (via Amazon Fresh), it aggressively steered some customers ordering food toward Amazon Fresh options (which are nearer, but with deliveries that come with a \$15 per month subscription fee). Amazon Fresh features low prices now, but it is by no means clear it will continue to do so if it is able to decimate local grocery stores. Indeed, a study on price discrimination has shown that one store (Staples) tended to raise prices for those digital consumers whom its algorithms calculated did not live near an office supply store.

Nor are such power plays rare among the most important digital platforms. The European Commission demonstrated that Google prioritized its “Google Shopping” service above smaller price-comparison services like Foundem, devastating fledgling firms.³⁶ While the European Union has fined that behavior as anti-competitive, regulators are ill-equipped to monitor the myriad ways that platforms can subtly nudge consumers toward one choice, and away from others. Thanks to a combination of cognitive capture and the soft corruption of the revolving door, relevant authorities have not required regulatory access to the key information, and have not invested in the resources they would parse it properly. This problem will only get worse in an era of digital assistants,

³⁵ Ariel Ezrachi & Maurice E. Stucke, *Virtual Competition: The Promise and Perils of the Algorithm-Driven Economy* (2016).

³⁶ Press Release, European Commission, Antitrust: Commission Fines Google €2.42 Billion for Abusing Dominance as Search Engine by Giving Illegal Advantage to Own Comparison Shopping Service (June 27, 2017) (http://europa.eu/rapid/press-release_IP-17-1784_en.htm).

when many recommendations will be ephemerally “voiced” rather than registered as text on websites or mobile screens.

When a firm can gather and continually analyze thousands of data points about any given consumer, and adjust its offerings and advertising in real time, the standard issue, arms-length relationship between buyer and seller modeled in basic economics textbooks becomes woefully inadequate. As Stacy Mitchell of the Institute for Local Self-Reliance recently observed, “[W]hen third-party sellers post new products, Amazon tracks the transactions and then starts selling many of their most popular products.”³⁷ Perhaps if extant laws were strictly enforced, massive platforms would be cautious about abusing their power. However, at least in the United States, according to New York University Professor Scott Galloway, officials are effectively “telling [tech] companies that the smart, shareholder-friendly thing to do is obvious: Break the law, lie, do whatever it takes, and then pay a (relatively) anemic fine if you happen to get caught.”³⁸ In Mitchell’s words, the firms effectively “become the market”; in mine, they become “functional sovereigns.”³⁹ In neither case are we dealing with classic interactions within a market—rather, we are facing an increasingly *political* economy, where power is exercised by firms, in a legal environment that firms themselves also shaped.

III. The Political Economy Alternative

Martha McCluskey has brilliantly exposed the shortcomings of mainstream law and economics in a series of articles. In “Defining the Pie, Not Dividing It,” she takes on one of the field’s defining moves: an insistence that maximizing gross social output is the primary role of law, with distributional concerns relegated to later taxation and transfers. The classical assumption here is that there is a “market” that, ideally, operates unimpeded by distortions imposed by law.

McCluskey demonstrates that the dominant law and economics paradigm of temporally sequenced production and distribution is not simply an analytical tool for clarity, but an ideologically loaded metaphor. It discredits policymakers’ efforts to improve the workplace or to alleviate externalities *before* machinery is built or work rules are set. The idea is to, instead, compensate individuals after the damage has been done, once authorities can fully assess the scope and intensity of harm. However, some harms are truly irremediable. All the money in the world cannot restore the cognitive capacity of

³⁷ Stacy Mitchell, Amazon Doesn’t Just Want to Dominate the Market: It Wants to Become the Market, *The Nation* (Feb. 15, 2018) (<https://www.thenation.com/article/amazon-doesnt-just-want-to-dominate-the-market-it-wants-to-become-the-market/>).

³⁸ Scott Galloway, Silicon Valley’s Tax-Avoiding, Job-Killing, Soul-Sucking Machine, *Esquire* (Mar. 2018) (<https://www.esquire.com/news-politics/a15895746/bust-big-tech-silicon-valley/>); see also Scott Galloway, *The Four: The Hidden DNA of Amazon, Apple, Facebook, and Google* (2017).

³⁹ Frank Pasquale, From Territorial to Functional Sovereignty: The Case of Amazon, *OpenDemocracy* (Jan. 5, 2018) (<https://www.opendemocracy.net/digitaliberties/frank-pasquale/from-territorial-to-functional-sovereignty-case-of-amazon>).

someone severely poisoned by lead paint. Moreover, the wealth made by polluters in “Time 1” (the time of production) is not sequestered into some apolitical bastion of the purely monetary. Instead, those resources all too often marshalled before or during “Time 2” (the time of political influence over distribution) in order to thwart serious redistributive efforts.⁴⁰

There is no simple division between the conditions of production and those of distribution. Rather, they reciprocally influence one another at all times. Workers with some financial reserve (or a strike fund) can walk off the job and either take time to find another one, or wait for their current employer to make concessions. Those without such support are far more vulnerable. Prior distribution is always influencing the terms of current production, and vice versa.

McCluskey also shows that the first, temporal simplification of production and distribution leads to another, even more misleading metaphor—that of society’s economic output as a pie, to be sliced only after it is baked. The pie metaphor, so common in standard law and economics frameworks, is truly half-baked: it is a simplification of the first simplification, and even more biased. McCluskey gives numerous examples where each metaphor is transparently debunked as inappropriate. She also shows how specific attention to particular “markets” illuminates the real stakes of regulation. The unduly capacious term “market” covers a diverse array of politico-economic patterns of exchange.⁴¹ McCluskey’s article demonstrates that diverse legal regimes matter just as much to the composition of society’s economic “pie” as to its distribution.

Sabeel Rahman’s work complements McCluskey’s, showing what can be done when a more open and holistic approach to social science informs the academic analysis of corporate power. Rahman debunks another misleading metaphor at the core of technocratic administration of economic systems—the Hayekian characterization of the economy as a spontaneously ordered, chaotic system.⁴² Rahman aims to replace this sense of the chaotic lack of intention in markets with a more concrete sense of the structures

⁴⁰ For an account of a similar tripartite division (albeit with a strikingly different political valence), see Carl Schmitt, *Appropriation, Distribution, Production*, in *Nomos of the Earth in the International Law of the Jus Publicum Europaeum* 324 (G.L. Ulmen trans., 2003) (1950).

⁴¹ Mirowski & Nik-Khah, *supra* note 20.

⁴² There is a deep connection here between Rahman’s critique and those of Ranchordás, Stucke, and Ezrachi. Rahman questions the fairness of market ordering; Ranchordás, Stucke, and Ezrachi undermine common narratives about the superiority of algorithmic ranking and rating over human judgment. The New Chicago School has amended and extended its classic defense of markets by emphasizing the role of big data and predictive analytics in overcoming consumers’ lack of knowledge and other distortions. However, it is hard to read the work presented in this issue without sensing that algorithms may become a new way to rationalize market ordering in the Freudian, as opposed to Weberian, sense. See, e.g., Frank Pasquale, *Algorithms and Markets: The Perfect Excuses*, Video Statement for the Rosa Luxemburg Foundation (Dec. 3, 2016) (<https://youtu.be/HteGOTWRqO8?t=16m34s>).

embedded in legal orders that heavily influence, and sometimes even pre-determine, economic results (ranging from educational attainment to health disparities and beyond.)

Rahman identifies a fundamental shortcoming in the law and economics tendency toward technocratically meliorist policy interventions. While it is critically important to ensure that engines of social mobility are nondiscriminatory and accessible, even the most meritocratic arrangements to advance opportunity fail to address the unfairness of a world where, for example, three men (Bill Gates, Warren Buffett, and Jeff Bezos) have more wealth than 150 million of their fellow U.S. citizens. Neoliberals may work very hard to ensure that in the future, everyone has an equal shot at such riches.⁴³ However, improving the chances of all to succeed within a given structure does nothing to ensure a more egalitarian structure (where, for instance, progressive taxation may keep an individual from reaching certain heights of wealth).

Rahman makes a compelling argument for reviving the “progressive political economy” of the early twentieth century to take on the vast power inequalities that present economic structures enable. Such political economy would limit the power of a CEO like Bezos to extract money from the transactions on Amazon’s mTurk platform (where some workers earn as little as a penny from each “human intelligence task” they perform).⁴⁴ It would also curb the profit expectations of real estate developers eager to gain from bidding wars on prime property. Rahman provides a framework to help policymakers “respond to new forms of private power in a changing economy,” including that of powerful internet platforms and financial interests.⁴⁵

The early twentieth-century Progressive movement did not seek to regulate utilities simply because large firms may not be efficient. They also worried directly about the *power* exercised by such firms: their ability to influence politicians, control an outsized share of GDP, and sandbag both rival firms and political opponents. As Rahman has explained in earlier work,

Industries triggered public utility regulation when there was a combination of economies of scale limiting ordinary accountability through market competition, and a moral or social importance that made the industries too vital to be left to the whims of the market or the control of a handful of private actors.⁴⁶

There are very few “natural” monopolies. Identifying the list of “foundational goods and services” meriting either antitrust action or direct utility regulation inevitably requires a mix of political, scientific, and legal considerations on top of economic calculations.⁴⁷

⁴³ This is also a theme of science fiction popular in Silicon Valley, such as the contest narrative *Ready Player 1*.

⁴⁴ Frank Pasquale, *Banana Republic.com*, Jotwell (2011) (<https://jotwell.com/banana-republic-com/>).

⁴⁵ K. Sabeel Rahman, *Private Power, Public Values: Regulating Social Infrastructure in a Changing Economy*, 39 *Cardozo L. Rev.* ____ (forthcoming 2018) (unpublished manuscript available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2986387), at 50.

⁴⁶ *Id.* at 18.

⁴⁷ Peter H. Schuck, *Multi-Culturalism Redux: Science, Law, and Politics*, 11 *Yale L. & Pol’y Rev.* 1 (1993).

As Rahman relates, three broad categories of regulation can provide a “21st century framework for public utility regulation:”

- 1) [F]irewalling core necessities away from behaviors and practices that might contaminate the basic provision of these goods and services—including through structural limits on the corporate organization and form of firms that provide infrastructural goods;
- 2) [I]mposing public obligations on infrastructural firms, whether negative obligations to prevent discrimination or unfair disparities in prices, or positive obligations to proactively provide equal, affordable, and accessible services to under-served constituencies; and
- 3) [C]reating public options, state-chartered, cheaper, basic versions of these services that would offer an alternative to exploitative private control in markets otherwise immune to competitive pressures.⁴⁸

These three approaches (“firewalls,” “public obligations” and “public options”) have all helped increase the accountability of private power in the past (as Robert Lee Hale’s work has shown).⁴⁹ Cable firms cannot charge a customer a higher rate because they dislike her politics. Nor can they squeeze businesses that they want to purchase, charging higher and higher rates to an acquisition target until it relents. Nor should regulators look kindly on holding companies that would more ruthlessly financialize essential services.

There are many legal scholars working in fields like communications law, banking law, and cyberlaw, who identify the limits of dominant regulatory approaches, but are researching in isolation. Rahman’s work, as well as that of many other New Brandeisians, provides a unifying framework for them to learn from one another, and should catalyze important interdisciplinary work. For example, it is well past time for those writing about search engines to explore how principles of net neutrality could translate into robust principles of search neutrality.⁵⁰ The European Commission has documented Google’s abuse of its dominant position in shopping services. Subsequent remedial actions should provide many opportunities for the imposition of public obligations (such as commitments to display at least some non-Google-owned properties prominently in contested search engine results pages) and firewalling (which might involve stricter merger review when a megafirm makes yet another acquisition).⁵¹

⁴⁸ Rahman, *supra* note 45, at 2.

⁴⁹ Robert Lee Hale, *Freedom Through Law: Public Control of Private Governing Power* (1952).

⁵⁰ Frank Pasquale, *When Antitrust Becomes Pro-Trust: The Digital Deformation of U.S. Competition Policy*, *Competition Pol’y Int’l Antitrust Chron.* (May 15, 2017) (<https://www.competitionpolicyinternational.com/wp-content/uploads/2017/05/CPI-Pasquale.pdf>).

⁵¹ See, e.g., *List of Mergers and Acquisitions by Facebook*, Wikipedia (https://en.wikipedia.org/wiki/List_of_mergers_and_acquisitions_by_Facebook) (last visited Feb. 16, 2018).

Both Rahman and McCluskey offer us a rigorous way of recognizing and controlling private power.⁵² This is work that could lead to fundamental reassessments of contemporary regulatory approaches. It is exactly the type of research that state, federal, and international authorities should consult as they try to rein in the power of many massive firms in our increasingly concentrated, winner-take-all economy.⁵³

Conclusion: Signs of Hope?

Economic policy shapes our daily lives, and can be a matter of life and death. Consider, for instance, the imposition of austerity on many Asian countries in the wake of the 1998 crisis. The once-booming economies of Malaysia, South Korea, Thailand, and Indonesia suddenly collapsed in 1997-1998, when skittish foreign investors sold off massive amounts of these countries' currencies.⁵⁴ Inflation soon followed, and food prices rose, causing a catastrophe akin the Great Depression in the United States. The International Monetary Fund offered to help with some forms of credit and aid, but only if its "beneficiaries" agreed to slash government budget deficits (in order to inspire confidence from investors).⁵⁵ The required cuts in government spending hurt national health systems, and worsened unemployment. The IMF even taxed kerosene (a cooking fuel) in Indonesia, causing more hardship.

IMF technocrats predicted such "shock therapy" would help more than it hurt. While Indonesia and Thailand faithfully followed IMF orthodoxy, Malaysia defied the organization.⁵⁶ It imposed capital controls, fixed its exchange rate, and maintained subsidies to support its poorest citizens. Unlike Indonesia and Thailand, Malaysia had "no significant rise in malnutrition among mothers."⁵⁷ Indonesia and Thailand also had very troubling disruptions in access to health care, which Malaysia did not experience.⁵⁸

Models of "expansionary austerity" predicted that reductions in government spending and deficits would "crowd in" private investment by reducing interest rates. But the deceptively simple "common sense" of austerity was probably more important in media, public forums, and politics. That "common sense" compares a nation in a financial

⁵² See Tarleton Gillespie & Nick Seaver, Critical Algorithm Studies: A Reading List, Social Media Collective Research Blog: Microsoft Research (Dec. 15, 2016) (<https://socialmediacollective.org/reading-lists/critical-algorithm-studies/>).

⁵³ Gustavo Grullon et al., Are U.S. Industries Becoming More Concentrated? (Aug. 31, 2017) (https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2612047).

⁵⁴ Morris Goldstein, *The Asian Financial Crisis: Causes, Cures, and Systemic Implications* (1998).

⁵⁵ Andrew Sheng, *From Asian to Global Financial Crisis: An Asian Regulator's View of Unfettered Finance in the 1990s and 2000s* (2009).

⁵⁶ David Stuckler & Sanjay Basu, *The Body Economic: Why Austerity Kills* 44-48 (2013).

⁵⁷ *Id.* at 47.

⁵⁸ *Id.* at 52-54.

crisis to a family that now has to cut back its budget (due to overspending), or to an overeating person who now “tightens the belt” to avoid excess.

Ha-Joon Chang, as well as authors in the school of Modern Monetary Theory (MMT), have debunked these homely analogies.⁵⁹ Chang’s approach was largely historical. He found that the same countries which insisted upon austerity for others’ financial crises, met their own recessions and depressions with stimulative spending and counter-cyclical, automatic stabilizers (such as unemployment insurance). While American technocrats eagerly pushed government spending cuts for Southeast Asian countries in the midst of crisis, America itself embraced spending on public works during its Great Depression (of the 1930s) and Great Recession (of 2008-2010). For the Modern Monetary Theorists, the analogy of country to family is simply a category mistake. No individual family issues its own currency, while most countries do. If a country prints more money to stimulate spending, it does not necessarily provoke unsustainable inflation.⁶⁰ And even if it does create some inflationary pressures, those can be a welcome counterbalance to the deflationary tendencies of a depression.

At first, these ideas were dismissed as heresy. But over time, the work of Chang, MMT theorists, and other heterodox thinkers has begun to have an impact. For example, the IMF has confessed that the austerity it recommended for Greece had severe negative consequences.⁶¹ Politicians are now more apt to question economic reasoning once accepted as the inevitable outcome of mathematical principles. Heterodox thinking has become a significant part of the economic conversation, as discontent with inequality and disillusionment with technocratic regulation have both been on the rise.

The essays in this issue should help ensure that the turn to new economic thinking promotes inclusive prosperity. Listokin, Bayern, and Kwak have identified major aporias in contemporary legal economic orthodoxy. Ranchordás, Stucke, and Ezrachi have demonstrated that technological fixes, ranging from digital ranking and rating systems to artificial intelligence-driven personal assistants, are unlikely to improve matters much unless they are wisely regulated. McCluskey and Rahman offer a blueprint for democratic

⁵⁹ Chang repeatedly criticized the International Monetary Fund’s (IMF) handling of the Asian financial crises of the late 1990s. Ha-Joon Chang, *Korea: The Misunderstood Crisis*, 26 *World Dev.* 1555 (1998); Ha-Joon Chang, *Bad Samaritans* (2009). For a characteristic MMT voice, see L. Randall Wray, *Modern Money Theory: A Primer on Macroeconomics for Sovereign Monetary Systems* 181 (2012) (discussing the debt traps caused by austerity).

⁶⁰ Scott Fulwiler, *Modern Monetary Theory: A Primer on the Operational Realities of the Monetary System* (2010); Pavlina R. Tcherneva, *Monopoly Money: The State as a Price Setter*, *Oeconomicus* (2002); Scott Fullwiler et al., *Modern Money Theory: A Response to Critics* (2012) (https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2008542).

⁶¹ IMF, *Greece: Ex Post Evaluation of Exceptional Access Under the 2010 Stand-By Arrangement* (2013) (“Market confidence was not restored, the banking system lost 30 percent of its deposits, and the economy encountered a much deeper-than-expected recession with exceptionally high unemployment. Public debt remained too high and eventually had to be restructured, with collateral damage for bank balance sheets that were also weakened by the recession.”).

regulation, which shapes the economy in productive ways and alleviates structural inequalities. Taken as a whole, this issue of *Critical Analysis of Law* shows that legal thinkers are not merely importers of ideas and models from economics, but also active participants, with a great deal to contribute to social science research.