MACROECONOMIC ANALYSIS OF LAW VERSUS LAW AND MACROECONOMICS

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I

INTRODUCTION

Efforts to conjoin the disciplines of law and macroeconomics highlight two main challenges: choosing the specific macroeconomic framework that is to be employed, and reconciling macroeconomic interventions with the rule of law. The former can be thought of as an exercise in economic analysis of law, since the difficulty lies in the realm of economics proper. The latter can be framed as an exercise in law and economics, because the focus lies in the interplay between economics and law.

Economic analysis of law starts with an economic theory, assumes that the theory's premises are valid, and then uses it to make sense of the legal and institutional framework. Conversely, law and economics emphasizes institutional detail that escapes "pure" economic theory, sacrificing technical sophistication for greater realism and policy relevance. This distinction, which is not new,[1] is neither necessary nor devoid of problems,[2] but can be illuminating.[3] In this Article, I demonstrate that this distinction holds in the subfield of macroeconomics as well, where it raises a distinct set of questions and problems.

The main problem of macroeconomic analysis of law is that there is not one useful macroeconomic approach, but rather several,[4] which are in tension with

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1. *See, e.g.,* Keith N. Hylton, *Law and Economics Versus Economic Analysis of Law*, 48 EUR. J. L. & ECON. 77, 78–79 (2019); Geoffrey P. Miller, *Law and Economics Versus Economic Analysis of Law*, 19 AM. BANKR. INST. L. REV. 459, 460 (2011).

2. *See* Eric Posner, *The Future of Law and Economics: Essays by Ten Law School Scholars*, U. CHI. L. SCH. ALUMNI MAG., Oct. 11, 2011 ("The most distinctive and also troubling trend is the division of law and economics into two subdisciplines—an 'economics law and economics' and a 'law and economics.'").

3. *See, e.g.,* GUIDO CALABRESI, *Of Law and Economics and Economic Analysis of Law: The Role of the Lawyer*, *in* THE FUTURE OF LAW AND ECONOMICS: ESSAYS IN REFORM AND RECOLLECTION 1, 2 (2016) ("I will explain what I think the difference between Law and Economics and Economic Analysis of Law is . . . [and] why *legal* scholars have a particularly important role to play in Law and Economics.").

4. *See, e.g.*, EDMUND S. PHELPS, SEVEN SCHOOLS OF MACROECONOMIC THOUGHT (1990) (explaining the different approaches to macroeconomics). *See also* Bruno M. Salama, *The Art of Law &*

one another. As such, these approaches become contentious and force scholars to answer a vexing question: *which* macroeconomics?[5] Part II provides a snapshot of different possibilities discussed in the literature that are based on Keynesianism, Austrian economics, endogenous growth theory, and structuralism.

Law and macroeconomics integrates macroeconomics with other viewpoints, especially legal theory and practice. Its most pressing challenge is that of reconciling government rule-breaking—a common practice in times of macroeconomic turmoil—with deference to the rule of law, which should be everlasting. In Part III, I develop the "elasticity" paradigm in law and macroeconomics, which embraces rather than conceals the inevitability of rule-breaking and debunks the artificiality of the "incompleteness" paradigm that characterizes prevailing views. This discussion shows that the meaning of law is constantly being reassessed, and this is an important cautionary note for attempts to generalize macroeconomic analysis beyond policymaking in specific settings. Part IV concludes.

II

WHICH MACROECONOMICS?

In the 1990s, dissatisfaction with static microeconomic analysis prompted a few scholars to consider spillovers and dynamic interactions among markets.[6] The core debate surrounds two fundamental ways to think about how the law affects the economy: (1) first-best economics, which characterizes standard (micro)economic analysis of law;[7] or (2) second-best economics,[8] which is at the heart of macroeconomic analysis of law.

First-best economics posits that if a law improves allocation in a specific market, then on that account it can be assumed to increase overall allocative efficiency in the economy. Accordingly, standard law and microeconomics

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Macroeconomics, 74 U. PITT. L. REV. 131, 148 ("[T]he kind of scientific project that characterizes Law & (Micro)economics is not readily replicable with Law & Macroeconomics.").

5. *See* Mark Kelman, *Could Lawyers Stop Recessions? Speculations on Law and Macroeconomics*, 45 STAN. L. REV. 1215, 1217 (1993) ("If one wanted to apply 'macro' to law, one must wonder 'which macro?,' a challenge largely spared those who sought to introduce microeconomic reasoning into the law.").

6. *See, e.g.*, John J. Donohue III, *Some Thoughts on Law and Economics and the General Theory of Second Best*, 73 CHI.-KENT L. REV. 257 (1998); Richard S. Markovits, *The Allocative Efficiency of Shifting From a "Negligence" System to a "Strict Liability" Regime in Our Highly-Pareto-Imperfect Economy: A Partial and Preliminary Third-Best Allocative-Efficiency Analysis*, 73 CHI.-KENT L. REV. 11 (1998); Richard S. Markovits, *Second-Best Theory and Law & Economics: An Introduction*, 73 CHI.-KENT L. REV. 3 (1998) [hereinafter Markovits, *Second-Best Theory*]; Andrew P. Morriss, *Implications of Second-Best Theory for Administrative and Regulatory Law: A Case Study of Public Utility Regulation*, 73 CHI.-KENT L. REV. 135 (1998); Thomas S. Ulen, *Judgment and the General Theory of Second Best in Law and Economics*, 73 CHI.-KENT L. REV. 189 (1998).

7. *See* Ulen *supra* note 6, at 216 ("[P]iecemeal, seriatim analysis of efficiency . . . is the convention in the field [of law and economics].").

8. *See* Markovits, *Second-Best Theory*, *supra* note 6, at 3 (introducing second-best theory).

assumes that improving allocation in a particular market is sufficient to enhance efficiency.[9] Second-best economics[10] makes no such efficiency assumption. Instead, second-best economics considers that fixing a distortion in market X may impose an even bigger distortion onto markets Y and Z, so improving allocation in market X may increase, decrease, or be neutral to social welfare.

To illustrate, consider the problem of incomplete contracts, a law and microeconomics favorite. Is it efficient for parties to leave a gap in the contract? Yes, when the value generated by superior risk allocation is lower than the transaction costs for negotiating the deal; no, otherwise. This is a first-best approach. But while those transaction costs would be a net loss for the parties, couldn't the transaction costs represent a gain for third parties through, for example, the lawyers' income, the title company's fees, and the government's taxes? And once these third-party revenues go down, might the actual losses exceed the transaction cost savings? And given the existence of spillovers, shouldn't the discussion of efficiency consider the whole "pie," rather than each single slice at a time? This is a second-best approach.

Second-best economics matters for present purposes precisely because connections between markets are at the heart of macroeconomics. To see why, consider the IS-LM model (or Hicks-Hansen model), which is almost invariably the first step for instruction in macroeconomics. The IS-LM model examines the relationship between interest rate on government bonds and economic output or GDP. It accounts for the intuitive notion that when base interests go up, inflation tends to go down, but employment, investment, and growth tend to go down as well. This is a "macro" model not merely because it incorporates interest rates, growth and other aggregate measurements, but because interest rates and output are determined together.

Why, then, did the emergence of second-best economics in the 1990s not fructify into a law and macroeconomics movement at that time? A plausible explanation is that the law and economics scholars interested in second-best reasoning refused to engage with the broader macroeconomic theories that provide a framework to study interplays between markets. Possibly, they viewed such theories as too radical a departure from the tradition of law and microeconomics.[11]

9. For a rare exception, see WILLIAM M. LANDES & RICHARD A. POSNER, THE ECONOMIC STRUCTURE OF TORT LAW 98 (1987) ("[Ours] is a theory about judicial behavior rather than global optima . . . .").

10. For the formal statement, see R.G. Lipsey & Kelvin Lancaster, *The General Theory of Second Best*, 24 REV. ECON. STUD. 11 (1956).

11. Macroeconomic thinking instead entered law and economics through the backdoor, mostly through what Mariana Pargendler calls the relinquishment of "modularity" in law and economics. *See* Mariana Pargendler, *Controlling Shareholders in the Twenty-First Century: Complicating Corporate Governance Beyond Agency Costs*, 45 J. CORP. L. 16–17 (forthcoming 2020) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3474555 [https://perma.cc/59W9-9EF6]. ("[In the] form of modularity premised on functional specialization . . . each field of law has *one* key efficiency objective . . . . While—remarkably—such modular specialization came to dominate policy discourse since the 1980s, it is increasingly coming under attack.")

The 2007–08 financial crisis and subsequent developments made clear the limits of first-best thinking for law and economics scholars.[12] Pressing topics post-crisis include price and monetary stability, systemic risk and bailouts, regulation of the banking and shadow banking system, unconventional monetary policy and central bank accountability, trade deficits and protectionism, growth and expansionary regulation, unemployment and inequality, among many others. These topics used to be outside of the purview of law and economics scholarship precisely because they evoked *macroeconomics,* instead of *microeconomics*.[13]

Surprisingly, the first legal scholar to overtly discuss macroeconomics in the aftermath of the 2007–08 crisis was (as far as I have been able to determine) Richard Posner. Posner, father of what once was "standard" law and (micro)economics, published books in 2009 and 2010 discussing macroeconomics at length[14] that mark his unexpected conversion to Keynesianism.[15] This Keynesian strand was then developed by Yair Listokin[16] and others who focused mostly on law as a tool for short-term countercyclical management of the business cycle.[17]

But Keynesian-inspired countercyclical manipulation of legal institutions is hardly the only option for macroeconomic analysis of law. This is demonstrated historically by the U.S. response to high inflation in the 1970s. Before achieving consensus to implement Volcker's hawkish monetary policies, the United States toyed with other initiatives such as the introduction of wage and price controls.[18] This episode is crucial in a certain narrative that portrays macroeconomic

12. *See* DAVID M. DRIESEN, THE ECONOMIC DYNAMICS OF LAW 4 (2012) ("[T]he whole emphasis of modern law and economics on microeconomics . . . equips policymakers poorly when they seek to address the most central questions they must confront. Policy is often about macro-level change, not about the fine-grained decisions that economists designed microeconomics to model. And macroeconomics, not microeconomics, studies the economy as a whole and therefore focuses on the systemic risks and economic development opportunities that should constitute a major focus for policymakers.").

13. This is not to deny that such problems can also be addressed by combining law and microeconomics. For an emblematic example, see Kathryn Judge, *Information Gaps and Shadow Banking*, 103 VA. L. REV. 411 (2017).

14. *See generally* RICHARD POSNER, THE CRISIS OF CAPITALIST DEMOCRACY 274 (2010) ("Keynes was the greatest economist of the twentieth century."); RICHARD POSNER, THE FAILURE OF CAPITALISM: THE CRISIS OF '08 AND THE DESCENT INTO DEPRESSION (2009).

15. Richard A. Posner, *How I Became a Keynesian*, NEW REPUBLIC (Sept. 23, 2009), https://newrepublic.com/article/69601/how-i-became-keynesian [https://perma.cc/PY5M-HRAU].

16. *See* YAIR LISTOKIN, LAW AND MACROECONOMICS: LEGAL REMEDIES TO RECESSIONS 25 (2019). *See also* Yair Listokin, *Equity, Efficiency, and Stability: The Importance of Macroeconomics for Evaluating Income Tax Policy*, 29 YALE J. ON REG. 45 (2012).

17. *See, e.g.* Zachary D. Liscow, *Counter-Cyclical Bankruptcy Law: An Efficiency Argument for Employment-Preserving Bankruptcy Rules*, 116 COLUM. L. REV. 1461 (2016); Jonathan S. Masur & Eric A. Posner*, Should Regulation Be Countercyclical?*, 34 YALE J. ON REG. 857 (2017).

18. *See* ROBERT J. SAMUELSON, THE GREAT INFLATION AND ITS AFTERMATH: THE PAST AND FUTURE OF AMERICAN AFFLUENCE 91, 99 (2010) (discussing the "repeated efforts—all ultimately failures—to suppress inflation through various forms of voluntary and mandatory wage and price controls. President Johnson, Nixon and Carter all tried this approach . . . . The history of Nixon's controls can be quickly summarized: They worked; they weakened; they collapsed . . . Carter's efforts to grapple with inflation were as fumbling and futile as Nixon's—perhaps more so").

analysis of law as a phenomenon of the post-Great Moderation period (1987–2007), since the failure of wage and price controls "tarnish[ed]" and "discouraged" the development of law and macroeconomics.[19]

The implicit message is that there are only two responses to inflation: first, monetarism, characterized as a "non-legal" kind of response; and second, wage and price controls, viewed as "legal" in nature but overall ineffective.[20] This message misses two possibilities. The first is that the legal response to inflation is not the addition of a new distortion, but the removal of an existing one. In the 1970s, this was part of the conversation, at least in academic circles.

The road not taken was memorably proposed in 1976 by F. A. Hayek.[21] Hayek contended that, to tame inflation, the United States should abolish the dollar's legal tender and introduce competition in currency.[22] While such a proposal probably sounds counterproductive and radical to present-day ears, the existence of Hayek's proposal shows that macroeconomic analysis of law needs not be Keynesian (and can in fact be anti-Keynesian).

Furthermore, the view of price controls as the only possible "legal" response to inflation misses successful initiatives worldwide. For example, in the mid-1990s Brazil tamed four-digit annual inflation with a creative mix of policies where legal engineering was critical: It created a virtual currency free from inflation, known as the "unit of real value" (URV).[23] Brazil denominated all contracts in the economy in URVs. Payments in the real economy continued to be made in the *cruzeiro real*, the national *fiat* currency. The nominal value of the URV in Brazilian *cruzeiros* was adjusted daily to reflect inflation, and the Central Bank sold dollars every time the price of Brazilian equivalent of one dollar reached one URV.[24]

At some point, a new law transformed the URV into a new national currency—the *real*, which replaced the old *cruzeiro real*. Brazil's URV strategy effectively combatted inflation, which came to the surprise of many, including the International Monetary Fund, which had refused to support the plan.[25] To be sure, high inflation has long ceased to be a core concern in most countries. Yet the lesson, useful for devotees of monetary shock therapy, is not an endorsement

19. Yair Listokin, *Law and Macro: What Took So Long?*, 83 LAW & CONTEMP. PROBS., no. 1, 2020, at 141, 141–42.

20. *Id.*

21. *See generally* F. A. HAYEK, CHOICE IN CURRENCY: A WAY TO STOP INFLATION (1976).

22. *See generally id.* at 9–22.

23. *See* Julia Y. Lee, *Money Norms*, 49 LOY. U. CHI. L.J. 57, 101 (2017) ("To combat skyrocketing hyperinflation in the 1990s, the Plano Real created a virtual currency, the Real, to replace the Brazilian cruzeiro.")

24. For a detailed explanation, see GUSTAVO H.B. FRANCO, THE REAL PLAN AND THE EXCHANGE RATE 1–11 (2000).

25. *See* LEE J. ALSTON ET AL., BRAZIL IN TRANSITION: BELIEFS, LEADERSHIP, AND INSTITUTIONAL CHANGE 101 (2016) ("[T]he cards seemed stacked against the *Real Plan*: the IMF refused to officially support the plan; the World Bank expressed skepticism on several occasions; and the US government refused to grant a zero coupon bond loan to back the plan.").

of demand pull inflation, but rather the cautionary note that law can sometimes work as a price coordination and disinflation mechanism.[26]

A trend in the field of law and economics that is intimately related to macroeconomics is a concern with economic growth. Recent scholarship by Robert Cooter–another founding father of law and economics who has jumped ship from static economic analysis—offers a telling example. Cooter now espouses "law and growth economics"—the study of how law increases economic innovation—as opposed to the traditional project of "law and efficiency economics," which explains how law improves resource allocation.[27]

The "paradox of growth" is at the heart of his recent work coauthored with Aaron Eldlin: "rapid innovation requires competition for extraordinary profits,"[28] yet perfect competition, which is otherwise the reference point for optimality, implies that all firms earn ordinary profits—leading to slow innovation.[29] As such, a distinction is drawn between innovating and non-innovating production (the "separation principle"),[30] wherein the policy goal would be to "strengthen the market power of innovators against consumers and producers who do not innovate."[31] The separation principle is complemented by the "fertility principle," which prescribes that "law and policy should strengthen the market power of fertile innovators against sterile innovators."[32] Although Cooter and Edlin do not work out the concrete implications of their ideas as the book is unfinished, it is not hard to foresee implementation difficulties since the proposal would be a hard swallow for lawyers, who turn to discussions over impartiality and equity almost reflexively.

There is no question that Cooter and Edlin's law and growth economics is, in fact, law and macroeconomics. Their ideas further fit comfortably within the paradigm of endogenous growth theory,[33] a branch of macroeconomics that focuses on the concrete determinants of economic growth and opens the "black box" of total factor productivity in the economy. Accordingly, growth is primarily

26. Peter Kingstone, *Sobering Up and Going Global: Brazil's Progress from Populism and Protectionism*, 15 L. & BUS. REV. AM. 105, 113–14 (2009).

27. *See generally* ROBERT COOTER, *preface to* RICHARD COOTER & AARON EDLIN, THE FALCON'S GYRE: LEGAL FOUNDATIONS OF ECONOMIC INNOVATION AND GROWTH (2014), https://www.law.berkeley.edu/library/resources/cooter.pdf [https://perma.cc/BQ43-U2PJ].

28. *Id.* at 4.2.

29. *Id.* at 4.2–4.3.

30. *See id*. at 4.7–4.8.

31. *Id*. at 5.10.

32. *Id.*

33. *See* AGNÈS BÉNASSY-QUÉRÉ ET AL., ECONOMIC POLICY: THEORY AND PRACTICE 482–83 (2010) (highlighting Schumpeterian creative destruction as a form of endogenous growth theory). *See also* PHILIPPE AGHION & PETER HOWITT, ENDOGENOUS GROWTH THEORY 1 (1998) ("[P]eople's innovative activities are conditioned by the laws, institutions, customs, and regulations that affect their incentive and their ability to appropriate rents from newly created knowledge . . . . [T]he purpose of endogenous growth theory is to seek some understanding of this interplay between technological knowledge and various structural characteristics of the economy . . . and how such an interplay results in economic growth.").

the result of investments in innovation by profit-seeking agents,[34] and not simply the byproduct of some unexplained technical progress premised on greater investment in machinery and equipment. And, to be sure, a discussion of endogenous growth is no newcomer to legal debates, especially in international patent law.[35]

The creation of conditions to generate growth have also been a core concern in the "law and development" research field, which is a hodge-podge of studies promoting the idea that law can be instrumentalized to ameliorate problems linked to underdevelopment.[36] The economics that underlie such studies, when identifiable, vary greatly, but a reliance on structuralism and new structuralism—perhaps a shorthand for mistrust of market-led growth—is common.[37] However, a non-negligible part of those interested in law and development take the opposite stance and emphasize the role of property and contract law to promote coordination and achieve growth.[38] As can be seen, the menu of macroeconomic perspectives to analyze law is broad.

III

RULE-BREAKING AND THE ELASTICITY PARADIGM

The alternative project at the crossroads of the disciplines of law and macroeconomics focuses not on economic theories and their applications, but on the role of lawyers and their understanding of the subtle workings of the legal system. Here, I focus on government rule-breaking during times of macroeconomic crisis, a circumstance far from uncommon. Rule-breaking is problematic because in constitutional democracies, government actions are expected to pass constitutional muster and withstand court oversight. Yet legal scholars interested in macroeconomics often skip this vexing problem, preferring to discuss channels of accountability and other topics of political expediency.[39] In

34. *See* Paul M. Romer, *The Origins of Endogenous Growth*, 8 J. ECON. PERSP., no. 1, Winter 1994, at 3, 4–10 (examining the link between GDP and investment).

35. *See, e.g.*, Daniel Benoliel, *Patent Club Convergence Among Nations*, 18 MARQ. INTELL. PROP. L. REV. 297 (2014); Daniel Benoliel & Bruno Meyerhof Salama, *Towards an Intellectual Property Bargaining Theory: The Post-WTO Era*, 32 U. PA. J. INT'L L. 265 (2010).

36. For an overview, see MICHAEL J. TREBILCOCK & MARIANA MOTA PRADO, ADVANCED INTRODUCTION TO LAW AND DEVELOPMENT (2014). *See also* THE NEW LAW AND ECONOMIC DEVELOPMENT: A CRITICAL APPRAISAL (David M. Trubek & Alvaro Santos eds., 2006).

37. David M. Trubek et al., *Toward a New Law and Development: New State Activism in Brazil and the Challenge for Legal Institutions,* 4 WORLD BANK L. REV 281 (2013) (discussing how law, especially public law, can improve state activism in the industrial sector of the developing world).

38. *See generally* HERNANDO DE SOTO, THE OTHER PATH: THE INVISIBLE REVOLUTION IN THE THIRD WORLD (1989); KENNETH DAM, THE LAW-GROWTH NEXUS: THE RULE OF LAW AND ECONOMICS DEVELOPMENT (2006). *But see* David Kennedy, *Some Caution about Property Rights as a Recipe for Economic Development,* 1 ACCT. ECON. & L. 1 (2011) (advising caution when considering property rights as the solution for economic development).

39. *See, e.g.*, Anna Gelpern, *Financial Crisis Containment*, 41 CONN. L. REV. 1051, 1057 (2009) ("[M]uch of what appears as rule-breaking in [financial crisis] containment is neither good nor bad, but unavoidable. Legal and institutional design for crisis response should reflect this reality, with channels of accountability appropriate to the tasks of containment.").

this Part, I develop a theoretical account that upholds the legality of rule-breaking during exceptional circumstances.

As a first approximation, the law has difficulty in dealing with ex post government actions that are not protected by an express legal safeguard. By "safeguard," I mean a legal text that makes room for governments to adopt extraordinary measures in face of economic shortfalls. To illustrate the concept of safeguard, the "scarce currency clause" set out under Article 7 of the Articles of Agreement of the International Monetary Fund authorizes countries "temporarily to impose limitations on freedom of exchange operations in the scarce currency."[40]

The existence of such safeguards creates a dilemma. By making room for episodic circumvention of the general rules during exceptional circumstances, safeguard clauses protect the rule of law and can greatly reduce the prospects of court challenges. However, they can also promote moral hazard and other evils. Thus, for example, in 2008 the Federal Reserve (Fed) provided tailored financial assistance to systemically important firms based on a safeguard set out under Section 13(3) of the Federal Reserve Act, which granted powers to the Fed to lend to "any individual, partnership, or corporation" in "unusual and exigent circumstances."[41] As a result, the Fed bailouts were largely viewed as legally defensible.[42] At the same time, these measures were perceived as having created moral hazard because they signaled that the Fed was ready to bail out firms making losing bets in financial markets.[43]

This dilemma can be framed in terms of two informational challenges. On one hand, the creation of a safeguard remedies the impossibility of transforming existing information into normative statements that can precisely guide government interventions in future states of the world. This is not an asymmetry of information between the industry and government, but rather a more fundamental problem of uncertainty, since no one knows or even can know when exactly such exceptional government action will be needed and justifiable.

40. Articles of Agreement of the International Monetary Fund art. 7, Dec. 27, 1945, 60 Stat. 1401, T.I.A.S. No. 1501.

41. 12 U.S.C. § 343 (2012).

42. *See* Neil H. Buchanan & Michael C. Dorf, *Don't End or Audit the Fed: Central Bank Independence in an Age of Austerity*, 102 CORNELL L. REV. 1, 30 (2016) ("[T]he claim that the Fed exceeded its authority in the Bear Stearns and AIG bailouts, even when fully credited, does not come close to demonstrating a pattern of law breaking."); Thomas O. Porter II, *The Federal Reserve's Catch-22: A Legal Analysis of the Federal Reserve's Emergency Powers*, 13 N.C. BANKING INST. 483, 485 (2009) ("This statutory authority made each action taken in the Bear bailout legally defensible."). *But see* Timothy A. Canova, *Financial Market Failure as a Crisis in the Rule of Law: From Market Fundamentalism to a New Keynesian Regulatory Model*, 3 HARV. L. & POL'Y REV. 369, 392 (2009) (portraying the Fed's actions during the 2007-08 crisis as violations of the rule of law); Lawrence H. White, *The Rule of Law or the Rule of Central Bankers?*, 30 CATO J. 451, 451 (2010) (during the crisis government "consider[ed] every possible remedy but applying the rule of law").

43. José Gabilondo, *Financial Hospitals: Defending the Fed's Role as a Market Maker of Last Resort*, 36 SEATTLE U. L. REV. 731, 775 (2013) ("The Bear deal *did* create a moral hazard by sending a signal that the federal government might come to the assistance of nonbank firms that had made losing bets in the credit market.").

On the other hand, the creation of the safeguard can reinforce perceptions that the government will step in to implement this exceptional remedy, which can lead to unfortunate consequences. Bailouts are again a classic example: The existence of a statutory bailout clause can cause excessive risk-taking within an industry.[44] Here, moral hazard arises exactly because of asymmetric information between the government and the industry. Such informational asymmetry can only be partly mitigated by prudential regulation.

This formulation, using the bailout example, illustrates the "incompleteness" paradigm in law and policy, which envisions that the legal conditioning of market participants is limited in two ways. The first limit arises from the human inability to fully anticipate and specify the future and thus the impossibility of drafting complete (that is, fully specified) legislation. The second limit relates to the linguistic imprecision which renders even the most clearly-drafted and unambiguous legislation subject to subtle distinctions when approached from different cannons of interpretation.

Safeguards, as well as general clauses and indeterminate legal concepts, represent partial solutions to the incompleteness paradigm. They counteract the challenges posed by limited human rationality and vagueness of the laws. Yet the informational limits that justify the use of general clauses and safeguards in legislation do not solve all of the relevant challenges posed to policymaking because some challenges are structural, not merely informational.

That is to say, changing the law can hardly change certain facts on the ground. For example, Brazilian banking law expressly authorizes the central bank to "monopolize" foreign exchange transactions "whenever a grave disequilibrium in the balance of payments occurs or there are serious reasons to foresee such imminent situation."[45] Critics argued that this safeguard heightened creditors' risk perceptions and thus Brazil's borrowing costs in dollars, and should therefore be removed.[46] Yet the removal of this statutory authorization could never by itself turn Brazil's currency into an international safe asset or a store of value, which is why the safeguard was never eliminated.[47] This amounts to the recognition that the fragility of Brazil's currency was not a legal problem, but rather a factual one.

The existence of structural (or "real world") problems exemplified by the inherent fragility of the Brazilian currency explains the need for swift governmental intervention beyond the limited space granted by preexisting

44. Thomas F. Hellmann et al., *Liberalization, Moral Hazard in Banking, and Prudential Regulation: Are Capital Requirements Enough?*, 90 AM. ECON. REV. 147, 148 (2000) ("[B]anks choose a risky asset portfolio that pays out high profits or bonuses if the gamble succeeds but leaves depositors, or their insurers, with the losses if the gamble fails.").

45. Lei N° 4.595, de 12.31.1964, art. 4, XVIII, *translated at* https://www.microfinancegateway.org/sites/default/files/mfg-en-paper-brazil-law-no-4595-of-december-31-1964-may-2000.pdf [https://perma.cc/DA9K-2TNR].

46. *See* Persio Arida, *Por uma Moeda Plenamente Conversível*, 23 REVISTA DE ECONOMIA POLÍTICA 151, 153 (2002).

47. Luiz Gonzaga Belluzzo & Ricardo Carneiro, *O Mito da Conversibilidade*, 24 REVISTA DE ECONOMIA POLÍTICA 218, 220 (2004).

safeguards and other general clauses. Lawmakers can eliminate the provision authorizing the central bank to "monopolize" foreign exchange transactions, but cannot eliminate the need for the central bank to do so under extreme circumstances (the same applies to bailouts, of course). And even if that specific safeguard is retained, there may be circumstances where the central bank will be forced to exceed the limits and conditions laid out by the safeguard—not because of legal circumstances, but because of a factual circumstance.

This observation unveils the limitations of the incompleteness paradigm and suggests the need for an alternative that can accommodate the inevitability of government rule-breaking. I call this approach the "elasticity paradigm,"[48] the essence of which is that policymaking is not only the art of writing down the formula that will subsequently constrain decision-making, but also the set of continuous government efforts that establish, fine-tune, update, and defend the institutional framework at hand—in most cases through rule-making and rule-following, but sometimes with rule-breaking.

Greater tolerance for rule-breaking might suggest that the elasticity paradigm represents a denial of the rule of law, but this is not the case. The paradigm should be better framed as a compromise between the ex ante concerns with improving the rules of the game, and the recognition that certain games may depend (temporarily, at least) upon their occasional subversion—whether it is Mario Draghi declaring that the European Central Bank is ready to do "whatever it takes"[49] to preserve the Euro, Richard Nixon deciding to close the gold window to "defend the dollar against the speculators,"[50] or Franklin Roosevelt taking the United States off of the gold standard because "the whole problem before us is to raise commodity prices."[51] Thus, the elasticity paradigm recognizes that where there are no safeguards in place, governments may have no option other than to break the law. Crucially, this rule-breaking should not be viewed as necessarily a contradiction of the rule of law.

Distinguishing between constitutive and regulative rules illuminates the point: In the words of John Searle, "regulative rules regulate antecedently or independently existing forms of behavior[,]" while "constitutive rules do not merely regulate, they create or define new forms of behavior."[52] To illustrate,

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48. *See* Bruno Meyerhof Salama & Osny da Silva Filho, *Elasticity, Incompleteness, and Constitutive Rules*, THE CLS BLUE SKY BLOG (July 30, 2013), http://clsbluesky.law.columbia.edu/2013/07/30/elasticity-incompleteness-and-constitutive-rules/ [https://perma.cc/H23S-DYY8] (articulating the "incompleteness paradigm").

49. Mario Draghi, President, European Cent. Bank, Remarks at the Global Investment Conference (July 26, 2012), http://www.ecb.europa.eu/press/key/date/2012/html/sp120726.en.html [https://perma.cc/58KE-VDFP].

50. Richard Nixon, U.S. President, Address to the Nation (Aug. 15, 1971), https://www.cvce.eu/content/publication/1999/1/1/168eed17-f28b-487b-9cd2-6d668e42e63a/publishable_en.pdf [https://perma.cc/5A9F-RQHS].

51. ROGER DANIELS, FRANKLIN D. ROOSEVELT: ROAD TO THE NEW DEAL, 1882–1939, at 140 (2015).

52. JOHN R. SEARLE, SPEECH ACTS: AN ESSAY IN THE PHILOSOPHY OF LANGUAGE 33 (Cambridge Univ. Press 1969).

Searle describes that "[t]he rules of football or chess, for example, do not merely regulate playing football or chess, but as it were they create the very possibility of playing such games."[53]

The distinction between constitutive and regulative rules makes clear the differences between the paradigms of incompleteness and elasticity. The incompleteness paradigm incorporates conserving policy within the malleability of regulative rules, such as safeguards. Thus, if preserving a policy requires governmental crisis containment actions that step outside of the quadrants established by regulative rules, then the incompleteness paradigm requires either letting go of the policy or of the rule of law. The constitutive rules—notably, the rules that determine that pre-established laws should be applied—must however remain untouched, pursuant to what is sometimes referred to as the "inviolability dogma."[54]

Conversely, greater tolerance for governmental crisis "containment"[55] measures permitted under the elasticity paradigm opens a wedge in the inviolability dogma. This tolerance shows that even constitutive rules must sometimes be violated, if only temporarily, in order to preserve a higher goal such as the integrity of the macroeconomy, the welfare of most, and ultimately the rule of law itself.[56]

The elasticity paradigm is of great practical relevance to discussions over the legality of governmental crisis containment actions. Consider again the problem of bailouts. In response to criticism of the 2008 bailouts, Congress enacted the Dodd-Frank Act (Dodd-Frank), which expressly aimed "to protect the American taxpayer by ending bailouts."[57] Dodd-Frank also amended existing law to curtail the ability of the Fed to implement rescue operations and emergency lending.[58] Yet, in a system of private money creation and concentrated banking, the demise of systemically-important entities can have devastating consequences, rendering the complete elimination of bailouts unrealistic[59] and the Dodd-Frank

53. *Id.*

54. *See* Guglielmo Feis & Umberto M. Sconfienza, *Challenging the Constitutive Rules Inviolability Dogma*, 3 PHENOMENOLOGY & MIND 127 (2012).

55. *See* Gelpern, *supra* note 39.

56. *See, e.g.,* Gene Healy, *Remembering Nixon's Wage and Price Controls*, WASH. EXAM'R (Aug. 16, 2011), https://www.washingtonexaminer.com/remembering-nixons-wage-and-price-controls [https://perma.cc/E9DC-9E8Q] (describing Nixon's freezing of prices and wages throughout the United States as an example of a practice articulated by George W. Bush regarding abandoning the "free-market principles to save the free-market system").

57. Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111–203, 124 Stat. 1376 (2010) (codified as amended in 12 U.S.C. §§ 5301–5641).

58. *Id.*

59. *See generally* Anthony J. Casey & Eric A. Posner*, A Framework for Bailout Regulation*, 91 NOTRE DAME L. REV. 479, 482 (2015) ("Bailouts are socially desirable because Congress cannot anticipate the contingencies that would make possible an ex ante insurance system that regulates behavior and charges firms in advance for liquidity support or other transfers."); Adam J. Levitin, *In Defense of Bailouts*, 99 GEO. L.J. 435 (2011) (proposing a framework for analyzing bailouts' legitimacy); Robert K. Rasmussen & David A. Skeel, Jr., *Governmental Intervention in an Economic Crisis*, 19 U. PA. J. BUS. L. 7, 8 (2016) ("It may be possible to make bailouts less likely, but we cannot make them disappear

mechanisms possibly impractical. Given this reality, one cannot exclude the possibility that future bailouts will break the rules for emergency lending established under the Dodd-Frank.

The elasticity paradigm also underscores a misperception common amongst macroeconomists and lawyers alike, which confuses the call for institutional analysis in macroeconomics with a search for the optimal and definitive laws that will solve problems once and for all—a kind of ceaseless search for the Holy Grail. For example, in his instructive *Big Ideas in Macroeconomics*, Kartik Athreya argues that society's best bet to prevent future financial crises would be to cause "[shareholders of] financial market entities to believe that policymakers possess an ironclad commitment to allowing them to fail and vanish . . . ."[60]

However, this belief will always be evanescent. Shareholders will sooner or later realize that policymakers' commitments of that kind are not fully credible, precisely because of the informational limitations inherent to the incompleteness paradigm: the informational black holes that render the future fundamentally uncertain, and the informational asymmetries that cause safeguards such as bailout clauses to bring moral hazard. In short, the difficulty in arriving at ironclad commitments is the difficulty of abiding by the incompleteness paradigm. Therein lies the core justification for embracing the elasticity paradigm.

An unacknowledged example of deference to the elasticity paradigm is articulated by Yair Listokin in his recent book, *Law and Macroeconomics*.[61] Listokin advocates that regulatory and approval standards for construction be made more flexible during economic downturns to boost aggregate demand and smooth the fluctuation of the business cycle.[62] Thus, for example, a project with questionable credentials gets regulatory clearance when the economy is in the zero-lower bound, but an otherwise identical project gets denied at other times. This disparity is not unfair because "the two proposals are not the same"[63] as their "social cost differs dramatically. . . ."[64]

Two ideas that undergird the elasticity paradigm are apparent in this formulation. First, this example illustrates that the legal meaning of a government action is time dependent: For instance, a bank rescue during a crisis can lawfully be treated differently from another that takes places in ordinary times. The meaning of law is in this sense elastic—that is, time-variant. Second, the legal system upholds the rule of law by preserving the institutional model that is put in

altogether."). *See also* REPUBLICAN STAFF OF H.R. COMM. ON FIN. SERV., 113TH CONG., FAILING TO END "TOO BIG TO FAIL": AN ASSESSMENT OF THE DODD-FRANK ACT FOUR YEARS LATER (2014), http://faculty.haas.berkeley.edu/ross_levine/Other/House_Republications_071814_tbtf_report_final.pdf [https://perma.cc/4QRK-MMRK] (arguing that the Dodd-Frank Act was based on a misunderstanding of the government's bailout policy).

60. KARTIK B. ATHREYA, BIG IDEAS IN MACROECONOMICS: A NONTECHNICAL VIEW 316 (2013).

61. LISTOKIN, *supra* note 16.

62. *Id.* at 143.

63. *Id.*

64. *Id.*

place through a myriad of laws and mechanisms. The focus lies therefore not in enforcing every rule, but on drawing a distinction between interventions that update the rule of the game in a new environment from those that in fact represent a departure from the existing model.[65]

To be sure, the recognition of the elasticity paradigm makes room for broader judgment calls on the part of regulators and risks opening the door for arbitrariness, the very door that the rule of law aims to close. The paradigm is therefore of doubtful use in times of normalcy but might be a necessary addition to legal debates concerning emergency law and other legal ideas that apply in extreme situations.

IV

CONCLUSION

Most of what passes as macroeconomic policymaking is lawmaking as well. Policy, whether it be fiscal, employment, trade, or foreign exchange, is typically implemented with legislation, decrees and regulations—that is, with laws. Even monetary policy as currently practiced in the United States is legalized, because easing and tightening, although discretionary, are bound by a statutory long-run economic objective of maximum employment and stable prices.[66] To suggest that law and macroeconomics will only now finally be conjoined is false and misleading. They are, and have been, inseparable.

What we are experiencing instead is the merging of law and macroeconomics as academic disciplines. Thus, scholars with a deep understanding of the theory and workings of the legal system are deploying their conceptual arsenal, experience, and intellect to discuss standard macroeconomic topics such as countercyclality and growth—or instead, are resorting to macroeconomics to reflect upon standard questions in the law.[67] Although the field of law and economics historically treats macroeconomics as a background topic, the shockwaves of the 2007–08 financial crisis have brought up novel concerns and a

65. *See* Kathryn Judge, *Regulation and Deregulation: The Baseline Challenge*, 104 VA. L. REV. ONLINE 101, 104 (2018) ("Determining when a change in the law is merely updating the rules of the game to maintain the status quo in a new environment, or is instead changing the rules of the game, has important implications for the type of processes that ought to accompany the action.").

66. *See* 12 U.S.C. § 225a (2012) ("The Board of Governors of the Federal Reserve System and the Federal Open Market Committee shall maintain long run growth of the monetary and credit aggregates commensurate with the economy's long run potential to increase production, so as to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates."). *See also* Joy Zhu, *Federal Reserve Reform Act of 1977*, FED. RESERVE HISTORY (Nov. 22, 2013), https://www.federalreservehistory.org/essays/fed_reform_act_of_1977 [https://perma.cc/8WV7-T5FQ] ("When the Federal Reserve was first established in 1913, Congress directed it only to 'furnish an elastic currency, to afford means of rediscounting commercial paper' and 'to establish a more effective supervision of banking in the United States.'").

67. It is not entirely novel for legal scholars to explore macroeconomics. For example, the tradition of economic law, especially international economic law, addresses problems of international coordination in finance and trade, which lies at the heart of macroeconomics.

renewed call for legal scholars to engage with macroeconomic policies and reasoning.

This renewed urgency to jointly consider law and macroeconomics gives rise to two main problems, one concerning the choice of the macroeconomic framework to be employed, and the other concerning the challenges to the rule of law that often accompany macroeconomic intervention. These questions can be treated as being part of two different intellectual projects: One is a macroeconomic analysis of law, which applies economic theory to legal materials and coordination problems in attempt to find hidden meanings or counterintuitive results. The second project revolves around discussing how law, courts, and legal reasoning matter beyond the self-evident observation that macroeconomic policies are implemented with laws. Taken together, these projects constitute what might one day be the law and macroeconomics tradition.

There is friction between these projects. Macroeconomic analysis understands law in terms of the criteria set out by the exterior viewpoint, that is, the macroeconomic lenses to be employed. Law therefore only has meaning through the vocabulary of something else. This is problematic. As demonstrated here, the distinctions between the incompleteness and elasticity paradigms show that the meaning of law is being continuously disputed. Law is not simply a thing out there to be illuminated with the lights of this or that economic framework, but rather an institutional reality that may be redefined without losing its character. This is the inescapable tension within the new law and macroeconomics tradition, if it should ever come into being.