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Equilibrium Theory, the FICAS Model, and International Banking Law

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I. SYNTHESIZING THEORY AND PRACTICE

> To find a form that accommodates the mess, that is the task of the artist now.
>
> —Samuel Beckett[1]

Conventional wisdom finds that international banking law is an applied field. In contrast to a traditional field like constitutional law, in which well-developed bodies of literature exist that draw upon feminist legal theory, critical race theory, law and economics, and critical legal studies, international banking law seems bereft of jurisprudential perspectives.[2] Finance professors may ruminate about whether

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1. Conversation with John Driver, 1961. Quoted in DEIRDRE BAIR, SAMUEL BECKETT: A BIOGRAPHY, 523 (1978).

2. Consider, for example, a recent casebook and two recent treatises: HAL S. SCOTT & PHILIP A. WELLONS, INTERNATIONAL FINANCE (2d ed. 1995), REGULATION OF FOREIGN BANKS (Michael Gruson & Ralph Reisner eds., 2d ed. 1995), and PHILIP HABLUTZEL, INTERNATIONAL BANKING LAW (1994). These excellent works cover a range of practical topics, ranging from Eurodollars to how foreign banks are regulated in the U.S. But there is little effort to consider whether jurisprudential concepts traditionally used in other fields of law might offer insights into such topics or the international banking system in general.

This observation is *not* meant as a criticism of the aforementioned works, and perhaps reflects

exchange rates move in accordance with the interest rate parity theorem, but what possible contribution could legal theorists make to understanding international banking?[3] After all, legal theory is rarified by nature and eschews gritty details. Practicing international banking lawyers have little time for apparently non-money making ideas. Consequently, the conventional view of international banking law is that it is about how cross-border transactions undertaken by commercial banks work[4] and how banks are regulated to ensure the safety and soundness of the international banking system.[5]

A "nuts and bolts" approach that follows conventional wisdom is unduly narrow. The normative premise of this Article is that complex and technical international banking law issues can be evaluated by thinking in terms of fundamental concepts that animate in law generally and in non-legal disciplines.[6] Equilibrium is one such concept. The equilibrium theory of international banking law developed in this Article is inspired by neoclassical economic theory and its application in the constitutional law context.

Why focus on equilibrium? Why worry about the international banking law context? Because international banking lawyers seem to practice in a state of learned helplessness at best, and cynicism at worst. They have witnessed crisis after crisis in the 1990s: in 1991, the spectacular Bank of Credit and Commerce International (BCCI) fraud;[7] in 1992-93, the overthrow of the world's central banks by private

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the nascent state of scholarship in international banking law relative to other legal fields. Moreover, it would be incorrect to suggest that extant scholarship in international banking law is entirely descriptive. To the contrary, there are a number of fine analytical pieces in the field. *See, e.g.*, JOSEPH J. NORTON, DEVISING INTERNATIONAL BANK SUPERVISORY STANDARDS (1995); THE INTERNATIONALIZATION OF CAPITAL MARKETS AND THE REGULATORY RESPONSE, (John Fingleton ed., 1992).

3. The interest rate parity theory says that the interest rate associated with financial instruments in one country that are covered for exchange rate risk (e.g., through forward contracts) should be the same as that for financial instruments in another country. Any difference in the nominal rates of interest of two currencies arises because of a premium or discount for one currency relative to the other in the forward market. In other words, premium and discount points reflect interest rate differentials. *See* Raj Bhala, *Risk Trade-Offs in the Foreign Exchange Spot, Forward and Derivative Markets*, 1 FINANCIER 34, 42–43 (1994); JEFF MADURA, INTERNATIONAL FINANCIAL MANAGEMENT 187–95 (3d ed. 1992); J. ORLIN GRABBE, INTERNATIONAL FINANCIAL MARKETS 84–96 (2d ed. 1991); RICHARD A. BREALEY & STEWART C. MYERS, PRINCIPLES OF CORPORATE FINANCE 834 (3d ed. 1988); WILLIAM R. FOLKS, JR. & RAJ AGGARWAL, INTERNATIONAL DIMENSIONS OF FINANCIAL MANAGEMENT 39–40, 46–48 (1988).

4. *See, e.g.*, ERNEST T. PATRIKIS ET AL., WIRE TRANSFERS (1993) (discussing the mechanics of wire transfers and wire transfer law).

5. *See, e.g.*, RAJ K. BHALA, FOREIGN BANK REGULATION AFTER BCCI (1994) (discussing the regulation of foreign banks in the U.S. in the wake of the BCCI scandal).

6. This premise is articulated to promote what Professor Rubin aptly calls "normative clarity." *See* Edward L. Rubin, *On Beyond Truth: A Theory for Evaluating Legal Scholarship*, 80 CAL. L. REV. 889, 912–19 (1992).

7. *See* BHALA, *supra* note 5, at 3–23.

foreign exchange traders in the markets for European currencies;[8] in 1994, the stunning collapse of Barings Bank as a result of yen index futures trading;[9] in 1994-95, the enormous devaluation of the Mexican peso and consequent world-wide "tequila" effect on emerging stock markets;[10] and in the securities trading losses and subsequent coverup

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8. *See* GREGORY J. MILLMAN, THE VANDALS' CROWN (1995); Christopher Young, Note, *The Ramification of the Exchange Rate Collapse in Europe: Implications for Monetary Union*, 13 B.U. INT'L L.J. 263 (1995); *The Campaign for Sterling*, ECONOMIST, Jan. 9, 1993, at 52; Richard W. Stevenson, *Europeans' Currency System Shaken as Britain Cuts Free*, N.Y. TIMES, Sept. 17, 1992, at A1.

9. *See* NICK LEESON, ROGUE TRADER (1996); Maximilian J.B. Hall, *Barings: The Bank of England's First Report to the Board of Banking Supervision*, 11 BUTTERWORTHS J. INT'L BANKING & FIN. L. 128 (Mar. 1996); Sara Calian, *"Rogue Trader" Says Deceiving Barings Wasn't Difficult, "Star" Status Helped*, WALL ST. J., Feb. 13, 1996, at A10; Nicholas Denton, *U.K. Company News: A Remarkable Comeback to the Top of the Tables*, FIN. TIMES, Dec. 30–31, 1995; Maximilian J.B. Hall, *A Review of the Board of Banking Supervision's Inquiry into the Collapse of Barings—Part 2*, 10 BUTTERWORTHS J. INT'L BANKING & FIN. L. 470 (Nov. 1995); Maximilian J.B. Hall, *A Review of the Board of Banking Supervision's Inquiry into the Collapse of Barings—Part 1*, 10 BUTTERWORTHS J. INT'L BANKING & FIN. L. 421 (Oct. 1995); *Spot the Smoking Receivable*, ECONOMIST, Oct. 21, 1995, at 79; Richard Dale, *The Wider Lessons of Barings*, 10 BUTTERWORTHS J. INT'L BANKING & FIN. L. 355 (Sept. 1995); *Who Lost Barings?*, ECONOMIST, July 22, 1995, at 16; BANK OF ENGLAND, REPORT OF THE BOARD OF BANKING SUPERVISION INQUIRY INTO THE CIRCUMSTANCES OF THE COLLAPSE OF BARINGS (July 18, 1995); Hugh S. Pigott, *Lessons from Barings*, 10 BUTTERWORTHS J. INT'L BANKING & FIN. L. 159 (Apr. 1995); Jason Fox & Diana Horrocks, *The Collapse of Baring*, 14 INT'L FIN. L. REV. 12 (1994); Nicholas Denton, *Ex-Barings Executives Face Singapore Summons*, FIN. TIMES, Dec. 30-31, 1994, at 22; Remarks by Eugene A. Ludwig, Comptroller of the Currency, before the European Institute's International Roundtable Seminar, Office of the Comptroller of the Currency News Release 95-46, Apr. 28, 1995; *Gone Dutch: Barings*, ECONOMIST, Mar. 11, 1995, at 73; *Broken Bank: Barings PLC Officials May Have Been Aware of Trader's Position*, WALL ST. J., Mar. 6, 1995, at A1; *The Bank That Disappeared*, ECONOMIST, Mar. 4, 1995, at 11; *A Fallen Star*, ECONOMIST, Mar. 4, 1995, at 19; *Barings Trader Who Brought Down Bank Surfaces in Germany*, WALL ST. J., Mar. 3, 1995, at A3; Glenn Whitney & Michael R. Sesit, *Dutch Giant Offers to Buy All of Barings*, WALL ST. J., Mar. 3, 1995, at A3; Steven Lipin & G. Bruce Knecht, *How Many Other Barings Are There?*, WALL ST. J., Feb. 28, 1995, at C1; *Britain's Barings PLC Bets on Derivatives—And the Cost Is Dear*, WALL ST. J., Feb. 27, 1995, at A1.

10. *See* Tim Carrington, *Mexico's Currency Devaluation Shows How an Economic Strategy Can Flop*, WALL ST. J., Mar. 17, 1995, at A2; Tim Carrington & Craig Torres, *U.S. Unveils Rescue Plan for Mexico*, WALL ST. J., Feb. 22, 1995, at A3; Craig Torres, *Mexico's Debt-Restructuring Plan Stalls*, WALL ST. J., Feb. 15, 1995, at A14; *Zedillo's Wake-Up Call*, WALL ST. J., Feb. 14, 1995, at A22; *To the Rescue*, ECONOMIST, Feb. 4, 1995, at 13; *Scenes From a Border: The Mexican Rescue*, ECONOMIST, Feb. 4, 1995, at 24; Craig Torres, *Mexico's Central Bank Struggles as Foreign Reserves Slump to Low Levels, New Data Show*, WALL ST. J., Feb. 3, 1995, at A8; Stephen Fidler & Leslie Crawford, *Mexican Concerns Shift to Damage Done by Crisis*, FIN. TIMES, Feb. 3, 1995, at 5; George Graham, *$50bn Aid for Mexico "Prevented Global Crisis,"* FIN. TIMES, Feb. 3, 1995, at 1; Thomas T. Vogel, Jr., *Mexico Worries Spread To Emerging Markets*, WALL ST. J., Jan. 31, 1995, at C1; *The World's Emerging Markets All At Sea*, ECONOMIST, Jan. 28, 1995, at 67; *Rescuing the Sombrero*, ECONOMIST, Jan. 21, 1995, at 18; *Quick Fix or Quagmire?*, ECONOMIST, Jan. 21, 1995, at 72; *U.S. Plans to Expand Help to Mexico; Loan Guarantees May Reach $40 billion*, WALL ST. J., Jan. 13, 1995, at A3; Michael R. Sesit, *Dollar Darwinism: Global Capital Crunch Is Beginning to Punish Some Weak Economies*, WALL ST. J., Jan. 12, 1995, at A1; *The Egg on Zedillo's Face*, ECONOMIST, Jan. 7, 1995, at 31; *Latin America in the Fallout Zone*, ECONOMIST, Jan. 7, 1995, at 59; Ted Bardacke, et al., *Mexico's Measures Fail to Calm Currency Markets*, FIN. TIMES, Jan. 5, 1995, at 1; *Mexico Faces Market Test*, FIN. TIMES, Jan. 5, 1995, at 19.

of those losses by Daiwa and Japanese authorities.[11] Lawyers dutifully attempt to consider the legal repercussions of the crises.[12] But they throw up their hands at the sight of the repercussions: more and increasingly technical rules and regulations that land on their desks and demand comprehension. They complain of a professional world of constant "upheaval," "turmoil," and "chaos." Whatever control they once may have had is lost. Even the international banking law scholar, who has time for quiet reflection, admits it is "impossible to keep up."

These understandable reactions are not founded upon a sublime theoretical perspective. They are not based on deep or systematic thought about stability or change, much less the concept of equilibrium. Indeed, in contrast to scholars in other disciplines, lawyers have not devoted much attention to this concept. Equilibrium is a familiar concept to physical scientists. To them, it is a state of balance among natural forces.[13] This balance may be static, as when a body is acted upon by opposing forces whose net effect is zero,[14] or dynamic, as in

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11. *See New Thinking Suggests Banks Take Broader, Automated Approach to Controlling Exposure*, 5 GLOBAL INV. TECH. 10 (Mar. 1996); Board of Governors of the Federal Reserve System, In the Matter of The Daiwa Bank, Limited, Docket No. 95-028-T-FB, Amendment of Termination Order (Feb. 2, 1996); William Dawkins, *Tokyo's top finance official quits*, FIN. TIMES, Dec. 30–31, 1995, at 1; *Daiwa Pursues Settlement Of U.S. Charges Against It*, WALL ST. J., Dec. 22, 1995, at A5; *Something Nasty in the Woodshed*, ECONOMIST, Nov. 11, 1995, at 17; John Bussey, *Japan's Bungling Ministry of Finance*, WALL ST. J., Nov. 10, 1995, at A14; *Daiwa and the Fed*, WALL ST. J., Nov. 7, 1995, at A22; Jathon Sapsford & Robert Steiner, *Daiwa Effects Ripple through Japan's Banking Industry*, WALL ST. J., Nov. 6, 1995, at A21; *In a Signal to Japan, U.S. Bars Daiwa Bank, Indicts It and Officials*, WALL ST. J., Nov. 3, 1995, at A1; Joint Statement of the Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, and New York State Banking Department, Nov. 2, 1995; Norihiko Shirouzu, *Daiwa Confirms it Told Trader to Hide Losses*, WALL ST. J., Oct. 23, 1995, at A14; *Tokyo Tells U.S. Reasons for Delay in Daiwa Report*, WALL ST. J., Oct. 13, 1995, at A11; *Japan Agency Let Daiwa Delay Report*, WALL ST. J., Oct. 10, 1995, at A17; *Daiwa Daze*, WALL ST. J., Oct. 9, 1995, at A12; Gerard Baker & Antonio Sharpe, *Daiwa Debacle Exacts High Price*, FIN. TIMES, Oct. 6, 1995, at 14; Gerard Baker, *Daiwa's Troubles Deepen*, FIN. TIMES, Oct. 4, 1995, at 8; Board of Governors of the Federal Reserve System, In the Matter of The Daiwa Bank, Limited, Docket No. 95-028-C-FB, Order Issued Pursuant to the New York State Banking Law and the Federal Deposit Insurance Act, as Amended (Oct. 2, 1995); *Wall Street Shokku*, ECONOMIST, Sept. 30, 1995, at 83; Jathon Sapsford, *Japanese Banks Get New, Lower Ratings*, WALL ST. J., Aug. 22, 1995, at A2; Jathon Sapsford, *Daiwa Scandal Creates Fallout for Tokyo*, WALL ST. J., Sept. 28, 1995, at A16.

12. For an analysis of the legal aftermath of the BCCI affair, see BHALA, FOREIGN BANK REGULATION, *supra* note 5. For an analysis of the market risk capital adequacy rules developed in part in response to regulatory concerns over financial market volatility including the foreign exchange rate crisis, see Raj Bhala, *Applying Equilibrium Theory and the FICAS Model: A Case Study of Capital Adequacy and Currency Trading*, 41 ST. LOUIS U. L.J. 1 (1996). For a discussion of possible legislative responses to the Daiwa scandal, including the requirement of external audits, see John R. Wilke, *Daiwa Scandal Spurs a Review of Banking Bill*, WALL ST. J., Dec. 6, 1995, at A2; *Hearing Before the Subcomm. on Financial Institutions and Consumer Credit of the House Comm. on Banking and Financial Services*, 104th Cong., 1st Sess. (1995) (testimony of Eugene A. Ludwig, Comptroller of the Currency).

13. *See, e.g.*, JAMES WALKER, INTRODUCTION TO PHYSICAL CHEMISTRY (8th ed. 1919) (discussing the triple point equilibrium of the three phases of water; e.g., gas, liquid, and solid states).

14. *See, e.g.*, RAYMOND L. MURRAY & GROVER C. COBB, PHYSICS: CONCEPTS AND CONSE-

a reversible chemical reaction when the velocities in both directions are equal.[15] Economists are also fluent with the concept. The neoclassical conception of an equilibrium is a state of balance among competing market forces in which there is neither excess demand for nor excess supply of a good or service.[16]

What practical value does an equilibrium theory of international banking law have? It is difficult to anticipate all the possible future uses to which this or any theory may be put. In general, two tests help assess the potential value of a theory. First, is it possible to derive logically from the theory some insights that were not obvious from the assumptions underlying the theory? Second, does the theory offer a means to apply empirical measurements and generate accurate predictions? The first test might be called the "Aha!" test. A person using the theory reacts by saying: "Aha! Now the phenomenon I observe makes sense," or "Aha! I did not conceptualize this phenomenon in such an elegant, orderly manner before." The second test might be called the "Wow!" test. A person using the theory says: "Wow! I did not know the importance and magnitude of this phenomenon before," or "Wow! I did not know the repercussions of this phenomenon before."

The equilibrium theory of international banking law developed in this Article is designed with the "Aha!" and "Wow!" tests in mind. It aims to make two immediate contributions to international banking law. First, it is a practical conceptual framework for the international banking lawyer in New York, London, Tokyo, Hong Kong, Singapore, or any other international banking center to make sense of her professional environment. The framework transforms unstructured talk about "chaos," "upheaval," and the like into careful consideration of equilibrium and its determinants. That is, the framework helps the lawyer order her thinking about what appears to be utter chaos.

Second, the theory provides a systematic way for regulators to gauge the likely effects of new rules on internationally active banks. Specifically, the theory helps guide the key institution responsible for drafting international banking rules—the Basle Committee on Banking Supervision, informally known as the Basle Supervisors Committee (BSC)[17]—to evaluate prospectively the impact of its pronouncements.

QUENCES (1970) (defining a static equilibrium as "the case where the system undergoes neither translation nor rotation").

15. WEBSTER'S COLLEGIATE DICTIONARY 392 (10th ed. 1993).

16. Therefore, assuming the price mechanism operates freely, the market for that good or service will clear. The neoclassical economic concept of an equilibrium is discussed below. *See infra* notes 110–130 and accompanying text.

17. The BSC was established in 1975 and was formally known as the "Committee on Banking Regulations and Supervisory Practices." It is usually referred to by its informal name, "Basle

The theory is a device for the BSC to predict the likely reactions of banks to changes in existing rules and proposed new rules.

How is the equilibrium theory of international banking law developed in this Article? The theory is constructed by asking three questions. First, what is the definition of "equilibrium"? Second, what are the determinants of a stable equilibrium? Third, what legal regime—that is, what set of existing and proposed rules on a particular topic (e.g., capital adequacy)[18]—is most likely to be a stable equilibrium?[19]

Committee." *See* Cynthia C. Lichtenstein, *Introductory Note*, 30 I.L.M. 967, 972 n.1 (1991). The BSC is discussed *infra* notes 53–83 and accompanying text.

Of course, the BSC has rules and proposals for the capital adequacy treatment of many transactions in addition to foreign exchange. *See generally* Frederick M. Struble & Norah Barger, *International Capital Standards for Banking Institutions*, *in* I REGULATION OF FOREIGN BANKS 4-1-19 (Michael Gruson & Ralph Reisner eds., 2d ed. 1995) (summarizing the July 1988 Basle Accord credit risk capital adequacy requirements); NORTON, DEVISING INTERNATIONAL BANK SUPERVISORY STANDARDS *supra* note 2, at 193–212 (also summarizing the credit risk capital requirements contained in the July 1988 Basle Accord); I GLOBAL RISK BASED CAPITAL REGULATIONS, Charles A. Stone & Anne Zissu eds. (1994) (treating selected topics concerning the BSC's capital adequacy regime); RAJ BHALA, PERSPECTIVES ON RISK-BASED CAPITAL 43–102 (1989) (discussing the Basle Accord rules to safeguard against the risk of loss arising from credit risks associated with a variety of on- and off-balance sheet banking transactions).

18. For the definition of capital adequacy, see *infra* note 67 and accompanying text.

19. The present effort is to be distinguished from my own earlier work in the capital adequacy area, and that of some other scholars, in part on the basis of the breadth of the theoretical perspective. These works tend to proceed immediately to the "raw data," i.e., the capital adequacy regime, with little development of a broad theory. As a result, these works critically analyze the capital adequacy regime using a narrow set of criteria relevant to this regime, but are not necessarily helpful in assessing other international banking law regimes. *See, e.g.*, Matthew Elderfield, *Basle Publishes Final Market Risk Capital Standards*, 11 BUTTERWORTHS J. INT'L BANKING & FIN. L. 125 (Mar. 1996) (evaluating the effect of the BSC's 1996 market risk amendment to the 1988 Basle Capital Accord on the European Union's capital adequacy directive); Walter I. Conroy, Note, *Risk-Based Capital Adequacy Guidelines: A Sound Regulatory Policy or A Symptom of Regulatory Inadequacy?*, 63 FORDHAM L. REV. 2395 (1995) (considering whether capital adequacy guidelines guarantee bank soundness); Hal S. Scott & Shinsaku Iwahara, *In Search of A Level Playing Field*, GROUP OF THIRTY OCCASIONAL PAPER 46 1–4 (1994) and Hal S. Scott, *The Competitive Implications of the Basle Capital Accord*, 39 ST. LOUIS U. L.J. 885 (1995); (sizing up the 1988 Basle Capital Accord based on the extent to which it levels the competitive playing field among banks); Duncan E. Alford, *Basle Committee International Capital Adequacy Standards: Analysis and Implications for the Banking Industry*, 10 DICK. J. INT'L L. 189, 209–20 (1992) (considering specific effects on banks of the 1988 Basle Capital Accord such as encouraging asset securitization and portfolio adjustments); Gallatin, *Nothing to Lose But Their Chains*, EUROMONEY 58 (Sept. 1992) (addressing distortions in bank lending and funding operations created by the 1988 Basle Capital Accord); William Taylor, *Risk-Based Assessment of the Capital Adequacy of Commercial Banks*, *in* 1 CURRENT LEGAL ISSUES AFFECTING CENTRAL BANKS 341–48 (Robert C. Effros ed., 1992) (discussing international cooperation on bank capital adequacy issues); Peter C. Hayward, *Prospects for International Cooperation by Bank Supervisors*, 24 INT'L LAW. 787 (1990) (explaining the cooperation among G-10 bank regulators necessary to reach the 1988 Basle Capital Accord); BHALA, PERSPECTIVES ON RISK-BASED CAPITAL, *supra* note 17, at xxvi–xxviii, 12–15 (adopting a "building blocks" approach and exploring the substance-form distinction in the context of credit risk rules for swaps); David T. Llewellyn, *The Strategic Dilemma of World Banking*, 4 BUTTERWORTHS J. INT'L BANKING & FIN. L. 504 (1989) (considering the effect of the 1988 Basle Capital Accord on competitive neutrality, the cost of business services, and other structural variables); Joseph Jude Norton, *Capital Adequacy Standards: A Legitimate Regulatory Concern for Prudential Supervision of Banking Activities?*, 49 OHIO ST. L.J. 1299 (1989) (assessing

Parts II and III of this Article address the first question. Part II lays out the starting point for equilibrium theory: the concept of law as equilibrium developed initially by Professors Eskridge and Frickey to critique Supreme Court decision-making.[20] Part II also makes two minor adjustments to the Eskridge-Frickey approach. First, it identifies the institutional players relevant to the international banking law context and their respective principal interests: international banks and making profits, the BSC and its future as a relevant plurilateral forum, and domestic bank regulators and their concern for safety and soundness. Second, it gives an example of a legal regime whose stability could be tested using equilibrium theory, namely, capital adequacy requirements for foreign exchange transactions.

Part III addresses the problem of defining a stable equilibrium by examining the applicability of neoclassical economic distinctions to international banking law. It argues for a dynamic rather than static concept of equilibrium, and indicates that either a partial or general equilibrium analysis is appropriate. Part III posits that a legal regime is likely to be a stable dynamic equilibrium if banks would have no reason to present significant opposition to that regime. Part III also explores the strengths and limitations of this definition.

Part IV discusses the second issue and identifies the factors that determine whether a legal regime is a stable dynamic equilibrium. Part IV introduces and develops a new model—the FICAS model—to decide whether banks are likely to oppose a regime, and thus whether the regime is stable—the FICAS model. This model has five determinants that affect stability: frequency of the adjustments to existing and proposed rules in the regime; the intricacy of the rules and proposals; the cogency of the rules and proposals; the authority of the rules and proposals; and the scope of the rules and proposals. A hypothesized relationship exists between each determinant and stability. The more frequent the adjustments to rules in the regime, the more likely banks will oppose the regime. The more intricate the rules, the more likely

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the appropriateness of regulatory concern about capital adequacy); Joseph Jude Norton, *The Work of the Basle Supervisors Committee on Bank Capital Adequacy and the July 1988 Report on "International Convergence of Capital Measurement and Capital Standards,"* 23 INT'L LAW. 245 (1989) (discussing the features of the 1988 Basle Capital Accord); William A. Lovett, *Moral Hazard, Bank Supervision and Risk-Based Capital Requirements*, 49 OHIO STATE L.J. 1365 (1989) (considering the relationship between the moral hazard problem and a risk-based capital scheme); Michael P. Malloy, *U.S. International Banking and the New Capital Adequacy Requirements: New, Old and Unexpected*, 7 ANN. REV. BANKING L. 75 (1988) (treating key aspects of capital adequacy requirements).

The present effort begins by developing a general conceptual framework in which to critique any international banking law regime. In the derivative work based on this Article, the paradigm is applied to the capital adequacy regime for foreign exchange transactions. *See* Bhala, *Applying Equilibrium Theory*, *supra* note 12.

20. *See* William N. Eskridge, Jr. & Philip P. Frickey, *Foreword: Law as Equilibrium*, 108 HARV. L. REV. 27 (1994).

banks will oppose the regime. The less cogent the rules, the more likely banks will oppose the regime. The less authoritative the rules, the more likely banks will oppose the regime. Finally, the narrower the scope of application of the rules, the more likely banks will oppose the regime.

Part V addresses the third issue, concerning the type of legal regime that is most likely to be a stable dynamic equilibrium. Using the FICAS variables, Part V outlines the "ideal type" of regime, i.e., one unlikely to give banks reason for significant, legitimate opposition. The ideal type is self-regulation in which banks, not the BSC, play the leading role in drafting rules and proposals.[21] Part V explains why such a self-regulatory regime minimizes bank opposition and, therefore, is likely to be a stable dynamic equilibrium. Finally, Part VI offers concluding remarks.[22]

II. THE STARTING POINT

> *For better or worse, since the collapse of the Bretton Woods international monetary order, {currency} traders provide the only financial discipline the world knows. They are financial vigilantes. Because governments could not provide financial law and order, traders took the law into their own hands. They sell protection at a price.*
>
> —Gregory J. Millman[23]

A. The Eskridge-Frickey Approach in Brief

A rare instance in which legal scholars devote attention to the problem of equilibrium in the law is a welcome article by Professors Eskridge and Frickey.[24] To be sure, they apply a concept to which

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21. For the distinction between self-regulation and no regulation, see *infra* note 206.

22. In a derivative article entitled *Applying Equilibrium Theory and the FICAS Model: A Case Study of Capital Adequacy and Currency Trading*, *supra* note 12, equilibrium theory and the FICAS model are used to test the BSC's capital requirements for foreign exchange transactions. Thus, the derivative article is a first effort at determining whether the theory and model are of practical use in accordance with the "Aha!" and "Wow!" tests mentioned above. Using a partial equilibrium analysis, the derivative article shows that until 1995, when the BSC issued an amended proposal on market risk, the capital adequacy regime for foreign exchange transactions was not a stable dynamic equilibrium. There were several reasons for banks to oppose—and indeed they did oppose—the regime. The derivative article, however, suggests that since 1995 the regime increasingly appears to resemble the self-regulatory ideal and may, therefore, be headed for a stable dynamic equilibrium. A broad implication of the derivative article is, therefore, that the theory and model may be put to practical use.

23. MILLMAN, *supra* note 8, at xiii.

24. *See* Eskridge & Frickey, *supra* note 20. For an interesting consideration of the Eskridge-Frickey approach to the problem of the retroactive application of rules, see Jill E. Fisch, Back to the Future: Retroactivity and Legal Change 70–78 (Nov. 12, 1995) (unpublished manuscript presented at William & Mary Law School faculty colloquium, on file with author. Revised version forthcoming in HARV. L. REV. Mar. 1997).

economists and physical scientists have devoted great thought. Still, the work of Professors Eskridge and Frickey, coupled with the unstructured talk of upheaval, turmoil, and chaos by international banking lawyers, is an inspiration to develop a rigorous theory of equilibrium for international banking law. In order to analyze Supreme Court decision-making, Professors Eskridge and Frickey posit a view of law as an equilibrium that draws upon the Hart-Sacks legal process school.[25] They attempt to transcend the familiar dialectic of legal formalism—which exalts the rule of law—and legal realism—which holds that rules result from judicial personal preferences.[26]

The Eskridge-Frickey approach focuses on the institutional context of the evolution of public law. Institutions—namely, the Supreme Court, Congress, and the Executive—are "rational, self-interested, interdependent, and affected by the sequence of institutional interaction."[27] These institutions "engage in purposive behavior,"[28] as each institution strives to promote its own vision of the public interest by acting in a strategic manner. When the institutions cooperate with and compete against one another, the result is law. That is, law is "an equilibrium, a state of balance among competing forces or institutions."[29]

This view contrasts sharply with legal formalism and legal realism. Legal formalists consider law to be a closed system of objective rules discoverable through the application of deductive, analogical reasoning.[30] Legal realists understand law to be the result of competing centers of power that use legal reasoning to cloak the policy preferences of the competitors.[31] Professors Eskridge and Frickey consider law to be an "equilibrium" which represents "a balance of competing institutional pressures."[32] They add that this balance yields law superior to law produced by a single institution.[33] Each institution offers a special expertise and represents a distinct constituency. Accordingly, law re-

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25. *See* HENRY M. HART, JR. & ALBERT M. SACKS, THE LEGAL PROCESS: BASIC PROBLEMS IN THE MAKING AND APPLICATION OF LAW (William N. Eskridge, Jr. & Philip P. Frickey eds., 1994).

26. Eskridge & Frickey, *supra* note 20, at 95.

27. *Id.* at 28; *see also id.* at 33.

28. *Id.*

29. *Id.*

30. *See* JEFFRIE G. MURPHY & JULES L. COLEMAN, PHILOSOPHY OF LAW 68–69 (rev. ed. 1990); RICHARD A. POSNER, THE PROBLEMS OF JURISPRUDENCE 14–16, 58–61 (1990); LORD LLOYD OF HAMPSTEAD & M.D.A. FREEMAN, LLOYD'S INTRODUCTION TO JURISPRUDENCE 679–80 (1985); EDGAR BODENHEIMER, JURISPRUDENCE 385–92 (rev. ed. 1974).

31. *See* AMERICAN LEGAL REALISM (William W. Fisher, III et al. eds., 1993); MURPHY & COLEMAN, *supra* note 30, at 33–36; LLOYD & FREEMAN, *supra* note 30, at 683–88; BODENHEIMER, *supra* note 30, at 124–33.

32. Eskridge & Frickey, *supra* note 20, at 32.

33. *Id.* at 35.

sulting from institutional interaction is better informed and more widely acceptable than that handed down by a single institution. Further, over time, law that is an institutional equilibrium is adaptable because parties objecting to outdated or otherwise inappropriate rules "have multiple fora in which to press their petitions for change."[34]

An important question is when the equilibrium is stable: Professors Eskridge and Frickey contend that "when no implementing institution is able to interpose a new view without being overridden by another institution," a stable equilibrium is attained.[35] As a result of a familiar sequential institutional interaction, they find that in the United States constitutional system "[a]t any given time, most legal issues are in a state of stable equilibrium."[36]

> Congress enacts statutes acceptable to the President, agencies implement them through regulations and enforcement proceedings, the judiciary interprets the statutes and agency actions, and Congress considers amending the statute to update it or to override errant interpretations. A consequence of this sequence is that each institution has trumping power. The rule adopted by each institution can be undone by the next institution to act.[37]

An interesting problem to which Professors Eskridge and Frickey devote much of their attention concerns temporary displacements from stable equilibria. They consider cases in which the Supreme Court causes a displacement to occur (as a positive matter), and articulate their views as to when the Court should displace a stable equilibrium (as a normative matter).

For an international banking lawyer, the Eskridge-Frickey approach raises challenging issues. For instance, a threshold question arises from the fact that their approach is developed and applied in the context of the Supreme Court's 1993 Term. This context is antiseptic. A central fact of an international banking lawyer's professional life is that her context is cross-border in nature. Consider the foreign exchange market—the global currency bazaar. The players never sleep (i.e., the bazaar is never really closed), and more importantly, the players are from starkly different legal backgrounds—civil, common, Islamic, and emerging legal cultures.

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34. *Id.*

35. *Id.* This contention seems analogous to a Pareto-style notion of efficiency in which no party can be made better off without making some other party worse off. The contention also might be thought of as "process efficiency."

36. *Id.* at 29.

37. *Id.* at 30.

A second central fact of the international banking lawyer's professional existence is the relentless onslaught of new technology. For instance, the foreign exchange market incorporates electronic technology that subverts (intentionally or not) widespread canons such as the need for a contract to be written in order to be enforceable.[38] Given these facts, the international banking lawyer is sure to wonder whether the Eskridge-Frickey approach can lend any useful insights to her profession.

Unless this approach is modified, her doubt is reasonable. Fortunately, the approach can be adjusted and refined to yield a theory which in turn sharpens her perception of "chaos" in international banking law. The Eskridge-Frickey approach can be re-worked to change the context from United States constitutional law to international banking law. Specifically, the relevant institutional players in international banking law and their interests can be highlighted. It is also helpful to give an example of a legal regime. Thereafter, it becomes possible to address squarely the questions of defining equilibrium in the new context, identifying its determinants, and positing an ideal-type regime.

B. Changing the Context

In the constitutional law context, the important institutions are domestic. In international banking law, the players operate at global, multilateral, and domestic levels. There are three key players: banks, which know no boundaries; the BSC, which consists of representatives from a subset of nations; and domestic bank regulators in individual countries. While each player has a range of institutional interests, its behavior typically is dominated by one interest: for banks, profits; for the BSC, institutional relevance; and for domestic regulators, safety and soundness.

1. Banks and Profit

A formidable force in international banking is the private sector—a force largely unaccounted for in the Eskridge-Frickey approach. Banks are the only institutional players that are truly global: while the BSC is a multilateral institution and bank regulators operate at the domestic level, banks are from every country and do not concern themselves with geopolitical boundaries, except to the extent these hamper their transactions. Consider the foreign exchange market: London, New York, and Tokyo are the leading trading centers, yet significant trading activity

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38. *See* Raj Bhala, *Self-Regulation in Global Electronic Markets Through Reinvigorated Trade Usages*, 31 IDAHO L. REV. 863 (1995) *and* Raj Bhala, *A Pragmatic Strategy for the Scope of Sales Law, the Statute of Frauds, and the Global Currency Bazaar*, 72 DENV. U. L. REV. 1 (1994).

occurs in Singapore, Hong Kong, Sydney, Geneva, Frankfurt, and Paris.[39] There is almost no technological barrier to participating in the foreign exchange market from any point on the globe. In fact, well over half of all over-the-counter ("OTC") foreign exchange transactions are cross-border in nature.[40]

The generic term "banks" is somewhat misleading. In fact, there are two broad classes of private sector players in the foreign exchange market: commercial banks and securities firms.[41] The distinction is relevant because, as discussed below, the former, but not the latter, are addressees of the BSC's pronouncements.[42] Nonetheless, the term "banks" (or, sometimes, "international banks") is used in BSC publications without any definition.[43] For present purposes, "bank" may be understood to mean a commercial bank that is actively engaged in cross-border transactions and is an addressee of the BSC's existing and proposed legal requirements. The transactions by these banks include not only foreign exchange, but also short-term Eurocurrency placements, syndicated lending, issuing letters of credit, and even classic securities activities like underwriting and portfolio management.[44] The BSC's requirements cover topics such as capital adequacy, comprehensive consolidated supervision, and disclosure of information.[45]

For example, foreign exchange market transactions include spots, forwards, currency options, and currency swaps, all of which are off-balance sheet activities.[46] What motivation lies behind these transac-

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39. MONETARY AND ECONOMIC AFFAIRS DEPARTMENT, BANK FOR INTERNATIONAL SETTLEMENTS, CENTRAL BANK SURVEY OF FOREIGN EXCHANGE MARKET ACTIVITY IN APRIL 1992 2, 13–16 (Mar. 1993) [hereinafter CENTRAL BANK SURVEY].

40. CENTRAL BANK SURVEY, *supra* note 39, at 2, 12–13.

41. Brokers constitute a third class. While the bulk of foreign exchange transactions are carried out directly between dealing banks or securities firms, about one-third of foreign exchange transactions in the leading trading centers involve brokers. CENTRAL BANK SURVEY, *supra* note 39, at 1, 11–12, 23–24.

42. *See infra* notes 201–203 and accompanying text. Put differently, commercial banks, but not securities firms, are within the scope of the prescriptive and enforcement jurisdiction of municipal bank regulators. Securities firms are, of course, subject to regulation by domestic securities regulators such as the U.S. Securities and Exchange Commission or the U.K. Securities and Investments Board.

43. *See, e.g.*, Basle Committee on Banking Regulations and Supervisory Practices, *International Convergence of Capital Measurement and Capital Standards*, 30 INT'L L. M. 980 (1991) (informally known as the 1988 Basle Capital Accord).

44. *See, e.g.*, TAEHO KIM, INTERNATIONAL MONEY AND BANKING (1993) (discussing international banking transactions).

45. With respect to capital adequacy, see Bhala, *Applying Equilibrium Theory*, *supra* note 12, and the sources cited *supra* notes 17–19. With respect to comprehensive consolidated supervision and information disclosure, see BHALA, FOREIGN BANK REGULATION, *supra* note 5, at 105–41, GENERAL ACCOUNTING OFFICE, INTERNATIONAL BANKING—STRENGTHENING THE FRAMEWORK FOR SUPERVISING INTERNATIONAL BANKS (Mar. 1994), and Duncan E. Alford, *Basle Committee Minimum Standards: International Regulatory Response to the Failure of BCCI*, 26 GEO. WASH. J. INT'L L. & ECON. 241 (1992).

46. That is, they do not involve booking assets or liabilities. For an explanation of these transactions, see Bhala, *Risk Trade-Offs*, *supra* note 3.

tions? Banks seek to make money, or to hedge risks so as to avoid losing money.[47]

> Like bounty hunters in the Old West, the [currency] traders enforce the economic law, not for love of law, but for profit. They have only one goal—making money. No political ideals or immaterial [sic] values can ever distract them from this goal. When the governments of Europe decided to implement a common monetary policy, they had a long-term program in mind to overcome centuries of division by establishing a historic union. Traders didn't care about that dream. For several years during the 1980s, the European monetary system was a profitable trading opportunity. Then in 1992, European governments showed by small words and acts that they might not be quite as committed to the program of unity as they originally said they were. Traders immediately reversed course, sold off some European currencies, bought others, and in the process demolished the European monetary system. Some European officials saw in the activities of the traders evidence of a conspiracy to wreck European unity. But that view gives traders credit for being more broad minded than they are. If European unity had continued to be a profitable project, the traders would certainly have supported it.[48]

There is no single formula for profiting from these or any other type of transaction. Different banks may employ different long- or short-term strategies, cost reduction strategies, or hedging strategies.

For example, banks may pursue a long-term investment strategy and take a long or short position in a particular currency or derivative product, like an option, with the belief that the value of the position will increase.[49] At some future date, long positions can be sold, and

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47. *See, e.g.*, Joseph S. Rizzello, *The Development and Evolution of Derivative Products*, *in* THE HANDBOOK OF DERIVATIVES & SYNTHETICS 1–8 (Robert A. Klein & Jess Lederman eds., 1994); GEN. ACCOUNTING OFFICE, FINANCIAL DERIVATIVES—ACTIONS NEEDED TO PROTECT THE FINANCIAL SYSTEM 25–29 (May 1994); INST. OF INT'L FIN., AN INTEGRATED BANK REGULATORY APPROACH TO DERIVATIVES ACTIVITIES 2–4 (May 1993). The discussion herein assumes that banks act as dealers, i.e., they seek profits for their own trading accounts. Alternatively, they may act as an agent for a customer, in which case they will obtain a fee for their services. For discussions of how to enhance risk management controls associated with derivatives activities, see DERIVATIVES POLICY GROUP, FRAMEWORK FOR VOLUNTARY OVERSIGHT (Mar. 1995); GEN. ACCOUNTING OFFICE, *supra*; GROUP OF THIRTY GLOBAL DERIVATIVES STUDY GROUP, DERIVATIVES: PRACTICES AND PRINCIPLES (July 1993).

48. MILLMAN, *supra* note 8, at xiii.

49. A "long" position means the bank buys and holds an asset. A "short" position means the bank sells an asset that it does not own but later covers that position by purchasing the asset and delivering it to the buyer.

While there is some debate about the meaning of the term "derivatives," it is commonly understood to encompass "financial instruments which derive their value from the performance of assets, interest or currency exchange rates, or indexes." Office of the Comptroller of the Currency, Banking Circular 277, *Risk Management of Financial Derivatives* 4 (1993), *reprinted in Safety and Soundness Issues Related to Bank Derivatives Activities—Part 1, Hearing before the House*

short positions can be covered profitably. Alternatively, banks may make money by adopting a short-term speculative strategy, seeking to profit by betting against anticipated market movements. These investment and speculative strategies may be used in trading spots, forwards, and options. Banks may use currency swaps to reduce funding costs and, thereby, increase profits. Finally, banks may use forwards, options, and swaps to hedge a risk they bear because of some other transaction in which they have engaged.[50] Such risks could arise from financial operations (e.g., funding or portfolio investment decisions) or international trade (i.e., the cross-border movement of goods). While hedging entails a cost (e.g., payment of an option premium), it may help avoid losses resulting from excessive risk exposure. In sum, while the banks use a variety of means, their end goal of profits remains uniform.[51]

It is important to qualify this point: the pursuit of profit is complemented by a good reputation. As discussed below, most banks value a reputation for integrity.[52] In most international financial markets, the banks are repeat players. Behaving opportunistically or in an unsafe and unsound manner may maximize short-term gains, but it is sure to harm a bank's long-term pursuit of profits because its pool of potential counterparties will dry up.

2. The BSC and Institutional Relevance

The BSC meets periodically at the Bank for International Settlements ("BIS") in Basle, Switzerland, though there is no formal legal relationship between the BSC and BIS.[53] After 1971, when the Bretton

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Comm. on Banking, Finance and Urban Affairs, 103d Cong., 1st Sess. 688 (Oct. 28, 1993). Accordingly, there is no need to actually buy the underlying asset, interest rate or currency instrument, or index. *See also* Rizzello, *supra* note 47, at 2–3; GENERAL ACCOUNTING OFFICE, FINANCIAL DERIVATIVES, *supra* note 47, at 3, 24. For instance, currency options and currency swaps are examples of derivatives in that their value depends in part on an exchange rate for an underlying pair of currencies. In addition, forwards are sometimes classified as derivatives. *See* Office of the Comptroller of the Currency, Banking Circular 277, *supra*, at 4; GENERAL ACCOUNTING OFFICE, FINANCIAL DERIVATIVES, *supra* note 47, at 26–27.

50. Hedging is a highly complex business beyond the scope of this Article. For a brief discussion, see Bhala, *Risk Trade-Offs*, *supra* note 3, at 43–48.

51. To be sure, different banks could have different secondary goals that serve their primary profit-making interest. For example, a larger bank (as measured by profits, assets, or market share) active in the foreign exchange market might try to obtain advantages over a smaller bank in the form of favorable rules or proposals. In practice, however, the broad membership of leading bank associations such as the International Swap Dealers Association and British Bankers Association, discussed below, suggests a remarkable degree of consonance among banks. *See infra* notes 82–83 and accompanying text.

52. *See infra* notes 212–213 and accompanying text. *See generally* LEON E. TRAKMAN, THE LAW MERCHANT: THE EVOLUTION OF COMMERCIAL LAW 39 (1983) (noting the necessity for a trader to preserve its reputation for reliability and morality, and discussing the appropriateness of self-regulation).

53. *See* BASLE COMM. ON BANKING SUPERVISION, PREFACE TO CONSULTATIVE PROPOSAL,

Woods fixed-exchange rate system broke down, the BIS provided the forum for finance ministers to gather and discuss international monetary matters. Since then, the BIS has played the same role for central bankers from the G-10 countries—Belgium, Canada, France, Germany, Italy, Japan, Netherlands, Sweden, United Kingdom, and United States—plus Switzerland and Luxembourg. As a result, the BSC consists of representatives from the central banks and bank regulators of the G-10 countries. In essence, the BSC is an informal forum for major industrial and financial countries to share views on significant international banking issues.

It is inappropriate to accord the BSC the status of a "multilateral" body because it is noticeably dissimilar from a truly multilateral body like the World Trade Organization (WTO).[54] Rather, the BSC is composed of a subset of the world's bank regulators; it excludes, for example, most of the central banks of the less developed and newly industrialized countries.[55] As a matter of public international law, this plurilateral body lacks any prescriptive, adjudicatory, or enforcement jurisdiction over banks.[56] That is, the BSC has no authority to write banking law for the G-10 countries, to resolve disputes among G-10 governments or private parties, or to enforce banking laws in G-10 countries.[57]

As a result, the BSC operates on a tenuous foundation. It is highly unlikely that the G-10 countries will confer jurisdictional authority upon the BSC. Allowing the BSC to write banking law would threaten

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THE PRUDENTIAL SUPERVISION OF NETTING, MARKET RISKS AND INTEREST RATE RISK 1, n.1 (Apr. 1993).

54. *See* Agreement Establishing the World Trade Organization, *in Uruguay Round Trade Agreement*, H.R. DOC. NO. 316, 103d Cong., 2d Sess. 659 (1994).

55. *See generally* BHALA, FOREIGN BANK REGULATION, *supra* note 5, at 116–19 (discussing the development of an exclusive "club" of banking regulators from major countries).

56. These three types of jurisdictions are distinguished as follows:

Under international law, a state is subject to limitations on

(a) jurisdiction to prescribe, i.e., to make its law applicable to the activities, relations, or status of persons, or the interests of persons in things, whether by legislation, by executive act or order, by administrative rule or regulation, or by determination of a court;

(b) jurisdiction to adjudicate, i.e., to subject persons or things to the process of its courts or administrative tribunals, whether in civil or in criminal proceedings, whether or not the state is a party to the proceedings;

(c) jurisdiction to enforce, i.e., to induce or compel compliance or to punish noncompliance with its laws or regulations, whether through the courts or by use of executive, administrative, police, or other nonjudicial action. RESTATEMENT (THIRD) OF THE FOREIGN RELATIONS LAW OF THE UNITED STATES § 401 (1987). *See generally* J.L. BRIERLY, THE LAW OF NATIONS 222–316 (1963) (discussing the different bases for jurisdiction).

57. The BSC is not a "state," hence §§ 402, 421, and 431 of RESTATEMENT, *supra* note 56, which lay out the bases for prescriptive, adjudicatory, and enforcement jurisdiction, respectively, are inapplicable. A "state" is "an entity that has a defined territory and a permanent population, under the control of its own government, and that engages in, or has the capacity to engage in, formal relations with other such entities." RESTATEMENT, *supra* note 56, § 201.

each country's sovereignty. The United States experience with the recently completed Uruguay Round is instructive. Many members of Congress feared that the WTO might be able to compel the United States to alter an international trade rule determined by a WTO dispute resolution panel to be inconsistent with the Uruguay Round agreements. To address this concern, Congress inserted in the Uruguay Round Agreements Act a supremacy clause: in the event of an inconsistency between United States law and a provision in a Uruguay Round agreement, the former takes precedence over the latter.[58] Moreover, Senator Robert Dole and the White House exchanged a letter agreement stating that if WTO dispute resolution panels rule against the United States three times in five years, then the panel decisions will be reviewed by a group of United States judges, and the United States could consider withdrawing from the WTO.[59]

The sovereignty concern is more pronounced in the international banking than the international trade context. As a result of the existence of a "constitution" for international trade—the General Agreement on Tariffs and Trade—and eight rounds of multilateral trade negotiations since 1947, international trade law is well developed and increasingly harmonized.[60] In contrast, banking structures tend to vary significantly across countries. These different countries support different domestic legal regimes on many issues, most notably rules regarding the scope of permissible banking activities.[61] No doubt the United States would be unwilling to cede sovereign authority to the BSC, which might impose rules wholly inapposite in the United States banking context. Indeed, "[m]embers of the Basel Committee still

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58. Section 102(a)(1) of the Uruguay Round Agreements Act states that "[n]o provision of any of the Uruguay Round Agreements, nor the application of any such provision to any person or circumstance, that is inconsistent with any law of the United States shall have effect." Uruguay Round Agreements Act, 19 U.S.C. § 3512(a)(1) (1994). *See also* RAJ BHALA, INTERNATIONAL TRADE LAW: CASES AND MATERIALS chs. 2, 4 (1996).

59. *See* BHALA, INTERNATIONAL TRADE LAW, *supra* note 58, ch. 2.

60. *Id.*

61. *See, e.g.*, GENERAL ACCOUNTING OFFICE, BANK REGULATORY STRUCTURE: CANADA 12–13, 18–19 (Sept. 1995) (noting non-bank activities of Canadian banks); GENERAL ACCOUNTING OFFICE, BANK REGULATORY STRUCTURE: FRANCE 2, 12–15 (Aug. 1995) (noting France's universal banking system); GENERAL ACCOUNTING OFFICE, BANK REGULATORY STRUCTURE: THE UNITED KINGDOM 16 (Dec. 1994) (noting U.K. banks conduct securities activities either in a subsidiary or in the bank itself); GENERAL ACCOUNTING OFFICE, BANK REGULATORY STRUCTURE: THE FEDERAL REPUBLIC OF GERMANY 10–11 (May 1994) (discussing Germany's universal banking system); Symposium, *Global Trends Toward Universal Banking*, 19 BROOK J. INT'L L. 1–129 (1993) (discussing international banking practices, including permissible non-banking activities in different countries); Charles M. Horn, *The Legal Barrier Between U.S. Investment and Commercial Banking: Its Origins, Application, and Prospects*, *in* 1 CURRENT LEGAL ISSUES AFFECTING CENTRAL BANKS, *supra* note 19, at 279–310 (discussing the Glass-Steagall Act); NICHOLAS A. LASH, BANKING LAWS AND REGULATIONS 126–41 (1987) (discussing non-banking activities of U.S. banks).

experience impediments in simply sharing information," as the BCCI and Daiwa cases amply illustrate.[62]

Given this "sovereignty limit" on the BSC's jurisdiction, what self-interest does the BSC promote? At bottom, it seeks continued relevance, i.e., to retain its status as a highly regarded forum for central bankers. This characterization is a legal process conception of the BSC:[63] the BSC wants to "preserve the integrity of its institutional character."[64] The extent to which the BSC's institutional relevance goal is met can be measured by the extent to which it produces influential legal recommendations. The BSC attempts to achieve its interest by publishing rules and proposals designed for implementation in G-10 countries, and possibly also in other countries.[65]

The BSC's success in this regard is evidenced by the elaborate capital adequacy regime it has produced.[66] In general, a legal regime in international banking may be defined as a set of existing and proposed rules on a discrete topic. The BSC's capital adequacy regime is, therefore, a set of rules and proposals on the amount of capital a bank must maintain to cushion against losses from credit and market risks.[67]

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62. RICHARD J. HERRING & ROBERT E. LITAN, FINANCIAL REGULATION IN THE GLOBAL ECONOMY 136 (1995). Regarding the BCCI affair, see BHALA, FOREIGN BANK REGULATION, *supra* note 5, at 130–35 (discussing the failure of the Bank of England to share information with the Federal Reserve). With respect to the Daiwa scandal, see the sources cited *supra* note 11.

63. *See* HENRY M. HART, JR. & ALBERT M. SACKS, THE LEGAL PROCESS: BASIC PROBLEMS IN THE MAKING AND APPLICATION OF LAW (William N. Eskridge, Jr. & Philip P. Frickey eds., 1994). For discussions of the legal process conception of the Supreme Court, see ALEXANDER M. BICKEL, THE LEAST DANGEROUS BRANCH 16–23 (1962); Lon L. Fuller, *The Forms and Limits of Adjudication*, 92 HARV. L. REV. 353, 365–72 (1978); and Herbert Wechsler, *Toward Neutral Principles of Constitutional Law*, 73 HARV. L. REV. 1, 7–9 (1959).

64. *See* Eskridge & Frickey, *supra* note 20, at 34.

65. *See, e.g.*, NORTON, DEVISING INTERNATIONAL BANK SUPERVISORY STANDARDS, *supra* note 2, at 175–201 (discussing the origins and work of the Basle Committee and highlighting its efforts in the area of capital adequacy); RICHARD J. HERRING & ROBERT E. LITAN, FINANCIAL REGULATION IN THE GLOBAL ECONOMY 8–9 (1995) (noting the existence of arbitrary and complicated facets in the Basle Committee's work on capital adequacy and arguing the Committee "should return to its original role of serving as an information clearinghouse and forum in which regulators from different countries can exchange views about how to measure and control various sorts of risks"); *id.* at 98–113 (covering the history of international bank supervision coordinated by the Basle Committee); *id.* at 132–37 (arguing that the Basle Committee should focus on its role as a forum for exchanging views about measuring and controlling risks); C.J. Thompson, *The Basle Concordat: International Collaboration in Banking Supervision*, in 1 CURRENT LEGAL ISSUES AFFECTING CENTRAL BANKS 331–32 (Robert C. Effros ed.) (observing that the Basle Committee "was established to provide a forum for regular confidential discussion on the handling of specific problems"); Charles Freeland, *The Work of the Basle Committee*, *in* 2 CURRENT LEGAL ISSUES AFFECTING CENTRAL BANKS 231–40 (Robert C. Effros ed.) (reviewing the history and work of the Basle Committee).

66. *See supra* notes 17–19. For an argument that the capital adequacy regime has "worked" despite international financial crises, see Ethan B. Kapstein, *Shockproof*, 75 FOREIGN AFF., Jan.-Feb. 1996, at 2. My skepticism of Kapstein's argument is discussed in David Mutch, *20 Years of Hard Work Ease Impact of Financial Fiascos*, CHRISTIAN SCI. MONITOR, Mar. 1, 1996, at 8.

67. "Credit risk" is the risk of counterparty failure, i.e., the risk a bank's counterparty will

These risks are associated with on-balance sheet transactions (e.g., conventional loans) and off-balance sheet transactions (e.g., foreign exchange spots, forwards, options, and swaps). Additionally, the regime covers matters relating to netting and the measurement of interest rate risk.[68] This regime is taken seriously by G-10 countries. For instance, the 1988 Basle Accord (hereinafter, the "Accord") has been implemented in the municipal law of the G-10 countries and many countries outside of the G-10 group.[69] In the United States, the Accord has been implemented through federal regulations.[70] In addition, federal bank regulators have issued the BSC's post-Accord publications as proposed federal regulations.[71]

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not fulfill its obligations to the bank. *See International Convergence of Capital Measurement and Capital Standards, supra* note 43, at 988–89, ¶¶ 8, II.31. "Market risk" is defined *supra* note 23.

The BSC's capital adequacy regime is not the only set of rules and proposals on capital requirements. In January 1996, the European Union's Capital Adequacy Directive (CAD), which applies to European banks and investment firms, took effect. Council Directive 93/6/ EEC of 15th March 1993 on the capital adequacy of investment firms and credit institutions. 1993 O.J. (L 141) 1. For a discussion of the CAD, see Matthew Elderfield, *Developments in EC and International Capital Adequacy Regulations*, 2 J. FIN. REG. & COMPLIANCE 314 (1994).

68. "Netting" refers to any technique used to calculate a net (as distinct from gross) position by offsetting positions associated with a series of transactions. *See* 1988 Basle Capital Accord, *supra note* 43, Annex 3, 30 INT'L LEGAL MATERIALS 1006. For example, a bank may be obligated to deliver a given currency on a particular date. Through a technique known as "bilateral netting by novation," this obligation is amalgamated with all other obligations for the same currency and value date, thereby substituting a single net amount for the previous gross obligations. *Id.* at n.6. "Interest rate risk" is the "the risk that changes in market interest rates might adversely affect an institution's financial condition." Basle Committee on Banking Supervision, "Measurement of Banks' Exposure to Interest Rate Risk," Annex 3, at 33 (Apr. 1993).

69. The Accord took full effect at the end of 1992. *See* Basle Capital Accord, *supra* note 43, at 996, ¶ 49.

70. For example, in the U.S., the Federal Reserve's implementing regulations are found at 12 C.F.R. pts. 208 app. A (for state member banks) and 225 app. A (for bank holding companies) (1996). The Federal Reserve's risk-based capital regulations supplement, not supplant, its traditional regulations concerning minimum primary capital-to-assets and total capital-to-assets ratios. *See* MICHAEL P. MALLOY, BANKING LAW AND REGULATION § 5.3.3.4 at 5.90–.117 (rel. Dec. 1995). The traditional regulations are not relevant to this Article.

The other U.S. federal bank regulators have issued similar regulations. *See* 12 C.F.R. pts. 3 app. A (risk-based capital regulations of the Office of the Comptroller of the Currency (OCC) for national banks) and 325, app. A (risk-based capital regulations of the Federal Deposit Insurance Corporation (FDIC) for insured state non-member banks) (1996). For a comparative analysis of the Federal Reserve, OCC, and FDIC regulations, see BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, REPORT TO CONGRESSIONAL COMMITTEES REGARDING DIFFERENCES IN CAPITAL AND ACCOUNTING STANDARDS AMONG THE FEDERAL BANKING AND THRIFT AGENCIES (Jan. 9, 1995), *reprinted in* 60 Fed. Reg. 3227 (1995).

With respect to the implementation of the Basle Accord in non-G-10 countries, see NORTON, DEVISING INTERNATIONAL BANK SUPERVISORY STANDARDS, *supra* note 2, at 229–33, 239.

71. *See, e.g.*, Federal Reserve Press Release on Risk-Based Capital Standards; Market Risk; and Internal Models Backtesting (Mar. 7, 1996) (proposing to implement the BSC's January 1996 capital adequacy rules on market risk); Federal Reserve Press Release on Risk-Based Capital Standards: Derivative Transactions (Aug. 29, 1995) (issuing a final rule to implement the BSC's April 1995 rule on the recognition of bilateral netting arrangements); Federal Reserve Press Release on Risk-Based Capital Standards: Market Risk (July 14, 1995) (proposing to implement the BSC's April 1995 proposed capital adequacy rules on market risk); Federal Reserve Press

Interestingly, the frequency with which the BSC created and modified its capital adequacy regime may help explain why an international banking lawyer finds her field chaotic. The BSC developed its capital adequacy regime between 1988–96 by publishing the following eight documents:[72]

(1) *The 1988 Basle Accord.*[73] A report setting forth capital rules for credit risk.[74]

(2) *The 1993 Market Risk Proposal.*[75] A "consultative proposal" to amend the 1988 Accord by requiring an express capital charge for market risk.

(3) *The 1993 Netting Proposal.*[76] A "consultative proposal" to amend the 1988 Accord to recognize certain netting techniques.

(4) *The 1993 Interest Rate Risk Proposal.*[77] A "consultative proposal" to amend the 1988 Accord to measure interest rate risk.

(5) *The 1994 Netting Amendment.*[78] An amendment to the 1988 Accord to recognize certain netting techniques.

(6) *The 1995 Netting Amendment.*[79] A second amendment to the 1988 Accord to recognize certain netting techniques.

Release on Capital and Capital Adequacy Guidelines (Dec. 2, 1994) (implementing the BSC's July 1994 rules on the recognition of bilateral netting arrangements); Federal Reserve Press Release on Capital and Capital Adequacy Guidelines (Aug. 22, 1994) (proposing to implement the BSC's July 1994 rules on the recognition of bilateral netting arrangements).

72. All documents listed below are on file with the author and may be obtained from the Bank for International Settlements, Postfach, CH-4002, Basle, Switzerland.

The BSC's economic and financial studies are sent to persons on its mailing list. One of the frustrations associated with research in international banking law, however, is the difficulty in obtaining the BSC's legal documents. Few appear on Lexis or in International Legal Materials, and if they are so published it is only after great delay. The best way to obtain a document is through personal contacts. The BSC ought to follow the example of the World Trade Organization and ensure that the results of its legal work are widely disseminated and easily accessible. One step would be to include the BSC's legal documents on the mailing list, and expand the addressees to cover legal data bases and law libraries. This step would be consistent with the BSC's interest of promoting itself as a pre-eminent international banking law forum.

73. *See supra* note 43. The "International Convergence of Capital Measurement and Capital Standards" is informally known as the "1988 Basle Accord."

74. "Credit risk" is the risk that a bank's counterparty will default on its obligations to the bank. *See* 1988 Basle Capital Accord, *supra* note 43, at 982, ¶ 8.

75. This document is formally entitled "The Supervisory Treatment of Market Risks" (Apr. 1993). It is prefaced by "The Prudential Supervision of Netting, Market Risks and Interest Rate Risk" (Apr. 1993).

76. This document is formally entitled "The Supervisory Recognition of Netting for Capital Adequacy Purposes" (Apr. 1993).

77. *See supra* note 68.

78. This document is formally entitled "The Capital Adequacy Treatment of the Credit Risk Associated with Certain Off-Balance Sheet Items" (July 1994). It is prefaced by a July 15, 1994 press statement.

79. This document is formally entitled "Basle Capital Accord: Treatment of Potential Exposure for Off-Balance Sheet Items" (Apr. 1995).

(7) *The 1995 Market Risk Proposal.*[80] A "consultative proposal," which supersedes the 1993 Market Risk Proposal, to amend the 1988 Accord by requiring an express capital charge for market risk.

(8) *The 1996 Market Risk Amendment.*[81] An amendment to the 1988 Basle Accord to cover capital rules on market risk, which confirms the proposed amendment in the 1995 Market Risk Proposal.

Even for the seasoned practitioner (or scholar), each one of these documents is extraordinarily complex, another reason she complains of upheaval. Nevertheless, she must pay a great deal of attention to each document and offer comments to the BSC (or relevant domestic bank regulator). These comments serve to exert pressure on the BSC to further modify its existing or proposed rules. For example, in 1993 three major banking groups, the International Swaps and Derivatives Association ("ISDA"), the British Bankers' Association ("BBA"), and the Institute of International Finance ("IIF"), published lengthy critiques of the BSC's consultative papers.[82] These critiques effectively forced the BSC to issue a revised consultative paper in 1995, which in turn was the subject of another round of comments from banks.[83] The BSC again responded to the banks' criticisms by issuing its 1996 Market Risk Amendment.

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80. This document is formally entitled "Planned Supplement to the Capital Accord to Incorporate Market Risks" (Apr. 1995). It is prefaced by a press release dated April 13, 1995 and a summary document entitled "Proposal to Issue a Supplement to the Basle Capital Accord to Cover Market Risks." It is followed by a commentary entitled "An Internal Model-Based Approach to Market Risk Capital Requirements."

81. This document is formally entitled "Amendment to the Capital Accord to Incorporate Market Risks" (Jan. 1996). It is prefaced by a Dec. 12, 1995 press statement, a Dec. 12, 1995 communique, and a summary document entitled "Overview of the Amendment to the Capital Accord to Incorporate Market Risks" (Jan. 1996). The Amendment is followed by a paper entitled "Supervisory Framework for the Use of 'Backtesting' in Conjunction with the Internal Models Approach to Market Risk Capital Requirements" (Jan. 1996).

82. *See* Letter from Joseph Bauman, Chairman, International Swaps and Derivatives Association, Inc., to Basle Committee on Banking Supervision re: Consultative Proposal by the Basle Committee: Capital Adequacy for Market Risk (Dec. 28, 1993) (on file with author); British Bankers' Association, The Supervisory Treatment of Market Risks (Oct. 1993) (on file with author); Institute of International Finance, Report of the Working Group on Capital Adequacy (Oct. 1993) (on file with author); Institute of International Finance, An Integrated Bank Regulatory Approach to Derivatives Activities (May 1993) (on file with author). The three groups represent a very substantial number of banks active in the foreign exchange market.

83. *See, e.g.*, Letter from David H. Sidwell, Managing Director and Controller, J.P. Morgan, to William W. Wiles, Secretary, Board of Governors of the Federal Reserve System re: Basle Committee Proposal on the Supervisory Treatment of Market Risks (Aug. 2, 1995) (with attachments) (on file with author); Letter from Gay H. Evans, Chairman, International Swaps and Derivatives Association, to Basle Committee on Banking Supervision re: Planned Supplement to the Capital Accord to Incorporate Market Risks (July 31, 1995) (on file with author). In addition, the Technical Committee of the International Organization of Securities Commissioners offered comments on the 1995 Market Risk Proposal. *See* Technical Committee, IOSCO, "Implications for Securities Regulators of the Increased Use of Value at Risk Models by Securities Firms" (July 1995) (on file with author).

3. Domestic Bank Regulators and Safety and Soundness

Aside from their participation in the BSC, bank regulators such as the Federal Reserve operate at the domestic level.[84] At this level, their role is to promulgate and enforce regulations that ensure the safety and soundness of their respective banking systems. Indeed, safety and soundness is "[t]he central concept of banking regulation."[85] Operationally, this concept is integrally linked to capital adequacy rules. Indeed, it may be argued that the capital adequacy regime is the single most important set of rules and proposals in both international and domestic banking law.

"Financial system soundness and stability are strengthened by ensuring that banks have adequate capital cushions to support the risks they undertake . . . ."[86] Thus, since the mid-1980s regulators have taken an increasingly "capital intensive" approach to safety and soundness.[87] Various arguments have been put forth to account for this

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84. Hereinafter, unless otherwise noted, the term "Federal Reserve" refers to the Board of Governors and the 12 Federal Reserve banks.

85. MALLOY, *supra* note 70, § 5.3.1, at 5.54. For a discussion of the meaning of this concept, see Heidi Mandanis Schooner, *Fiduciary Duties' Demanding Cousin: Bank Director Liability for Unsafe or Unsound Banking Practices*, 63 GEO. WASH. L. REV. 175, 187–202 (1995).

86. INSTITUTE OF INTERNATIONAL FINANCE, REPORT, *supra* note 82, at 1. *See also* INSTITUTE OF INTERNATIONAL FINANCE, AN INTEGRATED BANK REGULATORY APPROACH, *supra* note 47, at 5.

87. MALLOY, *supra* note 70, § 5.3.1, at 5.53–.54. For example, after a brief transition period (1988–1992), the Basle Accord took effect in the U.S. and other G-10 countries at the end of 1992. 1988 Basle Capital Accord, *supra* note 43, at 995–96, ¶¶ 45–50. In the U.S., at least, implementation of the Accord was hardly the end of the regulators' interest on the link between safety and soundness and capital adequacy. First, the Federal Reserve followed up on the BSC's 1993–1996 proposals with its own proposed regulations. *See supra* note 71.

Second, just one year after the Accord, in 1989 Congress passed the Financial Institutions Reform, Recovery, and Enforcement Act (FIRREA), Pub. L. 101-73, § 1001, 103 Stat. 183 (1989) (codified, *inter alia*, at scattered sections of 12 U.S.C.). For general discussions of FIRREA, see Daniel B. Gail & Joseph J. Norton, *A Decade's Journey from "Deregulation" to "Supervisory Regulation": The Financial Institutions Reform, Recovery, and Enforcement Act of 1989*, 45 BUS. LAW. 1103 (1990); Daniel B. Gail & Joseph J. Norton, *The Financial Institutions Reform, Recovery, and Enforcement Act of 1989: Dealing with the Regulators*, 107 BANKING L.J. 196 (1990); Michael P. Malloy, *Nothing to Fear but FIRREA Itself: Revising and Reshaping the Enforcement Process of Federal Bank Regulation*, 50 OHIO ST. L.J. 1117 (1989). This statute mandated an inter-agency study on ways to improve the safety and competitiveness of the U.S. banking system. 12 U.S.C. § 1811, § 1002(b). The result, known as the "Treasury Modernization Study," called capital "[t]he single most powerful tool to make banks safer" and faulted bank regulators for "not adequately focus[ing] on the crucial importance of capital." U.S. DEPARTMENT OF THE TREASURY, MODERNIZING THE FINANCIAL SYSTEM: RECOMMENDATIONS FOR SAFER, MORE COMPETITIVE BANKS (1991), *reprinted in* Fed. Banking L. Rep. (CCH) No. 1377, Part II (Feb. 14, 1991) at 29, [hereinafter Treasury Modernization Study (small caps)]. After all, capital is "an 'up-front' cushion to absorb losses ahead of the taxpayer, and banks are less likely to take excessive risk when they have substantial amounts of their own money at stake." TREASURY MODERNIZATION STUDY, supra at 29. *See also*, BHALA, PERSPECTIVES ON RISK-BASED CAPITAL, *supra* note 17, at 25–29, 43–44. The Study called not for an increase in capital ratios, but instead a "strengthening" of the role that capital plays in bank regulation. TREASURY MODERNIZATION STUDY, *supra*, at 29. A key recommendation was that regulators should develop capital guidelines to account for interest rate

reorientation. One argument is that the origins of the 1988 Basle Accord lie in the Third World debt crisis of the early to mid-1980s.[88] A different argument is that the Accord's origins lie in domestic politics.[89]

Whatever the correct explanation, there is no doubt that the interest of bank regulators in promoting safety and soundness through capital adequacy requirements influences the BSC. To the extent the BSC wants to maintain its institutional relevance, it must be sensitive to the interest of its members.[90] Accordingly, it is not surprising that the BSC devoted so much attention to capital adequacy from 1988 to 1996, and that one of the stated goals of the 1988 Accord is to "strengthen the soundness and stability of the international banking system."[91]

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risk associated with a bank's activities because the extant regulations at the time, based on the Basle Accord, dealt only with credit risk. Absent the inclusion of interest-rate risk factors in a risk-based capital ratio, a bank might attempt to satisfy the ratio by replacing high-credit risk assets with high interest-rate risk assets. TREASURY MODERNIZATION STUDY, *supra*, at 33. As mentioned above, one of the proposals discussed by bank regulators at the BSC in 1993 addresses this concern.

Third, in 1991 Congress enacted the Federal Deposit Insurance Corporation Improvement Act (FDICIA) of 1991, Pub. L. No. 102-242, 105 Stat. 2236 (1991) (codified in scattered sections of 12 U.S.C.). It links expressly the "safety and soundness" concept with capital adequacy. The FDICIA requires regulators to take "prompt corrective action" so as to resolve problems at a bank in a manner that minimizes the long-term cost to the Federal Deposit Insurance Corporation's insurance fund. 12 U.S.C. § 1831o(a)(1)–(2). Prompt corrective action can include implementing tighter capital rules for a problem bank. 12 U.S.C. § 1831o(c)–(f), (h)–(i), (k), (n). The FDICIA also authorizes bank regulators to impose more stringent capital requirements on banks that the regulators determine are in an unsafe and unsound condition or are engaged in an unsafe and unsound practice. 12 U.S.C. § 1831o(g); MALLOY, *supra* note 70, § 1.4.5 at 1.126, § 3.6 at 3.104, § 5.3.1 at 5.47. Pursuant to the FDICIA, the Federal Reserve (and other federal bank regulatory agencies) has promulgated regulations defining what "safety and soundness" means in terms of operational and managerial standards, asset quality, earnings, stock valuation standards, and compensation systems. 12 U.S.C. § 1831s; 12 C.F.R. pts. 208, 225, 263, 303, 308, 364; MALLOY, *supra* note 70, § 1.4.5 at 1.126, § 3.6 at 3.104, § 5.3.1 at 5.47.

88. *See, e.g.*, MILLMAN, THE VANDALS' CROWN, *supra* note 8, at 144; U.N. CENTER ON TRANSNATIONAL CORPORATIONS, TRANSNATIONAL BANKS AND THE EXTERNAL INDEBTEDNESS OF DEVELOPING COUNTRIES at 1–14, U.N. Doc. ST/CTC/SER.A/22 (1992). Indeed, the statutory authority for the U.S. to participate in the development of international bank capital standards lies in the International Lending Supervision Act of 1983 ("ILSA") which was enacted in part in response to the debt crisis. Pub. L. No. 98-181, tit. IX, 908, 97 Stat. 1278, 1280 (codified at 12 U.S.C. § 3901 (1983)). *See* 129 CONG. REC. pt. 2, 2320–23 (1983) (statement of Sen. Heinz observing that "more than twice the capital of the nine largest U.S. banks is committed to the less developed world"). Banks were dangerously over-exposed to poor credit risks as a result of loans to governments and parastatal companies. The risk-based capital scheme developed by the BSC was a regulatory effort to compel banks to better manage their credit risk exposures.

89. *See* ETHAN B. KAPSTEIN, GOVERNING THE GLOBAL ECONOMY 103–11 (1994) (arguing that the demand for international convergence of bank capital standards grew out of domestic political concerns in the United States); Ethan B. Kapstein, *Supervising International Banks: Origins and Implications of the Basle Accord*, *in* I GLOBAL RISK BASED CAPITAL REGULATIONS 3–37 (Charles A. Stone & Anne Zissu eds., 1994) (making the same argument).

90. Indeed, it is fair to say that the small permanent staff of the BIS has internalized this interest.

91. 1988 Basle Capital Accord, *supra* note 43, at ¶ 3. The second stated goal is "to diminish an existing source of competitive inequality among international banks." *Id.*

4. The Virtual Irrelevance of the Judiciary and Congress

In the constitutional law context, the judiciary and Congress are critically important institutions. To what extent are they relevant in the international banking law context? What relationship, if any, exists between these institutions and the interests of the BSC and bank regulators?

To be sure, the Federal Reserve (and other federal bank regulators) exist in the United States constitutional context: the capital adequacy regulations must implement a statute passed or an international agreement authorized by Congress. The statute or agreement, and the implementing regulations, are subject to judicial review. As a practical matter, however, there is little relation between the bank regulators' interest in safety and soundness and the interests of the judicial and legislative branches. Likewise, there is no relationship between the BSC's interest in institutional relevance and the Congress or judiciary. That is not to say that the judiciary or Congress oppose the BSC's or regulators' interests. To the contrary, they may share these interests if they think about them. Most judges and congresspersons, however, pay little attention to, and have little knowledge of, international banking law. It is likely that many are unaware of the BSC's existence and importance, and few know much about Federal Reserve functions aside from setting and implementing monetary policy. Capital adequacy rules are sure to appear byzantine to judges and congresspersons, and, unless widespread public confidence in the banking system is at stake, they will not boost the re-election prospects of legislators.

In the risk-based capital era (i.e., post-1992, when the Basle Accord as implemented through federal regulations took full effect), there has yet to be a court case raising a material issue about either the substance of the Accord or the implementing regulations.[92] Judicial non-involvement in this arena is to be contrasted with its highly significant role in shaping international trade law. Cases involving highly technical trade remedy laws such as antidumping and countervailing duties are routinely filed with the United States Court of International Trade, a specialized court dedicated to hearing such cases.[93]

The International Lending Supervision Act of 1983 (hereinafter, "ILSA") illustrates Congress's hands-off approach to international bank-

92. There have been cases in which the authority of Federal bank regulators to address capital adequacy problems was at issue. *See, e.g.*, First National Bank of Bellaire v. Comptroller of the Currency, 697 F.2d 674 (5th Cir. 1983) (questioning the Comptroller's authority regarding capital adequacy); First Nat'l Bank of Scotia v. Dept. of the Treasury, 659 F.2d 1059 (2d Cir. 1981) (upholding the authority of the Comptroller of the Currency to consider a capital adequacy problem as an "unsafe and unsound" banking practice). [Second Circuit rules prohibit the citation or use in unrelated cases of decisions without formal opinions.] After these cases, Congress appears to have resolved any doubts by statute. *See* 12 U.S.C. § 3907.

93. *See* BHALA, *supra* note 58, at chs. 4, 7–8.

ing law.[94] In the ILSA, Congress essentially delegated authority to the Federal Reserve to negotiate international capital adequacy guidelines for commercial banks. The result was the Basle Accord. The Accord is too general to be self-executing,[95] but instead of implementing it by statute, Congress was content to let the federal bank regulators implement it by regulation.[96] Even post-ILSA legislation has been rather short on detailed capital adequacy rules.[97] Again, this history is to be contrasted with congressional involvement in international trade negotiations, particularly in the Uruguay Round and North American Free Trade Agreement. In these negotiations, Congress delegated fast-track negotiating authority to the Executive.[98] Nonetheless, it remained substantially involved in the negotiations, and it even retained and exercised the right to include members of Congress on the United States Trade Representative's negotiating delegation.[99] The NAFTA and Uruguay Round agreements were implemented into United States law by Congressional action, as well as through regulations by the relevant executive agencies.[100]

In summary, the relevant institutional players in international banking law are entirely different from those to whom Professors Eskridge and Frickey apply their "law as equilibrium" approach. As discussed in Part III below, the inference to be drawn from this fact is that there is no well developed system of checks and balances in international banking law. In turn, a new definition of a stable equilibrium is needed.

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94. *See supra* note 88.

95. An international agreement is classified as self-executing if "it imposes immediate obligations within the treaty itself; and, alternatively, as merely a declaration of intent when it contains general statements of principle setting a standard of achievement for all parties." Louis B. Sohn, *International Implications of the 1994 Agreement*, *in* FUNDAMENTAL PERSPECTIVES ON INTERNATIONAL LAW 315–16 (William R. Slomanson ed., 2d ed. 1995).

96. *See supra* notes 70–71.

97. For example, with respect to the capital provisions of FIRREA and FDICIA, see *supra* note 87.

98. *See* BHALA, *supra* note 58, at ch. 4.

99. *See* BHALA, INTERNATIONAL TRADE LAW, *supra* note 58, at ch. 4 *and* Harold Hongju Koh, *The Fast Track and United States Trade Policy*, 18 BROOK. J. INT'L L. 143, 145–61 (1992).

100. *See* North American Free Trade Agreement Implementation Act, H.R. DOC. NO. 159, 103d Cong., 1st Sess. (Nov. 4, 1993), Pub. L. No. 103-182, 107 Stat. 2057 (codified in scattered sections of 19 U.S.C.); The Uruguay Round Agreements Act, H.R. DOC. No. 316, 103d Cong., 2d Sess. (Sept. 27, 1994), Pub. L. No. 103-465, 108 Stat. 4809 (codified in scattered sections of 19 U.S.C.). *See generally* HOUSE COMM. ON WAYS AND MEANS, OVERVIEW AND COMPILATION OF U.S. TRADE STATUTES, 104TH CONG., 1ST SESS., 186–87, 199–200 (Comm. Print 1995) (discussing the two Acts).

III. DEFINING A STABLE EQUILIBRIUM

Every definition is dangerous.

—Desiderius Erasmus[101]

A. The Lack of Formal Checks and Balances

Professors Eskridge and Frickey contend that a stable equilibrium exists when "no implementing institution is able to interpose a new view without being overridden by another institution."[102] This definition is inappropriate for assessing legal regimes in international banking. It assumes the existence of a well-developed scheme of institutional checks and balances. This assumption is valid in the United States constitutional context, but there is no analogous system of checks and balances in the international banking context.

To be sure, there is a process of adjustment of capital adequacy proposals that involves a sequential interaction among the BSC, domestic regulators, and banks.[103] Yet, at any point, regulators like the Federal Reserve can decline to implement BSC rules, ignore BSC proposals, and override self-regulatory measures of banks. While the Federal Reserve is subject to familiar administrative law constraints, as a practical matter, neither Congress nor the judiciary is likely to overrule its exercise of discretion in the international banking arena. In practice, legal power lies with the domestic regulators.

Consider the relationship between the BSC and a domestic bank regulator like the Federal Reserve. Unless Congress breaks with its usual custom and enacts specific legislation to force the hand of the Federal Reserve, the regulator can choose whether and how to implement BSC rules and proposals. The Federal Reserve might destroy its international credibility if it flagrantly disregards the BSC's issuances. But it would not be violating any international obligation arising from these issuances,[104] and, as noted above, the BSC has no authority to impose obligations on banks.[105] Indeed, it is the BSC that must attend to the concerns of the Federal Reserve. Given the BSC's interest in continuing as a leading forum for international banking matters, as

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101. DESIDERIUS ERASMUS, ADAGIA (1500) *quoted in* THE GREAT THOUGHTS 132 (George Selder ed., 1985).

102. *See* Eskridge & Frickey, *supra* note 20, at 32.

103. *See supra* notes 83–84 and accompanying text.

104. Furthermore, as discussed in the derivative article, as a matter of public international law these issuances do not amount to binding international agreements. *See* Bhala, *Applying Equilibrium Theory*, *supra* note 12, at Parts II.D & III.B.3 (discussing the authority of the BSC).

105. *See supra* notes 57–58 and accompanying text.

discussed above,[106] it cannot afford to alienate the world's most powerful central bank.

Consider the relationship between the Federal Reserve and banks; the latter are free to devise their own capital adequacy rules and indeed are doing so.[107] Such rules, however, operate in the shadow of domestic bank regulations. No self-regulatory regime can exist without the express or tacit consent of the domestic bank regulators. Banks subject to Federal Reserve regulation must fear the Federal Reserve, not the BSC. By avoiding conflict with the Federal Reserve, they reduce the risk of particularized reprisal in the form of bank examiners scrutinizing their operations (outside of the ordinary examination cycle). They also lessen the chance that the Federal Reserve will adopt a prophylactic measure that might raise the cost of foreign exchange transactions (e.g., by raising capital adequacy requirements) or even force such transactions offshore (e.g., by barring certain types of deals in the United States).

In sum, a domestic bank regulator can override the BSC or banks in the areas of capital adequacy rules and proposals because these items are not the products of an adjustment process with carefully calibrated checks and balances.[108] For their part, the BSC and banks generally want to avoid overrides in order to protect their own interests. This skewed situation demonstrates that the Eskridge-Frickey definition of a stable equilibrium should not be transferred to the international banking law context. If it were applied literally to any international banking law regime, the regime would be found inherently unstable. Because it is not fruitful to employ a systematically biased definition, a definition tailored for the present context is needed.

B. The Static-Dynamic Distinction

Before tailoring a definition of a stable equilibrium for legal regimes in international banking, it is important to identify and to avoid a pitfall associated with the Eskridge-Frickey definition: it pays in-

106. *See supra* notes 64–66 and accompanying text.

107. *See* Bhala, *Applying Equilibrium Theory*, *supra* note 12, at 100 (discussing internal value at risk models).

108. *Cf.* Eskridge & Frickey, *supra* note 20, at 38. As Professors Eskridge and Frickey point out, overrides are not the only way interdependent lawmaking institutions communicate with one another. These institutions may send "signals" to one another, that is, indicate expressions of preference that are not legal authority yet still may have legal consequences. Signals are an efficient means of conflict avoidance and may lead to implicit bargains among institutions, and even the achievement of a legal equilibrium. *See id.* at 39–41. For instance, the Federal Reserve may send signals to the BSC or banks through policy statements, informal discussions, and public lectures at forums like the Practicing Law Institute. These signals may be treated by the BSC or banks as evidence of the Federal Reserve's most important preferences and the nature of the legal equilibrium the Federal Reserve would like to achieve.

sufficient attention to the distinction between a static and dynamic equilibrium. This distinction is important for international banking lawyers. The rules which their clients live by are constantly changing. The correct inference from such change is not clear. For instance, it is tempting to say that the high frequency of BSC capital adequacy proposals signifies that the capital adequacy regime is unstable.[109] But is it correct to conclude that the BSC's proposals, if implemented, would destabilize the regime? Or is the proper inference that their implementation would cause a somewhat inelegant shift from one stable equilibrium to another?

A concept of stability based in part on neoclassical economic theory helps to clarify these issues.[110] Neoclassical economic theory distinguishes between static and dynamic equilibria, each of which may be stable or unstable. A static equilibrium is one which does not change.[111] For example, in the market for Japanese yen, if ¥ 100 per dollar is a rate which persists, then it is a stable equilibrium.[112] With respect to the duration of a static equilibrium, neoclassical theory identifies three possibilities: momentary, short-run, and long-run equilibria.[113] Distinguishing among these time periods is imprecise. In general, as time passes the supply of a good—such as yen—can increase, whereas a momentary equilibrium is associated with a fixed supply.[114] A static equilibrium is stable if it is restored in the event of a temporary movement away from the equilibrium.[115] Suppose a ¥ 100 per dollar

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109. *See infra* notes 155–170 and accompanying text.

110. The discussion below presumes that an equilibrium (either static or dynamic) exists. This assumption is not always correct. *See infra* note 150 and accompanying text. Accordingly, economists typically ask three questions: First, does an equilibrium exist? Second, if one does exist, then is it stable? Third, if there is a stable equilibrium, then is it unique or are there multiple stable equilibria? *See* JAN VAN DAAL & ALBERT JOLINK, THE EQUILIBRIUM ECONOMICS OF LEON WALRAS 159–63 (1993).

111. *See, e.g.*, WILLIAM J. BAUMOL & ALAN S. BLINDER, ECONOMICS: PRINCIPLES AND POLICY 81 (6th ed. 1994) ("[a]n equilibrium is a situation in which there are no inherent forces that produce change; that is, a situation that does not contain the seeds of its own destruction") (emphasis origianl); EDWIN MANSFIELD, PRINCIPLES OF MICROECONOMICS 43 (7th ed. 1992) ("[a]n equilibrium is a situation where there is *no tendency for change*: in other words, it is a situation that can persist. Thus, an equilibrium price is a price that can be maintained.") (emphasis added); MICHAEL STEWART, KEYNES AND AFTER 89 (1967) ("A situation is an equilibrium one if there is *no tendency for any of the variables to depart* from their existing levels.") (emphasis added).

112. *See* PAUL A. SAMUELSON & WILLIAM D. NORDHAUS, ECONOMICS 24 (15th ed. 1995); PAUL A. SAMUELSON, ECONOMICS 57–61, 609–10 (11th ed. 1980).

113. *See* BAUMOL & BLINDER, *supra* note 111, at 225–37; SAMUELSON & NORDHAUS, *supra* note 111, at 252–53; SAMUELSON, *supra* note 112, at 362; TODD G. BUCHHOLZ, NEW IDEAS FROM DEAD ECONOMISTS 152–57 (1989); PHYLLIS DEANE, THE EVOLUTION OF ECONOMIC IDEAS 118 (1978).

114. SAMUELSON & NORDHAUS, *supra* note 112, at 134–36; SAMUELSON, *supra* note 112, at 362.

115. BAUMOL & BLINDER, *supra* note 111, at 81, 83. *See also* MARK BLAUG, ECONOMIC

exchange rate is altered, perhaps because of an extrinsic shock like the insolvency of a Japanese bank or a vote of no confidence in a Japanese government. Because the equilibrium is static, with respect to market forces specifically, the supply of and demand for yen and the determinants of these supply and demand functions will cause a readjustment back to the ¥ 100 per dollar rate. If the market for yen does not return to this price, then it was not a stable equilibrium in the first place.

In contrast, a dynamic equilibrium is one that changes over time.[116] For example, an econometric model of the dollar-yen market might forecast the following equilibrium exchange rates: on October 1, ¥ 100 per dollar; on November 1, ¥ 125 per dollar; and on December 1, ¥ 150 per dollar.[117] The expected equilibrium rates vary because of changes in market forces, specifically the supply of and demand for yen, and the determinants of these supply and demand functions. For instance, if the Federal Reserve embarks on a contractionary monetary policy, then the supply of dollars will decrease, causing dollars to appreciate relative to the yen, perhaps from ¥ 100 to ¥ 150 per dollar. A dynamic equilibrium is stable if there is movement toward the hypothesized equilibrium forecasts, even if at any point these hypothesized values are never reached.[118] Accordingly, suppose on October 1 the observed exchange rate is ¥ 95 per dollar, on November 1 it is ¥ 123 per dollar, and on December 1 it is ¥ 149 per dollar. This dynamic equilibrium is stable because the market for yen is tending toward the hypothesized equilibria of ¥ 100, ¥ 125, and ¥ 150 per dollar on the respective dates, i.e., the market is converging toward

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THEORY IN RETROSPECT 429 (3d ed. 1978) (stating that "[b]y stability we mean the requirement that the system should return to equilibrium after any small 'shock'").

116. *See* DEANE, THE EVOLUTION OF ECONOMIC IDEAS, *supra* note 113, at 208 (discussing John Maynard Keynes' interest "in the problems of an economy in a state of disequilibrium and in the process of its *change through time*") (emphasis added).

117. Several 20th-century theories of economic growth also illustrate the concept of dynamic equilibria. For example, Schumpeter developed a concept of the stationary state and explained how growth from this quasi-equilibrium point occurs as a result of innovation and entrepreneurship. *See* JOSEPH A. SCHUMPETER, THE ECONOMICS AND SOCIOLOGY OF CAPITALISM 406–24 (Richard Swedberg ed., 1991); DEANE, *supra* note 113, at 191–93; JOSEPH SCHUMPETER, CAPITALISM, SOCIALISM, AND DEMOCRACY (1943); JOSEPH SCHUMPETER, THEORY OF ECONOMIC DEVELOPMENT (1934). The Harrod-Domar model posits a direct relationship between equilibrium growth in per capita income and effective demand increasing at a rate warranted by the growth of the capital stock. This model explains divergences from the equilibrium growth path by inaccurate entrepreneurial expectations about demand increases resulting in incorrect investment decisions. *See* R.F. HARROD, TOWARDS A DYNAMIC ECONOMICS (1948); EVSEY V. DOMAR, ESSAYS IN THE THEORY OF ECONOMIC GROWTH (1957); DEANE, *supra* note 113, at 196–99. The post-war neoclassical school postulates an aggregate production function with two flexible inputs, capital and labor, that are substitutable over the range of current technology. A stable equilibrium growth rate depends on the factor input mix which, in turn, depends on shifts in factor prices. *See* DEANE, *supra* note 113, at 200–01.

118. VAN DAAL & JOLINK, *supra* note 110, at 159–63. *See also* SAMUELSON, *supra* note 112, at 381–82 (discussing a dynamic cobweb equilibrium).

the forecasts of the econometric model. In contrast, rates of ¥ 95, ¥ 115, and ¥ 135 per dollar suggest ever-increasing deviations from the hypothesized dynamic equilibrium points on October 1, November 1, and December 1, and, therefore, dynamic disequilibrium. As one economist wrote, "[t]o justify special preoccupation with the position of equilibrium it is necessary to assert as an empirically testable truth that *there is a tendency towards this position* in our economic system, or that readjustments in general come quicker than new disturbances occur."[119]

The concept of a dynamic equilibrium is a more realistic depiction of observed phenomena—namely, changes in prices for goods, services, and financial instruments—than its static counterpart. As Alfred Marshall wrote,

> [W]hen pushed to its more remote and intricate logical consequence, *it* [the theory of static equilibria] *slips away from the conditions of real life.* In fact we are here verging on the high theme of economic progress; and here therefore it is especially needful to remember that economic problems are *imperfectly presented* when they are treated as problems of statical equilibrium and not of organic growth.[120]

Marshall's point similarly applies to legal problems. Because legal rules change, a dynamic equilibrium is the relevant concept in international banking law.

Applying the neoclassical economic concept in the present context, however, is challenging. The dollar-yen market example indicates that stability is determined by comparing the magnitude of changes in relation to a set of hypothesized equilibrium prices: the movement from ¥ 95 to 123 to 149 per dollar is stable because observed exchange rates close in on numerical forecasts of dynamic equilibria, whereas the opposite is true for the ¥ 95 to ¥ 115 to ¥ 135 per dollar movements. Thus, for example, to apply the neoclassical concept to the capital adequacy regime requires answers to two inquiries. First, what hypothetical capital adequacy regime would be a stable dynamic equilibrium? Second, how should the magnitude of changes in the capital adequacy regime be measured?

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119. T.W. Hutchison *quoted in* MARK BLAUG, THE METHODOLOGY OF ECONOMICS 160 (2d ed. 1992).

120. ALFRED MARSHALL, PRINCIPLES OF ECONOMICS 382 (8th ed. 1952) (emphasis added). For an introduction to Marshall's work, see BUCHHOLZ, NEW IDEAS FROM DEAD ECONOMISTS, *supra* note 112, at 141–68 and BLAUG, ECONOMIC THEORY IN RETROSPECT, *supra* note 115, at 343–447 (3d ed. 1978).

It is difficult to provide these answers. With respect to the first inquiry, a generic answer of little use is to say that a stable dynamic capital adequacy regime equilibrium would be one that maximizes the difference between total benefits and total costs, where such benefits and costs encompass both private and social interests. An alternative would be to try to construct a new capital adequacy regime.[121] Depending on the amount of work entailed, this alternative might be unattractive.

The second inquiry calls for an empirical response. It is necessary to know the amount by which capital charges for every banking transaction would increase as a result of rules proposed by the BSC.[122] Again, the significant effort entailed makes this endeavor unattractive. Moreover, the effort may not be worthwhile because the response will vary depending on assumptions about the transactions and interpretations of the proposals. In sum, in the present context, a systematic and empirically rigorous application of the neoclassical economic concept of dynamic stability may be unrealistic.

Nevertheless, the insights provided by this concept should be transferred to the international banking law context. The static-dynamic distinction should be retained and, for the reasons given by Alfred Marshall, the focus should be on dynamic equilibria. Moreover, a four-step methodology roughly approximating the logic behind the neoclassical concept should be adopted.

First, as in this part, a stable dynamic equilibrium in international banking law should be defined. Second, as in Part IV below, the determinants of stability should be identified. Third, as in Part V below, a sketch should be made of an "ideal type" international banking law regime that likely would be a stable dynamic equilibrium. Finally, the definition, determinants, and hypothesized ideal type should be tested against an actual international banking law regime.[123]

C. The Partial-General Distinction

There is a second pitfall to avoid that is associated with the Eskridge-Frickey definition of a stable equilibrium. That definition does not distinguish between partial and general equilibria. Here again is a useful neoclassical economic distinction. Whereas the static-dynamic distinction rests on a time-series analysis of a given market, the partial-general distinction is based on a cross-sectional analysis of many markets.

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121. This task is beyond the scope of this Article.
122. Here again, this analysis exceeds the scope of the present Article.
123. This test is performed in Bhala, *supra* note 12.

For instance, suppose a commodity market price is in equilibrium. Hence, there is neither an excess demand for nor supply of that commodity. This occurrence says nothing about the existence (or lack thereof) of equilibrium prices in other commodity markets. Indeed, underlying the occurrence is an implicit assumption that all other markets are frozen—the *ceteris paribus* assumption. Accordingly, the price represents a partial equilibrium. In contrast, it is possible to analyze all markets (that is, factor as well as commodity markets) in an economy at a given moment and consider whether prices therein equate the forces of demand and supply. When demand and supply in the economy as a whole are balanced, a general equilibrium exists.[124]

International banking law is a universe comprised of various legal regimes. In turn, each legal regime is a set of existing and proposed rules. The eight-document set of capital adequacy rules and proposals is one legal regime.[125] Other regimes include the set of rules and proposals governing the ability of banks to establish offices in foreign jurisdictions[126] and the set of underwriting and dealing in cross-border securities offerings.[127] There is no necessary connection among equilibrium conditions in different regimes because the BSC and domestic bank regulators tackle legal issues in a sequential fashion. That is, they do not attempt to solve all problems at once in order to achieve stability. In 1991, for example, rules on foreign bank entry changed dramatically,[128] but no adjustments were made to the capital adequacy regime until the following year when the Basle Accord took full effect.[129] Consequently, efforts by regulators may bring stability to one regime, but have little bearing on—or even disrupt—another regime.

Importing the neoclassical distinction between a partial and general equilibrium into the present context sharpens the methodology for assessing international banking law. Accordingly, the determinants of stability identified in Part IV below are designed for a partial equilibrium analysis of one legal regime. They are also designed to be generalizable to all international banking law regimes. In this regard, they can help evaluate equilibrium conditions in the regimes comprising the international banking law universe.

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124. *See* DEANE, *supra* note 113, at 95–96, 112–13, 117–18, 143; BLAUG, *supra* note 119, at 161–69; BLAUG, *supra* note 115, at 602–44.

125. *See supra* notes 73–81 and accompanying text.

126. *See* BHALA, *supra* note 5.

127. *See generally* MELANIE FEIN, SECURITIES ACTIVITIES OF BANKS (1993); Cecelia A. Calaby, Note, *The Basle Accord: An Opportunity for Expanding Bank Holding Company Securities Activities?*, 23 GEO. WASH. J. INT'L L. & ECON. 531, 534–49 (1989).

128. *See* BHALA, *supra* note 5.

129. *See supra* note 69 and accompanying text.

The simplicity of the neoclassical distinction masks the difficulty associated with deciding whether to focus on a regime and engage in a partial equilibrium analysis or to focus on all regimes and engage in a general equilibrium analysis. On the one hand, no reliable inference can be drawn about the stability of international banking law from a conclusion about the stability of a regime, even one as important as capital adequacy. After all, as indicated above, partial equilibrium analysis implies an unrealistic but necessary *ceteris paribus* assumption.[130] On the other hand, focusing on a field might provide macro-level insights. But it also may entail a Herculean analytical task.

D. A Word on Game Theory

A caveat should be offered concerning neoclassical economic imports. There are alternative economic perspectives on the concept of an equilibrium. A noteworthy example is the game theoretic concept of a Nash equilibrium. In a non-cooperative game, each player "is concerned with doing as well for himself as possible subject to clearly defined rules and possibilities."[131] The game can be a strategic form one in which each player may choose among an array of strategies and corresponding payoffs, or an extensive form one in which each player pays attention to the timing of other players' actions and the information available when decisions about actions must be made.[132] A Nash equilibrium exists when "no player has an incentive (in terms of improving his own payoff) to deviate from his part of the strategy array."[133]

The Nash equilibrium concept might be useful in assessing the stability of international banking regimes. For example, the BSC and bank regulators could be considered as one player with a shared interest in safety and soundness, and banks aggregated as the second player with a collective interest in profits. The two players could be seen as engaged in a non-cooperative game to determine the nature and content of rules and proposals in a regime. A Nash equilibrium could be redefined in this context as one in which neither player has an incentive to try to change the regime at issue. By hypothesizing a set of strategies and payoffs, it might be possible to identify the existence and determinants of such an equilibrium. In sum, while the definition of

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130. *See supra* note 124 and accompanying text.

131. DAVID M. KREPS, GAME THEORY AND ECONOMIC MODELING 9 (1990). *See also* SAMUELSON & NORDHAUS, *supra* note 112, at 189–92; MORTON D. DAVIS, GAME THEORY (rev. ed. 1983).

132. KREPS, *supra* note 131, at 10–21.

133. *Id.* at 28. *See also* SAMUELSON & NORDHAUS, *supra* note 112, at 192; DAVIS, *supra* note 131, at 11–19.

equilibrium offered below relies on neoclassical distinctions, future research on a game-theoretic paradigm would be welcome.

E. Legitimate Reasons for Significant Opposition from Banks

Establishing that a definition of stability in international banking law ought to (1) refer to a dynamic equilibrium and (2) encompass partial or general circumstances is necessary material for tailoring a new definition. The next step is to consider the addressees of a legal regime (or regimes). The addressees are, of course, banks.

1. Bank Opposition as Destabilizing

Suppose a regime engenders significant controversy among banks. Their concern might be that the regime is unlikely to meet its intended objective or could impose debilitating costs on banks. The most probable reaction from banks is they will push the authority responsible for creating the regime to modify the regime[134] or even start anew with a new regime. A second possible reaction is that banks will attempt to devise their own regime and persuade the authority that it should permit self-regulation. Either reaction suggests that the initial regime is not likely to endure. Significant bank opposition is potentially destabilizing to the regime.

To be sure, the BSC could issue, and domestic bank regulators could impose, a regime on banks regardless of bank concerns. But this scenario wrongly ascribes to the BSC and bank regulators a high degree of forcefulness and brutality. Neither player is, or can afford to be, unresponsive to the concerns of its ultimate constituency. Indeed, the BSC typically asks banks to comment on its proposals and carefully reviews comments received.[135]

The BSC and regulators are well aware that banks can shift their operations "offshore" to countries outside the G-10 group that do not automatically follow the BSC's regime. Because international banking markets, such as the foreign exchange market, are networks of computers, telephones, and fax machines, it is not particularly problematic

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134. This reaction indicates the possible relevance of public choice theory to the present context. *See* DANIEL A. FARBER & PHILIP P. FRICKEY, LAW AND PUBLIC CHOICE (1991), (explaining public choice theory) *and* Jonathan R. Macey, *The Political Science of Regulating Bank Risk*, 49 OHIO ST. L.J. 1277, 1278–90 (1989) (applying the public choice model of government decision-making to banking policy).

135. *See, e.g.*, Basle Committee on Banking Supervision, The Prudential Supervision of Netting, Market Risks and Interest Rate Risk, ¶ 2 at 1 (Apr. 1993); 1993 Market Risk Proposal, *supra* note 75, ¶¶ 8–9 at 3; Basle Committee on Banking Supervision, Press Statement, July 15, 1994; 1994 Netting Amendment, *supra* note 78, ¶¶ I.3, II.1 at 1; April 1995 Press Release, *supra* note 80, ¶ 1 at 1; 1995 Proposal to Issue Supplement, *supra* note 80, ¶ 1 at 1 and ¶ II.5 at 2; 1996 Overview, *supra* note 81, ¶ II.7 at 3.

for a bank to shift the locus of its trading activity from New York to the Cayman Islands.[136] As a consequence, banks can and do wield influence, typically in the form of oral and written comments on existing and proposed rules in a legal regime.[137]

2. The Definition and its Assumptions

The possible destabilizing effect of banks' reactions to a regime suggests a definition of a stable dynamic equilibrium. A legal regime in international banking is likely to be a stable dynamic equilibrium *if banks would not have legitimate reasons to present significant opposition* to that regime. This definition rests on four implicit assumptions.

First, the word "legitimate" (and, to a lesser extent, the word "significant") acknowledges that opposition could amount to nothing more than sour grapes. "Legitimate" assumes it is possible to distinguish mere whining from thoughtful criticisms. This distinction must be made on a case-by-case basis. Fortunately, it ought to be unnecessary to make this distinction very often. It is not rational for a bank to whine habitually about legal regimes. Rather, exercising self-restraint and providing criticisms when its interest in profits is seriously threatened comports with that interest. To "cry wolf" distracts the bank from profitable opportunities and, worse, undermines its credibility with the BSC and domestic bank regulators.

Second, the definition assumes it is possible to distinguish opposition to a regime from opposition to a particular rule or proposal in that regime. Again, judgment must be rendered on a case-by-case basis. For example, consider the BSC's proposal to require a bank to convert an option into a long or short currency position on the basis of deltas in order to determine the appropriate capital charge against the market risk associated with that option.[138] On the one hand, if the bank disputes the value of the delta even though the value is accepted by its regulator for use in making the conversion, then the bank is not mounting a challenge to the capital adequacy regime. On the other hand, if the bank argues that deltas are an inappropriate basis for conversion and a completely different methodology ought to be used, then it is making a fundamental criticism about the nature of the regime.

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136. Of course, some potential loci may present time zone, personnel, client support, or infrastructure problems.

137. *See supra* notes 82–83 and accompanying text.

138. *See* Bhala, *supra* note 12, at Part II.B.2. A delta is "the expected change of an option's price as a proportion of a small change in the price of the underlying instrument." 1993 Market Risk Proposal, *supra* note 75, Annex 1, at 43.

One technique for distinguishing opposition to a rule from opposition to a regime is to consider the totality of bank opposition. Banks may raise fundamental questions about a series of rules or proposals. While no single question undermines the stability of the regime, the aggregate effect of the challenges may call into question its stability. Of course, in some cases it may be difficult to decide whether a bank opposes a regime. For strategic reasons, it may cloak the intent that underlies its comments on rules or proposals of the regime. Even in these hard cases, an effort should be made to gauge the magnitude of the bank's opposition. As intimated above, the seductive inference to avoid is that every criticism and subsequent rule change destabilizes a regime.[139]

Third, the definition assumes a link between stability and durability. After all, bank opposition is what may cause the authority responsible for a regime to modify or replace the regime. Accordingly, the definition implies that a regime is not a stable dynamic equilibrium if it does not endure for a sustained period of time. The obvious next question is what is a "sustained" period in international banking law?[140] No single, unequivocal answer applies to all regimes, so here again judgment is required. Suppose banks accept a regime for ten years, but thereafter oppose it because of a changed financial climate. Was the regime stable for ten years, and thereafter unstable, or was it unstable from the beginning? The answer will depend on the regime, and with respect to some regimes reasonable minds may debate the answer.

Finally, the definition makes a *ceteris paribus* assumption with respect to popular views of an international banking law regime. That is, it is assumed that there is no major outrage among the public, and no consequent lobbying campaign, to change a regime. Put differently, it is assumed that the judiciary and legislature continue to be irrelevant. This assumption seems reasonable in that international banking law matters (as distinct from crises that implicate taxpayer funds like the Mexican peso devaluation and the U.S. financial bailout) tend to engender little public interest.

In sum, the implicit assumptions leave room for international banking lawyers to exercise discretion when applying the definition of stability. Lest this fact be viewed as a serious shortcoming, it should be observed that ambiguities in the Eskridge-Frickey definition of a stable equilibrium invite debate among constitutional lawyers. What

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139. *See supra* note 109 and accompanying text.

140. This question may help explain why it is not redundant to speak of an "equilibrium" as "stable." The word "stable" connotes a time element associated with "equilibrium," whereas the latter word is "time-neutral." Whether an equilibrium is "stable" or "unstable" depends on whether it persists over a certain period.

is a "balance" among competing institutional forces? When is it clear that a balance is struck? When can one institution be said to override another? Simply stated, a lawyer should expect to argue about whether a definition fits her fact pattern.[141]

3. Four Virtues

There are four virtues in defining stability in terms of legitimate bank opposition. The definition (i) avoids bias, (ii) is methodologically flexible, (iii) is normatively neutral, and (iv) does not assume a stable equilibrium exists.

a. Avoiding Bias

A practical problem associated with the application of equilibrium theory is whether to focus on the universe of international banking law, a regime within that universe (e.g., the aforementioned eight documents that comprise the capital adequacy regime), or a specific rule or proposal within a regime (e.g., a rule on use of deltas to compute the market risk capital charge for options). This problem plagues the Eskridge-Frickey approach, which posits that a stable equilibrium exists when "no implementing institution is able to interpose a new view without being overridden by another institution."[142] What reference is envisioned—is the stability of a field of law, individual regime, or specific rule or proposal at issue?

The definition of equilibrium for international banking law focuses on a legal regime rather than a specific rule or proposal in the regime. This focus is justified for the reason intimated above, namely, a narrow focus on a rule or proposal introduces a bias in favor of concluding that the rule or proposal is an unstable equilibrium.[143] The bias exists because rules change frequently, and proposals are made all the time. In contrast, by analyzing a regime, it is understood that rules and proposals are in a state of flux, but this state does not necessarily destabilize the regime. In brief, examining a regime prevents one from being mesmerized by movements within that regime.

b. Methodological Flexibility

The definition is methodologically flexible because it does *not* require demonstrated opposition from banks. The inference that a regime is unstable is strengthened if banks manifest publicly their disapproval

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141. *See generally* EDWARD H. LEVI, AN INTRODUCTION TO LEGAL REASONING 3–10 (1948) (discussing classifications, categories, and phases of legal reasoning).

142. *See* Eskridge & Frickey, *supra* note 20, at 32.

143. *See supra* notes 110–122 and accompanying text.

of the regime. Nonetheless, the phrase "would not have legitimate reasons" in the definition is meant to allow external observers—most notably international banking law scholars—to suggest arguments banks might make in the future, or might have made already, in opposition to a regime. This flexibility is necessary because of the informal ways a bank might express its views to the BSC or its regulator. It might present criticisms orally in a meeting or send a confidential letter, neither of which is discoverable by the scholar. To be sure, this lack of transparency presents a challenge for the scholar to empathize with the bank and avoid either underestimating or overestimating its possible opposition.

The definition is methodologically flexible in another sense. It allows for partial or general equilibrium analyses. To be sure, because it speaks of a regime, it expressly presumes a partial equilibrium analysis at a regime level and fluency with the regime components (i.e., all rules and proposals in the regime). The definition, however, permits general equilibrium analyses because it is easily expandable to encompass bank opposition to multiple regimes.

c. Normative Neutrality

The definition does not assume stability is "good" or "better" than "instability." Certainly there are a number of arguments in favor of a stable international banking law regime.[144] From a bank's perspective, stability provides addressees of rules and proposals in the regime with certainty and predictability.[145] For instance, uncertain, unpredictable capital adequacy rules are an undesirable overhang on the foreign exchange market if banks cannot gauge *a priori* the effect of such rules on the cost of their transactions. Instability raises transaction costs in part because banks must employ lawyers to understand and ensure compliance with all applicable rules. In contrast, a stable regime reduces inefficiency by allowing a bank to focus on profitable opportunities rather than deploy resources to adjust to changed rules. Sta-

144. Interestingly, Professors Eskridge and Frickey argue that the dialectical process by which the Supreme Court interacts with other institutions to interpret statutes reconciles democratic values with the rule of law. Eskridge & Frickey, *supra* note 20, at 77. Through this process, democratically elected decision makers internalize values of predictability and stability, while rule-of-law decision makers internalize values of popular accountability. *Id.* This argument raises an interesting question in the international banking law context: would a stable equilibrium be attractive because it is democratic? A negative answer seems in order. None of the three institutional players in the international banking law context is democratically elected, and none is properly characterized as a rule-of-law decisionmaker. Currency traders at banks almost certainly do not see themselves as representative of a country or their employers shareholders.

145. Professors Eskridge and Frickey acknowledge the importance of certainty and predictability associated with the rule of law. Eskridge & Frickey, *supra* note 20, at 77, 81, 87.

bility also minimizes barriers to entry, because potential entrants could be deterred by legal chaos.

Likewise, from the BSC's perspective, stability may be good. It may further the BSC's interest in institutional relevance. For example, if the capital adequacy regime is unstable, then banks may become frustrated with the BSC, seeing it at best as well-meaning but clumsy, and at worst as incompetent and destructive. Banks may seek to defuse the BSC's product, and marginalize the BSC, possibly by developing a self-regulatory regime.[146] That is, the BSC knows banks might complain to their regulators which, in turn, might urge the BSC to revise its regime or simply distance themselves from the regime. Thus, the BSC may be unlikely to issue rules or proposals that it expects to change significantly in the near future because of bank opposition. On the contrary, it may try to "get it right" the first time before issuing the rules or proposals.

Yet while "central banks [and the BSC] have made stability their god," markets are sometimes said to "thrive on instability."[147] To be sure, this statement typically refers to movements in market prices, not market rules.[148] Still, plausible reasons could exist to suggest that legal instability is beneficial to some players under certain conditions. For example, might the BSC's stature as a plurilateral forum be enhanced through crises that cause officials from domestic bank regulators to travel to Basle to concoct new rules in the same way foreign ministers meet at the United Nations Security Council to resolve international political emergencies?[149] Accordingly, defining equilibrium in terms of opposition from banks is designed to yield normative neutrality on this matter.

d. Existence of a Stable Dynamic Equilibrium

The definition of equilibrium acknowledges the practitioner's perspective that the idea of "stability" in the context of international banking law is an oxymoron. Indeed, an academic basis for this perspective exists: Professor Arrow's Nobel Prize winning impossibility theorem indicates that under certain circumstances a market might not

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146. Indeed, as discussed in the derivative article, this scenario might help explain why the BSC adopted in 1995 a two-track approach to capital rules for market risk, and why banks have developed their own risk management methodologies. *See* Bhala, *Applying Equilibrium Theory*, *supra* note 12, at Part III.

147. MARJORIE DEANE & ROBERT PRINGLE, THE CENTRAL BANKS 307 (1994).

148. The idea is that some banks can and do profit from short-term instability in certain markets.

149. During this author's tenure at the Federal Reserve, one senior Federal Reserve Bank of New York official proudly and publicly proclaimed he and other senior officials were "crisis junkies."

have any equilibrium.[150] The definition does not presume a stable dynamic equilibrium exists.

But even if an international banking law regime is not stable, it does not mean stability cannot exist and is impossible to achieve. Put differently, the practitioner's perspective can be interpreted not as learned helplessness but rather as a desperate plea to the BSC to "do something." Quite possibly, heretofore the BSC has been insufficiently attentive to the reactions of banks to regimes, and to factors that could render regimes acceptable to banks. Indeed, a practical insight provided by equilibrium theory and the FICAS model discussed in Part IV below is to re-orient the BSC toward bank reactions and to highlight such factors.

IV. DETERMINANTS OF A STABLE DYNAMIC EQUILIBRIUM: THE FICAS MODEL

> *In principle, the best rules are ones that encourage those to whom they apply to act in their own best interests under the threat of penalties if they do foolish or dangerous things.*[151]

The definition of equilibrium presented in Part III above is logically connected to the new FICAS model of the determinants of stability. The definition calls for a review of the rules in and proposals for a regime. Do they present banks with a reason for opposing the regime and thereby contain the seeds of the regime's destruction? To answer this question, it is necessary to understand what factors move banks to oppose a regime. That is, it is necessary to have a conceptual framework of the determinants of stability. Only by identifying these determinants is it possible to predict whether banks are likely to support or oppose a regime.

Perhaps the most fundamental unresolved issue raised by the Eskridge-Frickey approach to law as equilibrium concerns the variables that affect stability. What are the determinants of stability of a legal regime? In the present context, the issue may be rephrased in terms of the above definition of stability:[152] *what determines whether banks might have reason to oppose a regime?* The obvious answer is "a threat to banks'

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150. *See* Kenneth Arrow, *A Theorem on Expectations and the Stability of Equilibrium*, 24 ECONOMETRICA 288 (1956); Kenneth Arrow & Leonid Hurwicz, *Some Remarks on the Equilibrium of Economic Systems*, 28 ECONOMETRICA 640 (1960). For a general study of Professor Arrow's work, see GEORGE FEIWEL, ARROW AND THE FOUNDATIONS OF THE THEORIES OF ECONOMIC POLICY (1987). For a discussion of the repercussions of his work on political outcomes and the public interest, see FARBER & FRICKEY, *supra* note 133, at 38–62.

151. *Bettering Basle*, ECONOMIST, Dec. 9, 1995, at 78.

152. *See supra* notes 136–137 and accompanying text.

self-interest identified above, namely, profits."[153] But this generic answer merely masks the deep issue: what factors associated with a regime are likely to generate concern among banks that their "bottom line" is threatened? Addressing this issue helps organize thinking about change in international banking law. Moreover, the issue has important policy implications. If the BSC understands the determinants of stability, then it may be able to predict whether existing and proposed rules will contribute to the stability of, or destabilize, a regime.

Thus, a model of the determinants of stability of an international banking law regime is needed. From such a model, an ideal type of regime that would represent a stable dynamic equilibrium can be derived. The FICAS model is one such model, and self-regulation (discussed in Part V below) is an ideal type of regime.

The FICAS model identifies five independent variables that are hypothesized to affect the dependent variable, a stable dynamic equilibrium. The five independent variables are *f*requency, *i*ntricacy, *co*gency, *a*uthority, and *s*cope, or "FICAS" for short. Hence, the following conceptual equation:

> Achievement of a Stable Dynamic Equilibrium Regime in International Banking = Function of {frequency of adjustment to rules and proposals in the regime; intricacy of rules and proposals; cogency of rules and proposals; authority of rules and proposals; scope of rules and proposals}.

The FICAS model rests on general propositions about whether an existing or proposed rule in a regime is likely to garner a consensus of support among banks and thereby contribute to the stability of the overall regime. These propositions are hypothesized causal relationships between each of the five independent FICAS variables, on the one hand, and the dependent variable, stability of a regime, on the other hand. That is, the model sets forth *a priori* hypotheses about a direct or inverse causal relationship between each independent variable and the dependent variable. These hypotheses are set forth in Table 1 and discussed below.

Four caveats should be noted. First, the hypothesized link is not necessarily one that would be universally observed. Real-world exceptions to each hypothesis may exist. Instead, the hypotheses are probabilistic statements (i.e., forecasts) grounded on reasonable expectations of the behavior of banks.

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153. *See supra* notes 46–48 and accompanying text.

TABLE 1
HYPOTHESIZED RELATIONSHIPS BETWEEN THE FICAS VARIABLES AND THE STABILITY OF A LEGAL REGIME IN INTERNATIONAL BANKING

FICAS Independent Variables	Hypothesized Relationship of Independent Variable to the Dependent Variable (Stability of International Banking Law Regime)
Frequency	Inverse relationship. High adjustment frequency with respect to rules and proposals in a regime is likely to undermine the stability of the regime.
Intricacy	Inverse relationship. Simpler, more flexible rules and proposals in a regime are likely to enhance the stability of the regime.
Cogency	Direct relationship. Persuasive, well-grounded rules and proposals in a regime are likely to contribute to the stability of the regime.
Authority	Direct relationship. Rules or proposals in a regime that banks accept as authoritative are likely to enhance the stability of the regime.
Scope	Direct relationship. Comprehensive applicability of rules and proposals in a regime is likely to foster stability in the regime.

Second, at any point in time some independent variables may operate to promote stability, while others may cut against stability. Whether stability is achieved may depend on the relative strengths of the effects of the independent variables on the dependent variable. The FICAS model does not help predict the relative strengths of these effects. In econometric terms, the FICAS model does not generate "coefficients"

for each independent variable.[154] That issue is left to an examination of a particular BSC rule or proposal at issue.

Third, there could be interaction among the five independent variables. In econometric terms, there could be "multicollinearity" among these variables.[155] For example, rules in a regime may become more intricate, and proposals may be made with greater frequency, in an effort to broaden the scope of a regime. Fourth, there may be "optimality levels" associated with two of the hypothesized relationships. Banks may find a specific adjustment frequency or degree of intricacy to be ideal. Their opposition to a regime may be triggered when the BSC's rules or proposals exceed these levels. By design, the FICAS model does not define these levels. Different banks may have different tolerance levels for frequency of adjustment and degree of intricacy. In this respect, self-regulation (discussed in Part V below) is advantageous because it leaves banks free to define for themselves the optimal levels. In contrast, there are no optimal levels for cogency or authority. It is hard to imagine a regime that is "too" cogent or that has "too" strong a basis of authority. Likewise, as long as a regime correctly identifies similarly situated parties and treats them in a substantively equal manner, the regime is unlikely to be "too" comprehensive in scope.

A. Frequency of Adjustment

In *The Morality of Law*, Lon Fuller speaks of the "inner morality of law,"[156] which is defined in terms of "procedural" principles legislators must respect when devising and administering an efficacious system of rules for governing human conduct.[157] Failure to adhere to these principles is a recipe for disaster and results not just in a bad system of law, but in something that ought not to be considered a legal system at all.[158] One of Fuller's principles is that "laws should not be changed

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154. *See* DALE J. POIRIER, INTERMEDIATE STATISTICS AND ECONOMETRICS—A COMPARATIVE APPROACH 460–82 (1995) *and* JOHN JOHNSTON, ECONOMETRIC METHODS, 47–68 (1972).

155. *See* POIRIER, *supra* note 154, at 567 ("[m]ulticollinearity is present whenever one or more regressors are [sic] highly correlated with another regressor or a linear combination of regressors") *and* RAMU RAMANATHAN, STATISTICAL METHODS IN ECONOMETRICS 317 (1993) ("multicollinearity exists when there is at least one approximately linear set of relationships among independent variables").

156. LON FULLER, THE MORALITY OF LAW 38–42 (rev. ed. 1969).

157. *Id.* at 33–91, 97.

158. *Id.* at 39. Fuller identifies eight distinct routes to disaster:

> The first and most obvious lies in a failure to achieve rules at all, so that every issue must be decided on an ad hoc basis. The other routes are: (2) a failure to publicize, or at least to make available to the affected party, the rules he is expected to observe; (3) the abuse of retroactive legislation, which not only cannot itself guide action, but undercuts the integrity of rules prospective in effect, since it puts them under the threat of retrospective change; (4) *a failure to make rules understandable*; (5) the enactment of contradictory rules or (6) rules that require conduct beyond the powers of the affected party;

too frequently,"[159] otherwise the addressee of the law "cannot reorient his action" to the new laws.[160] He describes the perils of frequent change through an allegory, the efforts of a hapless monarch Rex who tries to reform his kingdom's laws by drafting a new code:

> [B]efore the effective date for the new code had arrived, it was discovered that so much time had been spent in successive revisions of Rex's original draft, that the substance of the code had been seriously overtaken by events. Ever since Rex assumed the throne there had been a suspension of ordinary legal processes and this had brought about important economic and institutional changes within the country. Accommodation to these altered conditions required many changes of substance in the law. Accordingly as soon as the new code became legally effective, it was subjected to a daily stream of amendments. Again popular discontent mounted; an anonymous pamphlet appeared on the streets carrying scurrilous cartoons of the king and a leading article with the title: "A law that changes every day is worse than no law at all."[161]

Thus, there is no moral obligation to obey a legal rule that constantly changes.[162] Accordingly, Fuller argues the inner morality of law demands stability of legal rules over time.[163]

Fuller is not alone in highlighting the temporal nature of rules. Professors Eskridge and Frickey imply a link between the time a rule has been operative and the stability of a legal equilibrium.[164] This link exists in public international law with respect to custom: a rule is not recognized as part of customary international law unless the proponent of the rule can show the rule has an enduring character.[165] In sum, it

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(7) *introducing such frequent changes in the rules that the subject cannot orient his action by them*; and, finally, (8) a failure of congruence between the rules as announced and their actual administration.

Id. at 39 (emphasis added). Frequency of rule changes is discussed above. The failure to make rules understandable is treated below in the context of the intricacy variable of the FICAS model. *See infra* notes 170–175 and accompanying text. For a discussion of Fuller's eight principles of legality, see J.W. HARRIS, LEGAL PHILOSOPHIES 130–35 (1980) and MARTIN P. GOLDING, PHILOSOPHY OF LAW 27–29, 46–50 (1975).

159. FULLER, *supra* note 156, at 79.

160. *Id.* at 39.

161. *Id.* at 37.

162. *Id.* at 39.

163. *Id.* at 41, 44.

164. *See, e.g.*, Eskridge & Frickey, *supra* note 20, at 31 (stating that "for *eighteen years* there was a stable institutional equilibrium" with respect to the Supreme Court's acceptance of the Equal Employment Opportunity Commission's interpretation of a statute) (emphasis added); *id.* at 81 (arguing that the Supreme Court should not "unsettle a *longstanding* private equilibrium without well-considered substantive jurisdiction") (emphasis added).

165. *See* FUNDAMENTAL PERSPECTIVES ON INTERNATIONAL LAW 12–13 (William Slomanson

is almost axiomatic that frequent changes to existing and proposed rules in a legal regime undermine the stability of the regime.

In the present context, change to a regime may take the form of a new rule issued by the BSC such as the 1988 Basle Accord and 1996 Market Risk Amendment.[166] Also, it may take the form of a proposed rule, which itself may be adjusted by the BSC and replaced by a modified proposal, such as the 1993 and 1995 Market Risk Proposals.[167]

As indicated above, change *per se* in these forms is not automatically destabilizing, because rule change inheres in the concept of a dynamic as distinct from static equilibrium.[168] There comes a point, however, when banks may find change overwhelming and see more upheaval than continuity in a regime. At this point, they may oppose the regime, hence undermining its stability.[169]

It is difficult to predict the exact point at which opposition on this ground is triggered. It may occur when banks find the costs of adjustment to change unacceptably high. Lawyers must be paid to decipher new rules, compliance officers must be paid to ensure these rules are followed, and regulators must be dealt with even when "innocent" or "technical" violations occur. In addition, senior management, heads of trading desks, and floor traders must be educated about new rules and alter their behavior accordingly.[170] The monetary and time costs of adjustment detract from banks' profit interest in, for example, foreign exchange transactions. Put bluntly, they are transaction costs which, if too high, will cause banks to protest "we spend more resources dealing with rules than in financial markets."

At this point, banks may prefer to attempt to devise their own self-regulatory regime. They will have greater control over the fre-

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ed., 2d ed. 1995) (stating that "[a] *continuous* practice of States in their international relations, accepted by many nations, qualifies as . . . a custom") (emphasis added); Anthony D'Amato, *Sources of General International Law*, *in* INTERNATIONAL LAW ANTHOLOGY 51, 63–64 (Anthony D'Amato ed., 1994) (discussing the meaning of duration with respect to establishing the existence of a customary rule); IAN BROWNLIE, PRINCIPLES OF PUBLIC INTERNATIONAL LAW 5 (1990) (noting that duration or passage of time is an element for determining the existence of an international custom); *The Asylum Case*, 1950 I.C.J. 276 (1950) (requiring proof of "*constant* and uniform usage" to show a customary rule exists) (emphasis added); *The Paquete Habana & The Lola*, 75 U.S. 677 (1900) (tracing the history of an alleged customary rule beginning with a 1403 order of King Henry IV).

166. *See supra* notes 43 and 81 and accompanying text.

167. *See supra* notes 75 and 80 and accompanying text.

168. *See supra* notes 108–121 and accompanying text; FULLER, *supra* note 156, at 44–45 (discussing the need "to steer a wavering middle course between too frequent change and no change at all").

169. *See* Bhala, *supra* note 12, at Part II.A.

170. *See generally* INTERNAL CONTROLS IN BANKING (Ray Kinsella ed., 1995) (discussing the design and implementation of systems to provide reasonable assurances of effective and efficient operations, reliable financial information disclosure, and compliance with laws and regulations).

quency of adjustment of rules in such a regime. Indeed, this phenomenon may help explain recent self-regulatory moves made by banks.[171] Moreover, they will not feel frustrated by a sequential adjustment process whereby the BSC issues rules upon which banks comment *post hoc*. Rather, the banks themselves can "get it right" the first time.

While the inverse relationship between the frequency of change and regime stability is clear, is there a distinction between changing existing rules and publishing proposed new rules? That is, does a proposal to issue a new rule have the same destabilizing effect on a regime as the modification of an existing rule? It seems hard to argue that a proposal is as destabilizing as an actual rule change, yet the destabilizing effects of a proposal are palpable. A proposal by the BSC may signal banks that the regime is subject to further (even incessant) change, and thus keep banks somewhat off balance. Stated differently, proposed rule changes may generate uncertainty about the durability of a regime and what to expect next from the BSC. Accordingly, wholly apart from the substance of a proposal, the frequency with which proposals are made may be a reason for bank opposition.

B. Intricacy

Banks are likely to oppose a regime if its rules and proposals are overly intricate. The precise point at which rules and proposals become "overly" intricate is difficult to define in a generic sense, but here Lon Fuller's argument in *The Morality of Law* is pertinent. He worries about "obscure and incoherent legislation" that makes legality "unattainable,"[172] and depicts Rex's problems in this regard.

> The dismay of Rex's subjects was all the more intense, therefore, when his code became available and it was discovered that it was truly a masterpiece of obscurity. Legal experts who studied it declared that there was not a single sentence in it that could be understood either by an ordinary citizen or by a trained lawyer. Indignation became general and soon a picket appeared before the royal palace carrying a sign that read, "How can anybody follow a rule that nobody can understand?"[173]

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171. *See* Bhala, *Applying Equilibrium Theory*, *supra* note 12.

172. FULLER, THE MORALITY OF LAW, *supra* note 156, at 63.

173. *Id.* at 36. No doubt the current Internal Revenue Code and popular support for a simplified flat or consumption tax illustrate Fuller's point. Other examples might be certain instances in which an administrative agency over-regulates an industry and thereby defeats the agency's purposes and mission.

Fuller concludes that "[t]he desideratum of clarity represents one of the most essential ingredients of legality."[174] In other words, intricacy is a basis for bank opposition insofar as overly intricate rules are incomprehensible even to experts.

This opposition, however, does not follow just from an abstract principle favoring clarity. Ultimately, it is based on the banks' bottom line—overly intricate rules and proposals are "expensive." Banks will object to the increased transaction costs associated with attempts to "figure out what is going on." For example, before a bank enters into a foreign exchange or any other financial market transaction, it must be sure it understands and knows how to apply the rules, and how proposed rules would affect its transaction. But, like Rex's subjects, the bank's lawyers, compliance officers, senior management, head traders, and floor traders will struggle with complex rules and proposals.[175] Some rules or proposals may be so difficult that a bank cannot fathom their intended goal and will, therefore, abandon its plans for engaging in a certain class of transactions. The transaction costs become opportunity costs.

The arbitrariness associated with intricacy, as well as costs, is another reason for opposition. Banks are unlikely to accept without question an intricate rule or proposal. The onus is—or ought to be—on the BSC to explain fully how a rule or proposal works, and why it must be detailed. Its failure to perform this task can cause banks to find rules and proposals arbitrary, that is, to see no purpose behind the intricacy.[176] In turn, the regime may seem to crumble under its own weight.

Still another basis for hypothesizing an inverse relationship between intricacy and stability is the interactive effect of the intricacy and frequency variables. These variables may operate together to destabilize a regime (i.e., multicollinearity may exist with respect to these variables). In a regime consisting of intricate rules and proposals, the BSC may be encouraged to tinker with rules and proposals. It may believe it can "fine tune" the regime, which it regards as calibrated to yield desirable policy outcomes. The result may be frequent issuance of new rules and proposals. Fine tuning, in turn, can add to the complexity

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174. *Id.* at 63. Fuller also admits that it is impossible to devise a quantitative scale for clarity, thus the inner morality of law is more a matter of the morality of aspiration than the morality of duty. *See id.* at 43.

175. *See* Louis Kaplow, *Rules versus Standards: An Economic Analysis*, 42 DUKE L.J. 557, 568–86 (1992) (arguing that rules are more costly than standards to create, but standards are more costly for individuals to interpret).

176. This hypothesized relationship is observed in the derivative article with respect to the 1988 Basle Accord and 1993 Market Risk Proposal. *See* Bhala, *Applying Equilibrium Theory*, *supra* note 12.

of the regime: rules may become laden with qualifications and exceptions, and proposals may be modified by new proposals. The regime becomes heavier and, once again, appears to crumble under its own weight.

Without a doubt, simple rules and proposals can be problematic for a bank if they are ambiguous and thereby generate confusion as to expected behavior. Conversely, a bank may accept that some legal issues may defy a simple rule. The bank, however, may argue that if rules and proposals must be either simple but ambiguous or intricate, on the other hand, then the bank ought to be allowed to construct its own self-regulatory regime. After all, in such a regime, the bank can better manage ambiguities or intricacies.[177]

C. Cogency

It seems rather obvious that the stability of a legal regime in international banking is enhanced if the rules existing in or proposed for that regime are cogent from the perspective of banks. Yet, there are numerous instances in which banks, through no fault of their own, cannot understand why a rule or proposal makes sense.[178] To be sure, "making sense" of a frequently changed or intricate rule or proposal is tedious, difficult, and costly. But cogency is a conceptually distinct variable from frequency or intricacy: the first two variables say nothing about the persuasiveness of a rule or proposal.

In contrast, cogency consists of two elements: the existence and transparency of a rationale. First, there must be a rationale for a rule or proposal, and banks must be persuaded by it that they ought to conform their behavior to the rule or proposal. The rationale may pertain to efficiency, fairness, or some other transcendent notion of what is just. Second, the authority responsible for the rule or proposal—namely, the BSC—must articulate clearly this rationale. The absence of either element may convey the message that the rule or proposal is arbitrary.

This message can have a corrosive effect on the stability of a regime. Friedrich A. Hayek makes this point in *The Road to Serfdom* in the context of his attack on collectivist economic planning.

> [A]s planning becomes more and more extensive, it becomes regularly necessary to qualify legal provisions increasingly by reference to what is "fair" or "reasonable"; this means that it becomes

177. Indeed, perhaps this argument helps explain why banks such as J.P. Morgan have devised internal value-at-risk models to determine their market risk capital charges. *See* Bhala, *Applying Equilibrium Theory*, *supra* note 12.

178. *See, e.g.*, Bhala, *Applying Equilibrium Theory*, *supra* note 12, at Part II.C.

> necessary to leave the decision of the concrete case more and more to the discretion of the judge or authority in question. *One could write a history of the decline of the Rule of Law . . . in terms of the progressive introduction of these vague formulas into legislation and jurisdiction, and of the increasing arbitrariness and uncertainty of, and the consequent disrespect for, the law and the judicature,* which in these circumstances could not but become an instrument of policy.[179]

In the present context, banks, frustrated and disenchanted, may be motivated to try to persuade the BSC to change its rules and proposals that lack cogency.[180] Alternatively, they may ask the BSC to grant them increased self-regulatory authority to devise, for example, their own risk management techniques which they find cogent.[181] In either case, a direct relationship between cogency and stability is apparent: a rule or proposal in a legal regime that is not cogent may be a target for opposition which, in turn, undermines the stability of the regime.

D. Authority

The stability of a regime in international banking law is undermined by doubts about the authority of that regime. The extent to which rules in the regime create obligations may be unclear. The status or nature of the entity drafting rules and proposals for the regime may be questioned. The process by which rules are created and modified by subsequent proposals may be opaque. These doubts strike at the heart of the authority of the regime. In turn, banks governed by the regime may reject or attempt to circumvent the regime.

While a direct relationship between authority and stability may be obvious, difficulty arises in identifying what confers authority on a regime in international banking law. One answer, intimated above, is to consider the binding nature of the BSC's issuances under public international law. Possibly, the authority of the BSC's rules and proposals is enhanced, and banks must accept the rules and proposals, if they are binding. However, it is clear that the BSC's documents, recommendations, and the like "are not binding in any legal sense."[182] Hence, even the terms "rules" and "proposed rules" are somewhat inapposite. A second and possibly related alternative is to explore whether self-regulatory initiatives by banks might develop into an

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179. FRIEDRICH A. HAYEK, THE ROAD TO SERFDOM 78 (1944).

180. This phenomenon is apparent from the discussion in the derivative article of the BSC's 1988 Accord and 1993 Market Risk Proposal. *See* Bhala, *Applying Equilibrium Theory*, *supra* note 12.

181. *See* Bhala, *Applying Equilibrium Theory*, *supra* note 12, at Part III.

182. Freeland, *supra* note 65, at 232. *See also* Bhala, *Applying Equilibrium Theory*, *supra* note 12.

international law merchant.[183] Such a law could be authoritative and instill a sense of binding obligation among banks. A third answer is to focus on features of the entity responsible for creating the regime. Is the expertise of the BSC widely acknowledged? Is it a representative body? Does it behave in a non-partisan way? Affirmative answers to these questions may encourage banks to accept the regime as authoritative.[184]

For the present purpose of developing an equilibrium theory, identifying what confers authority on an international banking law regime can be viewed as a species of the general jurisprudential problem of the authority of law. On this matter, the work of Professor George Christie is insightful.[185] He rejects both Kelsen's proposition that a law is authoritative insofar as it is derived from a basic rule or norm, and Hart's thesis that a law is authoritative if it relates to a rule of recognition.[186] After all, it is difficult to identify a basic norm, and impossible to state precisely a rule of recognition.[187] Instead, Professor Christie finds the concept of authority "has the notion of consent built into it."[188] "Authority" refers to the ability of a person "to command under a claim of right *that is accepted as such* by those over whom the person commanding is said to have authority."[189] The notion of acceptance distinguishes authority from power, which entails domination or coercion.[190] In brief, "[f]or authority to exist, the people to whom the authoritative pronouncements are addressed must not only accept them as authoritative, they must also accept a claim of right on the part of the issuer to issue these pronouncements."[191]

There are two types of authority: *de jure*, "whose exercise is dependent upon a set of rules";[192] and *de facto*, which is not dependent on a

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183. *See* Bhala, *Applying Equilibrium Theory*, *supra* note 12.

184. *See id.*

185. See, e.g., GEORGE C. CHRISTIE, LAW, NORMS & AUTHORITY 83–85 (1982). *See also* GEORGE C. CHRISTIE, JURISPRUDENCE: TEXT AND READINGS ON PHILOSOPHY OF LAW (1st ed. 1973).

186. CHRISTIE, LAW, NORMS AND AUTHORITY, *supra* note 185, at 83–85. *See generally* GOLDING, *supra* note 156, at 39–46 (discussing the Kelsen and Hart positions); BODENHEIMER, JURISPRUDENCE, *supra* note 30, at 100–09 (also explaining the Kelsen and Hart positions); Lloyd & Freeman, *supra* note 30, at 408–11 (discussing the rule of recognition); H.L.A. HART, THE CONCEPT OF LAW 92–107 (1961) (concerning the rule of recognition); H. Kelsen, *General Theory of Law and State* (1946) and *The Pure Theory of Law* (1967) *in* LLOYD & FREEMAN, *supra* note 30, at 354–62, 367–79 (discussing the basic norm).

187. CHRISTIE, LAW, NORMS AND AUTHORITY, *supra* note 185, at 84.

188. *Id.* at 111.

189. *Id.* at 99 (emphasis added).

190. *Id.* at 100.

191. *Id.* at 129. *See also* 89, 99–100. Consequently, Professor Christie argues there is no meaningful distinction between the concepts of authority and legitimacy. A challenge to authority on grounds of legitimacy is simply a claim that a person has no right to issue authoritative pronouncements, i.e., the person has no authority. *Id.* at 96–99, 101–04, 112.

192. CHRISTIE, LAW, NORMS AND AUTHORITY, *supra* note 185, at 86.

rule structure.[193] There are a number of legislative and judicial instances in which the exercise of authority is upheld as *de jure* even though there really was no *de jure* authority.[194] Therefore, Professor Christie concludes that "[o]ften, in the law, it turns out that the successful exercise of *de facto* authority . . . takes precedence over *de jure* authority."[195] In sum, not only is all authority based on consent, but also ultimately it is *de facto* authority.

The definition of equilibrium proffered above[196] accords with Professor Christie's focus on consent and his distinctions among types of authority. It may be argued that to the extent an international banking law regime developed by the BSC is said to have authority, that authority is consent-based and *de facto* in nature. There is, however, no rule structure on which it can base its authority.[197] The BSC has no ability to dominate or coerce its members, central banks outside of the G-10, or the private sector. At best, it can influence G-10 central banks, which might agree to promulgate the BSC's issuances as domestic regulations. Hence, the essence of the BSC's authority is voluntary acceptance by bank regulators and, in turn, banks. Moreover, as the definition of equilibrium suggests, bank acceptance of BSC pronouncements is critical for the stability of international banking law.

Highlighting the importance of acceptance raises still another fundamental jurisprudential matter. Why accept authority in the first place? Put differently, why is law binding? Professor Christie offers "historic and psychological factors" as an explanation. Building on the work of a Scandinavian legal realist,[198] Axel Hagerstrom, Professor Christie accepts that there may be some validity to the idea of a "conative impulse," that is, "the impulse to obedience engendered by a directive, such as a command, merely by the imperative form of expression."[199] A less abstruse answer, based on the ideas of another Scandinavian legal realist, Karl Olivecrona, is that accepting legal authority provides certainty and assurance.

This point is easily translatable into the present context. Banks have reason to prefer equilibrium over disequilibrium.[200] In the latter state, business is disrupted, risks are exacerbated, and ultimately profits are

193. *Id.* at 87.

194. *Id.* at 107–09.

195. *Id.* at 109.

196. *See supra* notes 136–137 and accompanying text.

197. For instance, there is no document akin to the Charter of the United Nations or the Agreement Establishing the World Trade Organization that pertains to the BSC.

198. For an introduction to Scandinavian legal realism, see J.M. KELLY, A SHORT HISTORY OF WESTERN LEGAL THEORY 369–71 (1992); HARRIS, LEGAL PHILOSOPHIES, *supra* note 158, at 98–102; BODENHEIMER, JURISPRUDENCE, *supra* note 30, at 128–33.

199. CHRISTIE, LAW, NORMS AND AUTHORITY, *supra* note 185, at 171.

200. *See supra* notes 143–148 and accompanying text.

jeopardized. Banks are therefore inclined to accept the authority of the BSC because it provides them with stability. For them, putting up strong opposition to a legal regime is a difficult and relatively uncommon step.

E. Scope

There is a dual nature to the "scope" of a legal regime in international banking. First, what substantive issues do the rules and proposals in the regime cover? Second, who are the addressees of those rules and proposals? In both respects, limitations in the scope of a regime may contribute to its instability.[201]

There is a direct relationship between the breadth of substantive coverage of a regime and its stability. A regime with "gaps" or "holes" may generate opposition from banks for two reasons. First, ambiguity may exist as to whether a transaction is covered by the rule or proposal or falls into a gap. What is the precise boundary around the regime? How should "fringe" transactions that straddle the boundary of the regime be treated?[202] Second, uncertainty may exist as to a transaction not within the ambit of the rules or proposals in the regime. Is such a transaction legal? If so, then what law applies?

A direct relationship also exists between the scope of the addressees and the stability of a regime. Banks subject to existing and proposed rules in a regime may look enviously at banks and non-bank financial institutions that escape the strictures of the regime. If a bank is insufficiently flexible to escape the regime, then it will demand a level playing field for similarly situated parties. Absent coverage of all similarly situated parties, a covered bank inevitably will view itself as unfairly disadvantaged and demand change. It will seek either to repeal those rules and proposals in the regime that it perceives to be onerous or to extend the coverage of the regime to include its competitors.[203]

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201. The lack of a level competitive playing field can arise because of differences in the way in which an international agreement is implemented into municipal law. For discussions of disharmonies from one country to another in the implementation of the Basle Accord, see Scott & Iwahara, *supra* note 18, and Raj Bhala & Ethan B. Kapstein, *The Basle Accord and Financial Competition*, 90 HARV. BUS. REV. 158 (Jan.-Feb. 1990).

202. As discussed in the derivative article, these controversies are raised by the way the 1993 Market Risk Proposal deals with options. *See* Bhala, *Applying Equilibrium Theory*, *supra* note 12.

203. As discussed in the derivative article, this aspect of scope is raised by the BSC's capital adequacy regime. *See* Bhala, *Applying Equilibrium Theory*, *supra* note 12. *See also* Richard Lapper, *Co-operation Urged Among Regulators*, FIN. TIMES, July 25, 1995, at 3 (discussing the need for greater international regulatory cooperation of financial conglomerates).

V. AN IDEAL TYPE: SELF-REGULATION

A man is rich in proportion to the number of things which he can afford to let alone.

Henry David Thoreau[204]

The FICAS model presented above offers five determinants of stability in the international banking law context. In turn, these variables suggest the outlines of a capital adequacy regime likely to be a stable dynamic equilibrium—namely, self-regulation.[205] For example, in a self-regulatory regime concerning capital adequacy, banks operate under delegated authority from the BSC and their domestic regulators to determine their capital requirements. Accordingly, banks, not the BSC, are principally responsible for devising rules and proposals. The BSC may lay down general constraints on the discretion of banks, but otherwise it takes a "hands-off" approach with respect to how banks determine appropriate capital levels. In sum, the burden of risk measurement shifts from the BSC to banks, and the BSC focuses on the adequacy of the output of the banks' risk measurement systems.[206]

An advantage to positing a self-regulatory regime as an ideal type is the primary role banks play in such a regime. One could argue that an equilibrium theory of international banking law is incomplete without a normative view of the role of banks. Clearly, the Eskridge-Frickey approach to law as equilibrium is about public law and public institutions—familiar terrain for the constitutional lawyer. International banking is, however, at least as much about markets and their players as about public sector entities. The normative issue is what role banks should play in bringing about a stable dynamic equilibrium.

A solution can be found by observing the world's largest financial market—the foreign exchange market.[207] Gone are the days when

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204. HENRY DAVID THOREAU, WALDEN, OR, LIFE IN THE WOODS AND ON THE DUTY OF CIVIL DISOBEDIENCE 60 (Signet Classic 1963) (1854).

205. To be sure, this equilibrium may not be unique, as the variables may suggest other stable dynamic equilibria.

206. Consequently, a self-regulatory regime is distinct from the absence of regulation: no regulation would mean the BSC does not care whether the capital banks hold is adequate to absorb losses, and a bank is not under any regulatory obligation to hold capital against potential losses.

A potentially fruitful line of future inquiry is to consider the ideal type self-regulation in relation to the concept of self-organizing systems. This concept has been used by physical, biological, and environmental scientists to explain how "complex systems in which randomness and chaos [exist] seem spontaneously to evolve into unexpected order," i.e., how order results from instability. *See* PAUL KRUGMAN, THE SELF-ORGANIZING ECONOMY vi (1996).

207. The average daily gross turnover in the foreign exchange market exceeds one trillion dollars. *See* CENTRAL BANK SURVEY, *supra* note 39, at 1, 5, and Table I at 6. The one trillion dollar figure includes trading in all OTC markets, namely, spot, forward, and derivatives (options and currency swaps), as well as exchange-traded derivatives (options and futures). Cross-currency

central banks regulated prices for foreign currencies pursuant to the Bretton Woods fixed-exchange rate system.[208] Now, central banks are lucky if they can intervene in a particular currency market to temporarily reinforce a pre-existing exchange rate trend.[209] The foreign exchange market suggests that private parties in international banking law dominate central banks. Emphasizing self-regulation helps translate this marketplace fact into a legal ideal type.

Why would banks be unlikely to oppose a self-regulatory regime, i.e., why might such a regime be stable? In brief, the answer is that the flexibility of such a regime ensures banks' comfort with the rules and proposals of the regime. Consider each FICAS variable in turn.

In a self-regulatory regime, the frequency with which a bank adjusts its self-developed rules and proposals depends on its preferences. Similarly, the intricacy of the rules and proposals is linked to the bank's preferences. In other words, a bank suits itself as to frequency and intricacy. With respect to cogency, as a rational actor a bank will not adopt rules or proposals it finds unpersuasive. Instead, it will attempt to base its rules on clear, sound rationales. Assuming any delegation of authority from the BSC and domestic regulators is proper, a bank in a self-regulatory regime does not question its own authority to devise rules and proposals. To the contrary, it tries to enhance the authority of the regime, possibly touting it as customary international law or international law merchant.[210] Finally, as for scope, a bank may seek to bring all relevant transactions and all similarly situated nonbank parties into the regime.[211] Should a self-regulatory regime accomplish this task, its rules and proposals are likely to be adjusted infrequently and to be simple, cogent, authoritative, and comprehensive in scope.

While the argument above provides a justification for self-regulation, it is hardly a definitive defense. Self-regulation raises regulatory

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interest rate swaps are excluded. *See also Big*, ECONOMIST, Sept. 23, 1995, at 63 (noting daily total net currency trading is $1.3 billion according to the Bank for International Settlements' April 1995 survey of the foreign exchange market).

208. For discussions of the Bretton Woods system, see HAROLD JAMES, INTERNATIONAL MONETARY COOPERATION SINCE BRETTON WOODS 1–346 (1996); HERBERT G. GRUBEL, THE INTERNATIONAL MONETARY SYSTEM 143–82 (1984); and KENNETH W. DAM, THE RULES OF THE GAME 71–189 (1982).

209. For discussions of the efficacy of foreign exchange intervention, see KATHRYN M. DOMINGUEZ & JEFFREY A. FRANKEL, DOES FOREIGN EXCHANGE INTERVENTION WORK? (1993) and YOICHI FUNABASHI, MANAGING THE DOLLAR: FROM THE PLAZA TO THE LOUVRE (1989).

210. *See supra* notes 180–181 and accompanying text.

211. In this respect, the statement of E. Gerald Corrigan, former president of the Federal Reserve Bank of New York and former chairman of the BSC, that "[n]o regime is capable of capturing all of the activities and trading strategies that individual institutions use" may be incorrect. Quoted in Richard Waters, *Tough Time Making A Level Playing Field*, FIN. TIMES, May 4, 1993, at 17.

concerns. For example, what prevents a rogue bank from taking advantage of the discretion a self-regulatory regime accords it, to gain a competitive edge?[212] (Stated in more general terms, the question might be what degree of inconsistency among self-devised rules should be tolerated?) A possible answer is that in some international financial markets, such as the foreign exchange market, a reputation for integrity is prized. Consider the likely fate of a bank that tries to reduce its costs associated with foreign exchange transactions by reducing the capital it maintains to unsafe and unsound levels. Its counterparties are sure to learn of this behavior. It is likely that they will curtail or eliminate their dealings with the rogue bank. After all, there is a systemic risk issue: if the bank fails to honor its obligations to the counterparties, and these obligations are significant, then the counterparties might be pulled down.[213] Not surprisingly, some non-Japanese banks worried about this problem in the wake of the Daiwa crisis. Western banks charged Japanese banks a risk premium of a few extra basis points over the London Interbank Offer Rate (LIBOR) for short-term Eurodollar loans.[214] In sum, counterparties have every incentive to avoid a domino effect, and thus a potentially rogue bank ignores reputational concerns at its peril.[215]

Certainly this answer does not deal adequately with possible externalities associated with a self-regulatory regime. If self-regulation corresponds with private contracting and self-determined policies to maximize profits, then it is consistent with social optimization only if there are no externalities. The regulators represented at the BSC are paid to worry about systemic risk and avoid government-led bailouts of troubled banks. Hence, they may question the consistency of self-regulation with social optimization. But before regulators dismiss self-regulation or constrain the operation of a self-regulatory regime, they ought to

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212. *See generally* CLAUDIO E.V. BORIO & RENATO FILOSA, THE CHANGING BORDERS OF BANKING: TRENDS AND IMPLICATIONS, BIS Economic Paper No. 43 at 37–38 (Dec. 1994) (arguing for a balance between regulation, which can give banks a false sense of security and create a moral hazard problem, and market-imposed discipline, which may be insufficient to safeguard systemic stability).

213. "Systemic risk" is the risk that financial problems at one bank may spread to that bank's counterparties, resulting in a domino effect in which the collapse of the first bank causes the collapse of subsequent banks. *See How Safe is Your Bank?*, ECONOMIST, Apr. 27, 1996, at 15; Cynthia C. Lichtenstein, *International Standards for Consolidated Supervision of Financial Conglomerates: Controlling Systemic Risk*, 19 BROOKLYN J. INT'L L. 141 (1993); Hideki Kanda, *Systemic Risk and International Financial Markets*, *in* REGULATING INTERNATIONAL FINANCIAL MARKETS: ISSUES AND POLICIES 267 (Franklin R. Edwards & Hugh T. Patrick eds., 1992).

214. *See* BANK FOR INTERNATIONAL SETTLEMENTS, INTERNATIONAL BANKING AND FINANCIAL MARKET DEVELOPMENTS app. 1 at 11–13 (Feb. 1996). Interestingly, the risk premium applied even to yen-denominated loans to Japanese banks. *See* the sources cited *supra* note 10.

215. This response assumes that a bank knows the identity of its potential counterparties. There are instances in the brokered foreign exchange market in which revelation of such identities is delayed. *See* Bhala, *Self-Regulation*, *supra* note 38.

(1) identify externalities and (2) articulate precise systemic risks and plausible transmission mechanisms associated with each externality. Put bluntly, regulatory actions ought to be narrowly and carefully crafted to address realistic systemic risks arising from externalities. After all, as noted in a recent international banking survey in *The Economist*, "[c]ross-border prescriptions for banking systems can sometimes do more harm than good."[216]

Another more cynical concern is that neither the BSC nor domestic bank regulators have an incentive to permit complete self-regulation. To do so would involve two major changes in regulatory culture. First, the BSC and regulators would have to stop thinking of themselves as "active players" and admit that they are no more than "referees" who administer rules written by representatives of the real players.[217] Second, the BSC and regulators would have to trust banks both to "get it right" and to "do the right thing." That is, they would have to agree that banks have sufficient expertise to regulate their own affairs in a safe and sound manner as well as that the reputation-systemic risk argument is more meritorious than the rogue behavior argument. Yet the traditional regulatory culture is one of high secrecy and low trust.[218]

An answer to this concern is that the BSC and regulators may have no choice but to change. They cannot possibly keep up with the rapid, sophisticated innovations in international financial markets. How can a BSC staff member or Federal Reserve analyst possibly understand the risks associated with structured foreign exchange derivatives in Singapore as well as the banks that develop and sell these products? How can the staff member or analyst monitor these risks on a 24-hour basis as well as the banks engendering these risks? Interestingly, the Reserve Bank of New Zealand may have accepted this point. Currently, it is experimenting with what may amount to self-regulation. The New Zealand regulator prudentially supervises banks by requiring them to disclose information to the public on the theory that "a well informed

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216. *A Standard Dose*, ECONOMIST, Apr. 27, 1996, at S36.

217. *See Bettering Basle*, ECONOMIST, Dec. 9, 1995, at 76, 78 (stating that "many regulators might not like the implication that they would have less to do").

218. For example, information about banks contained in bank examination reports and obtained through less formal means is not readily available to the public; if it were, then the public might misinterpret it and create a "run" on a particular bank, which might in turn necessitate a government bail out. In contrast, the Securities and Exchange Commission (SEC) has long relied on public disclosure of financial data as a technique of securities regulation. Thus, it is not surprising that bank regulatory agencies, who are charged with enforcing securities regulations with respect to banks, are notoriously lax in such enforcement. *See, e.g.*, Michael P. Malloy, *The 12(i)'ed Monster: Administration of the Securities Exchange Act of 1934 by the Federal Bank Regulatory Agencies*, 19 HOFSTRA L. REV. 269 (1990); Michael P. Malloy, *Public Disclosure as a Tool of Federal Bank Regulation*, 9 ANN. REV. BANKING L. 229 (1990).

market is the safest, best and least expensive way for a central bank to supervise banking operations."[219]

Other bank regulators may follow New Zealand's example, which could result in a gradual but inexorable movement toward increased self-regulation. From the perspective of equilibrium theory, this movement would be welcome because it would be a movement toward an ideal type which represents a stable dynamic equilibrium. Accordingly, the next inquiry is whether to use the FICAS variables in a partial or general equilibrium analysis.[220]

VI. SUMMARY

A synthetic scholarship in international banking that utilizes theoretical concepts to assess legal regimes can yield fruitful insights and policy prescriptions. Equilibrium theory is one such theoretical concept. It is derived from an approach to law as equilibrium used for Supreme Court decision-making and has been modified for the context of international banking law. Equilibrium theory has three essential features: a definition of a stable dynamic equilibrium, a set of determinants of stability, and an ideal type legal regime.

A legal regime is likely to be a stable dynamic equilibrium if banks would have no legitimate reasons to present significant opposition to the regime. The FICAS model posits five determinants of stability, namely, the (1) *f*requency of adjustment to rules and proposals in the regime; (2) *i*ntricacy of the rules and proposals; (3) *c*ogency of the rules and proposals; (4) *a*uthority of rules and proposals; and (5) *s*cope of rules and proposals. The model also hypothesizes relationships between these determinants and the dependent variable: (1) the more frequent the adjustments to rules and proposals in the regime, the more likely banks will oppose the regime; (2) the more intricate the rules and proposals, the more likely banks will oppose the regime; (3) the less cogent the rules and proposals, the more likely banks will oppose the

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219. Terry Hall, *Market—Not Central Bank—To Supervise NZ Banking*, FIN. TIMES, June 30, 1994, at 4.

220. The derivative article, *Applying Equilibrium Theory and the FICAS Model: A Case Study of Capital Adequacy and Currency Trading*, *supra* note 12, is devoted to this inquiry. It asks whether a particular regime, the BSC's capital adequacy rules and proposals for foreign exchange transactions, approximates the ideal type. The derivative article makes two arguments. First, until the BSC issued its 1995 Market Risk Proposal and finalized this Proposal in 1996, the regime was not a stable dynamic equilibrium. Banks had reason to oppose, and indeed did oppose, the regime on the basis of each of the FICAS variables. The regime hardly resembled the ideal type of self-regulation. Second, in contrast to the pre-1995 period, the current regime may be headed toward a stable dynamic equilibrium. With respect to the frequency, intricacy, and authority variables, the new regime resembles the ideal type of self-regulation. Difficult cogency and scope issues, however, must be resolved before the regime is truly stable. See *supra notes* 80–81 and accompanying text.

regime; (4) the less authoritative the rules and proposals, the more likely banks will oppose the regime; and (5) the narrower the scope of application of the rules and proposals, the more likely banks will oppose the regime.

Finally, the FICAS model suggests a self-regulatory regime as an ideal type because it would not engender bank opposition and, therefore, represents a stable dynamic equilibrium. When applied to legal regimes in international banking, the elements of equilibrium theory help scholars and practitioners make sense of, and appraise critically, the bewildering blur of rules and proposals that constitute international banking law.