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Coordination and Conflict: The Persistent Relevance of Networks in International Financial Regulation

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COORDINATION AND CONFLICT: THE PERSISTENT RELEVANCE OF NETWORKS IN INTERNATIONAL FINANCIAL REGULATION

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I
INTRODUCTION

Over the last two decades, scholarly enthusiasm about transnational regulatory networks has experienced something of a boom-and-bust cycle. Such networks—informal groupings of mid-level national officials, convened to develop nonbinding "soft law" norms of behavior in specialized fields of regulation—were identified as an important new phenomenon, were studied widely, and came to be seen as central pillars of the international legal order. Yet today, regulatory networks go largely unmentioned in polite academic conversation: a kind of "he-who-must-not-be-named" of international law.

In the work of Kal Raustiala, Anne-Marie Slaughter, and David Zaring[1]—who drew on Bob Keohane and Joseph Nye's study of "transgovernmental relations,"[2] and who were later joined by Janet Koven Levit, Charles Whitehead, and others[3]—transnational regulatory networks were foregrounded as a distinctive framework of transnational governance, falling somewhere between treaty-based international organizations and one-off incidents of international cooperation. Particularly in the realm of international financial

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1. *See generally* Kal Raustiala, *The Architecture of International Cooperation: Transgovernmental Networks and the Future of International Law*, 43 VA. J. INT'L L. 1 (2002) (highlighting transgovernmental networks as a distinctive framework of transnational governance); Anne-Marie Slaughter, *A Typology of Transjudicial Communication*, 29 U. RICH. L. REV. 99 (1994) (same); David Zaring, *International Law by Other Means: The Twilight Existence of International Financial Regulatory Organizations*, 33 TEX. INT'L L.J. 281 (1998) (same).

2. *See generally* Robert O. Keohane & Joseph S. Nye, *Transgovernmental Relations and International Organizations*, 27 WORLD POL. 39 (1974) (exploring the distinct importance of "transgovernmental" interactions in international relations).

3. *See generally* Janet Koven Levit, *A Bottom-Up Approach to International Lawmaking: The Tale of Three Trade Finance Instruments*, 30 YALE J. INT'L L. 125 (2005) (analyzing growth of transnational governance); Charles K. Whitehead, *What's Your Sign?—International Norms, Signals, and Compliance*, 27 MICH. J. INT'L L. 695 (2006) (same).

regulation—where an alphabet soup of transnational regulatory networks, including the Basel Committee on Banking Supervision, the Financial Action Task Force, the Financial Stability Forum, the International Association of Insurance Supervisors, and the International Organization of Securities Commissions (IOSCO) were busy at work—scholars and practitioners alike came to see networks as essential sources of international order.

In her seminal study of transnational regulatory networks, *A New World Order*, Slaughter took the theretofore largely descriptive literature of networks a step further, casting them as a solution to the paradox of globalization.[4] Engaging the unavoidable challenges that globalization has forced upon us, while avoiding the dangers of world government, networks emerge in Slaughter's account as the optimal means of collective action in a shrinking world.

As dramatically as networks emerged as a mainstay in the study of international order, however, they fell from grace just as quickly. Consider a bit of modest empirics: after a decade of growth in law journal references to "transnational networks," "transgovernmental networks," and "regulatory networks," such mentions peaked in 2010. In the years since, they have been in steady decline.[5]

In no small part, this change can be traced to the financial crisis that swept the globe in 2008. As David Zaring has highlighted, transnational regulatory networks did not play a significant role in either preventing or responding to the financial crisis.[6] In many areas of international relations, where networks have never been seen to play a central role, this might be of little note. The marginal relevance of networks to the financial crisis, by contrast, constituted a fairly damning critique of their utility, given longstanding emphasis on the financial market's regulatory networks as preeminent exemplars of the role that networks could play. Adding insult to this injury was the close nexus between the specific mandates of the Basel Committee, the Financial Stability Forum, the International Association of Insurance Supervisors, IOSCO, and other regulatory networks, and precisely the type of risk exposures and systemic market failures that characterized the financial crisis.

But the Thermidor of the transnational regulatory network "revolution" arises out of a broader and more foundational set of critiques than simply the failure of networks to save us from the financial crisis. This brief article engaged one among those challenges to the utility of transnational regulatory networks in global governance. In important recent work, scholars have questioned the ability of networks to play a meaningful role when relevant national preferences

4. *See generally* ANNE-MARIE SLAUGHTER, A NEW WORLD ORDER (2004).

5. Author's calculation based on search of Westlaw *Law Reviews and Journals* database (Feb. 26, 2015) (on file with author).

6. *See generally* David Zaring, *International Institutional Performance in Crisis*, 10 CHI. J. INT'L L. 475, 478–86 (2010).

are in conflict.[7] Whatever capacity regulatory networks might have where interests are aligned, the argument goes, they have little to offer in the far more widespread universe of situations in which nations disagree.

In significant part, this critique has been grounded on invocations of game theory—a longstanding source of insight into international relations and governance.[8] But challenges to the relevance of transnational regulatory networks in the face of conflict misunderstand the lessons of game theory. Contrary to what may be emerging as the conventional wisdom, game theory actually helps to suggest why networks can play an important role in settings characterized by conflict.

Rather than simply an exercise in applied mathematics, however, an understanding of the capacity of networks to help regulate the international financial markets has important implications for questions of institutional design. Especially since the financial crisis, scholars and policymakers have debated the optimal institutional framework for international financial regulation.[9] One might array the universe of choices along a spectrum ranging from highly formalized international institutions with significant political and legal authority, to ad hoc and informal agreements that address a single issue of bilateral concern. In between, one might variously situate high-level political gatherings such as the G-7 or G-20; hard law agreements established by multilateral or bilateral treaty, but lacking any institutional structure; and, of course, transnational regulatory networks.[10]

From the crucible of the financial crisis, observers have drawn divergent conclusions as to the choice among these alternatives. Some have argued for the need to create a "World Financial Organization" akin to the World Trade Organization.[11] Others have called for increased treaty making in the field of financial regulation, but without the creation of new institutional structures.[12] And yet others see regionalism and ad hoc coordination as the best that can be hoped for.[13] Each of these positions may have its merits. To the extent it relies

7. *See, e.g.*, Chris Brummer, *Post-American Securities Regulation*, 98 CAL. L. REV. 327 (2010); Matthew C. Turk, *Reframing International Financial Regulation After the Global Financial Crisis: Rational States and Interdependence, Not Regulatory Networks and Soft Law*, 36 MICH. J. INT'L L. 59 (2014); Pierre-Hugues Verdier, *Transnational Regulatory Networks and Their Limits*, 34 YALE J. INT'L L. 113 (2009).

8. *See* Duncan Snidal, *The Game Theory of International Politics*, *in* COOPERATION UNDER ANARCHY 28 (Kenneth A. Oye ed., 1986) (explaining utility of game theory in the study of international relations).

9. *See, e.g.*, Giulio Napolitano, *The Two Ways of Global Governance After the Financial Crisis: Multilateralism Versus Cooperation Among Governments*, 9 INT'L J. CONST. L. 310 (2011).

10. *See* Turk, *supra* note 7, at 71–72 (reviewing variety of institutions at work in international financial regulation).

11. *See, e.g.*, Barry J. Eichengreen, *Out of the Box Thoughts About the International Financial Architecture* (International Monetary Fund, Working Paper No. WP/09/116, 2009).

12. *See* Brummer, *supra* note 7, at 366–70 (arguing for the creation of a World Financial Organization).

13. *See generally* Turk, *supra* note 7, at 115–18.

on the incapacity of networks to navigate conflict, however, it is grounded in false premises. As a new architecture of international financial regulation is built in the coming years, policymakers should not abandon the role of transnational regulatory networks without reason.

The argument herein is thus a modest one: the capacity of transnational regulatory networks to play a central role in global governance—whether in international financial regulation or elsewhere—should not be dismissed merely because relevant national interests are not aligned. Conflict alone does not obviate the role of networks.[14]

By contrast, the argument is *not* that networks are invariably effective in the face of conflict, nor more generally—including by comparison with more formal institutions. In fact, formal institutions may be crucial in navigating certain forms of transnational conflict. Nor does this article embrace the defense of networks as apolitical decision-making structures, operating separate and apart from the policy preferences of their national members.[15] Various critiques of the efficacy of networks may thus be justified,[16] and it is clearly correct that distinct circumstances will dictate a broader or narrower role for transnational networks.[17]

Part II of this article frames the operative challenge to networks, reviewing the critiques of transnational regulatory networks offered by two leading scholars of international financial regulation: Chris Brummer and Pierre Verdier. Specifically, it highlights the distinction these scholars draw between strategic settings that are in the nature of coordination games, in which they see networks as having an impact, versus the more familiar Prisoner's Dilemma and other conflictual game settings, in which they see networks as incapable of having any meaningful role.

Part III reveals this dichotomous account of network utility to be false. After reviewing the basic dynamics of coordination, part III highlights the ways in which the key characteristics of coordination can persist, even in the face of significant conflicts between the preferences of relevant players, as demonstrated by Thomas Schelling more than a half-century ago. On the foundation of that more robust account of the nature of coordination, part IV points to an array of ways in which transnational regulatory networks might play an important role even when national interests are in conflict—over divergent accounting standards; varying enforcement priorities; the relative dominance of international financial centers, including as between developed

14. To be fair, Verdier emphasizes that he does not intend to dismiss the role of networks completely. *See* Verdier, *supra* note 7, at 116–17. This article seeks to push back, however, on the argument he offers for significantly limiting their role.

15. *Cf. id.* at 116 (explaining that networks should not be viewed as apolitical structures).

16. *See, e.g.*, Robert B. Ahdieh, *Imperfect Alternatives: Networks, Salience, and Institutional Design in Financial Crisis*, 79 U. CIN. L. REV. 527 (2010) (suggesting a particular critique of the role of networks amidst financial crises).

17. *See generally* Brummer, *supra* note 7, at 354–55, 362–63.

markets and offshore financial centers; or otherwise. Finally, part V focuses on the setting of international financial regulation specifically, identifying particular dynamics of coordination as to which transnational regulatory networks might contribute, or are already doing so.

II
THE LIMITS OF NETWORKS IN CONFLICT

After an extended run of nearly universal praise for their role in international relations generally, and especially in international financial regulation, transnational regulatory networks have hit something of a wall in recent years. In part, this can be traced to the global financial crisis, where networks played a far more modest role than might have been expected. But the real critique of transnational regulatory networks runs deeper than the crisis, to question the utility of networks more fundamentally.

In a pair of articles published on the tail end of the financial crisis, Chris Brummer and Pierre Verdier—leading scholars of financial regulation, especially of the transnational variety—questioned the euphoria that had long characterized the study of transnational regulatory networks.[18] In overlapping but distinct ways, each posited that widespread faith in networks as a centerpiece of the transnational legal order was misplaced. In most real-world circumstances, they argued, networks could not be helpful.[19]

Starting from an intimate awareness of the international undertakings of the U.S. Securities and Exchange Commission—and particularly its aspirations to increased harmonization in securities law—Brummer argues that theories of "transgovernmentalism" fail to engage the full complexity of international financial regulation today.[20] The challenges of today's financial markets, he suggests, go beyond information asymmetries or a lack of trust: the types of issues that can be addressed by way of non-coercive regulatory networks focused on dialogue and an expanding web of bilateral memoranda of understanding. Rather, "conflicting regulatory philosophies . . . , differing costs of adjust[ment], and competition among financial centers" also stand in the way of any effective regime of transnational financial regulation.[21]

Given the sharply contrasting competitive strategies preferred by developed economies versus offshore financial centers, for example, it is difficult to envision a dynamic of voluntary harmonization that could bring them together.[22] Whereas the former seek to offer a framework of stringent rules, and thereby

18. *See* Brummer, *supra* note 7, at 330–31; Verdier, *supra* note 7, at 114–15.

19. *See* Brummer, *supra* note 7, at 327–33; Verdier, *supra* note 7, at 114–18. Echoing Brummer and Verdier's criticisms, others have joined in questioning the capacity of networks to manage conflict. *See, e.g.*, Turk, *supra* note 7.

20. *See* Brummer, *supra* note 7, at 330 (using the term "transgovernmentalism" to capture theories of transnational regulatory networks as central to the international legal order).

21. *Id.*

22. *See id.* at 353.

serve a bonding function, the latter aim to meet the demand for minimal constraint, transparency, and liability.[23] The costs of adjustment, meanwhile, are both unevenly distributed, given that any point of convergence is likely to more closely approximate the regime of one jurisdiction than another, and more readily managed in those jurisdictions with an elaborate regulatory regime already in place.[24]

To address such conflicting interests, Brummer argues, transnational regulatory networks, as distinct from more exclusive, more coercive, and otherwise more forceful institutional structures, cannot suffice.[25] In place of transnational networks, therefore, Brummer counsels increased reliance on what he terms "governmental clubs."[26] More exclusive in their membership than many transnational regulatory networks, and operating across multiple functional areas of regulation, Brummer sees such clubs as better suited to navigate the conflict-laden landscape of international financial regulation today.

Taking on transnational regulatory networks even more directly, Verdier suggests a limited role, if any, for networks in the face of "distributional" issues among relevant national jurisdictions.[27] In line with Brummer's concern about varying adjustment costs, Verdier questions whether networks can effectively navigate the distinct impact of alternative regulatory choices on one jurisdiction versus another.[28] Thus, although networks might help to harmonize antifraud regulations among developed economies given those countries' relatively aligned interests, networks cannot effectively navigate the conflicting interests between those nations and various offshore financial centers. For offshore financial centers, it is precisely the *relative* laxity of investor protection that they rely upon.

National authorities can sometimes navigate such distributional imbalances by means of side payments.[29] In the case of offshore financial centers, for example, some portion of the surplus generated for developed nations by harmonization of securities fraud rules might be channeled to those offshore centers that bear the costs of such changes, via subsidies to some other sector in

23. *See id.*

24. *See id.* at 351.

25. *Cf. id.* at 364 (describing a shift away from traditional networks in international financial regulation).

26. *See id.* at 364–66. Brummer highlights two examples of such clubs: First, the Multilateral Memorandum of Understanding developed by IOSCO, which the U.S. Securities and Exchange Commission has promoted as a means to impose enforcement cooperation among those jurisdictions committed to a higher standard of securities regulation—in some contrast with network frameworks open to all comers. *See id.* at 366–67. Second, the bilateral framework of "mutual recognition," by which the Commission would accept the regulatory regime of selected jurisdictions as a surrogate for the imposition of U.S. rules. *See id.* at 368. It bears noting, however, that the Multilateral Memorandum of Understanding, with its genesis in IOSCO, is seen by many as a traditional network institution. *See infra* note 82 and accompanying text.

27. *See* Verdier, *supra* note 7, at 124–25.

28. *See id.*

29. *See id.* at 124–25, 128.

need. But this possibility only presents itself when relevant negotiations occur across multiple issue areas. In Verdier's account of transnational regulatory networks, however, networks lack such cross-functionality, thus limiting their ability to offer side payments.[30]

Beyond networks' inability to navigate distributional issues, Verdier also posits their limited utility where some potential for *enforcement* is necessary.[31] Whatever its early successes, thus, Verdier casts the ultimate inadequacies of the first Basel Accord on capital adequacy to have been grounded in the Basel Committee's inability to enforce its agreed terms.[32]

Enforcement concerns do not present themselves, of course, when interests are fully aligned. Transnational regulatory networks can readily facilitate the pursuit of criminal enterprises that are illegal in all nations of interest, for example.[33] Monitoring and enforcement are unnecessary in such a circumstance. In the many settings in which national interests are not so perfectly aligned, by contrast, Verdier posits networks to be of limited efficacy. In Verdier's account, thus, networks are only useful where relevant "standards and procedures . . . are beneficial to all states" and entail nothing more than "uncontroversial technical solutions."[34]

In advancing these overlapping critiques of transnational regulatory networks, Brummer and Verdier each rely on the lessons of game theory. In their view, game theory helps to suggest both when regulatory networks might be useful and, more importantly, the far wider range of circumstances in which they have little to offer. Brummer thus accuses transgovernmentalists of focusing too singularly on transnational interactions that can be understood as coordination games—and specifically as so-called Assurance games.[35] In these settings, including those in which information asymmetry and lack of trust are the primary barriers to harmonization in financial regulation, each party would prefer to invest the time and resources necessary for coordination at an optimal

30. *See generally id.*

31. *See id.* at 125–26.

32. *See id.* at 137–38.

33. *See id.* at 123.

34. *Id.* at 115.

35. *See* Brummer, *supra* note 7, at 330. Among the most common Assurance games is the Stag Hunt game. *See id.* In Stag Hunt, the players can collectively choose to hunt a stag, in hopes of securing the greater rewards of doing so. But each player can alternatively (and more predictably) catch hare alone. This dynamic generates the following payoffs (with the relevant equilibria marked by asterisks):

	Hunt Stag	Hunt Hare
Hunt Stag	(4,4)*	(-1,1)
Hunt Hare	(1,-1)	(1,1)*

In this setting, each player would prefer to coordinate around joint pursuit of the stag. But if they fear the other hunter may fail to adopt that strategy, or may abandon it at the first sight of a hare, each does better to abandon the stag hunt himself, and at least have some rabbit for dinner. *Id.*

Nash equilibrium.[36] In the absence of relevant information about the likely conduct of their counterpart, or a lack of trust, however, each is also incentivized to avoid being the sucker and embracing a higher standard alone.[37] The resulting risk is coordination around the suboptimal Nash equilibrium—a weaker standard or no standard at all—with lower investment by each national regulator, and lower social and individual returns.[38]

Although transnational regulatory networks can be helpful in resolving such Assurance games, Brummer argues that information asymmetry and mistrust are not the most crucial barriers to regulatory alignment in most cases.[39] Rather, the aforementioned divergences in regulatory philosophies and in adjustment costs, as well as jurisdictional competition, are the true obstacles of concern.[40]

In these settings, the dynamic is not that of an Assurance game, but rather that of the Battle of the Sexes.[41] In the Battle of the Sexes, players continue to prefer a coordinated result. Each, however, prefers coordination at a different Nash equilibrium.[42] Given this added element of conflicting preferences, Brummer suggests, transnational regulatory networks cannot facilitate coordination effectively.[43] Rather, when the Battle of the Sexes characterizes the relationship among national financial market regulators, more coercive and exclusive structures become necessary.[44]

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36. *See id.* at 344. Nash equilibria are those results from which no player will deviate, absent a change in the payoffs or the strategy choice of other players. Eric A. Posner, *Economic Analysis of Contract Law After Three Decades: Success or Failure?*, 112 YALE L.J. 829, 876 (2003).

37. *See* Brummer, *supra* note 7, at 344.

38. *See id.*

39. *See id.* at 330, 345.

40. *See id.* at 350–53.

41. *See id.* at 345. In the Battle of the Sexes, husband and wife each wishes to spend an evening together, but they have different preferences as to where they would like to spend it. The payoffs are thus as follows:

	Ballet	Boxing
Ballet	(5,3)*	(1,1)
Boxing	(-1,-1)	(3,5)*

Row player (let us assume the wife) would prefer to attend the ballet rather than boxing, but would rather attend boxing with her husband, than the ballet alone. Symmetrically, column player (the husband) would rather see a boxing match, but would choose the ballet over going to boxing by himself. *Id.*

42. Even among regulators equally committed to robust access to capital, for example, one might expect divergent preferences as to the necessary scope of disclosure, depending on their national firms' relative reliance on the capital markets versus bank financing. *Id.* at 350. Varying adjustment costs, especially where relevant financial regulations implicate corporate governance structures, may be to similar effect. *Id.* at 351.

43. *See id.*

44. Brummer further invokes game theory in his suggestion that the regulation of systemic risk, given its extraterritorial effects and the consequent alignment of national-level incentives associated with it, constitutes a relatively pure coordination game. Brummer, *supra* note 7, at 363.

To related effect, Verdier sorts the operative dynamics at work in international financial regulation into three clusters of games: pure coordination games, Battle of the Sexes games, and Prisoner's Dilemma games. Pure coordination arises in situations that involve information dissemination, the development of best practices, and the establishment of regulatory frameworks where they have not existed before.[45] These situations are relatively uncommon, or at least fairly limited in scope, yet it is here that transnational regulatory networks such as IOSCO and the Basel Committee have the greatest potential to play a role, in Verdier's account.[46] Because these situations do not involve any meaningful divergence in interests, preferences, or priorities, they do not necessitate formal or coercive institutions, and networks will suffice.[47]

By contrast, Verdier does not see a role for networks where distributional or enforcement concerns exist, given the distinct game dynamics that arise in that circumstance. Distributional issues, to begin, give rise to a Battle of the Sexes game.[48] Given their divergent preferences, each player seeks the embrace of his own preferred equilibrium, even though the players agree, at least at some level, on the desired ends. By holding out, Verdier suggests, each hopes the other might eventually come over to his side.[49] Some such dynamic might be expected to play out in any effort to harmonize the substantive antitrust rules governing resale price agreements, for example, as distinct from the aforementioned coordination of antitrust enforcement.[50]

Even more problematic are situations in which there is a need for enforcement. Even after reaching agreement, parties may face the temptation to defect from that agreement in pursuit of immediate gains, as in individual nations' use of technical barriers to limit the effect of multilateral trade agreements.[51] Similarly, in financial regulation, a given regulatory authority might consider reneging on a securities enforcement memorandum of understanding that mandates information exchange upon receipt of its counterpart's data.[52] This, of course, is the classic dynamic of the Prisoner's

45. *See* Verdier, *supra* note 7, at 167. As tested on Schelling's students more than a half-century ago, the "Meeting Place" dynamic of pure coordination manifests itself in the desire of two friends, separated in New York City with no means of communication, to find each other. *See* THOMAS SCHELLING, THE STRATEGY OF CONFLICT 56 (1981). Needing to determine both a time and place to meet, both must engage in an exercise in recursive expectations, in which each tries to determine where the other will expect him to expect her to expect him to expect her to look for him, *ad infinitum*. *Id.*

46. *See* Verdier, *supra* note 7, at 123. Among other examples, Verdier cites the coordination of enforcement actions against a mutually criminalized transnational cartel and joint efforts to curtail money laundering as falling within this range. *See id.* at 123, 167.

47. *See id.* at 123.

48. *See generally* Amir N. Licht, *Games Commissions Play: 2x2 Games of International Securities Regulation*, 24 YALE J. INT'L L. 61 (1999) (describing the Battle of the Sexes).

49. *See* Verdier, *supra* note 7, at 124.

50. *See id.*

51. *See id.* at 125.

52. *See* Eduard H. Cadmus, *Revisiting the SEC's Memoranda of Understanding: A Fresh Look*, 33 FORDHAM INT'L L.J. 1800, 1849 (2010).

Dilemma.[53] To avoid that game's familiar pathologies, in turn, some alteration in the operative payoffs is needed—a change that transnational regulatory networks are not empowered to impose.[54]

As part III demonstrates, a game theoretic account of international financial regulation turns out to be more complex than the accounts of Brummer and Verdier suggest. Conflicting interests need not give rise to a dynamic of defection, nor to the Prisoner's Dilemma, which reflects that incentive.[55] The conflict that characterizes the Battle of the Sexes, meanwhile, involves far greater alignment of interests than Brummer or Verdier acknowledge. Ultimately, conflict may be fully consistent with a game of coordination, and hence, with a role for transnational regulatory networks in international financial regulation.

III
RECONCILING COORDINATION AND CONFLICT IN GAME THEORY

By invoking game theory to question the importance of transnational networks in international financial regulation, the foregoing critiques are correct in their starting point: in its most basic form, the dynamic of coordination takes the form of a pure coordination game. As exemplified in Schelling's famous Meeting Place game, such pure coordination involves no element of varying interests, differing preferences, or conflict.[56] What the critics of transnational regulatory networks overlook, however, is the persistence of coordination even with the introduction of conflict.

A. The Dynamics of Coordination

To understand the flaw in the criticisms of transnational regulatory networks, it is useful to start with coordination in its pure form. At heart, what

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53. The payoffs of the Prisoner's Dilemma are as follows:

	Stay Silent	Confess
Stay Silent	(1,1)	(10,0)
Confess	(0,10)	(5,5)*

If both prisoners remain silent, they can only be convicted on (for example) a gun possession charge carrying a sentence of one year. By offering each prisoner the opportunity to walk free if they confess alone, however, the prosecutor can prompt both to do so, with the result that neither confession is needed individually, and each prisoner ends up incarcerated for five years. The incentive to defect in the Prisoner's Dilemma—to confess—thus generates a socially "suboptimal" equilibrium.

54. *See* Verdier, *supra* note 7, at 125. Repeat plays are, of course, among the most important means for solving the Prisoner's Dilemma.

55. "[I]n analyzing international securities regulation, the Prisoners' Dilemma is a useful paradigm in only a few of the problems that arise in practice." Licht, *supra* note 48, at 65; *see also* Robert B. Ahdieh, *The Visible Hand: Coordination Functions of the Regulatory State*, 95 MINN. L. REV. 578, 600–07 (2010); Richard H. McAdams, *Beyond the Prisoners' Dilemma: Coordination, Game Theory, and Law*, 82 S. CAL. L. REV. 209 (2009).

56. *See* SCHELLING, *supra* note 45, at 56 (describing the Meeting Place game task of finding one's friend in New York City, without the ability to communicate).

made Thomas Schelling's Meeting Place game interesting—or uninteresting, as the case may be—was that its solution lay not in changing the incentives of the players, but simply in shaping their expectations.[57] In seeking to locate one's friend in New York, thus, there is no flaw in either individual's incentives, or in their collective ones. Nor is there any issue of *trust*. Rather, the obstacle to effective coordination is each friend's inability to develop confident expectations of what their friend will do. This constitutes the essential point of contrast between a coordination game, be it the pure coordination dynamic of the Meeting Place game or any number of more conflictual coordination games, and the Prisoner's Dilemma and other games not characterized by coordination.

In the conflictual Prisoner's Dilemma, the motivating challenge is the players' incentive to defect. Given the payoff structure, both players in the Prisoner's Dilemma are incentivized to abandon a socially optimal outcome in favor of an equilibrium that is both socially and individually inferior. Critically, this incentive exists *independent of the strategy played by the other player.* Each player thus has a dominant strategy of defection—that is, confession—regardless of whether his counterpart chooses to remain silent or to confess. Displacing the parties' dominant strategy thus becomes the essential response to a Prisoner's Dilemma–like payoff structure.

By contrast, the challenge in the Meeting Place and other coordination games is *not* the presence of a dominant strategy and the resulting expectation of defection. Rather, the challenge is the presence of multiple Nash equilibria: multiple strategy combinations that are interdependent in their payoffs, and that neither party will have reason to abandon, once they are established. Each player's preferred strategy in a coordination game thus depends on the strategy played by the other. Yet they may fail to coordinate around aligned strategies, given the presence of multiple potential equilibria from which to choose.

Given the distinct challenges that underlie coordination games and the Prisoner's Dilemma, the means to those ends might likewise be expected to differ. In the Prisoner's Dilemma and similar settings, law and regulation are drawn upon to alter the incentives of relevant players. By changing the operative payoffs, legal interventions eliminate the incentive to defect—be it in environmental law, securities regulation, or elsewhere.[58]

While one could address coordination games in a similar fashion as the Prisoner's Dilemma, the natural solution lies elsewhere. At least in the first instance, coordination games need not be solved by altering the incentives of the relevant players. Why? Because in a coordination game, the incentives of

57. *See* Raustiala, *supra* note 1, at 24; *see also* Verdier, *supra* note 7 (describing the Meeting Place game).

58. Issue linkage often serves as a means to alter payoffs in international relations, including payoffs in international financial regulation. *See* Licht, *supra* note 48, at 89; *see also id.* at 91–92 (comparing the capacity of the European Union versus IOSCO to navigate the Prisoner's Dilemma). When the relevant payoffs generate a Prisoner's Dilemma, institutions with cross-substantive jurisdiction may be able to reduce the incentive to defect, by linking any such defection to the imposition of costs in other areas of necessary cooperation.

the parties are not (at least inherently) the source of any coordination failure that might occur, or of the parties' coordination around a suboptimal result. Rather, any such failure turns on their *expectations*—or, more precisely, on their inability to develop accurate expectations of one another. If I cannot predict where you will expect me to expect you to expect me to go, and so on, we may end up meeting further away than necessary. Worse, we may not find each other at all.[59]

From this, it becomes easy to see why transnational regulatory networks might be an attractive tool for facilitating optimal coordination. With their noncoercive, information-oriented, and expertise-driven nature, transnational networks seem well suited to shaping expectations at the heart of any coordination game in transnational regulation. On the other hand, it is equally easy to see why one might question the capacity of networks once conflict is present. If relevant national regulators' preferences diverge, one might expect transnational regulatory networks' primary focus on information generation and dissemination, their inability to coerce, and their lack of meaningful political power to render them fairly ineffective tools to resolve the conflict.

As it turns out, however, coordination is a more complex phenomenon than consideration of the Meeting Place game above might suggest. The same centrality of expectations and information that supports a place for networks in nonconflictual settings turns out to favor a role for them even when conflict is added to the mix. Understanding this requires consideration of the broader universe of coordination games.

B. Coordination and Conflict

From its origins, the study of coordination in game theory was primarily focused on conflict. Thomas Schelling, the leading expositor of coordination game theory in the economics literature, widely disseminated that work in his seminal, and Nobel Prize-recognized, book, *The Strategy of Conflict*.[60] "To study the strategy of conflict," he wrote, "is to take the view that most conflict situations are essentially *bargaining* situations. They are situations in which the ability of one participant to gain his ends is dependent to an important degree on the choices or decisions that the other participant will make."[61]

Schelling's ultimate focus, thus, was not how friends might find each other in New York City, but rather how to understand the then-raging Cold War. More

59. One might thus see the operative task in coordination games as two-fold: At a minimum, the goal is to avoid coordination failure. In the Meeting Place game, players hope to get to *some* common location rather than be separated. Beyond that, however, where one equilibrium is Kaldor–Hicks preferable to the other, the goal is get players to the *optimal* coordination point. *See* Matthew D. Adler & Eric A. Posner, *Rethinking Cost–Benefit Analysis*, 109 YALE L.J. 165, 190 (1999) (distinguishing Kaldor–Hicks and Pareto efficiency). In the Meeting Place game, for example, meeting closer to both players' starting point would be preferable to the alternative meeting point.

60. *See* SCHELLING, *supra* note 45; *see also* DAVID LEWIS, CONVENTION: A PHILOSOPHICAL STUDY (1969).

61. SCHELLING, *supra* note 45, at 5.

specifically, his concern was how to avoid that war turning hot:

> Viewing conflict behavior as a bargaining process is useful in keeping us from becoming exclusively preoccupied either with the conflict or with the common interest. To characterize the maneuvers and actions of limited war as a bargaining process is to emphasize that, in addition to the divergence of interest over the variables in dispute, there is a powerful common interest in reaching an outcome that is not enormously destructive of values to both sides. A "successful" employees' strike is not one that destroys the employer financially, it may even be one that never takes place. Something similar can be true of war.[62]

The examples of coordination dynamics explored by Schelling are similarly telling. In Schelling's account, the decision not to use chemical weapons during World War II, or atomic weapons during the Korean War, can be understood as exercises in coordination. Even clearer is his reference to the recurrent resolution of military conflicts along the lines of physical boundaries, including the river that ran along the thirty-eighth parallel in Korea, and the straits separating Taiwan from the Chinese mainland.[63] Such a boundary, Schelling suggested, has significant capacity to shape expectations in conflict settings:

> If some troops have retreated to the river . . . , they will expect to be expected to make a stand. This is the one spot to which they can retreat without necessarily being expected to retreat further, while, if they yield any further, there is no place left where they can be expected to make a determined stand. Similarly, the advancing party can expect to force the other to retreat to the river without having his advance interpreted as an insatiable demand for unlimited retreat. There is stability at the river—and perhaps nowhere else.[64]

This emphasis on the overlap of conflict and coordination in limited war, and in conflict situations more broadly, can be seen in the standard-form coordination games that introduce elements of conflict.[65] In the "limited war" of the Battle of the Sexes, of course, the interests of the spouses are in self-evident conflict.[66] Each one seeks coordination on his or her terms. And given as much, each is incentivized to bluff—and even lie—to get his or her way. Ultimately, however, the exercise remains one of coordination—with multiple equilibria, interdependent strategies, and a central role for mutual expectations. If the husband expects his wife to choose her preferred location in the end, he will go there as well.

An even more extreme dimension of conflict can be seen in the Hawk–Dove game, in which each party prefers to play hawk, to the other party's dove. In this coordination game, most commonly captured in the infamous game of "Chicken," two drivers race toward each other, with each determined not to

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62. *Id.* at 5–6.

63. *See id.* at 75–76.

64. *Id.* at 71.

65. Other coordination games with an element of conflict might also be identified. *Cf.* McAdams, *supra* note 55, at 226–27. But this article focuses on the standard-form games that are most commonly cited.

66. *See* Brummer, *supra* note 7, at 330 (defining the Battle of the Sexes); *see also supra* note 41 (same).

swerve.[67] One prevails when he continues on unflinchingly, while the other swerves. The element of conflict could thus not be more acute.

Yet the fundamental dynamic even in this conflict-laden game remains one of coordination. As in other coordination games, we see multiple equilibria. They are inverted strategies, to be sure, in which coordination occurs by our choice of opposite strategies. As with other Nash equilibria, though, the interdependence of our strategies renders any unilateral shift undesirable. If one driver is going to swerve, his opponent has no incentive to alter his strategy of continuing forward. If a given driver is *not* going to swerve, meanwhile, his opponent likewise has no incentive but to swerve. The "solution" to the Hawk–Dove game, as a result, continues to turn on our expectations of one another. Depending on what each player expects of his counterpart, he will set his strategy accordingly.[68]

Conflict is fully consistent, then, with coordination. The operative concern in both the Battle of the Sexes and Hawk–Dove games remains a failure of coordination—including potential coordination at a suboptimal equilibrium (if the payoffs were altered to include some Kaldor–Hicks efficiency ranking as between attendance at the ballet versus boxing, or in the emergence of one or the other player as the hawk). More significantly, there is no issue of *defection* in either game.[69] Once a player expects a certain equilibrium to emerge, they have no reason to defect from it. The husband prefers to go to the ballet with his wife, than to go to a boxing match alone.[70] And in the Hawk–Dove game, it is better to be the chicken than to be dead.[71] The introduction of conflict, then, need not negate a dynamic of coordination. So long as any such conflict does not alter the players' ultimate preference for coordination over the alternatives, the game to be played may remain one of coordination.[72]

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67. The resulting payoffs are as follows:

	Swerve	Continue
Swerve	(2,2)	(0,10)*
Continue	(10,0)*	(-10,-10)

68. One might include the Assurance (or Stag Hunt) game in this enumeration as well. *See* Brummer, *supra* note 7. The Stag Hunt captures not conflict per se, or even a lack of trust, but rather a lack of assurance that one's counterpart will fulfill his part of the bargain. Notably, Brummer and Verdier do not seem to question the ability of networks to help navigate Assurance game dynamics.

69. *See* Licht, *supra* note 48, at 101.

70. *See id.* ("[T]here is no compelling need for any strong enforcement mechanism [in the Battle of the Sexes], because once an agreement is reached, it is self-enforcing.").

71. For either player in the matrix in note 67, the prospect of no payoff (0) is superior to the negative payoff of the southeast quadrant (-10).

72. That Verdier's conception of coordination excludes such conflictual dynamics is suggested by his focus on *pure* coordination. He thus emphasizes that in pure coordination games, "the optimal outcome is self-sustaining." Verdier, *supra* note 7, at 123. In point of fact, that is true of any coordination game. To similar effect is his reference to situations in which "*mere* coordination" is needed. *See id.* at 168 (emphasis added). Brummer is broader in his conception of coordination; he

In Verdier's framework, the existence of "distributional" concerns—and the resulting conflict between the relevant national authorities—does not mean that the operative dynamic is not still one of coordination. It is not one of *pure* coordination, to be sure, but it may yet be a Battle of the Sexes game, and hence still a coordination dilemma.[73] Even enforcement concerns, for that matter—where they fall short of incentivizing defection—may still involve a multi-equilibrium coordination game. In the aforementioned dynamic of the Stag Hunt game, thus, there are "enforcement" problems of a sort.[74] Yet, as in the Battle of the Sexes and Hawk–Dove, there is no incentive to defect.[75] And coordination thus remains the operative concern.

Stating the point more formally, strategies in Stag Hunt, Battle of the Sexes, Hawk–Dove, and other coordination games remain *interdependent*. By contrast with the dominant strategy that characterizes the Prisoner's Dilemma—and necessitates some coercive alteration in the payoffs to the parties, if a suboptimal outcome is to be avoided—players' strategy choices in these coordination games continue to depend on the choices made by their counterparts. Just as in the pure coordination setting of the Meeting Place game, unless one changes what one does, one's counterpart has no incentive to do so. The introduction of conflict, as such, does not inevitably generate an incentive to defect.

Of course, the payoff structure in a particular, real-world setting of transnational regulation—whether conflictual or otherwise—may not be that of a coordination game. Further, the introduction of conflict *could* alter payoffs in a way that undermines any preexisting dynamic of coordination. At the extreme, it could even generate a Prisoner's Dilemma, or some other payoff structure characterized by an incentive to defect. What is crucial, however, is that there is no necessary exclusivity between coordination and conflict, even when interests or preferences significantly diverge.[76]

IV

THE ROLE OF NETWORKS IN CONFLICT

If transnational regulatory networks have a role to play in facilitating

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acknowledges the nature of the Battle of the Sexes as a coordination dynamic. *See* Brummer, *supra* note 7, at 330. Nonetheless, he describes settings characterized by a Battle of the Sexes dynamic as ill-suited to coordination-driven approaches. *See id.* at 343–44 (describing networks' role as limited to situations where relevant parties have "similar objectives and preferences").

73. Notably, Verdier casts distributional problems as giving rise to a Battle of the Sexes–type dynamic, but then engages that setting as if it were entirely distinct from the coordination game setting in which he sees networks to have their proper place. *See* Verdier, *supra* note 7, at 124.

74. *See supra* note 35 (describing payoffs in the Stag Hunt game).

75. Verdier wrongly equates enforcement problems with the risk of defection. *See* Verdier, *supra* note 7, at 115.

76. In conflict-laden situations, Verdier suggests that national regulators may "hold out" in negotiations. *See id.* at 124. In that, he is quite right. They can also be expected to bluff—even lie. The critical point, however, is that the dynamic remains one of coordination, notwithstanding those countervailing incentives.

coordination in the *absence* of conflict, the foregoing suggests that a similar role might persist, even when conflict is present. How, then, might we expect networks to facilitate coordination—whether in the absence or presence of conflict? More precisely, after identifying four distinct ways in which coordination might *fail* to occur, what are the ways in which transnational regulatory networks might reduce the risk of failure?

Four forms of coordination failure can be identified. Two forms may occur on the front end of any strategic interaction that necessitates coordination. First, no coordination equilibrium may emerge: friends or spouses may end up choosing different locations, one hunter may pursue stag while the other pursues hare, both cars may swerve or even collide, or trading across exchanges may be hampered by incompatible pricing or other standards. Second, even when players do successfully coordinate, they may do so around a relatively inefficient equilibrium.[77]

A third potential risk—inefficient lock-in—compounds the second. Once a given coordination equilibrium has emerged, it may be difficult to displace it, however suboptimal it may be. Given the lack of incentive to *unilaterally* defect from any Nash equilibrium in a coordination game—notwithstanding the gains to *mutual* adjustment—such changes in strategy may not occur.[78] Hence the stubborn persistence of suboptimal standards in many industries, even in the face of preferable alternatives.

Finally, delays in the emergence of new innovations and entire markets are a fourth potential form of coordination failure. Given the various risks of non-coordination, suboptimal coordination, and lock-in, the force of inertia may be strong at the outset of any coordination game. Unsure of what equilibrium may emerge—whether an efficient or inefficient one, or an otherwise preferred or disfavored one—and fearful of the (potentially costly) prospect of non-coordination, players may simply choose not to play the game.

How, then, are these various forms of coordination failure to be avoided? As with the Prisoner's Dilemma, an effort might be made to alter players' incentives in coordination game settings, whether by legal decree or otherwise. Such changes are not necessary, however, given the genesis of each of these potential failures not in the incentives of the parties, but rather in their inability to develop accurate expectations of one another.

To avoid coordination failure, thus, each party to a coordination game must effectively determine what the other player is likely to expect of him. As Schelling describes it, "What is necessary is to coordinate predictions, to read the same message in the common situation, to identify the one course of action

77. In the payoffs structures offered above, this cannot occur, given the corresponding payoffs to each equilibrium. It is not difficult to imagine circumstances in which one equilibrium may be Kaldor–Hicks preferred to the other, however. In those cases, coordination at the lesser equilibrium constitutes coordination failure of a particular sort.

78. For discussion of the possibility that communication may not effectively alleviate such lock-in effects, see Ahdieh, *supra* note 55, at 613–16.

that their expectations of each other can converge on. They must 'mutually recognize' some unique signal that coordinates their expectations of each other."[79]

Critical to this task, in Schelling's account, are so-called "focal points."[80] Where two friends seek to find each other in New York, a certain location, be it Grand Central Station or elsewhere, may be a focal point for decision. For spouses, the location of their last date might similarly be focal, whether it suggests a return to the ballet, or just the opposite. And for two boys racing toward each other in their cars, the question of who swerved last time may be focal in shaping their expectations. The "salience" of some given outcome, thus, can help to align the parties' expectations.[81]

If the shaping of expectations—perhaps especially by way of defining focal points for decision—is the key determinant of efficient coordination, can transnational regulatory networks contribute to that process? In a number of respects, transnational networks are especially well suited to doing so. To begin, optimal coordination will often turn on the collection, compilation, and dissemination of key information. The more a player knows, the more accurate he is likely to be in his evaluation of his counterpart's likely choices. If there is any task for which transnational networks have been seen to be well suited, it is just such gathering and sharing of information. IOSCO's generally praised Multilateral Memorandum of Understanding, for example, can be seen in this light.[82] By identifying (and ultimately addressing) key differences in enforcement, the Multilateral Memorandum of Understanding has fostered significant improvements in the quality of cooperation in securities law enforcement.

Beyond factual information per se, the shaping of expectations will often turn on relevant actors' *sense* of one another. Greater familiarity thus enhances one's capacity to develop an accurate judgment about what is likely to be focal to another. With their orientation to not simply recurrent, but ongoing and relatively low-stakes, engagement among participants, transnational regulatory networks provide an ideal mechanism for increased familiarity and socialization—and the increased accuracy of expectations that might be expected to follow from it.[83] To related effect, one might think of transnational

79. SCHELLING, *supra* note 45, at 54.

80. *See id.* at 57–58.

81. *See* ROBERT SUGDEN, THE ECONOMICS OF RIGHTS, CO-OPERATION AND WELFARE 89–90 (1986).

82. *See* Stavros Gadinis, *Three Pathways to Global Standards: Private, Regulator, and Ministry Networks*, AM. J. INT'L. L. (forthcoming 2015) (manuscript at 28–29) (on file with author); *see also* Antonio Marcacci, *IOSCO: The World Standard Setter for Globalized Financial Markets*, 12 RICH. J. GLOBAL L. & BUS. 23, 27 (2012).

83. *See* Andrew Lang & Joanne Scott, *The Hidden World of WTO Governance*, 20 EUR. J. INT'L L. 575, 611 (2009); Raustiala, *supra* note 1, at 55; Anne-Marie Slaughter, *Sovereignty and Power in a Networked World Order*, 40 STAN. J. INT'L L. 283, 314 (2004); Jenia Iontcheva Turner, *Transnational Networks and International Criminal Justice*, 105 MICH. L. REV. 985, 1002 (2007); *cf.* Eric J. Pan, *Challenge of International Cooperation and Institutional Design in Financial Supervision: Beyond*

regulatory networks as an institutional framework for repeat plays. Such iteration is most commonly highlighted as a solution to the Prisoner's Dilemma. In the work of Robert Axelrod and others, for example, players' dominant strategies of defection were effectively displaced when each could credibly threaten retaliation in a future play.[84]

Given the role of accurate expectations in the avoidance of coordination failures, repeated interactions may potentially be useful in coordination game settings as well. Each time the relevant game is played, each player gains enhanced insight into what to expect of his counterpart. By offering a forum for such recurrent engagement,[85] networks may be useful in facilitating efficient coordination.[86]

A final way in which transnational regulatory networks may play a role in shaping expectations stems from the fact that coordination games in transnational settings will usually be multiplayer rather than two-party games. Most commonly, a given player's strategy will be a function of what he expects of a multiplicity of other players. And the same will be true of each of the other players. As one seeks to develop accurate expectations of another, then, the signals he is receiving from others may be critical—given that his strategy can be expected to depend on what he expects of each of them. Transnational networks' agglomeration of broader collections of market participants may consequently be valuable in bringing together the various sources of expectation in question.[87]

None of this changes when we add conflict to the mix. If transnational regulatory networks can help us adopt a common disclosure standard when we agree, it may also do so when we differ, for example, in our preference for U.S. Generally Accepted Accounting Principles versus International Financial Reporting Standards. So long as we prefer a common accounting standard, even

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Transgovernmental Networks, 11 CHI. J. INT'L L. 243, 252–53 (2010) (noting the role of repeat interactions in G-7, G-20, and similar national groupings); Whitehead, *supra* note 3, at 704–05 (citing relationship-building and professional socialization among characteristics of transnational regulatory networks). On the role of familiarity in coordination settings, see SCHELLING, *supra* note 45, at 57–58; Ahdieh, *Imperfect Alternatives*, *supra* note 16, at 539–40.

84. *See* ROBERT AXELROD, THE EVOLUTION OF COOPERATION 54 (1984). In recent years, strategies besides Axelrod's tit-for-tat have been identified as solutions in repeat play Prisoner's Dilemma games. *See, e.g.*, KEN BINMORE, GAME THEORY AND THE SOCIAL CONTRACT II: JUST PLAYING 313–19 (1998).

85. *See supra* note 84 and accompanying text.

86. In earlier work, I have argued that the longevity of an institution or network may impact its ability to facilitate coordination. *See* Ahdieh, *Imperfect Alternatives*, *supra* note 16, at 539–41. The contributions of an older institution may thus be relatively more salient. The point above is a distinct one. By virtue of greater experience with each other, network participants may be better able to develop accurate expectations of one another. *Cf.* Licht, *supra* note 48, at 89–91, 93 (describing the European Union's progressive work on disclosure rules, over an extended period of time and noting potential for IOSCO's modest successes over time to impact its ability to succeed in more ambitious undertakings).

87. *Cf.* Stavros Gadinis, *The Financial Stability Board: The New Politics of International Financial Regulation*, 48 TEX. INT'L L.J. 157, 167 (2013) (suggesting role of "composition" of network in determining its impact).

if that standard is yours versus mine, expectations remain the key determinant of the result.[88] If any given national regulator expects others to adopt its less favored standard, it will embrace that standard as well, as predicted by the Battle of the Sexes.

In what ways, then, might transnational regulatory networks help to facilitate coordination in the face of conflict? At a minimum, networks offer a forum for members to signal one another as to the strength of their intention to stick to their guns.[89] As with Schelling's account of limited war, each player can utilize the network platform to forcefully assert his unwillingness to abandon his preferred course. Beyond mere assertion, networks offer a natural opportunity for nations to signal as much, by way of the provision of key information indicative of their commitment. More generally, like the river in Schelling's account of military conflict,[90] regulatory networks may facilitate players' efforts to render focal their preferred outcome.[91] By promoting their position in a network forum, parties may increase the salience of their preferences, and thereby shift expectations to their advantage.

By contrast with bilateral interactions among players with conflicting interests, transnational regulatory networks create opportunities to engage other network participants in ways that may impact the accounting or other standard around which national regulators ultimately coordinate.[92] As noted above, participation in network fora may help members develop more accurate expectations of the likely behavior of other network participants.[93] But if one's goal, given conflicting interests, is not merely to *predict* the ultimate equilibrium, but to shape it, networks may be even more useful. Thus, if one hopes to influence the expectations of a particular counterparty as to one's commitment to one's preferred standard, one powerful way to do so is through the behavior of yet other network participants. Where other members of the

88. The U.S. Securities and Exchange Commission's gradual embrace of International Financial Reporting Standards, as their likelihood of market dominance became progressively clearer and clearer, is suggestive of this pattern. That its embrace followed years of forceful resistance may be even more telling. *See* William W. Bratton, *Heedless Globalism: The SEC's Roadmap to Accounting Convergence*, 79 U. CIN. L. REV. 471 (2010).

89. *See* Gadinis, *supra* note 87, at 167.

90. *See supra* notes 64–65 and accompanying text.

91. Verdier acknowledges the role of focal points in coordination games. *See* Verdier, *supra* note 7, at 129. Yet he seems to see their role as limited to pure coordination settings. *See id.* Brummer, by contrast, does not directly engage the role of focal points or salience. In the face of conflict, he suggests that "[c]oordination depends on other factors, like the order of play . . . . If, as is often the case, players move simultaneously, the result would be undeterminable and additional negotiations would be necessary." Brummer, *supra* note 7, at 354. Those are precisely the circumstances in which focal points may determine the result.

92. *See* Kishanthi Parella, *Outsourcing Corporate Accountability*, 89 WASH. L. REV. 747, 795–96 (2014); Raustiala, *supra* note 1, at 25, 27; *cf.* Michael S. Barr, *Who's In Charge of Global Finance?*, 45 GEO. J. INT'L L. 971, 1002–03 (2014) (noting concerns about biases arising from the particular membership of a network); Thomas Risse, *"Let's Argue!": Communicative Action in World Politics*, 54 INT'L ORG. 1 (2000); David Zaring, *Rulemaking and Adjudication in International Law*, 46 COLUM. J. TRANSNAT'L L. 563, 573–74 (2008).

93. *See supra* notes 82–87 and accompanying text.

network embrace one's preferred standard, or even abandon one's competitor's standard for one's own, a strong impact on any given counterparty's expectations is to be expected.

The enumeration to this point suggests ways in which transnational regulatory networks might serve a useful role for national regulators playing a Battle of the Sexes game over their preferred standards. But one might also identify potential contributions of networks in even more conflictual settings. Transnational networks might help to define the boundaries of authority as multiple national regulators compete to assert their jurisdiction over a given complex transaction, for example. Assuming a standard public choice dynamic, each regulator might be expected to assert its jurisdiction, even while recognizing that duplicative exercises of jurisdiction would prove mutually harmful. In this Hawk–Dove dynamic, each national regulator seeks to press its claim, but only to the extent its counterpart, playing dove, will defer.[94]

The assertion of jurisdiction is likewise an exercise in shaping expectations, for which purpose transnational regulatory networks may prove a helpful tool. This utility arises for the same reason it does when regulators compete over alternative standards. Especially given the self-evidently rhetorical exercise entailed in Hawk–Dove-style interactions, in fact, networks may be even more useful here than in Battle of the Sexes–style standards competitions. If a national regulator's goal is to shape another's expectation as to whether it will assert jurisdiction, one can readily see how the force of the regulator's expression in a network forum, dedicated to collective action, would be relatively greater. By comparison with the regulator's assertion of its intentions in a one-off, bilateral interaction, the setting of a transnational regulatory network setting may be especially useful for that purpose.

As the latter example highlights, the role of transnational networks in conflictual settings may involve some significant dimensions of power, force, and even "coercion" of a sort. In that regard, critiques of transnational regulatory networks as involving the exercise of power by strong states is no critique at all.[95] Whereas the operation of network structures—like every occasion for transnational engagement—is defined by the exercise of power and influence, it is not ineffective or irrelevant for that reason.

Instead, the interesting question is how their role intersects with the dynamics of relative national power. Consider, for example, the potential utilization of transnational regulatory networks by historically strong states whose influence is on the decline.[96] As the power of U.S. financial market

94. Persistent elements of coordination may facilitate regulatory cooperation even where something of a Prisoner's Dilemma is at work. The successful coordination between banking authorities in Belgium, France, and Luxembourg in navigating the failure of Dexia in 2008 exemplifies that possibility. *See* BASEL COMMITTEE ON BANKING SUPERVISION, BANK FOR INT'L SETTLEMENTS, REPORT AND RECOMMENDATIONS OF THE CROSS-BORDER BANK RESOLUTION GROUP 11–12 (Mar. 2010), *available at* http://www.bis.org/publ/bcbs169.pdf.

95. *See* Parella, *supra* note 92, at 795–96.

96. The Securities and Exchange Commission's gradual shift away from unilateral assertions of

regulators has waned over the last several decades with the rise of competing financial centers in London, Tokyo, Germany, Hong Kong, and elsewhere, U.S. financial regulators have relied to a far greater degree on transnational regulatory networks.[97] Why?[98]

In significant part, the answer may lie in the coordination dynamic at work. If the relational structure of regulatory networks permits more effective shaping of expectations, they might be attractive policymaking tools in the face of a nation's declining ability to compel desired behavior. The same might be said of the collective nature of networks, which may enable the formerly strong regulator to leverage the expectations of any given national regulator to shape the expectations of others.

But one might also see benefits of transnational regulatory networks for nonhegemonic states in the presence of conflicting interests. For national regulators with limited ability to force their position on others—be it their choice of standard, their assertion of jurisdiction, or otherwise—transnational networks might be attractive not only by virtue of their collective nature, but also given their relational character and rhetorical orientation. The opportunities for leverage arising from the relational character of transnational regulatory networks, as described above, are fairly clear.[99] As to the networks' rhetorical orientation, even relatively weak network participants have the opportunity to talk a big game in a network setting. And so long as the operative dynamic remains one of coordination, that talk must be taken seriously, or at least more seriously than it otherwise would be.[100] By virtue of the forcefulness and consistency of its assertions, buttressed by its engagement with the network's broad membership, a national regulator otherwise limited in its influence may be empowered to shape outcomes in a network setting.[101]

Amir Licht has suggested a final potential benefit of transnational regulatory networks for relatively weaker states, in the face of conflicting interests. Where coordination underlies the incentives of the parties—notwithstanding distinct preferences in their choice of equilibrium—

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exterritorial jurisdiction might be understood in this light. *See* Robert B. Ahdieh, *Dialectical Regulation*, 38 CONN. L. REV. 863, 876–79 (2006). As early as the late 1980s, however, the Commission began to express a preference for cooperative approaches. *See* Paul G. Mahoney, *Securities Regulation by Enforcement: An International Perspective*, 7 YALE J. ON REG. 305, 310–20 (1990).

97. *Cf.* Brummer, *supra* note 7, at 332; Derek N. White, *Conduct and Effects: Reassessing the Protection of Foreign Investors from International Securities Fraud*, 22 REGENT U. L. REV. 81, 127 (2009).

98. Brummer suggests networks may be relatively less effective policy tools for the United States, as its power declines. *See* Brummer, *supra* note 7, at 355. But in fact, as described above, they may be especially useful, given that trend.

99. *See supra* note 82 and accompanying text.

100. Of course, this might be true of bilateral assertions as well. One could imagine that the network setting might be relatively more effective, however, as a vehicle for one state to influence the expectations of others.

101. Brummer describes the various ways in which hegemonic powers may press for the embrace of their preferred norms and standards. *See* Brummer, *supra* note 7, at 343. Networks may also sometimes play a role, however, in helping nonhegemonic actors resist such pressures.

transnational networks may offer a reputation-saving means for nations to embrace a disfavored equilibrium.[102] "[O]rganizations like IOSCO may [] facilitate cooperation . . . by helping the smaller player to save face domestically. Thus, it may be considered more respectable to yield to IOSCO than to the SEC."[103] To be sure, one could easily overstate the importance of this role. At least in some circumstances, however, it may be of value.[104]

Transnational regulatory networks have the capacity to play a significant role in international relations, then, even in the face of power differentials, distinct priorities, and divergent preferences. So long as relevant national authorities benefit more from coordination than from pursuing their particular preferences alone, networks can have an impact. That may be especially so in international financial regulation, given transnational networks' already prominent place.

V

COORDINATION GAMES IN INTERNATIONAL FINANCIAL REGULATION

Having seen a variety of ways in which transnational regulatory networks might facilitate coordination even in the face of conflict, it is useful to conclude by considering the potential role of the networks in international financial regulation more specifically. How might one expect the dynamics of coordination and conflict to play out in international financial regulation—the setting in which the role of transnational regulatory networks has been most directly challenged—and what are the implications for that role?

At a minimum, transnational regulatory networks are expected to play a valuable role when national financial regulators are in relative agreement. There is widespread consensus as to the value of transnational networks in information-sharing, a critical dimension of financial market regulation.[105] Important aspects of the work of IOSCO can clearly be understood in this light, including the Multilateral Memorandum of Understanding.[106] The same can be said of the International Association of Insurance Supervisors, and even the Basel Committee, perhaps especially in its early years. Dating back to the earliest days of regulatory networks' emergence as significant players in

102. *See* Licht, *supra* note 48, at 97.

103. *Id.*

104. At least some networks might—based on their particular composition, the formality of their jurisdiction, etc.—also be in a position to contribute by offering opportunities for issue linkage. *Cf. id.* (suggesting potential role of issue linkage in the face of power differentials). One might, furthermore, construct a definition of network structures that is broad enough to capture as much. *See* Verdier, *supra* note 7, at 115–16, 118 (suggesting broader definition, in line with that offered by Anne-Marie Slaughter, while seeming to *apply* a definition that leaves no room for issue linkage). While the possibility of such issue linkage does not speak directly to the facilitation of coordination, it suggests that even when conflict alters the payoffs of a coordination game into something in the nature of a Prisoner's Dilemma, networks might still have a role to play.

105. *Cf.* Brummer, *supra* note 7, at 343 (noting role of asymmetric information in international relations).

106. *See supra* note 82 and accompanying text.

international financial regulation, the International Association of Insurance Supervisors' Recommendation Concerning Mutual Assistance, Cooperation, and Sharing of Information played an important role.[107] In fostering linkages among national regulators and more active information exchange, the Recommendation has helped regulators fulfill their duties more effectively and efficiently.[108]

Beyond information-sharing, transnational networks can play a role in the establishment of common standards for disclosure, accounting practices, and perhaps even enforcement, when relevant national regulators agree as to applicable goals, the appropriate approach, or both. This may, for example, be the dynamic with reference to important aspects of antifraud regulation.

There is relatively widespread transnational consensus around the view of financial fraud as worthy of condemnation, and even prosecution.[109] At least up to a point, then, transnational regulatory networks can help to facilitate coordination in the enforcement of antifraud regulation. Minimally, they may help to reduce the transaction costs associated with such cooperation.[110] Adding a dimension of conflict to the mix, transnational regulatory networks can also be useful when trust is lacking in the antifraud context. Thus, when assurances of mutual commitment to some regulatory undertaking are important, regulatory networks can help to generate that assurance.

Even assuming common recognition of antifraud regulation as beneficial, each national regulator might legitimately worry about potential domestic pressures on its counterpart regulators that could curtail the extent or the quality of those counterparts' enforcement activity. At a minimum, one might be concerned about the prospect that foreign regulators will be distracted from an agreed commitment.[111] In such circumstances, the coordination dynamic of the Stag Hunt, national regulators can be expected to seek some reassurance from one another.[112]

Transnational regulatory networks, in turn, can help to offer that assurance. In particular, networks may do so by making the Pareto superior equilibrium more focal. By facilitating, and even encouraging, signaling behavior directed to the equilibrium of enforcement, transnational networks may help to increase

107. *See* Zaring, *supra* note 1, at 300. On the informational orientation of the Basel Committee, see Michael S. Barr & Geoffrey P. Miller, *Global Administrative Law: The View From Basel*, 17 EUR. J. INT'L L. 15, 22 (2006).

108. *See* Zaring, *supra* note 1, at 300–01.

109. *See* Licht, *supra* note 48, at 102–03; Verdier, *supra* note 7, at 113.

110. A similar account might be offered as to insider trading, when there is agreement as to the common benefits of bilateral (and perhaps even unilateral) regulation and enforcement. *See* Licht, *supra* note 48, at 117–18. There too, one might observe a Harmony game, in which networks play a role—not necessarily in facilitating coordination, but simply in reducing transaction costs.

111. *See id.* at 111.

112. *See id.* at 109–10. Brummer explicitly acknowledges the role of networks in settings where assurance is the key question. *See* Brummer, *supra* note 7, at 330. For him, this is the dynamic at work when it comes to the regulation of systemic risk. *See id.* at 331, 363. Even there, however, Brummer sees so-called "governmental clubs" as more effective. *See id.*

enforcement's salience, and thereby increase the prospect of coordination around it, among otherwise independent securities market regulators.[113]

A similar dynamic might be expected to play out in insider trading regulation, where the commitment to aggressive enforcement among national regulators is far more attenuated.[114] More specifically, the coordination dynamic of the Stag Hunt may be especially likely to emerge there, given the willingness of each national regulator to act against insider trading only if others are doing so as well. In that case, each regulator fears playing the fool, enforcing insider-trading rules against domestic market participants while its counterpart regulators fail to do so.[115]

In this circumstance, transnational networks can serve as a source of information about the relative level of national regulatory commitment across the globe. The networks may also offer a relatively more credible setting for the offering of appropriate assurances. To be sure, formal international institutions, with uncommon but readily imagined coercive powers, could achieve these ends more directly. Networks may suffice, however, given the coordination dynamic at work.[116]

The potential role of networks, however, does not end with situations in which conflict arises solely from a lack of trust. Transnational regulatory networks may also be useful in standard-setting, when relevant regulators disagree as to the preferred standard. As Chris Brummer highlights, in many circumstances national regulators may have distinct regulatory philosophies, the adjustment costs to a shared standard may rest more heavily on one regulator than another, or the benefits of adjustment may be asymmetrically distributed.[117] So long as a common standard remains preferable to each regulator's use of its own standard, however, networks can continue to play a facilitative role.

Presentation standards for mandatory disclosures, as opposed to the substantive disclosure obligations themselves, exemplify the potential for

113. Brummer offers a distinct framing of this dynamic, within which players' degree of risk aversion determines the likely equilibrium point. *See id.* at 344. In that account, networks may serve to modify the level of perceived risk.

114. At the extreme, antifraud regulation also has the potential to exhibit this type of conflictual dynamic. There may be double standards in various countries, for example, as to the regulation of inbound versus outbound fraud. *See* Licht, *supra* note 48, at 109. There may even be disagreement as to how bad fraud really is, or as to what particular conduct is problematic. *See id.* This too may generate a Stag Hunt dynamic, in which assurances are needed—and can be facilitated by transnational regulatory networks.

115. *See id.* at 118. This is especially likely to be the dynamic at work when one or both participants are focused, at least in part, on their international ranking as a center of financial market activity. *See id.*

116. *See id.* Licht also offers a distinct account of how a transnational regulatory network might contribute in the insider trading context, where a weak state is committed to insider trading regulation, even without mutual cooperation. In that circumstance, the network may permit issue linkage designed to secure such cooperation. Alternatively, it may allow for face-saving adjustments in the weak state's policy choices. *See id.* at 121.

117. *See* Brummer, *supra* note 7, at 349–51.

networks to play this harmonizing role.[118] Harmonizing such standards is especially crucial in the absence of capital market efficiency.[119] Even with efficient markets, however, harmonization can help to reduce transaction costs.[120] Yet the abandonment of distinct national standards, which have been internalized into the human capital of a given jurisdiction, into relevant educational and professional training programs, and into technological systems, create "distributional" issues of some significance.[121] Significant as they are, however, such distributional concerns do not alter the underlying dynamic of coordination. Each jurisdiction prefers to settle on a single presentation standard for market disclosures, notwithstanding their disagreement as to the particular choice.

What can transnational regulatory networks contribute in the face of this Battle of the Sexes? One key contribution may be to render some particular outcome relatively more focal. Transnational networks may do so directly, by way of their dissemination and promotion of a particular presentation standard. But they may also do so less explicitly, through their generation and distribution of information more generally. The significant success of the International Accounting Standards Board in fostering the harmonization of presentation standards (and increasingly substantive standards), even notwithstanding substantial U.S. resistance, relied on just these strategies.[122]

Beyond their focal point function, transnational regulatory networks may also play a role in the face of conflicting standard preferences by offering a face-saving means for national regulators who have previously embraced one disclosure standard to shift to another, without the appearance of conceding their sovereign prerogative to a competing sovereign.[123] By comparison with the latter, embrace of a standard articulated by a transnational network may be relatively more palatable.

Ultimately, even when national regulators engage in active regulatory competition, there may be a significant coordination dynamic at work and hence a role for transnational regulatory networks to play. This is just the dynamic, of course, in international financial regulation, with national regulators competing aggressively for trading and other financial market activity.[124] When one appreciates the nature of that competition, however, the

118. *See* Licht, *supra* note 48, at 98. A similar account might be offered as to substantive antitrust law, which Verdier cites as exemplary of this dynamic. Verdier, *supra* note 7, at 124.

119. *See* Licht, *supra* note 48, at 98.

120. *See id.* at 99.

121. *See id.* at 100 (describing investments associated with embrace of a given accounting standard for those nations not already utilizing it).

122. *See* David Zaring, *Sovereignty Mismatch and the New Administrative Law*, 91 WASH U. L. REV. 59, 76–78 (2013). It bears emphasizing that the IASB stands apart from the regulatory networks discussed herein, given its composition by private parties. *See* Walter Mattli & Tim Büthe, *Global Private Governance: Lessons from a National Model of Setting Standards in Accounting*, 68 LAW & CONTEMP. PROBS. 225, 250–51 (2005).

123. *See* Licht, *supra* note 48, at 101–02.

124. *See* Brummer, *supra* note 7, at 352.

continued relevance of networks becomes clear.

In the first order, regulatory competition in the international financial markets tends to be over the *standard* for market activity, rather than in pursuit of sharp differentiation.[125] Thus, national regulators do not seek to render their financial markets unique in some fashion. Rather, their goal is to be fully integrated with the international financial markets. Thus, in their competition with others over the applicable standard, what national regulators seek is the embrace of *their* standard over some competing one. At the extreme, even offshore financial centers do not seek to separate themselves from the financial markets, but rather to attract those seeking the most forgiving regulatory regime within those markets.

For the same reason, once any competition over the governing standard for trading activity is resolved, few national regulators will have any incentive to abandon it. Rather, regulatory competition then shifts to a competition *within* the standard. Each regulator seeks to provide regulatory options that attract business to its jurisdiction yet remain within the (however roughly defined) parameters of the international financial markets as they have come to exist.

This is precisely the dynamic of coordination described above. With its multiple equilibria, the centrality of expectations and focal points, and the stickiness of whatever equilibrium ultimately emerges, regulation of the international financial markets fits squarely within the realm of coordination game dynamics. As such, those markets offer a natural setting for transnational regulatory networks to play a role—however much conflict is also in play.

VI
CONCLUSION

In weighing the appropriate architecture of the international order, there may be many good reasons to embrace alternatives besides transnational regulatory networks. Especially in financial regulation and other areas in which they already have a long track record, however, any shift away from such networks should happen for the right reasons. And an asserted incapacity to navigate conflict is not among those reasons.

Even in the face of conflict, thus, regulatory networks can play an important role in international financial regulation and elsewhere. To be sure, networks will not always be effective in that role. Nor will they always be the most appropriate means to pursue goals of transnational coordination and harmonization. For example, in certain circumstances, transnational networks may not offer the speed of decisionmaking needed. Their capacity for enforcement may also be inadequate in many situations.

Whatever deficiencies they may have, however, do not arise because of conflicting interests among their participants. In fact, network structures may be especially well-suited to navigate such conflicts—even by comparison with

125. *Cf. id.*

formal international institutions. Given the dramatically higher barriers to the creation of formal international institutions, meanwhile, their creation ought not be assumed. In the years ahead, we should consequently expect transnational regulatory networks to continue to play a central role.