
William B.T. Mock

John Marshall Law School, wmock1@uic.edu
An Interdisciplinary Introduction to Legal Transparency: A Tool for Rational Development

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I. Introduction

Transparency is a specialized term in international economic law. It is a key concept in various GATT² and WTO³ agreements, in World Bank⁴ and IMF⁵ studies and in numerous bilateral and
multilateral agreements on investment and rights to establish businesses in foreign countries.

Transparency is also a concept which has been analyzed extensively under such disciplines as game theory, information theory, development theory, and political economy. Using insights from some of these areas, I will look at transparency in international economic law and seek to bring new meaning to our understanding of this concept. I will conclude with some remarks about the role of transparency and the rule of law in economic development.

As outlined, this is an ambitious agenda – one worthy of many extended scholarly works. In this brief article, however, I attempt to do no more than sketch some key intellectual links that have been overlooked in mainstream legal scholarship. In doing so, I hope to spark some of my colleagues in legal scholarship to pursue related interdisciplinary work, encompassing such fields as information theory, game theory, and political economy. Were these fields to be incorporated into law as the discipline of


8. Development theory is the field of study of economic, social, and political development, with primary attention to those nations shifting from command economies to market economies and to Third World nations. For a good summary of development theory and development issues, see KEMPE RONALD HOPE, SR., DEVELOPMENT IN THE THIRD WORLD: FROM POLICY FAILURE TO POLICY REFORM 3-24 (1996). See also BARRY P. BOSWORTH & GUR OFER, REFORMING PLANNED ECONOMIES IN AN INTEGRATING WORLD ECONOMY (1995).

INTRODUCTION TO LEGAL TRANSPARENCY

In recent decades, the potential for the development of legal theory and practice is vast. Demonstrating the truth of this statement must await later writings; this article seeks merely to point one direction in which such exploration may take us.

II. The Basic Meaning of “Transparency”

As used in legal practice and theory, “transparency” is a term of analogy. A regulation or law is to be transparent if the process and the effects of the regulation or law can be seen through easily, just as one can see easily through a clean window. If someone subject to the law can understand what is expected of her, can understand and comply with the commands of the law, and can foresee the consequences of compliance or non-compliance, then the law is transparent. If not, then the law is opaque.

III. Use of “Transparency” in International Economic Law

In many international economic law studies, treaties, and conventions, transparency plays a major role. Transparency is regularly recognized as a key element in governmental reform and development. Within the GATT/WTO system, transparency is one of the major concepts, along with such concepts as national treatment and most-favored nation status. In bilateral treaties

10. “Clear operating rules and a free flow of information assist economic decision making, reduce uncertainty, and increase confidence in the legitimacy of a government (whether democratic or not).” ASIAN DEVELOPMENT BANK, GOVERNANCE: PROMOTING SOUND DEVELOPMENT MANAGEMENT 34 (1997).

11. “Transparency in government operations is widely regarded as an important precondition for the macroeconomic fiscal sustainability, good governance, and overall fiscal rectitude.” KOPITS & CRAIG, supra note 5, at 1.


13. See Agreement on Technical Barriers to Trade, Art. 12, Part IV, Annex 1A, FINAL ACT supra note 2; Agreement on Subsidies and Countervailing Measures, Art. 27, Annex 1A, FINAL ACT supra note 2; General Agreement on Trade in Services, Art. II, Annex 1B, FINAL ACT, 33 I.L.M. 1169; Agreement on Trade-Related Aspects of Intellectual Property Rights, Art. 4, Part I, Annex 1C, FINAL ACT 33 I.L.M. 1194.
of Friendship, Commerce, and Navigation, as well as bilateral investment treaties, transparency is a central concept.

Within the GATT/WTO system, several examples of the importance of transparency can be observed. One example is present in the principle that all non-tariff barriers should be converted to equivalent tariff barriers. This is not because tariff barriers have less of an effect upon trade, but because that effect is more obvious. In other words, tariff barriers are more transparent than quotas and other non-tariff barriers.

Being more obvious produces three positive effects. First, businesspeople can take those effects into account in advance. Second, more persons affected by the tariff barrier will understand its impact upon them, including consumers paying for the goods. Third, nations will be able to adopt more principled negotiating positions once they are aware of the true economic significance of the barriers.

Within the context of bilateral investment treaties, transparency works in a similar way. An essential part of every bilateral investment treaty is that each state’s foreign nationals be allowed substantial freedom to invest and conduct financial business in the other nation. Such freedom can be frustrated if

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17. “For import control systems based on clearly defined product quotas, there are various well-tried methods of phasing out quotas that have the important advantages of being reasonably transparent and open to monitoring.” VINOD THOMAS, JOHN NASH, ET. AL., BEST PRACTICES IN TRADE POLICY REFORM 158 (1991). See also U.S. GENERAL ACCOUNTING OFFICE, THE DIFFICULTY OF QUANTIFYING NON-TARIFF MEASURES AFFECTING TRADE, GAO/NSIAD-85-133 (1985).

18. See e.g., “Neither Party shall in any way impair by unreasonable and discriminatory measures the management, conduct, operation, and sale or other disposition of covered investments.” Investment Treaty with Albania, Art. II.
the right to invest is subject to complex and confusing regulations directed at the foreign investor, particularly because these regulations could provide an opportunity to favor the local investor over the foreign one. Similarly, the freedom to invest can be frustrated if foreign investors are subject to officials who are free to exercise a large degree of discretion in approving or disapproving the investment. Thus, both confusing regulation and large grants of administrative discretion are barriers to transparency and amount to violations of most bilateral investment treaties.

IV. Game Theory

Game theory is a mathematical discipline which seeks to understand the choices and strategies available to parties engaged in structured negotiations or competition with each other. "Games" includes all types of structured interactions with defined rewards, not merely the games we play when gathered with friends for a relaxed evening. Examples of items analyzed by game theory include police questioning of a criminal suspect, job

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Para. 3(b), supra note 15. **Similarly see**, Investment Treaty with Uzbekistan, Art. II, Para. 3(b), supra note 15; Investment Treaty with Trinidad and Tobago, Art. II, Para. 3(b), supra note 15.

19. "[F]oreign investors suffer from a condition of adverse asymmetry in information costs compared to insiders. Thus, foreign investors' decisions on the location of their activities within a host country mainly reflect a ration response to the existence of information costs." Sergio Mariotti and Lucia Piscitello, *Information Costs and Location of FDIs with the Host Country: Empirical Evidence From Italy*, 26 J. INT'L BUS. STUDIES 815, 815 (1995).

20. "This history of game theory has been one of continual expansion of the structured situations susceptible to cogent analysis." William B.T. Mock, *Game Theory, Signalling, and International Legal Relations*, 26 GEO. WASH. J. INT'L L. & ECON. 33 (1992). Moreover, the growth of game theory can be seen throughout the twentieth century. For a technical historical summary of the development of game theory, see R.J. Aumann, *Game Theory*, in THE NEW PALGRAVE supra note 6, at 460-79. Today, von Neumann and Morgenstern's *Theory of Games and Economic Behavior* remains the most influential work applying modern game theory to the social sciences.

21. WILLIAM POUNDSTONE, *PRISONER'S DILEMMA* (1992)(looking at police interrogations, "who shall die" ultimata, and many other aspects of the history and analysis of the prisoner's dilemma problem); see also, Anatol Rapoport, *Prisoner's Dilemma*, in THE NEW PALGRAVE supra note 6, at 199; JOHN MCMILLAN, *GAME THEORY IN INTERNATIONAL ECONOMICS* 42-28 (1986). The Supreme Court's regulation of police interrogation for suspects under custodial arrest in Miranda v. Arizona, 384 U.S. 436 (1966), and the development of the exclusionary rule for illegally obtained evidence, beginning with the now antiquated case of Mapp v. Ohio, 367 U.S. 643 (1961), have effectively turned an isolated series of one-time custodial games, with a finite duration, into "Mutt and Jeff" games (or "good cop" and "bad cop") with an indefinite duration.
hunting,\textsuperscript{22} product pricing in a competitive business market,\textsuperscript{23} tort law,\textsuperscript{24} and arms control negotiations.\textsuperscript{25} Such popular games as bridge and chess are also studied in game theory,\textsuperscript{26} of course, and often provide useful examples for discussion.

Within game theory, scholars distinguish between different types of games. For example, games that occur only once are distinguished from games that the players play again and again.\textsuperscript{27} Games where players cooperate for a shared reward are distinguished from games where they compete.\textsuperscript{28} And, most importantly for a study of transparency, scholars distinguish between games of "imperfect information" and games of "perfect information."\textsuperscript{29}

Mock, supra note 20, at 39.


23. MORROW, supra note 6, at 51-58 (Cuban Missile Crisis), at 180-186 (Nuclear Deterrence).


25. See, e.g. Kenneth W. Abbott, 'Trust But Verify': The Production of Information in Arms Control Treaties and Other International Agreements, 26 CORNELL INT'L L. J., 1 (1993); Martin C. McGuire, Defence Economics, in THE NEW PALGRAVE, supra note 6, at 760-62 (indicating the "need for economic analysis became crucial from the early days of the strategic nuclear era"); R.P. Smith, Military Expenditure, in THE NEW PALGRAVE, supra note 6, at 463-65 ("Economists have also played an important, though controversial, role in the technical development of strategic doctrine, deterrence theory, nuclear targeting and other aspects of the uses to which military expenditure is put."). See also, BATES GILL AND J.N. MAK, ARMS, TRANSPARENCY AND SECURITY IN SOUTH-EAST ASIA, 1 (1997).

26. It is assumed throughout this article that readers are familiar with bridge and chess. For those readers who are not familiar with these games, however, a basic discussion of the fundamental concepts can be found in HOYLE'S RULES OF GAMES: DESCRIPTIONS OF INDOOR GAMES OF SKILL AND CHANCE, WITH ADVICE ON SKILFUL PLAY – BASED ON THE FOUNDATIONS LAID DOWN BY EDMOND HOYLE, 1672-1769, 1-33, 213-220 (Albert H. Morehead & Geoffrey Mott-Smith eds., 2d ed. 1983) (discussing the rules of bridge and chess, respectively).

27. Jean-Francois Mertens, Repeated Games, in THE NEW PALGRAVE, supra note 6, at 205.

28. JAMES W. FRIEDMAN, GAME THEORY WITH APPLICATIONS TO ECONOMICS, 22-67 (1986). See also, Joseph E. Harrington, Jr. Non-Cooperative Games, in THE NEW PALGRAVE at 178; A. Mas-Collel, Cooperative Equilibrium, in THE NEW PALGRAVE at 95; and Martin Shubik, Oscar Morgenstern in THE NEW PALGRAVE at 103; MORROW, supra note 6, at 188-218.

29. These terms are somewhat different than the terms "complete information" and "incomplete information." According to one scholar,

The players are said to have "imperfect" information when there is uncertainty about the actual behavior of the players or, more generally, when the evolution of the play until the point
Within any game context, a participant or player will have certain information. In the beginning of any bridge game, the player will know what cards he holds in his hand. However, he will not know how the remaining cards are distributed among the other three hands. As the bidding progresses, he will be able to gain additional information and reach some conclusions to guide his play. Only at the end of the hand will the average player finally know all there is to know about how the cards were distributed. Bridge is a game of imperfect information.

Contrast this with chess. In chess, each player knows at all times the complete placement of all the pieces on the chessboard. No information is hidden at any time. Chess is a game of perfect information.

Games of perfect information differ from games of imperfect information in several very important ways. In games of imperfect information, it becomes necessary to analyze all available information to learn about the information that is unavailable. In games of perfect information, this is not necessary. Games of imperfect information therefore permit the development of techniques of signaling, where a player will provide some additional information to partners or opponents. In bridge, players signal with their bids and the cards they play on each trick. In games of perfect information, it is neither necessary nor possible to signal information to other players.

This leads to the most important distinction for this article. In a game of imperfect information, false signalling—bluffing or deception—is possible. In bridge, an unusual bid or card played can convey false information to an opponent. In chess, no move can deceive an opponent about the actual layout of the pieces and

in time when a new decision is to be made is not known. . . .

On the contrary, information is "incomplete" when the players do not know some of the elements which define the rules of the game itself. These rules include the set of payoffs, the set of strategies, and the number of players.


32. See id. at 51-52.

33. See id at 53-55. (In this book, bluffing goes by the more precise term "inverted signalling"). See also, Mock supra note 20, at 39.
the threats inherent in that layout. Although weaker players may believe that it is important to know an opponent's intentions, stronger players are aware that it is the potential risks and opportunities on the chessboard that matter, not any plans the opponent may make. In chess and other games of perfect information, it is impossible to deceive an opponent.

V. Relating Game Theory to Law

Applying these insights of game theory to law provides us with some additional understanding of the concept of transparency. First, game theory provides an additional means for defining transparency. Second, game theory provides new sophistication in understanding the importance and effects of transparency.

By their nature, areas of legal regulation provide a system of defined actors, rules, and rewards (both positive and negative). Such areas are therefore natural subjects of game theory analysis and the concepts of perfect and imperfect information and of signalling and false signalling may be applied to an analysis of law.

Broadly speaking, we may say that the closer an area of regulation is to providing those subject to regulation with perfect information about the standards of conduct and the consequences of their actions, the more transparent the regulation is. Conversely, the more a party subject to regulation is required to seek signals about the law's requirements and effects, the less transparent it is. Examples of such signal-seeking are the efforts of investors in developing countries to judge the safety of their investments from the nuances of the statements of politicians and bureaucrats, rather than from the words of the law or regulation itself.

VI. Insights from Information Theory

Information theory is a relatively recent discipline which seeks to analyze and understand the role, processes, and costs of information gathering and analysis in modern society. Adding

34. For several examples of game theory analysis of law, see Baird, supra note 24.
35. See id. at 122.
some insights from information theory to our current understanding of transparency will provide us with an important additional element in understanding the role of transparency in law and development.\textsuperscript{37}

As the world has come to realize, information is a valuable commodity. Nations, businesses, and individuals spend large sums of money to acquire it. Intellectual property laws provide monopoly protections to inventors for revealing information; spy satellites are launched to obtain it; the World Wide Web is visited by million of people daily in search of it. If knowledge is power, it is worth spending time and money to obtain it.

There are several opportunities for costs to arise in obtaining information, because information gathering has several phases.\textsuperscript{38} First, information must be located. Then, it must be acquired. Then, it must be confirmed. Then, it must be analyzed. Only then may it be applied in a productive manner.

At each phase, an information-seeker may incur costs. If information is not located in a convenient site, a seeker may have to do substantial work to find it – in effect, incur a secondary information cost to locate a source for the primary information. Once information has been located, there may be a significant cost involved in acquiring it. If there is any reason to doubt the reliability of the information, the seeker may have to spend time and money confirming the accuracy and reliability of it. Finally, the seeker must devote additional resources to analyzing the

\textsuperscript{(1961); MICHAEL BUCKLAND, INFORMATION AND INFORMATION SYSTEMS (1991); PHILIPS, supra note 29.}

\textsuperscript{37. For a more thorough analysis of the significance of information law, in general, and transparency, in particular, and for a review of literature on information economics, see William B.T. Mock, On the Centrality of Information Law: A Rational Choice Discussion of Information Law and Official Transparency, 17 J. COMP. & INFO. L. 1069 (1999).}

VII. Relating Information Theory to Game Theory and Law

When we apply information theory's analysis of information acquisition costs to game theory and law, important insights will emerge. In particular, games of perfect and imperfect information will take on new meaning and the significance of transparency in economic development will become clear.

Games of imperfect information may now be seen as those games which impose significant information acquisition costs and barriers upon the players. Every meaningful information-gathering situation imposes some costs at the final, analytic phase. However, significant costs and barriers at the location, acquisition, and confirmation phases of information-gathering are aspects of games of imperfect information. In games of perfect information, these costs are minimal or non-existent.

A transparent legal or regulatory regime is therefore one in which the information-gathering costs, other than those relating to analysis, are kept to a minimal level. An opaque legal or regulatory regime is one which imposes significant information-acquisition costs or barriers upon a party subject to the law or regulation. Another way to state this is that an opaque legal regime imposes significant transaction costs on the acquisition of information about the legal regime itself.

It is highly unlikely that these information-gathering costs in opaque legal regimes will be borne by anyone other than the regulated party. In a few countries and a few settings, information costs are shared by governments, but this is not common. A clear example of this is the United States' Freedom of Information Act, which requires government agencies to locate and provide information in its possession to anyone making a proper request. European-style ombudsmen provide another example where governments underwrite the cost of providing information.

Therefore, it is normal to expect that opaque legal regimes would impose significantly greater transaction costs of locating,
gathering, and confirming information than would transparent legal regimes.

VIII. Conclusion: Transparency, Development, and the Rule of Law

From the standpoint of a global businessperson, investment in any country must be judged by the difference between the financial return and the costs associated with doing business in or with that country. From our analysis of transparency in law, games of perfect and imperfect knowledge, and information acquisition costs, what can we say about the effects of transparent and opaque legal regimes upon incentives to invest?

Opaque legal regimes create the conditions for regulatory games of imperfect knowledge. Such games necessarily involve the possibility of signalling, including false signalling, and significant costs associated with the location, acquisition, and confirmation of information of value to the player or regulated party. In practical terms, this may mean that a market participant may have to hire expensive local agents to gather regulatory information, may have to make bribes or "grease payments" to local officials to obtain interpretations or applications of the law, may have to make a preliminary business move to test the regulators, and may have to engage in speculation about the intent of political leaders. All of this is expensive and none of it is a completely adequate substitute for "perfect" knowledge.

By contrast, a transparent legal regime imposes none of these costs. Although there will naturally be costs associated with ascertaining and evaluating business risks, there will be no or minimal costs associated with locating, acquiring, and confirming the regulatory requirements and consequences associated with investment. A transparent legal regime will provide lower-cost

41. Concern over this reaction to non-transparent overseas regulation of international business led to enactment of the Foreign Corrupt Practices Act, 15 U.S.C.A. § 78dd-2. See also, Recommendation of the Council on Bribery in International Business Transactions, OECD Doc. C(94) 75/Final (May 27, 1994). It also led to the creation of Transparency International, an international group of business people and academics working towards greater transparency for the reduction of official corruption.

42. "Unless an effective, credible and transparent regulatory system can be put in place, either via an independent regulator or in some other way, countries like the developing Asian economies are less likely to be able to continue attracting private sector capital, particularly from overseas." NATIONAL ECONOMIC RESEARCH ASSOCIATES, GOVERNANCE AND REGULATORY REGIMES FOR PRIVATE SECTOR INFRASTRUCTURE DEVELOPMENT 12 (1998).
business opportunities and, necessarily, better potential for profit for businesspeople interested in global business. Whether this profit potential is left to the businessperson or some of it is recaptured by the government through taxation is an issue for another day, but it is clear that a country with a transparent legal regime will be a more attractive location for investment than the same country with an opaque legal regime. No nation seeking development can afford the lost investment associated with opaque legal regimes.

Legal systems which apply the same rules to every similarly-situated party and avoid both confusing regulation and large grants of administrative discretion are described as embodying the Rule of Law. The Rule of Law is often described as a political good, a worthy aim in the fundamental principles of any legal system and a necessity in support of human rights. However, our analysis of transparency, game theory, and information theory demonstrates that the Rule of Law goes beyond political philosophy and humanitarian values in law.

A country whose legal system embodies the Rule of Law necessarily is a transparent legal system. Such a system applies the same rules to all similarly-situated parties. In doing so, it dramatically reduces the opportunities for false regulatory signalling and the costs associated with acquiring legal information. The Rule of Law lowers transaction costs associated with international business and investment. By demonstrating that the Rule of Law has significant economic and practical consequences, we provide nations, including developing nations, with self-interested reasons to adopt transparent legal regimes. In development, the Rule of Law is as much an economic imperative as a political one.

43. "[I]nvestors and lenders [in developing countries] require a predictable framework of rules in which commercial activity and lending activity will be conducted, including accessible and comprehensive legal rules which are actually applied and the breach of which gives rise to sanctions." ASIAN DEVELOPMENT BANK, GOVERNANCE: PROMOTING SOUND DEVELOPMENT MANAGEMENT 16 (1997).

44. "An effective rule of law is as fundamental for a free market as it is for the effective exercise of human rights. The rule of law assures that governments are truly accountable." Boeninger, supra note 4 at 278.