

SYMPOSIUM ON THE INTERNET AND LEGAL THEORY: THE INTERNET, SECURITIES REGULATION,
AND THEORY OF LAW

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SUMMARY:

... Rarely has a change in the environment affected society as dramatically as the Internet. ... Further, the Internet environment is particularly conducive to the creation and enforcement of customary law. ... B. The Commission's Response to the Internet Environment: Substance, Enforcement, Mechanisms for Change, and Methods of Change ... The law was adapted to the changing environment of the Internet by allowing its use (and its advantages) while maintaining the values and policies underlying the securities laws. ... Thus, securities law enforcement has used the new technology; for example, the Commission has established areas on its Internet site where investors can inform the Commission about violations of the law and ask questions from the staff. ... Because the Internet can be used to exchange information, it can be used as a forum for securities trading, similar to securities exchanges. ... If traditional intermediaries disappear and no mechanism fills the void, it is likely that trading-site markets will not continue to function, as investors find their trade agreements ineffective and too costly to enforce. ... B. Securities Lawmakers' Response to the Internet Environment: Substance, Enforcement, Mechanisms for Change, and Methods of Change ... First, nothing concerning trading sites suggests that the fundamental policies of ensuring investor confidence and facilitating capital should be changed. ...

TEXT:

Introduction

Rarely has a change in the environment affected society as dramatically as the Internet. It has transformed the way we retain, transfer, and exchange information. At minimal cost, the Internet offers far more information at a faster pace than ever before. It enables us to interact around the globe with more people than at any time in the past. When such dramatic environmental changes occur, drastic changes in the law often follow. n1

The Internet affects the environment in which securities markets operate and the laws that govern them. n2 The use of the Internet has already begun to change the way information about securities is disseminated and the way securities are traded, n3 two activities regulated by the securities laws. n4

The purpose of this article is to begin an inquiry on a number of questions: Should the securities laws be adapted to the use of the Internet? If so, how? What path of inquiry should be taken to answer the questions, and how should we

think about adapting law to a changing environment of actors and actions subject to law? These questions are limited to the securities acts regulating securities markets. The inquiry, however, is broader. It touches on the way law should change generally in a broader context of legal theory. The article starts by defining law, then examines two particular situations in which securities markets have used the Internet, and the lawmakers' response to these uses. The article concludes with a critical analysis of this response in the context of legal theory.

Part I of this article proposes a view of law as an adaptive, self-replicating system of coercive communications, consisting of three parts: substance of coercive communications, mechanisms for enforcement, and mechanisms and methods for changing law. Parts II and III of the article show how the three parts of the legal system react to behavioral changes of those who are regulated by law as their environment changes.

To examine the response of law in such cases, I chose two situations under the securities acts. The first, discussed in Part II of the article, deals with the use of the Internet to deliver prospectuses. The Securities and Exchange Commission ("Commission") issued an interpretive release in connection with transfers by the Internet in a way that maintained the status quo. n5 In this manner, the Commission allowed issuers and some investors to capture the benefits of the Internet, while reducing adverse effects of this use on other investors, in furtherance of the policies of the securities acts. n6 The three-part model of law is applied to analyze the adaptation of the securities laws on this subject.

Part III of the article describes the regulation of securities exchanges - a species of securities trading markets - and the use of the Internet to establish on-line trading sites. In some cases, the staff of the Commission allowed issuers to provide such trading sites to their shareholders. n7 Applying the model of law to this example, the far-reaching implications of such permission are highlighted and lead to a proposed method of adapting the securities laws to Internet trading sites.

Here, we must reexamine fundamental policies underlying the law and adopt a new format of changing and enforcing law. This Part examines an emerging cooperative effort among the adaptive mechanisms of law: the Commission and custom-creating markets. I believe that in order to cope with the fundamental changes that the Internet may introduce into the securities markets, two parts of law's adaptive structure - the Commission and the markets - must closely interact to allow for experiments and controls almost simultaneously. These two actors are already moving in this direction.

The proposed three-part model of law is designed to provide a framework for explaining, and especially guiding, the way we think about adapting law to changes in the environment of actors. Hopefully, a developed model will help predict the law's response to changes in the environment. I recognize that technology and markets are not the only drivers of legal change; law is also affected by the existing legal infrastructure, which may provide actors both incentives and disincentives to certain behavior and changed environments. The focus of this article, however, is on adaptation of law to changes in people's behavior as their environment changes.

The inquiry here transcends the particular issues under the securities laws. It may help develop a broader generalization - a model of law's adaptation to the changed environments of those whom it regulates. As we are experiencing an ever-increasing pace of change in all aspects of our lives, a systematic inquiry into the response of law to change is critical.

I. A View of Law: A Three-part Adaptive, Self-replicating System of Coercive Communications Used to Help Organize Society

I view law as an adaptive, self-replicating system of coercive communications. n8 While not the only view of law, this view provides a useful framework for examining law's response to a changing environment. "Changing environment" means changing beliefs, activities, and behavior of actors in the society. "Response of law" means response to this changing environment - changes in the organizational rules under which society functions. n9 Further, there is no consensus on the concept of coercion. Some would view the law as coercive only if it is backed by the force of a political unit, such as the state. n10 I take a more expansive view of coercion to include the coercive force of custom. This, of course, means that there is no clear dividing line between law and social rules that people may feel constrained to follow without threat of state-enforced sanctions. We may distinguish between customary law that is sanctioned by "legal-like" sanctions and methods, and law that is not. In any event, the problem is not unique to our context here. The law concerning the definition of contracts as opposed to non-contract obligations poses similar issues and can provide a guide to the distinction as well. n11

Law is a structured system. The structure consists of substance, enforcement mechanisms, and mechanisms and methods of adaptation. The term "system" denotes a holistic view of a complex arrangement composed of types of items and individual items related in a predictable pattern - a repetitious rhythm. n12 "Structure" denotes a stable relationship among the parts of the system: "The mutual relation of the constituent parts or elements of a whole as determining its peculiar nature or character" n13 The securities laws, with which I deal later, also constitute a system. We have a seamless web of systems within systems, from the atoms to the cosmos, each with somewhat different fundamental rules and yet each relating to the whole and to each other. Our organization of chaos into patterns of orders and systems is not a reality but one which we need in order to be able to think about issues and sort out solutions. This article deals with a specific legal system - the securities laws - and relates it to law generally, a broader system to which the securities laws belong.

A. Law Is a Structured System n14

Law's structure contains three main parts: (1) the substance of coercive communications to members of a society; (2) mechanisms and methods of enforcing these communications; and (3) mechanisms and methods for adapting the structure and the substance of its components to changing environments.

I recognize that the very act of enforcement can change law and that many enforcement and adaptive mechanisms can perform both functions. Some mechanisms and their impact differ in degree. By enforcing the law, the police introduce some change, but not as much as legislatures or courts. It seems that the more "hands-on" enforcement mechanisms perform, the less immediate general impact they may have. Perhaps the police change law in a way similar to the way market actors change the law, gradually and incrementally. Enforcement and change may be distinguished by their purpose, focus, and intended results. This distinction helps the analysis and justifies treating them separately.

1. Substance

The main part of the law's structure consists of the substance of coercive communications to members of a society. This part is organized according to the generality of the communications: (1) specific decisions, defining the relationship among individuals and entities; (2) rules that apply generally to types of individuals and entities; n15 and (3) foundational norms, values, and policies that the rules are designed to implement. n16 Rules subsume and generalize specific decisions; values and policies subsume and generalize both latter types of items. n17 This format of communication is not surprising. It mirrors the format in which humans retain information and is a usual format (though not the only one) of communicating, organizing, and retaining detailed and complex data. n18 To be sure, the features of legal substance are not as clear-cut. The characteristics of "legal values" can be attributable to non-legal disciplines as well. n19 However, taken together with law's other features there emerges a unique system that is distinguishable from other systems.

2. Mechanisms and Methods of Enforcement

Law's structure contains mechanisms of enforcing law's communications. The mechanisms include designated actors that implement these coercive measures in law. The actors themselves are not part of law; their designation, however, is. Some measures are used by governments to enforce their coercive communications; others - usually similar mechanisms - are used by the public to enforce its customs. In addition, regulators and the courts recognize accepted customs and use their enforcement powers to coerce compliance with the dictates of these customs. n20 While law prescribes the identity of law enforcers and their methods, enforcers, such as administrative agencies, can develop "soft" indirect enforcement mechanisms that produce compliance. These methods are effective when applied to regulated industries whose business depends on an ongoing relationship with regulators. n21

3. Mechanisms and Methods for Change

Mechanisms for change are part of an adaptive system and the structure of law. The existence of such mechanisms per se does not destabilize the structure; rather, the mechanisms are crucial to the continuous existence of the structure. The structure must be stable, as well as resilient to change. Without adaptability, the structure will be too brittle and break with even minor changes in the environment.

Adaptive mechanisms can cause changes in various parts of the structure, mostly in the number and sometimes nature of the individual items, of which the structure is the organizing pattern. Even if the types of items change, the structure may remain intact. However, the structure may lose its identity and become another type of system, or perish,

if fundamental changes occur in the nature of the relationships among the items and types of items within the structure or in the main components of the structure. n22

The same principles apply to law. Most adaptive changes in law do not affect the foundational components of law's structure nor the norms, values, policies, or types of items in the substantive part of the structure; they affect the content and the number of items in the parts of the structure, leaving the structure intact. However, if norms, values, or policies within the substance of law's coercive communications change in a fundamental way, or if the mechanisms for enforcement or mechanisms for change are eliminated or significantly altered, the particular legal system may be doomed to lose its identity; it may become another kind of system or perish. n23

In law, the mechanisms of change consist of four designated types of actors, each of which can create and adapt law: (1) legislatures that enact statutes or rules; (2) agencies that implement statutes, rules, and their own decisions, such as the Commission; (3) courts that adapt legislative statutes, rules, and their own decisions; and (4) markets that create and adapt customary laws.

Arguably, markets are part of the actors' environment rather than part of law. Clearly, markets are unique and distinguished from the three other lawmakers. First, in the markets, the actors that change the law and the actors that change the environment may be the same or closely connected. Business persons and lawyers create new customs or more likely adjust existing customs in reaction to an invention. An invention that changed the environment and customary law are both products of the market. The Internet demonstrates this point.

Second, in market law, it is harder to identify the individuals or institutions that change law. To be sure, there are leaders that trigger a new or different path. Each follower leaves its imprint on and strengthens the coercive force of new customs. Moreover, the resulting customary laws can be attributed to preferences and decisions of a multitude of individuals. Thus, market customary laws are the product of actions and ideas of numerous individuals. Their hand may be visible, but not identifiable.

The difficulty of identifying the law changers has a number of benefits and disadvantages. On the minus side, among other things: (1) it is more difficult to attach responsibility to particular actors for changes in the law; (2) there is no requirement that the changes will be rationalized or justified; (3) there are no review mechanisms regarding the substance of changed custom; (4) at the initial stage of change, it is difficult to predict where the change in customary law will lead and when it will end; and (5) market activities are difficult to monitor because few market actors have the duty to report.

Some of these disadvantages are reduced by the unique process of change: (1) review and legitimacy of an adaptive new custom depends on the degree of its following; (2) because custom must be publicized (or else it will have no followers), the rationalization of the changes in the custom may be aired in the public domain, similar to the public domain discussion of political ideas; (3) the itemized justification may not be as important when numerous actors follow the new custom. Their following is a "black box" that proves the custom's value, like the price of a product that determines its value, even though the buyers may have different reasons for buying the product; (4) market law does not become coercive immediately; law's coercive weight depends on the degree and intensity of its following. Thus, as adoption and following of market law - custom - grows, so does its coercive backing and its predictability. Hence, it is also less necessary to identify the persons who started breaking the new path; (5) whenever custom requires a review, amendment, or adoption, the other three mechanisms of change (the legislatures, courts, and administrative agencies) are available to perform the task; and (6) market activities and complaints about inadequacies of market law can be brought to the attention of the three other mechanisms of change by competitors, consumers, and other affected parties through hearings and by other means.

In addition, other lawmakers also change the environment in which law operates. The traditional lawmakers are increasingly drawing on the markets for the substance of law by incorporating "best practices" of industries. n24 Lawmakers also use the markets to enforce law through self-regulatory organizations, trade organizations, and other means. n25 Further, the Internet environment is particularly conducive to the creation and enforcement of customary law. Many of the characteristics of customary law are immediately recognizable in the world of cyberspace. Markets have become a lawmaker in too many ways to be relegated to a mere environmental factor. Therefore, notwithstanding the differences between markets as lawmakers and other lawmakers, I consider markets to be lawmakers rather than the mere environment in which law operates.

Adaptive methods differ in different structures. Karl Popper has observed such differences in genetic, behavioral, and theoretical structures. In reaction to environmental changes, genetic systems mutate in a non-cognitive and non-

intentional manner. n26 Those unlucky genes that do not mutate "correctly" die, and those lucky genes that happen to mutate in the "right" way live. n27 Behavioral systems usually adapt by intentional, cognitive actions using a trial and error method. n28 Unlucky actors that do not learn from the errors suffer the consequences and die, and those who tried the right way or learned from the errors live and prosper.

Scientific theories are changed cognitively as well, but unlike behavioral systems, changes are guided by reasoning (and partially by intuition). n29 The changes occur after rigorous testing by reasoning and experiments. n30 In addition, scientific theories must pass the testing of expert colleagues. n31 In some respects the process is similar to market adaptation. A leader breaks a new path and, unless he convinces the followers, the theory dies or lies dormant until such a following is formed. A similar process applies to other lawmakers. The process, however, is more institutionalized, legitimizing change and its support only through the proper channels.

Adaptation of law is generally effected in three ways: (1) textual interpretation, by exploring meaning and applying analogy; (2) policy considerations, more remote from text: identifying the problem, explaining the problem, choosing the criteria for solutions, listing the options, and choosing the solutions in light of the criteria; and (3) culmination of decisions and actions of numerous individuals and units in the markets. However, all adaptation methods depend to a certain degree on followers and consensus, including desires of powerful organized groups. Adaptations are also affected by the lawmakers' own interests (e.g., to be re-elected or avoid being overruled by higher courts). These pressures rarely form part of the formal methods of adaptation; their existence, however, is recognized (and sometimes criticized).

Methods of adaptation depend to some extent on which type of lawmakers engage in adapting law. Custom adapts through a gradually increasing following. n32 The other three kinds of lawmakers - legislatures, courts, and administrative agencies - use methods similar to scientific theories' adaptations, based on cognitive decisions. However, courts and administrative agencies use both textual and policy methods, while legislatures use mostly policy methods.

Arguably, the methods of courts and administrative agencies differ: courts use a textual approach, while agencies use a policy analysis approach. I conclude, however, that both courts and agencies use both approaches. Administrative agencies must interpret the text of the governing legislation and follow its dictates to determine their authority and the guiding principles for their actions. However, where agencies, such as the Commission, have powers that extend beyond judicial decisions, such as ex ante advisory powers or exemptive powers, n33 they may have to use a policy analysis approach. Some judicial decisions have taken the policy approach. n34

B. Relation of Adapting Law to Existing Law

Karl Popper said that while all new scientific theories change at least parts of former theories, showing that the former theories are either wrong or incomplete, new theories encompass the (partial) truth of the theories they contradict. n35 Thus, Einstein's theory of relativity differs from Newton's theory by showing that it is not true in certain environments, yet subsumes Newton's theory for the limited environment as to which it is true. n36

In law, the relationships between new and traditional policies and rules seem different than in science. Law can be tested by norms of right and wrong as well as by truth and falsity. Theoretically, norm setting seems to allow lawmakers more discretion to change existing laws than scientific theorizers would have; lawmakers can introduce new fundamental policies and values that fully trump and deviate from their predecessors rather than subsume them.

Yet, in reality, the way in which the law changes is astoundingly similar to the way in which new theories in science are fashioned. n37 Most new legal rules and underlying policies conflict with parts of their predecessors but contain and reaffirm part of their predecessors. n38 Generally, like most new scientific theories, new adaptive laws subsume most of prior laws and only "tweak" them in certain areas.

There can be a number of reasons for the conservative attitude of lawmakers to adapting and modifying law. In fact, these reasons are similar (and some are identical) to the reasons for the doctrine of stare decisis.

First, new laws are risky and costly for lawmakers and the regulated. Existing laws have been tested, and their strengths and weaknesses in a normally changing environment are known. New laws that have not been tested may bring unanticipated results. n39 Unlike scientific theories, n40 it is almost impossible to test new laws in advance and limit these results. n41

Second, new laws impose learning costs on the legal profession, lawmakers, the regulated, and the public. Even something as minor as the introduction of new section numbers to a body of law imposes such costs. n42 In addition,

while old laws have been examined and interpreted, new laws must acquire their interpretative gloss. Developing this gloss is costly.

Third, we have a limited capacity for attention. That is why we create habits that put ourselves on "automatic pilot." Doing so enables us to pay attention to new and unexpected (and, therefore, more risky) events. Old laws are habitually followed by most people (or habitually not followed by some people). That is why, while they are excited by new ideas, people cannot easily break old habits. New laws require law-abiding citizens to break old habits and create habits of compliance. n43 That is costly.

Therefore, even when logic may require a complete break from the past, experience builds on the past. People rarely adopt entirely new values and policies or rules that do not relate to existing legal and social structures and behavioral norms. n44

Finally, laws are not enacted in a vacuum. They do not start with a clean slate but against the backdrop of the other existing laws. Fundamental changes in the structure of law affect these other laws and may require drastic changes of all existing laws addressing the same area or subject matter. That is costly. Consequently, when changes in the laws are necessary, the bulk of existing law is left intact.

C. Relationship of Environmental Changes to Legal Change

The impact of a changed environment on law is not uniform. The impact depends on which part of the law's structure the changed environment affects. If the effect is on specific cases or rules, the impact of the rules will change. Therefore, rules must be amended in order to maintain the status quo: the fundamental policies which the rules implement. If, however, the changed environment affects the fundamental policies and the values on which the legal system is based, when the old order that is subject to regulation is changed, when different actors, driven by different incentives take the place of the old actors, then a far more complex response by the law may be necessary.

A new environment may eliminate the problems that existing laws, regulating the old order, were designed to reduce or eliminate; it may raise new problems that existing laws do not address. A new environment can lead to different problem definitions and values underlying the definition. In such cases the underlying policies and perhaps the very structure of the laws must be reexamined. n45

II. Regulation of Prospectus Delivery

The emerging cyberspace is posing significant challenges to legal adaptation. In the securities area, cyberspace has a serious impact in two senses. First, it creates an entirely different mode of communication. The question here is: How should legal rules change to accommodate the new communication technology? If cyberspace does not alter our fundamental values, how should legal rules adapt and change in order to maintain our current values? What should the substance of our rules be in light of the changing environment for the actors in the securities markets?

Second, cyberspace allows communication at an unheard of speed. The issue here is: Which mechanism and method for legal change is more suited to respond quickly in this new environment, recognizing that some existing mechanisms and methods of legal adaptation simply cannot operate at such speed? Police using a horse and buggy cannot match nor catch a speeding car, let alone a plane.

Based on the framework developed in Part I, these two issues relate to the substance of the legal system and to the mechanisms and methods of change of the legal system.

This Part of the article inquires into the impact of the Internet on the delivery of prospectuses. The securities acts regulate disclosure concerning securities offerings in a number of ways. Some information is required, and some information is prohibited. n46 The discussion here relates only to the requirement of delivering a prospectus to potential investors in a public offering. n47

There are two main policies underlying the securities acts. One is to maintain investors' confidence in the integrity of the markets mainly through disclosure: reducing investors' information costs and shifting these costs to the issuers and others, such as market intermediaries, for whom the costs are lower. n48 The second policy underlying the securities acts is somewhat subservient to the first but has become increasingly important in recent years. This policy is to reduce the costs of and encourage capital formation. n49 The Commission is sensitive to the costs imposed on issuers and intermediaries and is sympathetic to means of reducing the regulatory costs. n50

A. Need to Adapt Securities Regulation to Internet Communications: Impact of the Internet on the Environment of the Actors that Are Subject to the Securities Laws

As compared to traditional modes of information transfer, the Internet can reduce the cost of transmitting information for issuers, intermediaries, and some investors. Hence, these parties sought to deliver and receive prospectuses through the Internet, and they asked the Commission to clarify the status of this form of information delivery. n51

B. The Commission's Response to the Internet Environment: Substance, Enforcement, Mechanisms for Change, and Methods of Change

1. Impact on the Substance of the Securities Laws

As a new mode of communication, the Internet does not affect the desirability of information transfer, nor does it impose a different institutional arrangement concerning delivery of prospectuses. The new mode of information transfer affects only the manner in which the information is transferred. Thus, the use of the Internet does not change the values underlying the fundamental policies on which our securities laws are based, the criteria of what is good - which law should either leave alone or support - and bad - which the law should restrict or prohibit altogether. Further, prospectus delivery by the Internet does not seem to affect the fundamental policies of the securities acts. If the status quo for investors remains the same, the underlying policies of the securities acts are not adversely affected by the use of the Internet to deliver prospectuses. In fact, by reducing the costs of capital formation, the securities laws' policies are advanced.

To maintain the status quo, the rules must be changed. Investors' costs of receiving prospectuses through the Internet must be examined. First, not all investors have access to the Internet or wish to receive prospectuses through the Internet. n52 Some of those who do, however, prefer to receive information through this new medium. n53 Clearly, if investors can choose between the new mode of information transfer and the traditional one, they can evaluate their costs and make the decision accordingly. This is precisely the first condition that the Commission imposed on the use of the Internet for prospectus delivery. n54 However, once investors make the choice, they bear the burden of notifying the senders if they change their mind. After their initial choice has been made, the mode of information transfer remains the same until they change the choice.

This, however, is not all. Prospectuses are written in English. n55 Information transfer through the Internet involves an electronic language as well. Therefore, regardless of the investors' consent, the Commission requires that the electronic language used to transfer the prospectuses not be unduly complex or unavailable. n56

Professor Lawrence Lessig suggested that the first question we should ask about the regulation of the Internet is: "Should this new space, cyberspace, be regulated by analogy to the regulation of other space, not quite cyber, or should we give up analogy and start anew?" n57 In the area of prospectus delivery, the Commission chose the path of regulation by analogy. n58 Under existing laws, there are a number of acceptable ways to deliver a prospectus, such as the mails or physical handing over. n59 These traditional delivery forms have proven highly reliable. n60 There is less certainty today that Internet delivery will be as reliable, and investors bear a greater risk that prospectuses will fail to reach them. Therefore, the Commission required that senders of prospectuses receive some indication of receipt: for example, that the receiver downloaded or copied the information, or actively responded in some other way to the information. n61

In addition, materials sent by the Internet may be intercepted and changed before they reach the recipient. n62 The Commission imposed conditions on the senders to reduce the recipient's risks to this possibility, subject to a reasonableness standard. n63 Presumably, the Commission determined that by agreeing to receive prospectuses through the Internet the investors do not agree to bear this risk, except where reasonable precautions by the issuers are insufficient. Thus, so long as the costs to the information sender of protecting recipients from these risks are not high, the sender is liable.

In sum, the Commission allowed the use of the Internet and at the same time imposed conditions that equate information transfer through the new medium with information transfer through the mails and other traditional media. The law was adapted to the changing environment of the Internet by allowing its use (and its advantages) while maintaining the values and policies underlying the securities laws. The Internet rules have the same impact as the pre-Internet rules. n64

2. Response of Securities Laws' Enforcement Mechanisms

The enforcement mechanisms of the requirement for prospectus delivery are affected by the Internet. Arguably, the real world has lost control over the Internet - the cyberspace and the virtual world it has created. n65 Hence, some proponents of this view say: cyberspace should be left alone. n66 I beg to differ.

To be sure, a number of the traditional enforcement mechanisms of this "real" world cannot be effectively applied to the virtual world because the costs of such enforcement have greatly risen. For example, the Internet has increased the cost of enforcing the prohibition on misleading statements and offers of securities without registration because it is more difficult to identify and apprehend the senders and because senders can reach many parties. n67 However, the loss of control is not complete so long as some connections exist, as they must, between the real world and the virtual world of the Internet.

First and foremost are the actors. They may exist in the two worlds, but none of them occupies only the virtual world. Law applies to these actors and their actions. The Internet allows actors to do things they could not do before, in ways they could not do before, or in less time that was required before, but that is all. It may be harder to locate some actors than to locate others, but most can still be located and disciplined. In principle, those in the real world can control the virtual world.

However, in the virtual world, governments' ability to enforce some of their rules has weakened. n68 The "earthbound" actors, such as the telephone companies and other technical staff or the National Science Foundation, are not necessarily those who communicate. These conduits may be justified in rejecting responsibility for the substance of the information they transmit. Therefore, there may be a need to adopt new enforcement mechanisms and perhaps different norms to effectively regulate the virtual world. n69 Further, the focus of enforcement may change. For example, rather than regulate securities offerings on which some securities acts are based, it may be more effective to regulate securities purchases. That would bring into play the issuers' acceptance of payments rather than their communications, and the payment mechanisms that may be more identifiable and subject to regulation. In addition, the securities issuers may be regulated to require them to disseminate information more frequently and fully.

Second, new enforcement mechanisms may be created. For example, a possible enforcement avenue is to provide incentives for a new profession to police the communications or the communicators on the Internet. Cyberspace gatekeepers could be required to receive approvals from, and pay for, the monitoring of such professional actors, similar to those who must receive and pay for audited financial statements or legal opinions in order to make a public offering of securities. Such incentives to professionals are effective because the profession obtains a government monopoly and can make a good living. The cost to the gatekeepers must, of course, be evaluated, but competition among the new professionals may reduce their fees. These fees may be far lower than the losses incurred by investors short-term and by the markets long-term when prohibition of harmful practices is not strictly enforced by government.

Third, technology is now being developed to limit and control access to the Internet or access to particular audiences. For example, offers to sophisticated investors that need not be accompanied by an effective registration statement and a statutory prospectus can be made either by providing investors with special keys to the particular offering sites or by announcing that the offerings are not available to all readers. n70 Alternatively, cautionary language on offerings that certain regulatory systems do not apply to them may prove effective. n71

Fourth, the costs of enforcing law may have changed. But not all costs have increased; the Internet has helped reduce some of the costs. n72 Thus, securities law enforcement has used the new technology; for example, the Commission has established areas on its Internet site where investors can inform the Commission about violations of the law and ask questions from the staff. n73

The Commission has used the Internet to warn investors against certain promises that are "too good to be true" because "they are" and to caution investors against fraudulent practices. n74 The National Association of Securities Dealers ("NASD") has a statutory power and duty of regulating the broker-dealer community, subject to the supervision of the Commission. n75 Among its duties, the NASD supervises the advertising of its members. n76 Since many broker-dealers use the Internet to advertise, the NASD has been using software that scans the Internet automatically and picks certain words, such as "assure," "secure," "guarantee," "20 percent and more," and similar words that denote a promise of high return and low risk. n77 These advertisements are then evaluated by examiners. n78 In short, fire can sometimes be fought with fire.

3. The Choice of Adaptive Mechanisms and Method of Adaptation

In the case of prospectus delivery, the Commission is the legitimate traditional adaptive mechanism and there is no reason to substitute another mechanism for it. The Commission's relationship with the industry is ongoing, as issuers file their registration statements with the Commission. The response of the agency to developments was quite prompt. In early 1995, the Commission guided the industry by publishing an Interpretive Release with respect to the delivery of prospectuses through the Internet. n79 This adaptation of the law to the changed circumstances of the industry and the market actors seems to have worked smoothly and quite well. n80

III. Regulation of Securities Exchanges

A second change in the environment of securities markets and its actors is the introduction of trading sites. In this case, sponsors or issuers offer the holders of securities a meeting place where buyers and sellers of the securities may trade. The Securities Exchange Act of 1934 regulates the securities markets, including exchanges, where investors trade their shares. n81 Since markets in the United States are mainly conducted by market intermediaries - broker-dealers, market makers, underwriters, and other institutions that have joined the markets, such as subsidiaries of bank holding companies and insurance companies - the primary regulation of these marketplaces or market systems is performed by a self-regulatory organization of the intermediaries, subject to the oversight of the Commission. n82

Based on the framework developed in Part I, this Part inquires into the lawmakers' reaction to this new format of trading and into the need for adaptation of the law's substance, enforcement, and change mechanisms and methods.

The policies underlying the regulation of the exchanges can be summarized as: (1) maintaining investor confidence in the markets (treating investors, especially small investors, fairly, and avoiding overreaching and conflict of interest treatment of investors by market intermediaries); n83 (2) maintaining efficient markets from which both issuers and investors benefit (orderly markets, assuring instantaneous or timely public price information, effective enforcement of trades); n84 and (3) reducing the costs of trading. n85

A. Need to Adapt Securities Regulation to Internet Communications: Impact of the Internet on the Environment of Actors that Maintain Exchanges and Trade on Exchanges

Because the Internet can be used to exchange information, it can be used as a forum for securities trading, similar to securities exchanges. Entrepreneurs, issuers, or market intermediaries (e.g., brokers and dealers) can set up websites, inviting shareholders for free or for a fee (or other form of compensation) to enter the sites and trade with other shareholders. For holders of shares that are not traded on exchanges and have illiquid or no markets, such websites are likely to increase liquidity. Shareholders value liquidity and are willing to forego returns on liquid shares. Therefore, for the issuers generally and issuers of illiquid securities especially, such trading sites can reduce the cost of capital.

Trading sites established by actors other than groups of intermediaries are a new phenomenon. n86 The current securities laws regulating exchanges do not fit these trading sites. The Commission was asked to determine whether trading websites fall within the definition of "exchange" in the Securities Exchange Act of 1934, whether they should be regulated, and if so, how. In response to a request for clarification of the status of trading sites, the staff issued several no-action letters that allow the opening of such sites under certain conditions. n87 This discussion is limited to sites established by issuers of securities, providing a forum for trading by the holders of their securities.

To evaluate the impact of the need for changing the securities laws, we first examine the impact of the Internet on the actors that maintain and trade on exchanges and trading sites by exploring the differences and similarities between trading sites and traditional exchanges. Internet trading sites and exchanges are similar in that they offer trading forums to investors and the benefit of liquidity. n88 However, this similarity is not as close as it seems at first blush because Internet trading sites offer a trading forum to investors who "do it themselves," n89 while the exchanges are forums for intermediaries who trade on behalf of investors or to some extent for their own accounts. n90 Thus, both the promoters and users of the sites are different from those involved in exchanges.

In essence, trading sites eliminate the broker-dealers and other securities intermediaries, resulting in benefits and costs to investors. n91 On the benefits side, sites eliminate the cost of intermediaries and the risks from intermediaries' overreaching. However, Internet trading sites pose for investors a number of dangers - dangers against which they are protected by the intermediaries in traditional exchanges and other securities markets. When the intermediaries leave, these dangers appear.

Intermediaries serve two crucial functions in the markets. First, they ensure that the parties will not renege on the trades. n92 More often than not, securities trades cannot be executed simultaneously. n93 Because securities markets

are volatile, either sellers or buyers would usually have incentive to renege on the trades before execution. n94 If that happened often and investors learn about this risk, they would either demand high returns or cease trading; no markets would develop.

Intermediaries ensure the execution of trades by acting as escrow agents, holding both sellers' securities and buyers' money. n95 Since these intermediaries obtain their commissions upon execution of the trades, they have strong incentives to ensure the execution and bear the costs. If traditional intermediaries disappear and no mechanism fills the void, it is likely that trading-site markets will not continue to function, as investors find their trade agreements ineffective and too costly to enforce. Further, if investors do not understand the working of the markets, this experience may also reduce their trust in the traditional markets.

Second, intermediaries publish the prices of the trades. n96 Price information substantially reduces the trading costs for other investors because it offers shorthand information about the value of the traded securities. The duty to publish the prices is not imposed on the parties to the trades but on those who service traders. n97 If these service providers disappear, someone else must provide the services as a condition to maintenance of efficient markets. Further, even though price information benefits investors generally, not all traders are interested in publishing the price of their bid or ask price. n98 Individual investors may wish to shield their offer or bid prices because this information may signal their trading position or give the wrong signal about their evaluation of the securities. n99

Third, trading sites need not be connected to other trading exchanges. If they develop in isolation, and if different promoters offer sites for trades in the same securities, inefficient segmented markets may develop, with different prices for the same securities.

Fourth, issuers' control of trading sites poses unique threats to the integrity of the sites. Issuers may be tempted to affect the price of their securities. n100 Moreover, trading sites arguably pose a competitive threat to established exchanges if the sites provide the same services to investors at lower costs. Such competition may be unfair if trading sites remain unregulated while the exchanges bear regulatory costs. Although competition can enhance the efficiency of the exchanges, an unequal playing field can threaten their existence in the future. Since the United States' exchanges, especially the New York Stock Exchange, are among the most, if not the most, efficient exchanges in the world, the risk of their lost hegemony by action or inaction of the Commission can have serious consequences. Thus, before trading sites are allowed to proceed, the continued viability of the existing securities markets should be ensured, at least until it is clear that trading sites can provide a viable alternative to existing markets. At the same time, because I believe that competition per se is desirable as a matter of policy, attempts should be made to allow trading sites to develop under certain conditions. In fact, the Commission has adopted a new regulatory framework to allow alternative electronic trading systems, as it attempts to adapt the law to the new environment. The new framework offers persons who wish to conduct these electronic trading systems a choice to register as national securities exchanges or as broker-dealers. n101

B. Securities Lawmakers' Response to the Internet Environment: Substance, Enforcement, Mechanisms for Change, and Methods of Change

1. Impact on the Substance of the Securities Laws

Internet trading sites change not only the mode of trading among investors but also the nature and institutional structure of traditional securities markets. Trading sites are fundamentally different from securities exchanges. They are operated by different actors with different incentives and different rewards. Thus, Internet trading sites provide different institutional infrastructures for securities trading. This raises the question of how the new type of market affects the policies underlying securities markets regulation and the rules codifying those policies.

A textual analysis of the definition of "exchange" in the Securities Exchange Act of 1934 n102 is not helpful. There are no guides in the existing legislation to interpret the Internet trading "exchanges" as the new trading sites. They were not anticipated by Congress; they involve not only a new and different technology but also a very different structure and participating actors.

The underlying policies and values of the Act may be affected by the trading sites. The results of their regulation are hard to predict and may lead to new policies and values or to reinforced current policies and values underlying the law. In sum, trading sites can put in question the current fundamental policies of the law and require a different regulatory regime altogether.

2. Impact on Enforcement Mechanisms

Presumably, trading sites do not pose enforcement problems for the Commission. However, they pose serious enforcement problems for investors. As discussed above, investors may need new and other guarantors of the trading contracts among them and some new mechanisms to ensure the performance of the trades regardless of price fluctuations. It is difficult, however, to envision which mechanism would effectively enforce the traders' contracts. Presumably we can create mechanisms for guaranteeing the execution of the trades among individual traders. Such guarantees may be offered by the promoters of the sites or by third parties, and many other possibilities come to mind. We can create a link to a national depository that would confirm trades upon proof of payment. The costs of the new mechanisms must be evaluated as experience about the sites is gathered.

3. The Choice of Adaptive Mechanisms and Method of Adaptation

The first question that trading sites raise is: Which of the mechanisms for change is best suited to determine the adaptation of the securities laws to the new Internet trading sites: Congress, the courts, the Commission, or the markets?

Congress should not legislate new regulation for the trading sites. There is little experience on how these sites function and the consequences of their operations. Congress cannot experiment in allowing piecemeal limited use of the sites nor monitor the problems they raise and the problems they solve. n103

The courts are also not the appropriate mechanism for adapting the securities laws to the trading sites. Courts cannot act unless they are requested to do so in the case of conflict among parties. Besides, courts are not equipped to conduct the study necessary to design a regulatory system nor to enforce such a system. Presumably, if courts were asked to determine whether trading sites are exchanges, they would use the policy analysis adopted in the VALIC case n104 and impose the current securities laws on such sites, awaiting the Commission's adaptation of the law to these new "exchanges."

This situation is precisely one that requires experimentation by an administrative agency. n105 First, the values and policies underlying the securities acts support implementation of new technology and trading sites. Second, the Commission has authorized trading sites under certain conditions. n106 These conditions might be strict at the outset and then relaxed as more experience is gathered respecting any problems that these sites pose. n107 Moreover, the Commission has expressed that it is "mindful of the benefits of increasing use of new technologies for investors and the markets, and has encouraged experimentation and innovation by adopting flexible interpretations of the federal securities laws." n108

If the Commission approached the issue by imposing on trading sites the regulations applicable to exchanges as they exist today, it is likely to freeze the development of trading sites. These sites cannot operate under the current exchange regulation and to change the regulation would require congressional action, which, as we noted above, is not the appropriate adaptive mechanism in this case.

This brings us to the markets. Could the markets be left to adapt and shape market customs to regulate trading sites? Leaving the markets to develop best practices for trading sites is a very attractive suggestion. The hand of the multitudes of investors and the promoters' behavioral adaptive mode of trial and error might offer regulators a proven, optimal model of regulation. If markets also provide effective sanctions to those who violate adapted customs, perhaps no government regulation would be necessary. Further, market "creeping" regulation may avoid unanticipated consequences, which government regulations tend to bring as side effects, regardless of how well-intentioned and how focused regulators try to be.

I reject markets as a sole mechanism for adapting the securities laws to trading sites for a number of reasons. First, nothing concerning trading sites suggests that the fundamental policies of ensuring investor confidence and facilitating capital should be changed. These remain the main guides to the institutional structures of the markets. Inexpensive enforcement of trades must be secured. Prices must be published. Segmentation should be avoided. Yet it is not clear that markets would heed these policies and ensure compliance with them. If markets would have heeded these policies in the past, we would not have government securities regulation today.

Second, the stakes are too high to allow promoters to break, on their own and for their own benefit, new grounds in shaping the new institutions for markets, especially when these new markets are still small. Third, and most importantly, failure to ensure the integrity of the new markets may taint existing markets. Investors do not always make refined distinctions when they are defrauded or find they made decisions without sufficient information. Paradoxically, "free"

markets require a regulatory infrastructure. n109 This infrastructure can be developed by the actors, such as broker-dealers and other intermediaries. However, infrastructure is less likely when markets develop by suppliers of sites and actions of investors. Neither the suppliers nor the investors are likely to have sufficient identity of interest to combine in self-regulatory organizations and provide the infrastructure. n110

Leaving the markets alone to design the trading sites is not the answer. Leaving the Commission alone to design a regulatory scheme for the trading sites is also not the full answer. It seems that we should develop a close interactive adaptive system between the markets and the Commission. In fact, such an interactive approach is to some extent already being practiced by the Commission. The Commission publishes many company proposals for comments; Commissioners and staff meet regularly with industry representatives, lawyers, and consumer representative groups. The industry may make presentations to the staff to educate and provide information. Lawyers seek and receive the staff's interpretation of the law *ex ante*, while offering the staff information about events in the markets. This does not mean that the parties bare their hearts to each other. Neither the staff nor the industry are fully informative, but a substantial amount of information is exchanged between them in a search for a solution satisfactory to both parties.

It seems that the trading sites require a period of experimentation, with controlled limits, under close monitoring of the Commission. It may well be that this method is beginning to take shape in the form of no-action letters that the staff has issued for issuer trading sites. The method of change in this case is therefore complex, slow, experimental, and public. This method is, of course, remindful of the method by which markets adapt their customary law. It may well be that we have reached a stage where law's adaptation requires interaction between markets and agencies. Markets represent an amalgamation of perspectives of different actors driven by differing interests, understandings, and levels of information. In the case of securities markets and other markets, this amalgamation is translated into the price in dollars. The dollars become the common denominator.

In the case of market custom, however, the amalgamation of perspectives of different actors, driven by various interests and understandings and levels of information, does not always reflect a common denominator. Although custom represents a pattern of behavior that is followed by an increasing number of actors, this pattern is not transparent, nor clearly predictable. When regulatory agencies adopt a custom or "best practices" of an industry, the agencies can meld together the various aspects of the custom-producing actors; in some respect the agencies provide the missing common denominator that money would have provided in the form of price, to create better rules while subsuming the substance of the customs.

How do agencies collate and meld together items that do not emanate from similar sources or for similar reasons (sometimes from conflicting reasons)? Put differently, how do agencies generalize disparate items that are generated by disparate driving forces and for different reasons? The answer is: not by mathematical addition. Rather, a "soft process" of judgment based on information, context, and experience brings about a coherent rule based on the substance of the custom. This process is demonstrated by the restatements of the laws and codification of uniform laws - drafting, articulation of norms, and rationalization of market customs.

One form of interaction between the staff of the Commission and industry is worth noting; this form is not unique to the agency and is practiced, in different ways, by other agencies as well. The Commission's staff has been offering the public informal views on proposed activities that may raise issues under the federal securities laws. n111 These letters offer a number of advantages.

The letters inform the staff about proposed transactions in the market, possible legal barriers to novel transactions, and problems they might pose for investors. The letters help avoid or reduce enforcement by litigation and leave some room for restructuring and legitimizing proposed activities. No-action letters benefit the public and strengthen the rule of law by publicizing the staff's interpretation and application of the securities laws. n112 The business community has come to depend on the consistent application of the letters' rulings in making business decisions. The process facilitates business transactions, especially novel transactions, that may not exactly fit within the regulatory framework when the interpretation of the law applicable to them is uncertain.

The main source of the staff's authority is its discretion to recommend that the Commission prosecute violations of the statutes under its jurisdiction. n113 The weight given to the staff's letters depends mostly on the type of reasoning on which the decision is based. When the letter represents the opinion of the staff on a particular legal issue, n114 the letter is likely to be viewed as a precedent on the legal issues in the particular fact pattern, at least until it is reversed by the staff, the Commission, or the courts. n115 Courts, however, often defer to the staff's legal interpretation and expertise. n116 When the staff grants a no-action position even "without necessarily agreeing with" the requestor's

legal position, n117 such a letter has less weight than an interpretative letter. n118 It might still be used by third parties if the facts at hand closely resemble those cited in the letter. n119

Formally and officially, no-action letters have no value as precedents. n120 Neither the Commission nor the staff are bound by these no-action letters. n121 Yet, practicing attorneys and academics view no-action letters as a source of law, and they are considered precedents by parties other than the recipients, providing a partial safe harbor and guidance to practitioners. n122 The letters augment the limited number of court cases and Commission interpretations and are sometimes the only authoritative interpretations of the Act. Perhaps the paucity of judicial decisions may be attributed in part to no-action letters that meet the needs of the parties and the industry. Moreover, the no-action process is generally less costly than a formal exemptive application or Commission administrative action, and far less costly than litigation.

So long as the staff and the Commission value no-action letters, they will accord them precedential weight. If people could not rely on these letters people would cease to ask for them, and the benefits from such letters to the staff, the Commission, the industry, and the parties would be lost. That may be the reason why the staff is concerned with uniformity and predictability of no-action letters. The frequency with which the staff reverses prior letters differs depending on changes in the business environment and the industry, the problems that the letters addressed, and the unintended consequences that such letters brought about. n123 Thus, the letters provide substantial comfort to their recipients even in private litigation. n124

In some respects no-action letters are similar to judicial decisions because they are based on specific fact situations, rely on precedents, and constitute precedents, especially when they provide analysis and reasoning. The letters differ from a judicial decision because they are given with little express legal authority and are granted *ex ante*, and not *ex post*, as a result of conflict. The letters are similar to customary law. Their age and extent of following adds to their precedential weight. Their flexibility allows for adjusting law to changing circumstances. For law's adaptation to the Internet environment, they may be a most appropriate tool.

Conclusion

This article offers a first step towards an examination of adaptation of law to a changing environment of the actors that are regulated by law. I suggest a model of law as a structured, adaptive, self-replicating system of coercive communications regulating relationships among types of actors (individuals or groups). The three-part structure of the law consists of substantive communications that differ in their degree of generality (specific cases, rules, policies, and values), mechanisms for enforcing the law, and mechanisms for adapting law when the actors that are regulated experience a new environment (legislatures, administrative agencies, courts, the markets), using methods of adaptation (textual analysis, analogy, and policy analysis).

When the environment of regulated actors changes rapidly, as it changes today and is likely to change in the future, a new combined mechanism of markets and agencies is being developed to adapt the law accordingly. This new mechanism and its methods of adaptation invite a close examination and empirical study, for I believe this is the future mechanism for legal change.

FOOTNOTES:

n1. Professors Monroe E. Price and John F. Duffy have explained that "judges and legislators frequently invoke technological change as a justification for altering regulatory arrangements, revising statutes, or reconsidering constitutional doctrine." Monroe E. Price & John F. Duffy, *Technological Change and Doctrinal Persistence: Telecommunications Reform in Congress and the Court*, 97 *Colum. L. Rev.* 976, 976 (1997). They posit that this may be especially so when the technological change affects instruments of speech. See *id.* at 977. See generally Michael A. Geist, *The Reality of Bytes: Regulating Economic Activity in the Age of the Internet*, 73 *Wash. L. Rev.* 521 (1998) (discussing the development of Internet law, the impact of the Internet on economic regulation, and proposals for adapting economic regulation to the Internet, suggesting that no single approach is adequate).

n2. See, e.g., Donald C. Langevoort, *Information Technology and the Structure of Securities Regulation*, 98 *Harv. L. Rev.* 747, 748 (1985) ("Technology also affects the securities market on a more fundamental level: it

alters the market's structure."). Like it has securities laws, the Internet has changed the regime in which many types of commercial transactions occur. For a discussion of some of these changes, see Diana J.P. McKenzie, *Commerce on the Net: Surfing Through Cyberspace Without Getting Wet*, 14 *J. Marshall J. Computer & Info. L.* 247 (1996) (attempting to identify some areas of potential liability for persons conducting business in cyberspace). At the beginning of 1999, SEC Chairman Arthur Levitt expressed his concern at the impact that Internet trading has had on the patterns of investors' behavior. He noticed a 330 percent increase in investor complaints concerning Internet trading. The very speed and ease of placing trades on-line encouraged certain patterns of behavior that exposed investors to higher risks. Chairman Levitt warned investors against such tendencies. He has not suggested, however, any imminent changes in the rules. See *SEC Chairman Levitt Addresses Internet Trading Concerns, Fed. Sec. L. Rep. (CCH) No. 1859, at 1* (Feb. 3, 1999).

n3. The Internet and other methods of electronic media have created major environmental changes in areas other than securities regulation. See, e.g., Mark E. Budnitz, *Stored Value Cards and the Consumer: The Need for Regulation*, 46 *Am. U. L. Rev.* 1027 (1997) (arguing that federal legislation is needed in the area of electronic cash to ensure the integrity of the payment system because many consumers are confused about the nature of the arising system). Professor Budnitz' examination of electronic cash perhaps provides a good analogy to the situation regarding securities regulation. Like the regime he described, the integrity of the securities markets may be threatened by the emergence of the Internet if its use is not properly regulated. I argue, however, that this is best done through the Commission and not through federal legislation.

n4. For a discussion of another area where changes in technology have affected the securities markets and laws, see Charles W. Mooney, Jr., *Property, Credit, and Regulation Meet Information Technology: Clearance and Settlement in the Securities Markets*, 55 *Law & Contemp. Probs.* 131 (1992) (examining technology and commercial law in the context of securities market clearing and settlement). See also Kenneth W. Brakebill, Note, *The Application of Securities Laws in Cyberspace: Jurisdictional and Regulatory Problems Posed by Internet Securities Transactions*, 18 *Hastings Comm. & Ent. L.J.* 901 (1996) (examining new securities law issues raised by the Internet).

n5. See *Use of Electronic Media for Delivery Purposes*, Securities Act Release No. 7233, 60 *Fed. Reg.* 53,458, 53,459 (Oct. 13, 1995) [hereinafter *Use of Electronic Media*] (noting that release does not affect parties' rights or responsibilities under the securities laws).

n6. See *id.* at 53,458 (noting benefits of electronic distribution).

n7. See, e.g., *Real Goods Trading Corp.*, SEC No-Action Letter, [1996-1997 Transfer Binder] *Fed. Sec. L. Rep. (CCH) P 77,226, at 77,131* (June 24, 1996) [hereinafter *RGTC No-Action Letter*].

n8. See Hugh Baxter, *Autopoiesis and the "Relative Autonomy" of Law*, 19 *Cardozo L. Rev.* 1987, 2037-39 (1998) (describing view that legal system is structurally coupled to societal system).

n9. I do not view law as a living organism. It is a species of communication among actors in society. This communication helps organize society and its members' relationships and activities.

n10. See John Austin, *The Province of Jurisprudence Determined and the Uses of the Study of Jurisprudence* 13-23 (Noonday Press 1954) (1832, 1863) (defining "command" as idea that is sanctioned if disobeyed).

n11. See 1 E. Allan Farnsworth, *Farnsworth on Contracts* 1.1, at 4 (2d ed. 1990) (defining "contract" as "a promise, or a set of promises, that the law will enforce or ...recognize"; "[a] promise for which the promisee has given nothing in return" is generally not enforceable).

n12. A system is:

An organized or connected group of objects.

... A set or assemblage of things connected, associated, or interdependent, so as to form a complex unity; a whole composed of parts in orderly arrangement according to some scheme or plan; rarely applied to a simple or small assemblage of things (nearly = "group" or "set").

[In linguistics:] A group of terms, units, or categories, in a paradigmatic relationship to one another.

17 The Oxford English Dictionary 496 (2d ed. 1989). Thus, the term "system" focuses on the whole rather than its parts and on a pattern of relationships among the parts. In this sense a system is predictable. However, a system need not be stable. For example, a system can be chaotic, so long as its parts consistently relate to each other in a chaotic manner.

n13. 16 The Oxford English Dictionary 959 (2d ed. 1989); see also *id.* ("an organized body or combination of mutually connected and dependent parts or elements," and "in a wider sense: [a] fabric or framework of material parts put together"). Thus, the earmarks of a structure are particular elements, and a relationship among them that is stable and paints the whole with the color of a unique identity. Arguably, a chaotic system does not have a structure because, although the relationship among its components gives the whole an identity, its structure is not sufficiently determinate.

n14. The idea of this structure of law was triggered by Karl Popper's collection of lectures, *The Myth of the Framework*. See Karl R. Popper, *The Rationality of Scientific Revolutions: Selection Versus Instruction*, in *The Myth of the Framework* 1 (M.A. Notturmo ed., 1994). Popper compares and distinguishes three adaptive systems: genes, behavior, and scientific theories. See *id.* at 2-7. He says that all three adaptive systems have a current structure and each structure contains mechanisms for adapting to a changing environment in accordance with certain rules. See *id.* at 2-5; see also Baxter, *supra* note 8, at 2037-39 (describing that effect on communications by other systems depends on structures of legal system).

n15. There are detailed statutes, rules, forms, and guidelines regarding the required disclosure for securities offerings, the prohibitions on offerings of unregistered securities, and the prohibitions on fraud. See, e.g., 15 *U.S.C.* 77e(a) (1994) (prohibiting the sale of unregistered securities); *id.* 77aa (listing the items of information required in a registration statement); *id.* 78j(b) (prohibiting fraud in connection with the purchase or sale of securities); 17 *C.F.R.* 229.501-.502 (1998) (listing the items of information to appear in a prospectus). The rules governing the stock exchanges and behavior of broker-dealers provide for the orderly operation of the markets by prohibiting these intermediaries from taking unfair advantage of investors and issuers. See 15 *U.S.C.* 78f(b)(5) (1994) (stating that rules of an exchange "are designed to prevent fraudulent and manipulative acts and practices" and "to remove impediments to and perfect the mechanism of a free and open market and a national market system"); *id.* 78o-3(b)(6) (requiring similar objectives). These rules are promulgated by the exchanges and the National Association of Securities Dealers and reviewed by the Commission. See *id.* 78s (granting Commission oversight over self-regulatory organizations).

n16. Underlying the securities laws are two paramount policies: the policy of protecting investors, designed to entice investors to put their money at risk in the markets, and the policy of facilitating capital formation, designed to assist issuers in raising capital. See H.R. Conf. Rep. No. 104-369, at 31 (1995), reprinted in 1995 U.S.C.C.A.N. 730, 730 (stating that the purpose of securities laws is "to protect investors and to maintain confidence in the securities markets" to benefit "national savings, capital formation, and investment"). These two objectives are considered beneficial to the public as a whole and to members of the public. See, e.g., *15 U.S.C. 78n(a)* (1994) (prohibiting solicitation of proxies in violation of the rules and regulations "as the Commission may prescribe as necessary or appropriate in the public interest or for the protection of investors"). They conflict to some extent and require a balancing, with a higher value given to protecting investors.

n17. For example, the securities laws contain many decisions regarding wrongful fraudulent statements (or omissions) by a defendant to the detriment of a plaintiff. See, e.g., *In re MGSI Sec., Inc., Securities Act Release No. 7578* (Sept. 10, 1998), available in LEXIS, Fedsec Library, Secrel File. These decisions may be based on Rule 10b-5 under the Securities Exchange Act of 1934, *17 C.F.R. 240.10b-5* (1998). The prohibitions on fraud, as many other securities acts' regulations, are based on two policies: protecting investors, to maintain their confidence in the markets' integrity, and the encouragement of capital formation. See, e.g., *Sargent v. Genesco, Inc., 492 F.2d 750, 760 (5th Cir. 1974)* (stating that basic intent of the 1934 Act antifraud provisions is same as that of the 1934 Act: "to protect investors and instill confidence in the securities markets").

n18. Cf. K. Eric Drexler, *Engines of Creation* 217-18 (1986) (pointing to the issue of information overload and the need for organizing information); Mary C. Potter, *Remembering*, in *3 Thinking: An Invitation to Cognitive Science* 3, 4-17 (Daniel N. Osherson & Edward E. Smith eds., 1990) (describing process of encoding and retrieving information).

n19. See Baxter, *supra* note 8, at 2037-62 (discussing view that legal system has "structural couplings" to other systems).

n20. See, e.g., U.C.C. 2-202(a) (1995) (final written expression may be explained or supplemented by course of dealing, usage of trade, or course of performance); John D. Calamari & Joseph M. Perillo, *The Law of Contracts* 3.13, at 155 (4th ed. 1998) (stating that course of performance, course of dealing, and trade usage are used in determining the intent of parties in interpreting a writing); W. Page Keeton et al., *Prosser and Keeton on the Law of Torts* 33, at 193-96 (W. Page Keeton ed., 5th ed. 1984) (discussing custom as evidence of the standard of reasonable conduct). But see Lisa Bernstein, *Merchant Law in a Merchant Court: Rethinking the Code's Search for Immanent Business Norms*, *144 U. Pa. L. Rev.* 1765 (1996) (critiquing the UCC's search for and application of "immanent business norms").

n21. For example, rather than bring enforcement, administrative, or judicial proceedings, or together with such proceedings, administrative agencies can publish their opinions or concerns regarding certain practices that the regulators have observed emerging in the industry. The Commission's Division of Investment Management occasionally expresses its concerns in a letter to Matthew Fink, President of the Investment Company Institute, the trade association of the mutual fund industry. See, e.g., *Investment Co. Inst., 1993 SEC No-Act. LEXIS 673* (Apr. 19, 1993). Such publications and letters are relatively inexpensive and raise the industry's awareness and diligence. Similarly, regulators may seek information and education about the market practices from the industry and others. That allows regulators, industry, and consumers to develop a common language and mutual understanding. Arguably, regulators that come too close to industries can become captives of the industries. However, even if regulators become captive, captivity is partial because regulators are subject to congressional supervision and media surveillance. On the plus side, captivity of this sort encourages open discourse, effective

enforcement measures, and avoidance of confrontational relationships that, in the last analysis, do not necessarily result in effective regulation.

n22. This is the danger that is posed to the identity of legal systems from absorbing different definitions of relationship and abandoning some of the main features of law, such as coercion.

n23. For example, if law is shorn of its coercive component, it will cease to be law. If legal values are fully substituted by philosophical or economic values, law is likely to disappear and be subsumed in other disciplines.

n24. See Laurence H. Meyer, Address at Widener University (Apr. 16, 1998), available in LEXIS, Banking Library, Fedpr File ("An important function of supervisors is to act as something of a clearinghouse for best practices.").

n25. See, e.g., *15 U.S.C. 78s* (1994) (granting the Commission oversight authority over regulatory organizations); Investment Co. Inst., *1988 SEC No-Act. Lexis 315* (Feb. 25, 1988) (noting that the Commission staff considered industry comments in its decision); Robert McGough, Top Regulator Urges Industry to Reform, *Wall St. J.*, Dec. 19, 1996, at C31 (noting that Barry Barbash, director of Commission Division of Investment Management, warned mutual fund industry about soft-dollar practices in recent speech).

n26. See Popper, *supra* note 14, at 5 (noting that genetic mutations are not goal-directed).

n27. See *id.* at 3 (noting that badly adapted mutations are eliminated).

n28. See *id.* at 5 (noting that behavioral trials are goal-directed).

n29. To some extent methods of law change, and changes in scientific theories are similar in that adaptations in scientific theories can also be distinguished by the methods chosen, e.g., some scientists are theorists, some are experimenters, and some choose to do both.

n30. See Popper, *supra* note 14, at 6 (noting that scientific theories are open to investigation).

n31. See *id.* at 7 (noting that scientific theories are open to criticism).

n32. This method resembles in one respect the adaptation of genetic systems because it does not have a single cognitive intentional actor. See *id.* at 5 (noting that genetic mutations are not goal-directed). However, I do not view law as a living organism. Rather, I view it as a mechanism that society must have and develop in order to survive. Law is not the cell or the gene but rather the basic rules that enable the community to function, the analog of the rules that make the body and mind function. For example, living organisms develop a structure according to certain rules. The larger they are, the larger their bone structure must be. However, as societies become more complex, so does the law and other non-law rules that regulate the behavior of societies' members. I do not view law as a mere communication system because law is coercive. Mainly, these views, which are interesting and intriguing, are not useful for the inquiry undertaken in this article.

n33. See, e.g., *15 U.S.C. 80a-6(c)* (1994) (authorizing the Commission to exempt parties or securities from the Investment Company Act of 1940 where in the public interest).

n34. See, e.g., *SEC v. Variable Annuity Life Ins. Co. of Am.*, 359 U.S. 65 (1959). In the VALIC case, the Supreme Court was asked to determine the law applicable to variable annuities. See *id.* at 66-69. This issue required classification of the annuities as either insurance or securities. The annuities had features of securities because the annuity contract holders, rather than the insurance company (as is the case with traditional fixed annuities), bore the risks and took the benefits of investment of the reserves funding these annuities. See *id.* at 70-71.

Justice Douglas, for the majority, adopted a doctrinal analysis, phrasing the issue in terms of a definition: Are variable annuities securities or are they insurance? See *id.* at 68. Justice Brennan took a policy approach: Do investors in variable annuities need the protection of the securities acts? See *id.* at 76 (Brennan, J., concurring). Justice Brennan concluded that variable annuities are both insurance and securities and that their classification would not be helpful to provide the answer. See *id.* at 80-81 (Brennan, J., concurring). Rather, his question led to the answer that, while in a traditional annuity the insurance company was a debtor that took the investment risk, in the new type of variable annuities the insurance company became a manager of other people's money, at their risk. See *id.* at 80 (Brennan, J., concurring); see also *id.* at 78 (Brennan, J., concurring) ("The situation changes where the coin of the company's obligation is not money but is rather the present condition of its investment portfolio. To this extent, the historic functions of state insurance regulation become meaningless." Hence, investors/annuity contract holders needed the protection of the securities acts.).

n35. See Popper, *supra* note 14, at 12 (noting that a new theory must be able to explain the success of the former theory, thus the former theory "must appear as a good approximation to the new theory").

n36. See *id.* at 21 (noting that Einstein's theory contains Newton's theory as an approximation); *id.* at 20 (noting that the old theory is "approximately valid for velocities which are small compared with the velocity of light").

n37. Arguably, the problem lies not on our following the trodden paths but in not sufficiently breaking away from them. See Drexler, *supra* note 18, at 231 ("The difficulty lies, not in the new ideas, but in escaping the old ones...." (quoting John Maynard Keynes)).

n38. See, e.g., *Basic Inc. v. Levinson*, 485 U.S. 224, 244 n.22 (1988) (noting that actions under Rule 10b-5 of the 1934 Act "are distinct from common-law deceit and misrepresentation claims, and are in part designed to add to the protections provided investors by the common law" (citations omitted)).

n39. See, e.g., Payment of Asset-Based Sales Loads by Registered Open-End Management Investment Companies, Investment Company Act Release No. 16,431, 53 *Fed. Reg.* 23,258, 23,264 (June 21, 1988) (noting that the use of Rule 12b-1 by the mutual fund industry "has resulted in many distribution practices that could not have been anticipated when the rule was adopted").

n40. Arguably, even scientific theories cannot be accurately tested because the very testing, in some environments, changes the results.

n41. This is why we favor state laws, dual regulation, and market experimentation, even if they may bring some adverse results. The receptive attitude to requests for exemptions and no-action letters by the Commission

is in part due to the desire for information about market experimentation. See 1 Tamar Frankel, *The Regulation of Money Managers* ch. II, sec. C, 1, at 148 (Supp. 1998).

n42. If new numbers are introduced merely for the sake of symmetry, the cost may exceed the benefit.

n43. Cf. Ragnar Granit, *The Purposive Brain* 128 (1980) (physiologically people need and, therefore recreate, a stable world).

n44. That is why "legal transplants" take roots successfully when they are planted in a fertile ground of familiar laws, ideas, culture, and history. Otherwise, they usually shrivel and die.

n45. An analogy to the discussion of electronic currency law again seems appropriate here. Mr. Brian W. Smith and Mr. Ramsey J. Wilson argue that a proposal for the development of such law should be constrained by two premises:

First, the law should not stifle or steer without reason future technological development... Further, regulations that focus heavily on technological distinctions between payment systems would be unwise, because: (1) it is likely that such distinctions will become antiquated quickly in this fast-paced industry; and (2) such distinctions fail to consider the substance of the underlying relationship between the parties.

Brian W. Smith & Ramsey J. Wilson, *How Best to Guide the Evolution of Electronic Currency Law*, 46 *Am. U. L. Rev.* 1105, 1127 (1997). It is important to remember that we are dealing with a rapidly evolving area of technology. The difficult goal, of course, is to regulate Internet use to the extent necessary to protect investors while not stifling developments which bring about net efficiencies.

n46. See, e.g., 15 *U.S.C.* 77h(d) (1994) (prohibiting untrue statements in a registration statement); *id.* 77aa (listing the items of information required in a registration statement).

n47. See *id.* 77e(b)(2) (requiring prospectus delivery under the 1933 Act).

n48. See Securities and Exchange Commission, *Report to the Congress: The Impact of Recent Technological Advances on the Securities Markets* (last modified Nov. 26, 1997) <<http://www.sec.gov/news/studies/techrp97.htm>>.

n49. See H.R. Rep. No. 104-622, at 16 (1996), reprinted in 1996 *U.S.C.C.A.N.* 3877, 3878 (noting that a purpose of the 1996 legislation is the promotion of capital formation).

n50. See *Use of Electronic Media*, *supra* note 5, at 53,458 (noting that the use of electronic media allows the dissemination of information in a more cost-effective manner than paper-based methods).

n51. See *id.* at 53,460 (noting that the release is intended to provide guidance regarding electronic delivery). In 1995, the Commission issued a detailed release accompanied by questions and answers that guided the use of the Internet for delivering prospectuses. See *id.* at 53,458. The Commission recognized the increase in electronic prospectus delivery in its November 1998 release proposing prospectus delivery reforms. See *The Regulation of Securities Offerings*, Securities Act Release No. 7606A, 63 *Fed. Reg.* 67,174, 67,223 (Dec. 4, 1998) ("Electronic

delivery of prospectuses is becoming more common."); cf. *id. at 67,216* (noting that the proposed easing of restrictions on communications during the offering process "would enable issuers and market participants to take significantly greater advantage of the Internet and other electronic media to communicate and deliver information to investors").

n52. See *Use of Electronic Media*, supra note 5, at 53,461 ("Not all investors purchasing securities could be presumed to have the ability to access the final prospectus via an Internet Web site.").

n53. See *id.* (noting that investor consent, coupled with notice and access, may satisfy the delivery requirement).

n54. See *id.*

n55. See *17 C.F.R. 230.403(c)* (1998) (requiring English language for a registration statement).

n56. See *Use of Electronic Media*, supra note 5, at 53,460-61 (discussing access).

n57. Lawrence Lessig, *The Path of Cyberlaw*, *104 Yale L.J. 1743, 1743* (1995).

n58. See *Use of Electronic Media*, supra note 5, at 53,460 ("The Commission believes that the question of whether delivery through electronic media has been achieved is most easily examined by analogy to paper delivery procedures.").

n59. See *15 U.S.C. 77e(b)(2)* (1994) (requiring securities to be accompanied or preceded by a prospectus); *Securities Act Concepts and Their Effects on Capital Formation*, Securities Act Release No. 7314, *61 Fed. Reg. 40,044, 40,047* (July 31, 1996) (discussing the fulfillment of delivery requirements by actual and constructive delivery).

n60. See *Use of Electronic Media*, supra note 5, at 53,458 (implying benefits of paper delivery in requiring electronic delivery to meet the same requirements).

n61. See *id.* at 53,461.

n62. See *id.* at 53,460 (requiring those providing information to "take the reasonable precautions to ensure the integrity and security of that information").

n63. See *id.*

n64. For other examples of the Commission's adaptation of the law to the use of the Internet, see *Regulation of Exchanges and Alternative Trading Systems*, Exchange Act Release No. 40,760, *63 Fed. Reg. 70,844, 70,847* (Dec. 22, 1998) (final rules); *Regulation of Exchanges and Alternative Trading Systems*, Exchange Act Release No. 39,884, *63 Fed. Reg. 23,504* (Apr. 29, 1998) (Proposing Release); *Regulation of Exchanges*, Exchange Act

Release No. 38,672, *62 Fed. Reg. 30,485* (June 4, 1997) (Concept Release); Cross-Border Tender Offers, Business Combinations and Rights Offerings, Securities Act Release No. 7611, *63 Fed. Reg. 69,136* (Dec. 15, 1998) (Proposing Release); Statement of the Commission Regarding Use of Internet Web Sites to Offer Securities, Solicit Securities Transactions or Advertise Investment Services Offshore, Securities Act Release No. 7606A, *63 Fed. Reg. 67,174* (Dec. 4, 1998) (Proposing Release); Statement of the Commission Regarding Use of Internet Web Sites to Offer Securities, Solicit Securities Transactions or Advertise Investment Services Offshore, Securities Act Release No. 7516, *63 Fed. Reg. 14,806* (Mar. 27, 1998) (Interpretation); Regulation of Takeovers and Security Holder Communications, Securities Act Release No. 7607, *63 Fed. Reg. 67,331* (Dec. 4, 1998) (Proposing Release).

n65. See David R. Johnson & David Post, *Law and Borders - The Rise of Law in Cyberspace*, *48 Stan. L. Rev. 1367, 1370* (1996) (arguing that the rise of a cyberspace network is destroying the power of local governments to control its behavior).

n66. Cf. *id. at 1380* ("Assertion by any local jurisdiction of the right to set the rules applicable to the 'domain name space' is an illegitimate extra-territorial power grab.").

n67. See Katrina Brooker, *The Scary Rise of Internet Stock Scams*, *Fortune*, Oct. 26, 1998, at 187 (noting that the Internet enables "crooks" to find large numbers of "potential victims" "quickly, cheaply, and anonymously").

n68. Cf. Dipak K. Rastogi, *Living Without Borders*, *Bus. Q.*, Summer 1997, at 48.

n69. See Lawrence Lessig, *The Zones of Cyberspace*, *48 Stan. L. Rev. 1403, 1407* (1996).

n70. See, e.g., IPONET, SEC No-Action Letter, [1996-1997 Transfer Binder] *Fed. Sec. L. Rep. (CCH) P 77,252, at 77,270* (July 26, 1996).

n71. See Christina K. McGlosson, Comment, *Who Needs Wall Street? The Dilemma of Regulating Securities Trading in Cyberspace*, *5 CommLaw Conspectus 305, 309-10* (1997) (noting the Pennsylvania regulations and NASAA proposals involving cautionary language).

n72. See Joseph F. Cella III & John Reed Stark, *SEC Enforcement and the Internet: Meeting the Challenge of the Next Millenium, A Program for the Eagle and the Internet*, *52 Bus. Law. 815, 836* (1997) (noting that Internet "scam artists" usually must surface because they want investors to contact them).

n73. See *id. at 844-46* (noting the establishment of an Enforcement Complaint Center and educational initiatives, including initiatives on the Commission's website and in Internet forums). The Commission's website can be found at <http://www.sec.gov/> and offers many features to users, including information about the Commission, investor assistance and a forum for complaints, a database of EDGAR filings, a digest of recent SEC statements, and current SEC rulemaking information.

n74. See McGlosson, *supra* note 71, at 312 (noting the establishment of an "Investor Alerts" section on the Commission's web page).

n75. See *15 U.S.C. 78s* (1994) (granting the Commission oversight authority over self-regulatory organizations).

n76. See NASD Manual (CCH) Rule 2210, at 4171 (Aug. 1997) (regulating communications with the public).

n77. See Brooker, *supra* note 67, at 198 (noting NASD's use of NetWatch software program).

n78. See NASD Will Employ Automation to Beef Up Its Internet Surveillance, *San Diego Union Trib.*, Feb. 13, 1998, at C5 (noting that the NetWatch indicators will "serve as guides for further investigation").

n79. See *Use of Electronic Media*, *supra* note 5, at 53,458.

n80. See Beth Duncan, Wallman Suggests SEC Should Be Open to Seminal, Not Incremental, Change, 29 *Sec. Reg. & L. Rep. (BNA)* 993 (July 18, 1997) (noting that the initial response was "dismay at the lack of specific guidance," but ultimately issuers were pleased).

n81. See *Securities Exchange Act of 1934*, *15 U.S.C. 78a-78mm* (1994).

n82. See *id.* 78s (granting the Commission oversight and authority over self-regulatory organizations).

n83. See, e.g., *id.* 78f(b)(5) (providing that the rules of an exchange "are designed to prevent fraudulent and manipulative acts and practices").

n84. See *id.* (providing that rules of an exchange are designed "to remove impediments to and perfect the mechanism of a free and open market").

n85. See *id.* (implying policy of reducing costs of trading).

n86. See Steven M.H. Wallman, *Regulating in a World of Technological and Global Change*, *Metropolitan Corp. Couns.*, Oct. 1996, at 1 n.2 ("Some companies have already set up Internet trading sites.").

n87. A no-action letter was granted to Real Goods Trading Corporation ("RGTC") on June 24, 1996, allowing it to establish an "off the grid" trading system for its common stock. See *RGTC No-Action Letter*, *supra* note 7, at 77,131. Since granting the no-action letter to RGTC, the Commission has granted such letters to other corporations proposing to operate similar sites and will no longer respond to such requests "unless they present novel or unusual issues." *Flamemaster Corp., SEC No-Action Letter*, 1996 *WL* 762990, at 6 (Oct. 29, 1996). The Commission has spoken only vaguely about other areas where the Internet may affect the secondary market. See *Securities and Exchange Commission, Report to the Congress: The Impact of Recent Technological Advances on the Securities Markets* (last modified Nov. 26, 1997) <<http://www.sec.gov/news/studies/techrp97.htm>>.

n88. Issuers who promote trading sites are interested in offering their shareholders an inexpensive trading forum to reduce the issuers' cost of capital.

n89. RGTC did not propose to execute or settle any transactions itself, but merely to provide a passive "bulletin board," which would provide information about prospective buyers and sellers of its stock. See *RGTC No-Action Letter*, *supra* note 7, at 77,131. Any transactions would occur only through direct contact between participants who would need their own exemptions from the securities acts. See *id.* at 77,132. Presumably, these trades could be effectuated through broker-dealers or by eliminating the role of the broker-dealer, through the issuer's transfer agent, or by physically exchanging the paper shares.

n90. See *15 U.S.C. 78c(a)(1)* (1994) (defining "exchange"); *id.* 78k(a)(1) (prohibiting exchange members from trading on their own accounts, with exceptions).

n91. Professor Donald Langevoort took an early view of the impact of information technology on the structure of securities regulation. See Langevoort, *supra* note 2, at 747. He pointed out that the current regulatory structure assigns significant roles to intermediaries and argued that if regulators believe these roles are important, they must either "use the regulatory apparatus to maintain the intermediaries' position, and thereby impede generally beneficial market forces, or seek an alternative means to perform the functions." *Id.* at 764.

n92. See 1 Tamar Frankel, *Securitization: Structured Financing, Financial Assets Pools, and Asset-Backed Securities* 3.2.2.3, at 78 (1991) ("Institutions rarely dishonor their obligations to lend or pay up their demand obligations, except when they fail.").

n93. See Richard A. Booth, *The Uncertain Case for Regulating Program Trading*, *1994 Colum. Bus. L. Rev.* 1, 61 (noting that "in a made market ... buyers and sellers need not be simultaneously present for a trade to occur").

n94. See 1 Frankel, *supra* note 92, at 78 ("Price fluctuations tempt buyers and sellers to breach their obligations when gains and losses are high.").

n95. See *12 C.F.R. 220.4* (1998) (requiring intermediaries to receive securities price within one payment period, or sell the securities to pay for them); *17 C.F.R. 31.8(a)(1)* (1998) (requiring leverage transaction merchants to maintain cover); *id.* 240.15c3-3(b) (requiring brokers or dealers to control securities subject to sale or vouch for availability).

n96. See *id.* 240.11Ac1-1(b)(1) (requiring exchanges and associations to establish procedures for making bids available to exchange members); *id.* 240.11Ac1-1(c)(1) (requiring members to communicate bids and offers to exchange or association); Rule 60(b), 2 N.Y.S.E. Guide (CCH) P 2060, at 2645 (Nov. 1996) (requiring members to comply with the Commission rule); Rule 60(c), *id.*, at 2645-46 (requiring exchanges to make bids and offers reported by specialists available to quotation vendors).

n97. See *17 C.F.R. 240.11Ac1-1(b)(1)*, (c)(1); Rule 60(b)-(c), 2 N.Y.S.E. Guide (CCH) P 2060, at 2645-46.

n98. If an investor wishes to sell at a price and there are no buyers, he may wish to reduce his asking price, but not publish the reduction. There are mechanisms that would allow the lower price to be disclosed only to a

buyer that agreed to buy at the higher price. Once that buyer commits to the purchase, the buyer may discover that he could get the stock at a lower price. On the other hand, if the asking price is not lowered, there may still be no buyers. The publication may, therefore, depend on the desires of the seller or the buyer, as the case may be.

n99. The market in government securities provides a good example. There are few main dealers that are allowed to bid on government securities. See Business Briefs, N.Y. Post, Oct. 1, 1998, at 34 (noting that the Federal Reserve Bank of New York recognizes 33 primary government securities dealers); see also 5 C.F.R. 6801.102(f) (1998) (defining "primary government securities dealer" as "a firm with which the Federal Reserve conducts its open market operations"). They may trade among themselves. However, they would rather not inform each other of their need for either cash or securities. Hence, they long ago established a buffer, a broker who receives orders of buy and sell on condition of anonymity.

n100. Higher prices indicate successful operations, help raise funds, facilitate planned mergers and acquisitions, and protect against takeovers. Lower prices can facilitate repurchase of company stock or management leveraged buyouts.

n101. See Regulation of Exchanges and Alternative Trading Systems, Exchange Act Release No. 40,760, 63 Fed. Reg. 70,844, 70,847 (Dec. 22, 1998); see also Regulation of Exchanges and Alternative Trading Systems, Exchange Act Release No. 39,884, 63 Fed. Reg. 23,504 (Apr. 29, 1998) (Proposing Release); Regulation of Exchanges, Exchange Act Release No. 38,672, 62 Fed. Reg. 30,485 (June 4, 1997) (Concept Release). For a discussion of Commission regulation of alternative trading systems, see Daniel M. Gallagher, Comment, Move Over Tickertape, Here Comes the Cyber-Exchange: The Rise of Internet-Based Securities Trading Systems, 47 Cath. U. L. Rev. 1009 (1998) (advocating the creation of a new "national securities association" to operate as a self-regulatory organization for all alternative trading systems).

The alternative trading systems are defined and the choices to the actor are designed to reduce regulatory problems. See Regulation of Exchanges and Alternative Trading Systems, 63 Fed. Reg. at 70,846 (noting that the new regulatory framework "is flexible enough to accommodate the evolving technology of, and benefits provided by, alternative trading systems"). New Rule 3a1-1 grants an exemption from regulation as an exchange to alternative trading systems in compliance with new Regulation ATS and meeting other conditions. See *id.* at 70,917 (to be codified at 17 C.F.R. 240.3a1-1(a)). New Regulation ATS requires alternative trading systems choosing to register as broker-dealers to comply with enhanced regulation. See *id.* at 70,921-25 (to be codified at 17 C.F.R. 242.300-.303) (Regulation ATS).

Regulation ATS generally defines an "alternative trading system" as an entity "that constitutes ... a market place or facilities for bringing together purchasers and sellers of securities or for otherwise performing with respect to securities the functions commonly performed by a stock exchange" and does not set rules governing subscribers' conduct (except on the exchange) nor does it discipline them (other than by exclusion). See *id.* at 70,922 (to be codified at 17 C.F.R. 242.300(a)); see also Regulation of Exchanges, 62 Fed. Reg. at 30,486 n.1 (noting that the term "alternative trading system" is used in the release "to refer generally to automated systems that centralize, display, match, cross, or otherwise execute trading interest, but that are not currently registered with the Commission as national securities exchanges or operated by a registered securities association").

An alternative trading system regulated under Regulation ATS must register as a broker-dealer; file a notice of operation as an alternative trading system; allow Commission examinations, inspections, and investigations; and meet recordkeeping, reporting, and confidentiality requirements. A system with high trading volume must also provide access to publicly displayed orders. A system with 20 percent or more of the trading volume in an equity security (or certain debt securities) must also provide fair access and meet capacity, integrity, and security requirements. See Regulation of Exchanges and Alternative Trading Systems, 63 Fed. Reg. at 70,922-24 (to be codified at 17 C.F.R. 242.301(b)).

In addition, the Commission adopted Rule 3b-16 to revise the definition of "exchange" to include an entity that "brings together the orders for securities of multiple buyers and sellers" and "uses established, non-

discretionary methods (whether by providing a trading facility or by setting rules) under which such orders interact with each other, and the buyers and sellers entering such orders agree to the terms of a trade." *Id. at 70,918* (to be codified at *17 C.F.R. 240.3b-16(a)*); see also *id. at 70,848* (noting that the new definition includes markets engaging in activities functionally equivalent to traditional exchanges). The new definition does not include "bulletin board types of systems" that display "orders" but allow subscribers to contact each other and agree to terms outside the system. See *id. at 70,850 & n.47* (citing no-action letters involving issuer trading sites).

n102. See *15 U.S.C. 78c(a)(1)* (1994).

n103. The failure of Congress to develop appropriate regulation in the related field of telecommunications law is chronicled in Price & Duffy, *supra* note 1, at 977-79 ("In Congress, we see an institution bold in word, but incremental in deed."). Price and Duffy explain that the Telecommunications Act of 1996 merely "establishes a framework for the next round of conflict - conflict that will take place in courts, regulatory agencies, and the marketplace." *Id. at 978*.

n104. See *SEC v. Variable Annuity Life Ins. Co. of Am.*, 359 U.S. 65, 76 (1959) (Brennan, J., concurring) (examining whether holders of investments need the protection of the securities acts).

n105. Professor Lessig suggests a similar approach to the regulation of cyberspace, though he suggests a different method for getting there. He argues that common law should set the boundaries of cyberspace because its "undefined potential" requires "lots of room for democratic experimentation." Lessig, *supra* note 57, at 1753. "Experimentation, because stable doctrine is only built upon the ground of long-standing experimentation." *Id.*

n106. See, e.g., *RGTC No-Action Letter*, *supra* note 7, at 77,131.

n107. If we follow the logic of Professor George L. Priest, to the extent that any of these new regulations are inefficient, courts will either overturn them or construe them in a manner which creates a more efficient regime. See George L. Priest, *The Common Law Process and the Selection of Efficient Rules*, 6 *J. Legal Stud.* 65, 73 (1977) ("Where government suits are brought under legal rules that are inefficient, the stakes will be higher and defendants will be more likely to resist the suits and force litigation.").

n108. Securities and Exchange Commission, Report to the Congress: The Impact of Recent Technological Advances on the Securities Markets (last modified Nov. 26, 1997) <<http://www.sec.gov/news/studies/techrp97.htm>>.

n109. See, e.g., Deborah A. Ballam, *The Evolution of the Government-Business Relationship in the United States: Colonial Times to Present*, 31 *Am. Bus. L.J.* 553 (1994) (describing, among other things, how elements of the business community have supported a strong role for the government in creating the environment in which business operates); Joseph P. Tomain & Sidney A. Shapiro, *Analyzing Government Regulation*, 49 *Admin. L. Rev.* 377 (1997) (explaining how governmental regulation attempts to remedy market failures).

n110. See Tamar Frankel, *Should Funds and Investment Advisers Form a Self-Regulatory Organization?*, in *The Financial Services Revolution* 447 (Clifford E. Kirsch ed., 1997).

n111. In response to letters of inquiry, the staff issues "no-action letters" stating that the staff will not recommend to the Commission an enforcement action if the proposed activities take place. See Monthly Publication of List of Significant Letters Issued by the Division of Corporate Finance, Securities Act Release No. 5691, *41 Fed. Reg. 13,682* (Mar. 31, 1976) (describing the no-action letter process). Hence the name: "no-action letters." For a discussion of the no-action letter process, see 1 Frankel, *supra* note 41, ch. II, sec. C., 1-5.2, at 148.

n112. In recent years the staff has resorted to letters to the Investment Company Institute, expressing the staff's concerns about certain issues or events. See, e.g., *Investment Co. Inst., 1993 SEC No-Act. Lexis 673* (Apr. 19, 1993). These letters help inform the industry about the staff's concerns, and often elicit the industry's response by voluntary self-enforcement or self-studies that provide information to the staff and can result in self-enforcement. See *Investment Co. Inst., Report to the Division of Investment Management, U.S. Securities and Exchange Commission, Implementation of the Institute's Recommendations on Personal Investing (1995)*, summarized in *Mutual Funds Have Implemented Institute's Recommendations on Personal Investing, ICI Survey Finds, PR Newswire, Apr. 21, 1995*, available in LEXIS, News Library, Arcnws File.

n113. See 1 Frankel, *supra* note 41, ch. II, sec. C, 3, at 148. Therefore, no-action letters state that the staff grants or denies assurance that it will not recommend an enforcement action to the Commission.

n114. Usually the request letter analyzes the law and the staff may either agree with the position in the letters of request or with part of the position, or offer its own interpretation, leading to the no-action position. See *id.*

n115. See *id.*

n116. See *id.*

n117. The main reason for such letters is that, although the proposed activities are impermissible, or it is unclear whether they are permissible, the staff will not recommend enforcement action, presumably because the Commission's resources would be better employed otherwise. See *id.*

n118. See *id.*

n119. A third type of reasoning is that the proposed activities are very unique and in all probability will not be repeated by the requestor or anyone else. Although in most letters the staff emphasizes that the letters have no precedential value and are limited to the particular case, in these unique cases the language of the emphasis is stronger. See *id.* A favorable response limited to a unique situation is a far weaker precedent for an identical set of facts in a similar context.

n120. See *id.* 1, at 148.

n121. See *id.*

n122. See *id.*; Simon M. Lorne et al., *Securities Law Considerations Affecting Employee Benefit Plans A-8* (BNA Corp. Practice Series No. 44-2nd, 1997) ("Persons obtaining no-action letters are entitled to rely on them, but generally other persons are not entitled to so rely. However, since 1971...[the Commission] has at least moved toward allowing a more general reliance although not as a formal policy.").

n123. See 1 Frankel, *supra* note 41, ch. II, sec. C, 4.1, at 148.

n124. See *id.* 4.2, at 148. In some cases courts may refuse to defer to the staff's interpretation of the law; for example, if the issue does not involve a matter within the special expertise of the staff or when the Commission is the plaintiff - to avoid a result that the agency would be both prosecutor and legislator. See *id.* 5.1, at 148; see also *New York City Employees' Retirement Sys. v. American Brands, Inc.*, 634 F. Supp. 1382, 1389 n.6 (S.D.N.Y. 1986) (refusing to defer where issue does not involve matter within special expertise of staff); *SEC v. Energy Group, Inc.*, 459 F. Supp. 1234, 1238 (S.D.N.Y. 1978) (refusing to defer where Commission is plaintiff).