INFORMATION SOCIETY CHALLENGES TO FINANCIAL REGULATION

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I. INTRODUCTION

CHANGES in the market for information pose challenges to financial regulation by disrupting settled distinctions on which financial regulation depend. In some cases, these distinctions are based on explicit or implicit understandings of technological conditions. In other cases, the distinctions are based on factors independent of the state of technology.

This article argues that regulatory distinctions based on implicit understandings of technological conditions should be revised as the technology changes. When rules are based on factors other than the state of technology, they should be reviewed to ensure that technological change does not affect their application. Significantly, regulators should not assume that investors will experience information online in the same way that they experience information offline.

This article is divided into five main parts. Part II provides background on the role that information plays in the financial markets. Part III discusses the explicit and implicit understandings of technological conditions in regulation. Next, the article examines three regulatory distinctions that are challenged by technological development. Specifically, Part IV examines and compares traditional news sources and regulated investment publications. Then, Part V discusses and contrasts professional and non-professional market participants. Last, Part VI discusses the differences between sophisticated and non-sophisticated market participants. ¹

Legal rules rely on definitions to determine whether and how people are regulated. Investment advisers are regulated by financial regulators, but newspapers are not. However, distinguishing between news and investment advice is increasingly difficult online. When social practices of different groups converge in this way, regulators should not insist on maintaining the old regulatory distinctions.

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^{1.} In this article, I focus on examples of challenges to securities regulation rather than to the regulation of banking and insurance. There are other issues in securities regulation not examined here, such as online shareholder communications and internet stock offerings. Banking and insurance regulation also raise similar issues. For example, in banking and insurance, the questions of where consumers acquire information about banking and insurance services and how they process that information are similar to the issues about information gathering and processing identified in this article. Many of the important issues in financial regulation concern the way that the Internet loosens links between firms and transactions and local geography, whereas law is territorial. These issues are also beyond this article's scope.

Although professional market participants may be regulated, and non-professional investors do not need to be, easy and cheaper access to trading resources online means distinguishing between professional and non-professional market participants is harder. Regulatory regimes commonly recognise that unsophisticated investors need more protection than sophisticated market participants. But online, the vulnerable may feel that they are in fact sophisticated and empowered.

These different regulatory distinctions, used as criteria for the application of regulatory requirements, affect the conditions of competition in the financial markets. Specifically, regulation imposes costs on those who are regulated, and these costs may be passed along to consumers of services provided by regulated firms. As a result, regulated investment advice may be more expensive, but perhaps no more useful, than information from an unregulated source of information. Regulatory costs and onerous regulatory requirements can also operate as barriers to entry. For example, if a professional market participant is required to comply with training and licensing requirements that do not apply to non-professionals, then the definition of who is a "professional" operates as a barrier to entry. Significantly, "professional" activities are foreclosed to those who do not meet the training and licensing requirements. Regulatory costs may be justified if they are necessary to address market failures, but not where they impede competition that would operate in investors' interests.³

Initially, some commentators celebrated the disruptive potential of the Internet; in economic as well as political terms. The Internet would allow for cheap speech,⁴ and cheap transactions.⁵ Ordinary investors would be empowered by easier access to investment information and by increased competition between financial services providers.⁶ As of 2005, it is not clear that the disruptive potential of the internet has been realized. Firms and regulators have acted to minimize disruption. Regulators argue that online investors require regulatory protection to guard against their vulnerability, even where the investors do not acknowledge that they need regulatory protection.⁷ Traditional offline businesses have taken advantage of

^{2.} See, e.g., Conrad S. Ciccotello, C. Terry Grant & Mark Dickie, Will Consult for Food! Rethinking Barriers to Professional Entry in the Information Age, 40 Am. Bus. L.J. 905, 911 (2003) ("Traditionally, professional institutions were protected quite well from competition by regulation.").

^{3.} Public choice theorists argue that regulations are commonly promoted by those who will obtain rents as a result of the regulations. Life tends to be more complicated than this. See, e.g., Sam Peltzman, The Economic Theory of Regulation after a Decade of Deregulation, BROOKINGS PAPERS ON ECONOMIC ACTIVITY, MICROECONOMICS 1, 10 (Martin Neil Baily & Clifford Winston eds., 1989) (discussing the idea that "[g]iven the usual constraints on discrimination, regulators will allocate benefits across consumer and producer groups so that total political utility is maximized").

^{4.} *See*, *e.g.*, Eugene Volokh, *Cheap Speech and What it Will Do*, 104 YALE L.J. 1805, 1807 (1995) ("Cheap speech will mean that far more speakers—rich and poor, popular and not, banal and avant garde—will be able to make their work available to all.").

^{5.} See, e.g., Andrew D. Klein, Wallstreet.com: Fat Cat Investing at the Click of a Mouse 6 (1998).

^{6.} *See*, *e.g.*, Arthur Levitt, Chairman, Securities & Exchange Commission (SEC), Plain Talk About On-line Investing, Speech at the National Press Club (May 4, 1999), *available at* http://www.sec.gov/news/speech/speecharchive/1999/spch274.htm (referring to empowering technology).

^{7.} *Id*.

online channels of communication and trading, fending off much of the threatened competition from new online challengers.

II. INFORMATION AND FINANCIAL MARKETS

Information is central to the functioning of financial markets because these markets exist to price risk. Financial regulation reflects this fact by mandating and controlling disclosures to prospective investors in three ways. First, by controlling who is allowed to make claims about expertise in financial information; second, by requiring the publication of market prices for securities; and, third, by prohibiting fiduciaries from trading on the basis of inside information. Whether or not the market in any particular security is efficient, market participants routinely behave as though information is useful for making investment decisions.

In the recent past, professional investors had access to information which was not generally available to investors at large. In the days before Regulation FD, issuers and their advisors would commonly discuss financial information with analysts and others who might influence the market well before they revealed the same information to the market in general. Now that investors have the same access to information as professionals, it may be difficult for them to sort between more and less useful information. 10

One criterion which regulators have used to distinguish between unsophisticated investors, who are entitled to greater regulatory protection, and sophisticated investors, who may get less protection, is the amount of information or the level of access to information the investor possesses. Today, investors have access to large amounts of information from a wider variety of sources than ever before. Investors can now obtain information about investments and investment strategies through print and broadcast media, in person through investment seminars, and online through financial portals, broker-dealer web sites, and chat rooms. In the United States, filings of public companies are available online at no charge. Exchange and non-exchange markets publish trade data and other information. Although many operators of online financial information resources are regulated firms or traditional information businesses, anyone can publish their views about investments

^{8.} See, e.g., Eugene F. Fama & Kenneth R. French, The Capital Asset Pricing Model: Theory and Evidence, 18 J. Econ. Perspectives, Summer 2004, at 25.

^{9.} See, e.g., Selective Disclosure and Insider Trading, 65 Fed. Reg. 51,715, 51,716 (Aug. 24, 2000) (codified at 17 C.F.R. pt. 243) ("[W]e have become increasingly concerned about the selective disclosure of material information by issuers. As reflected in recent publicized reports, many issuers are disclosing important nonpublic information, such as advance warnings of earnings results, to securities analysts or selected institutional investors or both, before making full disclosure of the same information to the general public. Where this has happened, those who were privy to the information beforehand were able to make a profit or avoid a loss at the expense of those kept in the dark.").

^{10.} But see, e.g., Yochai Benkler, Coase's Penguin, or, Linux and the Theory of the Firm, 112 YALE L.J. 369, 390-96 (2002) (describing various online mechanisms for ensuring relevance and accreditation of online information).

^{11.} See, e.g., C. Edward Fletcher, III, Sophisticated Investors under the Federal Securities Laws, 1988 DUKE L.J. 1081, 1083.

^{12.} See SEC, Filings and Forms, http://www.sec.gov/edgar.shtml (last visited Sept. 19, 2005).

through email or chat rooms.¹³ In addition, investors can now obtain hard information about issuers of securities and economic trends through multiple channels. Many of these channels did not exist until relatively recently, and those that did were prohibitively expensive for non-professional investors.¹⁴ Investors can also benefit from different opinions about individual securities, issuers, and about market trends. Regulators should respond to this leveling of the informational playing field by shifting their emphasis to the question of whether an investor is capable of making effective use of the available information.

As a result of these changes in the information market, regulators need to address a number of different questions. First, what they can do to help investors manage and sort through the enormously increased volume of available information. Second, regulators should study whether investors experience information they receive through various channels differently.¹⁵ Third, regulators should consider whether they need to take action in relation to markets in new kinds of information. Increasingly, not only is technology being used to give investors information about what investments to make, but more generally, what investment strategies they should use. Information about investments and investment strategies take, a new form as firms develop software programmes and courses on and off-line that are designed to teach people how to invest. Other computer programmes apply algorithms to match up those who wish to buy and sell investments, thereby eliminating the need for any direct human intervention.¹⁶

Firms can make money from selling investment-oriented publications and seminars. However, investor training programmes are not regulated in the same way as traditional advice from broker-dealers. If the programmes are part of a broker-dealer's advertising strategy, then they will be covered by the broker's Self Regulatory Organizations's (SROs) rules on advertising.¹⁷ If the programmes are not part of the broker-dealer's strategy, they may be effectively unregulated. Also, at a time when regulators sponsor investor education programmes,¹⁸ it may be difficult for investors to distinguish between different offerings, except that regulator-sponsored programmes emphasise conservative strategies and non-

^{13.} A number of recent trading suspensions have involved suggestions that spam email was used to tout shares. *See*, *e.g.*, Courtside Products Inc. Order of Suspension of Trading, 70 Fed. Reg. 5258 (Feb. 1, 2005) (suspending securities because of a possible unlawful distribution involving failure to comply with resale restrictions under Regulation D, and the issuer was the subject of spam email touting its shares).

^{14.} Levitt, supra note 6.

^{15.} See, e.g., Caroline Bradley, Online Financial Information: Law and Technological Change, 26 J.L. & POL'Y 375 (2004) (suggesting that regulators should take account of 3 Is of Internet information: immediacy, interactivity, and interjurisdictionality).

^{16.} See, e.g., Press Release, Int'l Swaps & Derivatives Ass'n (ISDA), Automation of Processing in Privately Negotiated Derivatives Accelerates, Says ISDA: Credit Derivatives Lead the Way (Mar. 16, 2005), available at http://www.isda.org/press/pressprocessingsurvey03-16-05.html.

^{17.} See, e.g., New York Stock Exchange (NYSE), Communications with the Public, Rule 472(a)(1), available at http://rules.nyse.com/NYSE/NYSE_Rules/ (last visited Sept. 9, 2005).

^{18.} See, e.g., Financial Literacy & Educ. Comm'n, Investor Information, http://www.mymoney.gov/ (last visited Sept. 18, 2005); SEC, Investor Education and Assistance, http://www.sec.gov/investor.shtml (last visited Sept. 19, 2005) ("We cannot tell you what investments to make, but we can tell you how to invest wisely and avoid fraud.").

regulator-sponsored programmes promise empowerment and excitement. This difference is problematic. Although adopting speculative investment strategies would be rational for some investors, if not for others, ¹⁹ regulators are criticised if they advocate particular strategies. ²⁰

III. EXPLICIT AND IMPLICIT UNDERSTANDINGS OF TECHNOLOGICAL CONDITIONS IN REGULATION

Some legal rules rely on explicit understandings of technological conditions. Rules that require disclosures to be made in written documents must be adjusted for the online environment. The regulator must consider whether e-mailed or webpublished documents are equivalent to paper documents. Consumer-focused disclosure requirements that require information to be published using specific font sizes do not work in an online environment where the reader, not the publisher, controls how the reader sees the text. How the regulator should adjust the rule may not always be obvious or uncontroversial, and market participants may lobby for the result they want. But in these cases, the fact that the rule is based on an explicit understanding of technology is clear and uncontroversial.

Even where the language of a rule shows that it is based on an explicit understanding of technological conditions, technological change raises issues for regulation that may be less obvious and more complex than those on which regulators focus initially. In the past, securities markets had a clear physical location, whether in coffeehouses²¹ or on a sidewalk.²² Statutory definitions of exchanges reflected this reality and referred to physical marketplaces.²³ When regulators were faced with a new reality where it was possible for financial markets to operate with no physical trading floor, they had to decide whether the existence of a physical marketplace was critical to the nature of the exchange.²⁴ Although an

^{19.} *Cf.* Edward J. McCaffery, *Why People Play Lotteries and Why It Matters*, 1994 WISC. L. REV. 71, 74 (1994) ("[C]onsumers desire large amounts of sudden wealth, and lotteries offer a unique opportunity to satisfy such desires.").

^{20.} See, e.g., Henry T.C. Hu, Faith and Magic: Investor Beliefs and Government Neutrality, 78 Tex. L. Rev. 777, 837-38 (2000).

^{21.} See, e.g., 1 DAVID KYNASTON, THE CITY OF LONDON 16 (1994) (noting the London Stock Exchange's origins in the coffee houses of Change Alley).

^{22.} American Stock & Options Exchange (AMEX) was originally known as the Curb Exchange because of its physical location. ROBERT SOBEL, AMEX: A HISTORY OF THE AMERICAN STOCK EXCHANGE, 1921-1971, at xv (1972).

^{23.} The Securities Exchange Act of 1934 defines an exchange as "any organization, association, or group of persons ... which constitutes, maintains, or provides 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 as that term is generally understood." *See* Security Exchange Act of 1934, § 3(a)(1), 15 U.S.C. § 78c(a)(1) (2000).

^{24.} See 17 C.F.R. § 240.3b-16(a) (2005). Cf. Therese H. Maynard, What is an "Exchange?"—Proprietary Electronic Securities Trading Systems and the Statutory Definition of an Exchange, 49 WASH. & LEE L. REV. 833, 876-82 (1992) (critiquing the SEC's use of no-action letters to define exchanges in ways inconsistent with the statutory language). The National Securities Markets Improvement Act of 1996, Pub. L. No. 104-290, granted the SEC a general exemptive authority under the Securities Exchange Act of 1934. 15 U.S.C. § 78mm ("[T]he Commission, by rule, regulation, or order, may conditionally or unconditionally exempt any person, security, or transaction,

exchange market can function without a trading floor, and software may match orders more efficiently than people can, self-regulation may work differently in market environments where the participants never have to meet, as opposed to environments where the participants are conscious of belonging to a club composed of real people. This is not meant to suggest that self-regulation in markets where the participants never meet is necessarily less effective than in markets where the participants do meet.²⁵ Rather, self-regulation is likely to work differently in different contexts. Mitchel Abolafia compares the views of participants in impersonal bond markets with those of participants in the personalized NYSE as follows:

Traders sit in a room full of other traders transacting with the market through the telephone and computer networks. Said another trader, "I don't really feel like I can rely on anybody here. *That's the way this business is.* You've got to rely on yourself." Such statements define both actors and action. They describe an impersonal environment in which trust and co-operation are nearly absent. This is in noted contrast to traders at the New York Stock Exchange where traders transact face to face and talk about trust and building relationships with customers. ²⁶

Other studies suggest that effective norms can develop within communities of people bound together by common interests; for example, by shared religious beliefs.²⁷ However, the extent to which the sort of real-world trust relationships that produce effective norms will translate to virtual communities is unclear.²⁸

Even where the language of a rule shows that it is based on a particular assumption about technology, and regulators know that they need to think about the underlying basis for the rule in order to apply it in changed conditions, the regulator may not immediately think about all of the implications of the change. But a wide range of rules is based on implicit, rather than explicit, understandings of

or any class or classes of persons, securities, or transactions, from any provision or provisions of this title or of any rule or regulation thereunder, to the extent that such exemption is necessary or appropriate in the public interest, and is consistent with the protection of investors.").

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^{25.} After all, market participants may be more likely to engage in collusive behavior if they know those with whom they are colluding. *Cf.* Barak Richman, *A Theory of Private Ordering*, 104 COLUM. L. REV. 2328, 2347 (2004), *available at* http://eprints.law.duke.edu/archive/00001119/01/104_Colum. _L._Rev._2328_(2004).pdf ("Another cost associated with the relational contracting and reputation mechanisms that support private ordering is the potential for collusive behavior.").

^{26.} Mitchel Y. Abolafia, *Markets as Cultures: An Ethnographic Approach*, *in* THE LAWS OF THE MARKETS 69, 72 (Michel Callon ed., 1998).

^{27.} See, e.g., Barak Richman, Community Enforcement of Informal Contracts: Jewish Diamond Merchants in New York (The Harvard John M. Olin Discussion Paper Series No. 384 (2002)), available at http://eprints.law.duke.edu/archive/00000814/01/Harvard Olin Ctr 384.pdf.

^{28.} Many scholars who write about trust in electronic environments focus on issues such as trust in e-commerce and trust in personal relationships rather than on how trust in these environments may affect the ability of virtual communities to generate and apply norms. See, e.g., Kari Chopra & William A. Wallace, Trust in Electronic Environments, in PROCEEDINGS OF THE 36TH HAWAII INTERNATIONAL CONFERENCE ON SYSTEM SCIENCES (2003), available at http://csdl2.computer.org/comp/proceedings/hicss/2003/1874/09/187490331a.pdf. For a discussion of standards generation on the Internet, see, e.g., A. Michael Froomkin, Habermas@discourse.net: Toward a Critical Theory of Cyberspace, 116 HARV. L. REV. 749, 798-805 (2003).

technological conditions. Changes in technology allow new ways of doing business which challenge existing rules obliquely. For example, rules that apply to activities undertaken within a particular geographic territory do not apply as easily where technological developments facilitate the moving of those activities offshore. When firms begin to take advantage of these new ways of doing business, policy makers must consider whether and how they should react to the implications of the changes. Offshoring may reduce the costs of doing business, but it may also involve new risks that financial regulators must consider and urge firms to guard against. Technological changes may reduce transaction costs, as in the case of offshoring, and economic barriers to entry. But legal rules also impose transaction costs and may create barriers to entry. If regulators maintain old rules despite changed conditions, they may protect monopoly positions in ways that harm consumers' interests.

While technological changes may empower investors by increasing competition between service providers, they may also highlight and increase investors' vulnerabilities. In addition, regulators who are responsible for enforcing the securities laws are constantly reminded that many investors are hopeful to the point of being gullible.³¹ Significantly, behavioral economists suggest that investors are generally affected by biases that interfere with their ability to make rational investment decisions.³² Regulators adopt mixed strategies of enforcing regulations against firms that take advantage of vulnerable investors and of publishing advice for investors;³³ however, whether the regulators' advice reaches the people who need it most is not clear.

Many of the rules that securities regulators administer seek to ensure that investors receive information about issuers of securities. Increasingly, issuers of securities use their web sites to communicate with potential and actual investors. Consequently, regulators have adjusted their approaches to disclosure requirements.³⁴ However, adjusting disclosure requirements to new communications

^{29.} *See*, *e.g.*, Peltzman, *supra* note 3, at 34 (describing how the development of the Eurodollar market undermined U.S. authorities' ability to regulate dollar interest rates).

^{30.} The Bank for International Settlements (BIS), International Organization of Securities Commissions (IOSCO) and the International Association of Insurance Supervisors (IAIS) have together addressed the issue of whether and how offshoring may increase a financial institution's operational risks. *See* THE JOINT FORUM, OUTSOURCING IN FINANCIAL SERVICES (Feb. 2005), *available at* http://www.bis.org/publ/joint12.pdf.

^{31.} Regulators consistently warn investors that if something sounds too good to be true, it usually is. *See*, *e.g.*, U.S. Sec. & Exch. Comm'n (SEC), *Invest Wisely: Advice From Your Securities Industry Regulators*, *available at* http://www.sec.gov/investor/pubs/inws.htm; N. Am. Secs. Adm'rs Assoc. (NASAA), NASAA's 2005 Top 10 Threats to Investors (Mar. 24, 2005), http://www.nasaa.org/nasaa_newsroom/current_nasaa_headlines/2719.cfm.

^{32.} See, e.g., Donald C. Langevoort, *Taming the Animal Spirits of the Stock Markets: A Behavioral Approach to Securities Regulation*, 97 Nw. U.L. REV. 135, 143-48 (2002) (explaining the field of "behavioral finance").

^{33.} In July 2005, the SEC announced enforcement action against a firm that had promoted "autotrading" and, at the same time, issued an investor alert. *See* Press Release, SEC, SEC Sues Online Adviser for Conduct Involving "Auto-Trading" (July 1, 2005), *available at* http://www.sec.gov/news/press/2005-98.htm; SEC, All About Auto-Trading, *available at* http://www.sec.gov/investor/pubs/autotrading.htm (last visited Sept. 19, 2005).

^{34.} See, e.g., Press Release, SEC, SEC Votes to Adopt Securities Act Rule Reform and Shell

practices requires more than liberalizing the rules so that issuers can merely make the prospectus available online instead of sending out large numbers of physical copies. If people experience e-mailed or web-based information differently from hard copy information, disclosures made through e-mail or web pages may not be functionally equivalent to paper-based disclosures.³⁵ On the Internet, publishers can use techniques that are not available offline. Specifically, they can use sounds and animation to attract readers' attention to particular material.³⁶ Some of these techniques may be self-regulating if they irritate potential investors.³⁷ Other attention-getting strategies may not be self-regulating.

From the reader's perspective, online information may be different from offline information in ways that regulators should consider. Cyberpsychologists suggest using the Internet to obtain information may promote "nonlinearity in the exploration of knowledge" and "communication via impressions rather than logical connections." An investor who relies on impressions and explores information in a non-linear way would differ from securities law's model of a rational, reasonable investor who invests based on relevant factual information. ³⁹

Company Regulations; Considers Matters Remanded by Court of Appeals (July 1, 2005), *available at* http://www.sec.gov/news/press/2005-99.htm; Securities Offering Reform, 70 Fed. Reg. 44, 722 (Aug. 3, 2005); Securities Offering Reform, 69 Fed. Reg. 67,392 (proposed Nov. 17, 2004).

- 35. Julie Williams of the Office of the Comptroller of the Currency has recently suggested that there is a more general issue of whether disclosure requirements really achieve their objective. *See*, *e.g.*, Julie L. Williams, Acting Comptroller of the Currency, Remarks Before Women in Housing and Finance and The Exchequer Club 5 (Jan. 12, 2005), *available at* http://www.occ.treas.gov/ftp/release/2005-1a.pdf ("Let's just admit that we can't throw a bunch of lawyers—however talented—into a room and expect that they are going to come up with consumer disclosures that are understandable to most people. There's a critical element that's been missing from our consumer disclosure rulemaking processes—testing *how consumers interpret* particular disclosures and how to make disclosures *usable* to them. And we also need to think about how we can build in periodic reviews to determine if the disclosures are still desired and effective.").
- 36. See, e.g., Weiyin Hong et al., Does Animation Attract Online Users' Attention? The Effects of Flash on Information Search Performance and Perceptions, 15 INFO. SYS. RES. 60, 61 (Mar. 2004) ("A major reason for using animation is to attract users' attention.").
- 37. See, e.g., id. at $7\overline{7}$. The authors note that flash animation can interfere with focused attention and may irritate readers as a result; therefore, they suggest that web designers should "be conservative" in their use of flash. Id.
- 38. Luciano Gamberini & Stefano Bussolon, *Human Navigation in Electronic Environments*, 4 CYBERPSYCHOLOGY & BEHAV. 57, 59 (2001).
- 39. Securities law gives investors remedies with respect to materially misleading information and material omissions. In assessing whether omitted information was material, courts will assess whether a reasonable investor would have considered the information to be significant. *See*, *e.g.*, TSC Industries, Inc. v. Northway, 426 U.S. 438, 449 (1976) ("The general standard of materiality that we think best comports with the policies of Rule 14a-9 is as follows: An omitted fact is material if there is a substantial likelihood that a reasonable shareholder would consider it important in deciding how to vote.... What the standard does contemplate is a showing of a substantial likelihood that, under all the circumstances, the omitted fact would have assumed actual significance in the deliberations of the reasonable shareholder. Put another way, there must be a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the "total mix" of information made available."); *In re* Oracle Corp. Derivative Litig., 867 A.2d 904, 940 (Del. Ch. 2004) ("The only principled manner in which to hold a defendant liable in any of these contexts is to evaluate the information in his possession, compare it to what the market knew, and identify if any of the non-disclosed information would have been of consequence to a rational investor,

One major function of disclosure requirements is to enable prospective investors to evaluate the risks of possible investments. People assess risk in different ways in different circumstances. Sometimes, people assess risk analytically; at other times, they assess risk intuitively. People generally combine rational analysis and affect in assessing risk. Even professional traders in the financial markets are affected by their emotions when they trade. Moreover, the most successful traders seem to trade on intuition.

Affective reactions can be manipulated.⁴⁴ Some investors may be encouraged by advertising campaigns to engage in risky investment strategies. In particular, online investors may be over-confident,⁴⁵ and they may be especially vulnerable to being manipulated. When investors are manipulated into abandoning rational analysis, they may be excluded from obtaining remedies under the securities laws on the theory that rational investors would not have been affected by misleading information provided to the market. Changing patterns of decision-making by investors may require revisiting the assumption that only rational investors deserve statutory protections.⁴⁶

in light of the total mix of public information.").

- 42. See, e.g., Andrew W. Lo & Dmitry V. Repin, The Psychophysiology of Real-Time Financial Risk Processing, 14 J. COGNITIVE NEUROSCIENCE 323, 332 (2002) ("Our findings suggest that emotional responses are a significant factor in the real-time processing of financial risks. Contrary to the common belief that emotions have no place in rational financial decision-making processes, physiological variables associated with the ANS exhibit significant changes during market events even for highly experienced professional traders. Moreover, the response patterns among variables and events differed in important ways for less experienced traders—mean autonomic responses were significantly higher—suggesting the possibility of relating trading skills to certain physiological characteristics that can be measured."). Lo and Repin studied "10 professional traders employed by the foreign-exchange and interest-rate derivatives business unit of a major global financial institution based in Boston, MA." Id. at 325.
- 43. *Id.* at 332 ("[T]he most successful traders seem to trade based on their intuition about price swings and market dynamics, often without the ability (or the need) to articulate a precise quantitative algorithm for making these complex decisions. Their intuitive trading 'rules' are based on the associations and relations between various information tokens that are formed on a subconscious level, and our findings, and those in the extant cognitive sciences literature, suggest that decisions based on the intuitive judgments require not only cognitive but also emotional mechanisms.") (citation omitted).
- 44. See, e.g., Slovic et al., supra note 40, at 319. A consciousness of the risk that affective reactions might interfere with rational decision-making is illustrated by the SEC's traditional approach of controlling gun-jumping in the period before publication of a prospectus. But see Securities Offering Reform, 70 Fed. Reg. 44,722, 44,731 (Aug. 3, 2005) (noting that "the gun-jumping provisions of the Securities Act impose substantial and increasingly unworkable restrictions on many communications that would be beneficial to investors and markets").
- 45. See, e.g., Brad M. Barber & Terrance Odean, Online Investors: Do the Slow Die First?, 15 REV. OF FIN. STUD. 455, 456 (2002).
- 46. See, e.g., Langevoort, supra note 32. Cf. Stephen J. Choi & A.C. Pritchard, Behavioral Economics and the SEC, 56 STAN. L. REV. 1, 5 (2003) (suggesting that it may not be possible to protect irrational investors through regulation).

^{40.} See, e.g., Paul Slovic et al., Risk as Analysis and Risk as Feelings: Some Thoughts about Affect, Reason, Risk and Rationality, 24 RISK ANALYSIS 311, 313 (2004).

^{41.} See, e.g., id. at 314.

IV. TRADITIONAL NEWS SOURCES AND REGULATED INVESTMENT PUBLICATIONS

Securities regulators and other financial regulators regulate "investment advisors" and not "newspapers." Even if traditional newspapers publish articles about investment, they tend to be characterized as news stories rather than as investment advice. Further, some investment information is news, and even entertainment. However, some newspaper stories and columns may influence the behavior of investors, and seem to be closer to advice as a result. It is even harder to draw the line between advice and news online. Online newspapers and financial portals are harder to distinguish than print newspapers and print tipsheets. In addition, online financial portals may be run by newspapers. Both financial portals and online newspapers contain articles about investment and advertisements that can link readers directly to financial service providers. The financial service providers pay the publishers for the advertisements. As a result, the publishers may have a financial interest in their readers noticing the advertisements or even contracting with the advertising firms.

The regulatory line between investment advice and newspapers relies on three different distinctions: first, the distinction between general and specific information; second, between personalized and general information; and, third, between reputable and disreputable publishers. The purpose motivating publication of the information may be relevant. If the publisher's motive is to sell newspapers, she is not an investment adviser. On the other hand, if her purpose is to sell securities, she may be considered an advisor.⁴⁹ The United Kingdom's Financial Services Authority has suggested that even impersonal advice might be considered giving advice for

^{47.} The U.S. Investment Advisers Act of 1940 defines an investment adviser as "any person who, for compensation, engages in the business of advising others, either directly or through publications or writings, as to the value of securities or as to the advisability of investing in, purchasing, or selling securities, or who, for compensation and as part of a regular business, issues or promulgates analyses or reports concerning securities." 15 U.S.C. § 80b-2(a)(11) (2000). Banks, broker-dealers, lawyers, accountants, and teachers are all excluded from the definition as is: "the publisher of any bona fide newspaper, news magazine or business or financial publication of general and regular circulation." 15 U.S.C. § 80b-2(a)(11)(D). See also Lowe v. SEC, 472 U.S. 181, 204 (1985) ("One of the statutory exclusions is for 'the publisher of any bona fide newspaper, news magazine or business or financial publication of general and regular circulation.' Although neither the text of the Act nor its legislative history defines the precise scope of this exclusion, two points seem tolerably clear. Congress did not intend to exclude publications that are distributed by investment advisers as a normal part of the business of servicing their clients. The legislative history plainly demonstrates that Congress was primarily interested in regulating the business of rendering personalized investment advice, including publishing activities that are a normal incident thereto. On the other hand, Congress, plainly sensitive to First Amendment concerns, wanted to make clear that it did not seek to regulate the press through the licensing of nonpersonalized publishing activities.") (quoting 15 U.S.C. § 80b-2(a)(11)(D)).

^{48.} See, e.g., Lowe, 472 U.S. at 203-12 (illustrating the complex analysis that is involved in determining whether a distributed newsletter is excluded by statute).

^{49.} Commercial speech may be subjected to a greater degree of regulation than non-commercial speech. *See*, *e.g.*, Commodity Trend Serv., Inc v. Commodity Futures Trading Comm'n, 149 F.3d 679, 686 (3d Cir. 1998) (holding publications were "not commercial speech" if they did "not propose a commercial transaction between CTS and a specific customer"). *Cf.* The Financial Services and Markets Act 2000 (Regulated Activities) Order 2001, 2001/544, 54(1), *available at* http://www.opsi.gov.uk/si/si2001/20010544.htm.

commercial purposes.⁵⁰ But the EU's Markets for Financial Instruments Directive only applies to personal recommendations to a client.⁵¹ In the United States, the provision of compensated impersonal advice has not been treated as an activity requiring licensing.⁵² Also, when newspapers benefit from constitutional protection from licensing, as they do in the United States, online services that do not provide specific advice are likely to benefit from the same protection.⁵³

Courts and regulators are faced with issues about how to apply rules regulating communications to online communications in many contexts beyond the sphere of financial regulation. For example, the Federal Election Commission (FEC) recently addressed the issue of when internet communications should be treated as "public communications." "Public communications" is a term relevant both to issues of the allocation of campaign funds and to requirements for disclaimers.⁵⁴ In proposing new regulations, the FEC stated:

The Commission's proposed rule attempts to strike a balance between provisions of the Act that regulate "general public political advertising" and significant public policy considerations that encourage the Internet as a forum for free or low-cost speech and open information exchange.⁵⁵

The FEC raised the question whether bloggers should be expressly exempted from the definition of public communications.⁵⁶ Bloggers have strongly objected to this proposal.⁵⁷

^{50.} Financial Services Authority, The Perimeter Guidance Manual, PERG 8.27.5 (Eng.), available at http://fsahandbook.info/FSA/html/handbook/PERG/8/27. Impersonal advice has been characterized as including circumstances where a newspaper gives advice in response to readers' letters "to generate goodwill," or a website which generates income from advertising rather than from readers. Financial Services Authority, Handbook, AUTH. 7.3.4 (Eng.) (revoked June 30, 2005), available at http://fsahandbook.info/FSA/handbook.jsp?doc=/handbook/AUTH/7/3.

^{51.} Council Directive No. 2004/39, Art. 4(4) O.J. L145/1, 10 (2004).

^{52.} See, e.g., Taucher v. Born, 53 F. Supp. 2d 464, 482 (D.D.C. 1999) (holding the statute requiring licensing of publishers of commodities trading advice to be unconstitutional as a prior restraint on speech). Cf. 17 C.F.R. § 4.14(a)(9) (exempting from licensing a person who does not "(i) Direct [] client accounts; or (ii) Provid[e] commodity trading advice based on, or tailored to, the commodity interest or cash market positions or other circumstances or characteristics of particular clients").

^{53.} See, e.g., Forsalebyowner.com Corp. v. Zinnemann, 347 F. Supp. 2d 868, 877 (E.D. Cal. 2004) ("FSBO's argument that Section 10026 unconstitutionally discriminates based on media type is persuasive. The Court agrees that California's real estate licensing scheme impermissibly differentiates between certain types of publications carrying the same basic content. As indicated above, while Section 10026 exempts 'newspapers of general circulation' from the advance fee provisions that trigger licensing requirement, websites like FSBO's are not so exempted. Given the uncontroverted fact that FSBO's activities are virtually identical to those pursued online by California newspapers, the distinction drawn between the two publishing mediums appears wholly arbitrary.").

^{54.} Internet Communications, 70 Fed. Reg. 16,967, 16,969 (proposed Apr. 4, 2005) (to be codified at 11 C.F.R. pts. 100, 110 & 114).

^{55.} Id. at 16,969.

^{56.} Id. at 16,971.

^{57.} See, e.g., Duncan Black et al., Comments on Notice of Proposed Rulemaking: The Internet: Definitions of "Public Communication" and "Generic Campaign Activity" and Disclaimers 6 (June 3, 2005), available at http://www.fec.gov/pdf/nprm/internet_comm/comm_09.pdf.

Similarly, journalists have reacted negatively to the idea that they might be expected to be licensed as investment advisers.⁵⁸ Newspaper journalists also emphasize that, unlike some contributors to online publications, they are subject to codes of ethics.⁵⁹ The existence of such self-regulatory schemes may protect journalists from the obligation to be licensed even in jurisdictions where the press is less protected than in the United States.

From the perspective of the investor who relies on negligent or reckless information about trading strategies, the source of the advice may not seem relevant. An investor might expect to have a remedy in relation to negligently published information whether it were included in a broker-dealer's newsletter, on a website, or in a newspaper. David McGowan pointed out that "[t]he reasons justifying special treatment for media speakers rested largely on the traditionally high cost of general publication."

Newspapers have changed with the development of communications technologies and with new competitors. If online newspapers receive remuneration for linking their readers to websites of financial services providers, perhaps they should be required, at the very least, to publish disclaimers that they are not licensed providers of investment advice.

V. PROFESSIONAL AND NON-PROFESSIONAL MARKET PARTICIPANTS

Professional occupations are typically distinguished from non-professional occupations by both expertise and exclusion. Professionals have the legal right to limit access to their profession and consequently command higher fees. Professionals can do this because they have persuaded legislators that the expertise they possess can only be properly acquired under regulated conditions, and that the

^{58.} See, e.g., Australian Press Council, Submission to the Parliamentary Joint Statutory Committee on Corporations and Securities on the Financial Services Reform Bill 2001 (June 6, 2001), available at http://www.presscouncil.org.au/pcsite/fop/fop_subs/finance.html ("It is inappropriate for the press to be burdened with a regulatory regime which would lead it to have to consider whether the information that they propose to disseminate is financial product advice or to re-express that material so that it eliminates the implication that it is financial product advice.").

^{59.} See, e.g., Jane B. Singer, Who Are These Guys? The Online Challenge to the Notion of Journalistic Professionalism, 4 JOURNALISM 139, 151-53 (2003).

^{60.} Cf. David McGowan, From Social Friction to Social Meaning: What Expressive Uses of Code Tell Us About Free Speech, 64 OHIO ST. L.J. 1515, 1544 (2003) ("The content of a 'reference guide' to collecting and cooking mushrooms is relatively particular and probably would strike most readers as relatively verifiable, suggesting to them that they could rely on it in deciding what to eat. If readers do not know that publishers are immune from liability for mistakes, then readers will not adjust their level of reliance to take that immunity into account.").

^{61.} Id. at 1558.

^{62.} See, e.g., ELIOT FREIDSON, PROFESSIONALISM REBORN: THEORY PROPHECY AND POLICY 18 (1994) ("Gaining recognition as a 'profession' was important to occupations not only because it was associated with traditional gentry status, but also because its traditional connotations of disinterested dedication and learning legitimated the effort to gain protection from competition in the labor market.").

^{63.} These higher fees are sometimes characterized as "rents." *See*, *e.g.*, HAROLD PERKIN, THE RISE OF PROFESSIONAL SOCIETY: ENGLAND SINCE 1880, at 7 (1990).

exercise of their professional activities is socially useful.⁶⁴ People who are not properly licensed may be sanctioned for carrying out acts for which licensing is required.⁶⁵ Much of the literature on the professions focuses on how groups succeed in claiming professional status and the impact of professional monopolies on consumer welfare. In Europe, public authorities have acknowledged that professional monopolies may, in some circumstances, need to be weakened in the interests of consumers.⁶⁶ If monopolisation means that professional services are priced out of the reach of consumers, consumers will be harmed.⁶⁷

One key distinction between professionals and non-professionals is that professionals usually charge fees for performing professional services to their clients while non-professionals do not charge for similar activities. Also, licensing requirements usually apply to a person who is in the business of providing particular professional services. ⁶⁸ This distinction between remunerated and unremunerated services may also be used to determine which of a number of different regulatory schemes applies to a person. Broker-dealers who do not receive separate remuneration for the advice they give to investors are not required to register as investment advisers. ⁶⁹ The SEC recently proposed regulations under which broker-dealers who offer different types of account to clients, including execution-only

^{64.} See, e.g., CCBE Response to the Clementi Consultation Document (June 4, 2004), available at http://www.ccbe.org/doc/En/ccbe_response_clementi_040604_en.pdf ("Lawyers have a vital role in the administration of justice and in maintaining the rule of law, both of which are essential foundations of a democratic society.").

^{65.} For example, non-lawyers may be sanctioned for the unauthorized practice of law. See, e.g., Quintin Johnstone, Connecticut Unauthorized Practice Laws and Some Options for Their Reform, 36 CONN. L. REV. 303, 313-14 (2004). An ABA Task Force has recommended applying a simplified regulatory regime to finders (who often believe that they are not broker-dealers). Am. Bar Ass'n, ABA Report and Recommendations of the Task Force on Private Placement Broker-Dealers (June 7, 2005) [hereinafter ABA Task Force], available at http://www.ibba.org/_files/ABATaskForceReport6-2-05.pdf.

^{66.} See, e.g., Iain Paterson et al., Economic Impact of Regulation in the Field of Liberal Professions in Different Member States: Final Report–Part 1 (Jan. 2003), available at http://europa.eu.int/comm/competition/publications/prof_services/prof_services_ihs_part_1.pdf; DAVID CLEMENTI, REPORT OF THE REVIEW OF THE REGULATORY FRAMEWORK FOR LEGAL SERVICES IN ENGLAND AND WALES: FINAL REPORT (Dec. 2004) [hereinafter CLEMENTI REVIEW], available at http://www.legal-services-review.org.uk/content/report/report-chap.pdf.

^{67.} *See*, *e.g.*, CLEMENTI REVIEW, *supra* note 66, at 6 ("The issue of costs is an important one: high quality legal services are important to society, but of limited value if available only to the very rich or those paid for by the State.").

^{68.} Cf. ABA Task Force, supra note 65, at 1 ("Essentially ... any person who accepts 'transaction based compensation,' i.e., commissions, for bringing capital to a third party securities issuer, must be somehow registered to sell those securities through a member of the NASD."). In some circumstances, a person may be sanctioned for providing professional services even if the services are not remunerated to any significant extent. See, e.g., Ralph C. Cavanagh & Deborah Rhode, Unauthorized Practice of Law and Pro Se Divorce, 86 Yale L.J. 104, 109 (1976) (stating costs for kits and personalized assistance in document preparation in divorce cases as ranging in price from \$3 to \$180). Analysis of the unauthorized practice of law tends to focus on the character of the services provided, rather than on whether those services are remunerated in the same way. Cf. Paul D. Healy, In Search of the Delicate Balance: Legal and Ethical Questions in Assisting the Pro Se Patron, 90 LAW LIBR. J. 129, 129-30 (1998).

^{69.} Investment Advisors Act of 1940, § 202(a)(11), 15 U.S.C. § 80b-2(a)(11) (2000).

accounts and full-service accounts, should not be treated as separately remunerated for their advice for the purposes of the Investment Advisers Act.⁷⁰

In the information market, regulatory distinctions focus as much on where the remuneration comes from as on whether or not an information provider receives remuneration for their services at all. A person who publishes her opinions about a particular securities issuer in a newspaper need not be licensed as a professional investment advisor even though she is remunerated by the newspaper for doing so. However, a person who publishes stock tips in an investment newsletter and charges a fee will need to be licensed.⁷¹

Another key traditional distinction between professionals and non-professionals is that professionals have expertise that others do not have. More precisely, professionals are usually people who have been recognized by a professional organization as having achieved the level of expertise necessary for entry into the profession.⁷²

Securities law and regulation impose requirements on professionals that do not apply to non-professional investors. Broker-dealers must establish that they have the necessary expertise to act as brokers and dealers through examination. In addition, they must establish that they satisfy an SRO's fitness requirements. If they meet these conditions for authorization, broker-dealers are then subject to ongoing obligations under SRO rules. Some of these SRO rules track legal requirements that apply to market participants generally.⁷³ Other SRO rules go further. For example, one rule requires SRO members to behave according to "high standards of commercial honor."

During the 1990s, a number of factors encouraged some investors to begin to trade securities on a daily basis. These factors included easier and cheaper access to real time information about trades in the financial markets, the stock market boom, and the advertising of some broker-dealer firms.⁷⁵ The trading strategies at broker-dealer firms that promote day-trading advocate involve reacting to patterns in trading activity.⁷⁶

These new "day traders" traded for a living, but many of them were not classic professional market participants.⁷⁷ They often had no formal training in securities

^{70.} Certain Broker-Dealers Deemed Not To Be Investment Advisers, 70 Fed. Reg. 2716 (proposed Jan. 14, 2005).

^{71.} See, e.g., supra note 47.

^{72.} See, e.g., NASD MANUAL (CCH), Rules 1014, 1031 (2005), available at http://nasd.complinet.com/nasd/display/index.html (Membership and Registration Rules).

^{73.} *Id.* at Conduct Rule 2120 ("No member shall effect any transaction in, or induce the purchase or sale of, any security by means of any manipulative, deceptive or other fraudulent device or contrivance."). This language tracks the language of rule 10b-5. 17 C.F.R. § 240.10b-5.

^{74.} NASD MANUAL, *supra* note 72, at Conduct Rule 2110.

^{75.} LAWRENCE A. CUNNINGHAM, OUTSMARTING THE SMART MONEY 225-27 (2002).

^{76.} *Id.* at 226 ("Advertising lured day novices into day-trader classrooms, where newcomers were taught not to care anything about the business whose stock they trade. Lessons focused on technical trading strategies, the proven-to-be-impossible practice of predicting price movements from price history and other data.").

^{77.} NASD MANUAL, *supra* note 72, at Conduct Rule 2360(e) (defining a day trading strategy as "an overall trading strategy characterized by the regular transmission by a customer of intra-day orders to effect both purchase and sale transactions in the same security or securities."). The GAO has

trading, and in many ways, they seemed more like customers than professional securities dealers.⁷⁸ Many day traders were, and still are, clients of broker-dealer firms.⁷⁹ Other day traders are employees of broker-dealer firms.

During the 1990s, some broker-dealer firms arranged their relationships with their day traders differently. These firms made the traders principals of firms structured as limited liability companies. ⁸⁰ If these firms held no customer accounts and were members of an exchange, the firms were not required to become members of the National Association of Securities Dealers (NASD). ⁸¹ In addition to avoiding the burdens of NASD controls, the firms and the traders who became principals in those firms also discovered a mechanism for getting around the margin rules. Margin regulation applies to loans to customers, and not to transactions by principals using the firm's capital. ⁸² The SEC decided not to accept the firms' characterizations of their relationships with their day-trading principals. However, the fact that the new day traders could be customers, employees, or principals of broker-dealer firms may indicate more than that greedy broker-dealer firms were trying to take advantage of vulnerable gamblers in whatever way they could. This fact also illustrates that the distinction between professional and non-professional market participants was beginning to blur.

In response to this blurring of distinctions between professionals and customers, regulators reinforced the distinctions. The SEC and Congress worried that vulnerable investors were losing money because of inappropriate trading behaviour.⁸³ Arthur Levitt, then Chairman of the SEC, described the new day

defined day trading as "consistently both buying and selling the same securities intraday via direct access technology to take advantage of short-term price movements." U.S. GEN. ACCOUNTING OFFICE, GAO-02-20, SECURITIES OPERATIONS: UPDATE ON ACTIONS TAKEN TO ADDRESS DAY TRADING CONCERNS 4 (Nov. 27, 2001), available at http://www.gao.gov/new.items/d0220.pdf.

- 78. See Caroline Bradley, Disorderly Conduct: Day Traders and the Ideology of "Fair and Orderly Markets," 26 J. CORP. L. 63, 63-64 (2000).
- 79. See, e.g., Office of Compliance Inspections and Examinations, SEC, Report of Examinations of Day-Trading Broker-Dealers, § IIIB (Feb. 25, 2000), available at http://www.sec.gov/news/studies/daytrading.htm.
 - 80. See id. § IV.A.
- 81. See Securities Exchange Act of 1934, 17 C.F.R. § 240.15b9-1. This exemption was designed for exchange specialists. See, e.g., Arthur Levitt, Chairman of the U.S. Securities and Exchange Commission, Testimony Before the Senate Permanent Subcommittee on Investigations Committee on Governmental Affairs Concerning Day Trading (Sept. 16, 1999) [hereinafter Levitt Testimony], available at http://www.sec.gov/news/testimony/testarchive/1999/tsty2199.htm ("Although this exemption was intended primarily for exchange specialists, a number of day-trading firms are organized as LLCs and are using this exemption as a means to maintain membership only in the Phlx. About 12 to 15 day-trading firms are currently members only of the Phlx.").
- 82. See, e.g., Levitt Testimony, supra note 81 ("[W]hen day-trading firms are organized as LLCs and individual day traders contribute to the firm's capital, the day traders are permitted to trade using the firm's capital. These LLC firms typically participate in joint back office ("JBO") arrangements, which allow them to enhance their borrowing power. JBO arrangements have become popular because they allow day-trading firms to receive preferential margin treatment from their clearing firms. Specifically, a day-trading firm that participates in a JBO arrangement can receive credit from its JBO clearing firm on 'good faith' terms. As a result, the customer margin requirements found in Regulation T and SRO rules do not limit the extension of credit to a JBO participant. Rather, credit can be extended for up to 100 percent of the purchase price of the securities.") (footnote omitted).
 - 83. See Levitt Testimony, supra note 81.

traders as gamblers,⁸⁴ contrasting their behavior with the "speculative" behavior of professional market participants. The Permanent Subcommittee on Investigations also characterized day trading as gambling.⁸⁵

In response to the concerns of regulators and legislators, stock exchanges required principals of their member firms to pass the General Securities Representative Series 7 examination. 86 Traders claiming professional status should establish that status by passing an examination. Also, vulnerable potential customers of broker-dealers who tried to lure them into day trading should be protected by risk disclosures emphasizing that day trading was risky.⁸⁷ Further, NASD rules provide that firms which promote day trading strategies (directly or indirectly) should provide risk disclosures to their prospective non-institutional customers.⁸⁸ In addition, they should only approve customers for day trading accounts if they have "reasonable grounds for believing that the day-trading strategy is appropriate for the customer."89 NASD also requires a customer to have a minimum of \$25,000 equity in any day trading account. 90 In 2001, the General Accounting Office (GAO) found that day trading firms had responded to increased regulatory scrutiny and were tending to emphasize the risks associated with day trading. 91 Exchanges amended their margin rules to prevent firms and traders using business forms to avoid the consequences that would follow from the substance of their relationships. For example, the Philadelphia Stock Exchange now applies the margin rules to "margin accounts of customers, whether members, partners of members, member organizations or stockholders therein or non-members."92

^{84.} *See* Levitt, *supra* note 6. Websites that promote online betting may also invoke the rhetoric of professionalism: there are professional gamblers and non-professionals. *See*, *e.g.*, Professional Gambler.com, http://www.professionalgambler.com/ ("Sports betting as a business"). Gamblers can also bet on the financial markets. Spread betting firms such as the IG Group provide a means for people to bet on outcomes in the financial markets. *See*, *e.g.*, IG Index, Binary Betting, http://www.igindex.co.uk/content/so_binary.html (last visited Sept. 19, 2005).

^{85.} See Day Trading: Everyone Gambles But the House, Hearings before the Permanent Subcomm. on Investigations of the Committee on Governmental Affairs, 106th Cong. 106-505 (2000).

^{86.} *See*, *e.g.*, Self-Regulatory Organizations, Exchange Act Release No. 34-41776 (Aug. 20, 1999), 64 Fed. Reg. 47,214 (Aug. 30, 1999); Self-Regulatory Organizations, Exchange Act Release No. 34-41881 (Sept. 17, 1999), 64 Fed. Reg. 51,822 (Sept. 24, 1999); Self-Regulatory Organizations, Exchange Act Release No. 34-39874 (Apr. 14, 1998), 63 Fed. Reg. 19,990 (Apr. 22, 1998).

^{87.} See Order Approving Proposed Rule Change and Amendment No. 1 and Notice of Filing and Order Granting Accelerated Approval of Amendment No. 2 Relating to the Opening of Day-Trading Accounts, Exchange Act Release No. 34-43021, 65 Fed. Reg. 44,082 (July 17, 2000). See also Notice of Filing of Proposed Rule Change by the National Association of Securities Dealers, Inc., Relating to Opening of Day-Trading Accounts, Exchange Act Release 34-41875, 64 Fed. Reg. 51,165 (Sept. 21, 1999).

^{88.} For the content of the risk disclosure statement, see NASD MANUAL, *supra* note 72, at Conduct Rule 2361.

^{89.} Id. at Conduct Rule 2360.

^{90.} See, e.g., id. at Conduct Rule 2520(f)(8)(B)(iv)(a); NASD, Notice to Members 04-38, Credit Extension/Day Trading Requirements (2004), available at http://www.nasd.com/web/groups/rules_regs/documents/notice_to_members/nasdw_003091.pdf.

^{91.} See U.S. GEN. ACCOUNTING OFFICE, supra note 77, at 19.

^{92.} Philadelphia Stock Exchange (PHLX), Inc., Rules of the Board of Governors, Rule 722(b), *available at* http://www.cchwallstreet.com/PhiladelphiaStockExchangePHLX/RULESOFTHEBOARD OFGOVERNORS/default.asp (last visited Oct. 12, 2005).

Although the day trading rules seek to maintain clear lines between professionals and non-professionals, there is evidence that these lines are blurred. Day traders continue to operate, and they continue to believe that they are operating on the basis of expertise. They may not have clients who pay them for their professional services, but this type of erosion of traditional distinctions does not only occur in the financial markets. If new technologies encourage new working methods, it may be necessary to revisit the idea that there is a connection between professional activity and direct remuneration by a client. Programmers who collaborate on open software are not paid for their collaboration, but they likely apply at least the same standards of care to their work as they would if they were being remunerated directly.⁹³

Day traders are still trading. Moreover, day traders do not behave as we expect "normal" non-professional investors to behave. In a number of recent cases, non-day-trader investors have argued that day traders are not appropriate lead counsel under the Private Securities Litigation Reform Act (PSLRA)⁹⁴ because they are not "typical" investors and may be vulnerable to defences of non-reliance that would not apply to other investors.⁹⁵ If day traders are making investment decisions based on market price trends, rather than on the basis of specific information disclosed to the market by an issuer, they are not the typical fundamental value investor that securities regulation assumes. On the other hand, in securities fraud cases, investors are not required to prove that their investing decisions in fact took account of misleading statements to the market, or the omission of material facts. In an efficient market, the courts will allow investors to benefit from a presumption of reliance, subject to the defendant's proof that the investor did not in fact rely on material statements or omissions.⁹⁶

The idea that day traders are professionals still lingers. Some broker-dealer firms are encouraging people to become their clients as day traders, invoking the idea that the traders are engaging in a quasi-professional activity.⁹⁷ These firms buttress the

^{93.} Barak Richman characterizes this activity as "professional" activity. Richman, *supra* note 25, at 2361 ("In the open software movement, however, programmers abide by a professional community norm where participants do not demand direct compensation for their contributions."). On what collaboration on open source software might mean for organization theory, see Benkler, *supra* note 10. Benkler compares programmers to academics who participate in a professional enterprise of generating knowledge without being remunerated for individual contributions. *Id.* at 381-82.

^{94.} See 15 U.S.C. § 78u-4(a)(3) (2000).

^{95.} See, e.g., Pirelli Armstrong Tire Corp. Retiree Med. Benefits Trust v. LaBranche & Co., [2004 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶92,839, at ¶93,916 (S.D.N.Y. 2004) ("Specifically, CalPERS contends that Empire 'is a massive day-trading operation—using program trading to dart in and out of NYSE stocks in small trades, thousands of times a day' ..., and that, as an in-and-out trading entity, Empire is subject to unique defenses. Even assuming, arguendo, that Empire is either a day-trading operation or an in-out trader, courts differ as to whether such entities may serve as a lead plaintiff in a standard securities fraud class action involving alleged fraud on the market."); Taubenfeld v. Career Educ. Corp., [2003-2004 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶92,715, at ¶93,443 (N.D. Ill. 2004) ("Koontz and Margaritis attack Schroder's ability to serve as lead counsel on both typicality and adequacy grounds. Concerning typicality, Koontz and Margaritis claim that Schroder was a day trader, thereby making him atypical from the remaining members of the class and subject to certain unique defenses.").

^{96.} See, e.g., Basic v. Levinson, 485 U.S. 224, 241-50 (1988).

^{97.} See, e.g., Andrew Kezeli, Trade to Learn, Not to Earn..., PRISTINE VIEW, Summer/Fall 2004, at 3 (copy on file with author); Andrew Kezeli, Avoiding the Trading-in-Isolation Trap, PRISTINE

idea of day trading as a professional activity by describing their training programmes as "universities." Broker-dealer firms are not alone in this; other non-broker-dealer firms also describe themselves as trading universities. Although broker-dealers' advertising materials are subject to regulation by their SRO, the is not so clear that the same applies to non-broker-dealer firms' "training programmes." The SEC warns day traders that educational seminars and books about day trading may not be objective. When regulated broker-dealers make specific claims about the profits their clients will make from day trading, they may be subject to sanction. In the same way that general news articles are not treated as investment advice, generalized advice about trading strategies, in particular where that advice originates from firms that are not otherwise regulated as broker-dealers or investment advisers, may avoid regulatory controls.

Characterising day trading as a "professional" activity, as daytrading firms do,¹⁰⁴ responds to the concerns of those who worry that day traders may not understand that when they trade, they are competing in the markets with professional traders and institutional investors¹⁰⁵ who have greater financial and experiential resources. At the same time, the "professional" rhetoric may encourage prospective traders to be over-confident and to discount day trading risk warnings. These over-confident

VIEW, Winter/Spring 2005, at 16, 17, *available at* http://www2.pristine.com/PristineView/archive/PristineViewWinter2005.pdf ("Trading is a profession and at all times I want to treat it as such—even down to my morning 'commute,' the walk downstairs.").

- 98. See, e.g., PRISTINE VIEW, Winter/Spring 2005, at 14 (advertising the Pristine Trading University), available at http://www2.pristine.com/PristineView/archive/PristineViewWinter2005.pdf.
- 99. *See*, *e.g.*, Daytrading University, http://www.daytrading-university.com/ ("Disclosure: We are not an investment advisor, financial planner or registered broker. We provide realtime market analysis and educational services for active traders. You accept all liability resulting from your trading decisions. Daytrading is a speculative, high risk activity and is not suitable for many investors.").
- 100. See NASD MANUAL, supra note 72, at Conduct Rule 2210. For disciplinary proceedings involving this rule, see NASD Regulation, Inc., Office of Hearing Officers, Dep't of Enforcement v. Pac. On-line Trading & Sec., Inc., Disciplinary Proceeding No. C01000037 (Dec. 7, 2001), available at http://www.nasd.com/web/groups/enforcement/documents/oho_disciplinary_decisions/nasdw_00 6581.pdf; NASD Regulation, Inc., Office of Hearing Officers, Dep't of Enforcement v. Ellen M. Aleshire, Disciplinary Proceeding No. C8A010060 (June 12, 2002), available at http://www.nasd.com/web/groups/enforcement/documents/oho_disciplinary_decisions/nasdw_006 565.pdf.
- 101. See, e.g., U.S. GEN. ACCOUNTING OFFICE, SECURITIES OPERATIONS, DAY TRADING REQUIRES CONTINUED OVERSIGHT 21 (Feb. 24, 2000), available at http://www.gao.gov/new.items/gg00061.pdf ("SEC has also stated that it is concerned about Web sites that, although not operated by day trading firms, are trying to capitalize on day trading. Many of these sites appear to advertise the potential rewards of day trading by use of the sites' recommendation. SEC said it is looking into whether these sites are violating the federal securities laws."). Cf. Taucher v. Born, 53 F. Supp. 2d 464, 482 (D.D.C. 1999) (holding the statute requiring licensing of publishers of commodities trading advice to be unconstitutional as a prior restraint on speech).
- $102. \quad SEC, Day\ Trading:\ Your\ Dollars\ at\ Risk\ (Apr.\ 20,\ 2005), http://www.sec.gov/investor/pubs/daytips.htm.$
- 103. See, e.g., Press Release, NASD, NASD Regulation Charges All-Tech, Houtkin, and Others with Day Trading and Advertising Violations (July 17, 2000), available at http://www.nasd.com/web/idcplg?IdcService=SS_GET_PAGE&ssDocName=NASDW_011401.
 - 104. See Kezeli, supra note 97.
 - 105. See U.S. GEN. ACCOUNTING OFFICE, supra note 101, at 3.

prospective traders may have no trouble persuading a broker-dealer firm that day trading is a suitable investment strategy for them.

Day traders may be an extreme example of self-directed investors. But they are a useful illustration of how a combination of technological change, successful marketing, and entrepreneurial ambition can combine to challenge regulatory distinctions.

VI. SOPHISTICATED AND UNSOPHISTICATED MARKET PARTICIPANTS

Day traders are not the only investors whose conceptions of who they are are altered by technology. Day traders choose to engage with the new market for financial information, but other investors need to use the new information market because of other factors beyond their control. For example, changes in pension arrangements from defined benefit to defined contribution schemes mean that large numbers of workers rely on their investment decisions for their retirement. ¹⁰⁶ Social security privatisation would increase the number of people who would need to begin making more complicated investment decisions. In making these decisions, investors can rely on a range of different (and differently regulated) intermediaries, ranging from investment advisers to mutual funds to broker-dealers. Investors may decide to obtain some information from unregulated sources such as investment clubs, ¹⁰⁷ online chat rooms, and unregulated online and offline publications.

The investor who knows that she needs help in making investment decisions benefits from some regulatory protections. For example, broker-dealers are required to assess whether the investments and investment strategies they recommend to their clients are suitable for the clients. ¹⁰⁸ In making this determination, the broker-dealer is required to take into account the customer's financial condition and investment objectives. ¹⁰⁹ As with all financial regulation, there are problems with enforcement of the rules. Regulators sometimes express concern that financial firms are not as careful as they might be in their assessments of customers' experience and understanding. ¹¹⁰

^{106.} *Cf.* FINANCIAL SERVICES AUTHORITY, PENSIONS: CHALLENGES AND CHOICES: THE FIRST REPORT OF THE PENSIONS COMMISSION ¶ 11 (Jan. 2005), *available at* http://www.fsa.gov.uk/pubs/pensions/pensions_report1.pdf ("Helping people access the education, information and advice which they need in order to make appropriate financial decisions with confidence is central to the FSA's aims of protecting consumers, promoting public awareness of the financial system and maintaining market confidence. We provide a wide range of consumer materials and tools, including a consumer website, comparative tables (including a pensions table and an annuities table), an on-line pensions calculator and consumer leaflets."). *See also, e.g.*, Jeffrey J. Bailey et al., *A Review of Major Influences on Employee Retirement Investment Decisions*, 23 J. OF FIN. SERVICES RES. 149, 149-65 (2003) (summarizing four sets of social influences "so that researchers and policy makers can better understand all the influences affecting an employee when making retirement plan contribution and investment decisions").

^{107.} See, e.g., National Association of Investors Corporation (NAIC), http://www.better-investing.org/index.html (last visited Sept. 9, 2005).

^{108.} See, e.g., NASD MANUAL, supra note 72, at Conduct Rule 2310; text accompanying supra note 89.

^{109.} Id.

^{110.} See, e.g., FINANCIAL SERVICES AUTHORITY, EQUITY CONTRACTS FOR DIFFERENCE (CFDs)

Another investor may decide that he does not need to consult a broker in making his investment decisions. He may have lost trust in financial firms as a result of market scandals. He may think that he can make investment choices on his own and can take advantage of the lower fees brokers charge for non-discretionary accounts. In this case, the broker will generally not be assessing the suitability of the investor's investments, as brokers usually do not have duties to monitor their clients' non-discretionary accounts. After an investment goes badly, a customer may argue that he is less sophisticated than he originally seemed. An investor's ultimate assessment of an investment opportunity may differ dramatically from that same investor's initial assessment of the same opportunity. Unless the broker-dealer encourages the investor to adopt a particular investment strategy or guarantee, the performance of the investment in some way, there is no basis for arguing that the investor should not bear responsibility for his own decision.

Brokers who promote day-trading strategies have an obligation to make sure they only open day trading accounts for customers for whom day trading is suitable. However, it is unclear to what extent this enhanced suitability obligation extends to other investment strategies, ¹¹³ in particular where the investors decide on particular investment strategies as a result of information they obtain from sources other than the broker.

Increased availability of information about investments and investment strategies may encourage some investors to characterize themselves to their brokers as more sophisticated than they actually are. Some investors may decide to open non-discretionary accounts rather than discretionary accounts because they trust their own ability to make investment decisions. Some investors who feel most empowered, such as some online day traders¹¹⁴ and members of investment clubs,¹¹⁵

AND SPREAD BETTING THEMATIC PROJECT (May 18, 2005), available at http://www.fsa.gov.uk/pubs/other/cfds letter.pdf.

^{111.} See, e.g., Organisation for Economics Cooperation and Development (OECD), OECD's Financial Education Project: Background and Implementation, 87 FIN. MARKET TRENDS 223, 226 (Oct. 2004), available at http://www.oecd.org/dataoecd/28/36/33865427.pdf ("[C]onsumers ... may distrust financial institutions and anything to do with them.")

^{112.} See, e.g., De Kwiatkowski v. Bear, Stearns & Co., 306 F.3d 1293, 1302 (2d Cir. 2002) ("It is uncontested that a broker ordinarily has no duty to monitor a nondiscretionary account, or to give advice to such a customer on an ongoing basis. The broker's duties ordinarily end after each transaction is done, and thus do not include a duty to offer unsolicited information, advice, or warnings concerning the customer's investments. A nondiscretionary customer by definition keeps control over the account and has full responsibility for trading decisions. On a transaction-by-transaction basis, the broker owes duties of diligence and competence in executing the client's trade orders, and is obliged to give honest and complete information when recommending a purchase or sale. The client may enjoy the broker's advice and recommendations with respect to a given trade, but has no legal claim on the broker's ongoing attention.").

^{113.} *But see*, *e.g.*, NASD, Notice to Members 04-89, Liquefied Home Equity 3 (Dec. 2004), *available at* http://www.nasd.com/web/groups/rules_regs/documents/notice_to_members/nasdw_01 2714.pdf.

^{114.} See, e.g., Barber & Odean, supra note 45.

^{115.} See, e.g., Brad M. Barber & Terrance Odean, Too Many Cooks Spoil the Profits: Investment Club Performance, FIN. ANALYSTS J. 17 (Jan./Feb. 2000), available at http://faculty.haas.berkeley.edu/odean/papers/clubs/FAJ%20JF00%20Barber%20and%20Odean.pd f#search='barber%20and%20odean' (finding that investment clubs tended to underperform the market).

may in fact be much more vulnerable than they realize. Experience makes a difference in how investors behave. 116

Increasingly, financial regulators are focusing on the problem of how to help investors sort and analyse the information available to them. This leads regulators to suggest that disclosure requirements may need to be rethought. Regulators, trade associations, and inter-governmental organisations are promoting investor education initiatives. To rexample, Congress established the Financial Literacy and Education Commission to improve financial literacy in the United States, and to coordinate the actions of agencies interested in financial literacy. Individual agencies also dedicate resources to promoting financial education; for example, the SEC has an Office of Investor Education and Assistance. Also, central banks are using online games to educate people about monetary policy. For investors who are already online, these information resources are easily accessible. And for the careful investor who wants to know how to check on a broker or adviser she is thinking of hiring, the SEC offers several suggestions.

^{116.} Lo & Repin, *supra* note 42, at 329 ("The differences in response patterns for deviations and trend-reversals observed in this case indicate that less experienced traders may be more sensitive to short-term changes in the market variables than their more experienced colleagues.").

^{117.} See, e.g., James Fanto, We're All Capitalists Now: The Importance, Nature, Provision and Regulation of Investor Education, 49 CASE W. RES. L. REV. 105, 108 (1998). But see Hu, supra note 20. The U.K.'s Department for International Development has even set up a website at http://www.sendmoneyhome.org/, which allows people to compare the costs of different methods of sending remittances home. See Dep't for Int'l Dev., Sending Money Home? A Survey of Remittance Products and Services in the United Kingdom (Mar. 31, 2005), available at http://www.sendmoneyhome.org/NewFiles/Full%20report.pdf.

^{118.} See, e.g., Julie L. Williams, Acting Comptroller of the Currency, Remarks Before Women in Housing and Finance and The Exchequer Club, Washington, D.C. (Jan. 12, 2005), available at http://www.occ.treas.gov/ftp/release/2005-1a.pdf ("There's a critical element that's been missing from our consumer disclosure rulemaking processes—testing how consumers interpret particular disclosures and how to make disclosures usable to them. And we also need to think about how we can build in periodic reviews to determine if the disclosures are still desired and effective.").

^{119.} In the United Kingdom, the Institute of Financial Studies has developed programs to educate students aged from 14 to 19 in financial studies. *See* http://www.ifslearning.com/qualifications/age_14_-_19/index.cfm. *See also* Annual Report & Accounts of the Chartered Institute of Bankers, January-December 2004, at 3, *available at* http://www.ifslearning.com/institute/annual_report_2004/annualreport2004.pdf ("During 2004 the **ifs**' financial capability qualifications for schools, the only ones of their kind throughout the UK, were given a considerable boost when the Certificate in Financial Studies (CeFS) was awarded the full UCAS tariff for university admissions. Our qualifications are now on a par with all the others offered throughout the schools and colleges sector as pathways to a university education. This represents yet another first for the **ifs**.").

^{120.} See, e.g., OECD, Financial Education Project, supra note 111, at 223.

^{121.} *See* Fair and Accurate Credit Transactions Act of 2003 § 513, Pub. L. No. 108-159 (amending Fair Credit Reporting Act, 15 U.S.C. § 1681). *See also* Financial Literacy and Education Commission, http://www.mymoney.gov/ (offering financial information).

^{122.} See U.S. SEC, Investor Information, http://www.sec.gov/investor.shtml.

^{123.} See, e.g., Federal Reserve Bank of Boston, Peanuts and Crackerjacks, http://www.bos.frb.org/peanuts/leadpgs/intro.htm; Bank of Finland, Rahamuseo, http://www.rahamuseo.fi/english/multi_politiikka.html; Deutsche Bundesbank, School Service, http://www.bundesbank.de/bildung/bildung.en.php; Reserve Bank of New Zealand, MoPoS, http://www.rbnz.govt.nz/education/0116902.html.

^{124.} SEC, Protect Your Money: Check Out Brokers and Advisers,

Numerous private sector initiatives also focus on investor education and training. Some of these resources encourage caution. As an illustration, the Motley Fool provides access to information about a wide range of different issues from choosing a broker to budgeting. In addition, StockPatrol.com publishes reports on issuers and links to announcements by regulators and news stories about investing. Other private sector education resources are less inclined to promote caution. Daytrading firms' websites seek to educate people in day trading strategies. Private investor training programmes raise many of the same issues that investment advisor regulation and anti-fraud rules seek to address. Specifically, how can investors be sure that the training programmes, including software and (online and offline) courses, they pay for are in fact worth the money? Moreover, should the business of investor education be regulated? North American Securities Administrators Association (NASAA) regularly includes investment seminars in its list of top threats to investors.

However, focusing on regulating the firms that seek to educate investors is perhaps not the most effective way of ensuring that people are able to manage their money. Instead, we should focus more attention on educating investors, not just on educating those who seek out reliable sources for their information. Because financial services firms have started to build financial relationships with children, financial education must begin early. ¹³⁰ Children can have prepaid credit cards, ¹³¹ and firms use educational resources to develop relationships with young people that may become profitable later. ¹³² A serious investor education programme would require people to pass an exam before they may invest or before being allowed to invest in other than very basic ways. ¹³³

http://www.sec.gov/investor/brokers.htm.

- 125. See The Motley Fool, http://www.fool.com/ (last visited Sept. 8, 2005).
- 126. See, e.g., StockPatrol.com, http://www.stockpatrol.com/ (last visited Sept. 8, 2005).
- 127. *See*, *e.g.*, TerraNovaOnline at http://www.terranovaonline.com/TNO_EDU/HomeEDU.asp (last visited Dec. 8, 2005).
- 128. James Fanto notes that investor education in the United States is "a market commodity supplied by a bewildering number of providers, both profit-making, nonprofit and even governmental, who offer it to different kinds of people (e.g., children, adults, sophisticated, unsophisticated) in different ways." James A. Fanto, *Comparative Investor Education*, 64 BROOK. L. REV. 1083, 1100 (1998)
- 129. See, e.g., NASAA, supra note 31. Investment seminars did not make this top 10 list for 2005 but were given a "dishonorable mention." *Id.*
- 130. Cf. Fanto, supra note $\frac{2}{K}$, at 1100 ("The U.S. educational system generally provides investor education to young people but not in a standardized way. Its provision varies from state to state, often appearing in a basic economic or finance class or in a revised home economics course.").
- 131. One example is the AllowCard, described at http://www.allowcard.com/("A new way to pay. It's called the Allow Card—and it's changing the relationship between children and parents, building a strong foundation of trust, understanding, financial freedom and responsibility.").
- 132. Columbia Funds has an educational website geared to children and young people, including games, and information about mutual funds. Columbia Funds, *YoungInvestor*, http://www.younginvestor.com/ (last visited Sept. 8, 2005).
- 133. See, e.g., Stephen Choi, Regulating Investors Not Issuers: A Market-Based Proposal, 88 CAL. L. REV. 279, 311 (2000).

VII. CONCLUSION

Regulatory distinctions incorporate implicit, as well as explicit, understandings of technological conditions. This article argues that three distinctions at the heart of current securities regulation in particular are challenged by technological development. It is increasingly difficult to distinguish between traditional news sources and regulated investment publications, between professional and non-professional market participants, and between sophisticated and unsophisticated investors. Changing patterns of information-gathering and decision-making by investors require revisiting core assumptions of securities law; specifically, the assumptions that only rational investors deserve statutory protections; that impersonal trading advice is not "investment advice"; and, that it is easy to distinguish between professional and non-professional and sophisticated and unsophisticated investors.

The changing world in which online investors are operating raises real questions about whether traditional securities regulation can effectively protect investors. Although legislators and regulators are building resources for educating investors for the financial decisions they need to make, non-governmental entities are actively involved in educating and training investors as well. Investors who take advantage of all of the informational resources available to them are likely to believe that they are empowered investors. However, the investors who believe in their own empowerment may, in fact, be vulnerable to being misled and cheated by those who have trained them.