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PREDICTION MARKETS AND THE FIRST AMENDMENT

Miriam A. Cherry*

Robert L. Rogers**

The continuing development of prediction markets is important because of their success in foretelling the future in politics, economics, and science. In this article, we identify the expressive elements inherent in prediction markets and explore how legislation such as the Unlawful Internet Gambling Enforcement Act of 2006 might harm such predictive speech. This article is the first to explore First Amendment protections for prediction markets in such depth, and in so doing, we distinguish prediction markets from other regulated areas such as gambling, commodities, and securities trading. The article's examination of prediction markets also illustrates the limitations of current commercial speech doctrine. We conclude by discussing how the executive, legislative, and judicial branches might resolve the First Amendment challenges of regulating prediction markets, and we propose a new legal test, modeled on existing free speech jurisprudence, which may assist courts in adjudicating any constitutional challenges.

Thine oracle, in vain to be,
Oh wherefore am I thus consign'd,
With eyes that every truth must see,
Lone in the City of the Blind?¹

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1. JOHAN CHRISTOPH FRIEDRICH SCHILLER, *Cassandra*, in THE POEMS AND BALLADS OF SCHILLER 98, 100 (Lord Lytton Edwards trans., 1887).

In 2006, Congress passed The Unlawful Internet Gambling Enforcement Act, aimed at ending Internet gambling.² Although perhaps not its intent, the bill creates further legal uncertainty for prediction markets, an emerging technology that allows thousands of people to join together to make predictions about the future in a market-based setting. These prediction markets, unlike many other economic activities, contain important elements of speech and expression and therefore should be accorded substantial First Amendment protection. This article explores the interplay between this emerging technology, the First Amendment, and the recent gambling legislation. The article also discusses how many traditional models of regulation, including the regimes governing gambling, securities law, and commodities trading, fit poorly with this new form of collaborative information gathering. Taken as a whole, this article's examination of prediction markets also helps to shed light on the limitations of current commercial speech doctrine. To overcome the clash between the First Amendment and regulatory efforts, this article provides specific recommendations regarding the ways in which the Executive Branch, Congress, and the courts can help resolve the conflict between the First Amendment and restrictions on prediction markets, including a proposal for a judicial test modeled on existing First Amendment principles.

Although gambling websites were prevented from operating in the United States under the Department of Justice's interpretation of the Wire Act before the October 2006 legislation,³ many companies had side-stepped this interpretation by relocating their businesses offshore. The October 2006 legislation foreclosed that option by preventing credit card companies from making payments to gambling websites, regardless of their location.⁴ Although analysts certainly can debate the merits of this recent crackdown⁵—perhaps designed as an appeal to the religious right

2. Security and Accountability For Every Port Act of 2006, Pub. L. No. 109-347, § 802, 120 Stat. 1884, 1952 (to be codified at 31 U.S.C.A. § 53 (West Supp. 2007)). The provisions regarding internet gambling were tacked on to a bill that primarily dealt with the issue of port safety. For a brief preliminary discussion of the contents of the bill, see I. Nelson Rose, *Viewpoint: The Unlawful Internet Gambling Enforcement Act of 2006 Analyzed*, 10 GAMING L. REV. 537 (2006).

3. See 18 U.S.C. § 1084 (2000 & Supp. 2004); Christine Hurt, *Regulating Public Morals and Private Markets: Online Securities Trading, Internet Gambling, and the Speculation Paradox*, 86 B.U. L. REV. 371, 414 (2006).

4. 31 U.S.C.A. § 5364 (West Supp. 2006). In an action that has received surprisingly little law review commentary, Antigua is currently fighting the United States in the WTO on the effect of the internet gambling ban. See Kelly A. Tran, *The WTO Appellate Body Gambles on the Future of the GATS: Analyzing the Internet Gambling Dispute Between Antigua and the United States Before the World Trade Organization*, 6 APPALACHIAN J.L. 165, 165-66 (2006).

5. In this article, our focus is the effect of the internet gambling ban on prediction markets. Whether the decision to ban certain forms of gambling is a wise policy choice is beyond the scope of this article. At the same time, we do note the concern that money that once went to online casinos may ultimately support organized crime. See Peter Sanders, *Why the Local Bookie Could Be a Big Winner in 2007 Super Bowl*, WALL ST. J., Jan. 31, 2007, at B1 (noting that government crackdown is not eliminating gambling, just driving it underground). In addition, it is important to realize that currently, our system of regulating gambling itself is a patchwork, including jurisdictions that allow all

before the November 2006 congressional elections⁶—the fact is that this legislation has far-reaching consequences in ways that Congress probably did not intend.⁷ One of those unintended consequences may be the inhibition of prediction markets.

Prediction markets, also known as information markets or idea futures,⁸ are a relatively new technology that allows many individuals to express their opinions in a market setting. By letting people put “their money where their mouth is,” information markets encourage thousands of people to join together in cyberspace to predict future events.⁹ These markets are more than games of chance or entertainment, given that they draw on the unique information, knowledge, and skills that individual participants bring with them to the market.¹⁰ Prediction markets distill participants’ views into a collective wisdom and in so doing, advance utilitarian goals, creating social welfare and monetary value that go beyond the amounts invested in the markets. Prediction markets are not subject to many of the ills traditionally associated with gambling, given the lack of involvement by organized crime, the small monetary sums involved, and the minimal risk of addiction.¹¹ Yet, in the congressional zeal to stamp out Internet gambling, information markets are in danger of being trampled.

Because of the expressive element inherent in prediction markets, we contend that one’s participation in such a market is often entitled to First Amendment protection. Each person who participates in an information market is, in essence, offering his or her opinion on the outcome of an uncertain future event. A survey of the markets currently operating shows that they have tended to cluster in certain areas, predicting political events, current events, as well as developments in entertainment,

sorts of gambling, those that forbid gambling, and those that engage in state-sponsored gambling in the form of lotteries. See generally Frederick Preston et al., *Gambling as Stigmatized Behavior: Regional Relabeling and the Law*, 556 ANNALS AM. ACAD. POL. & SOC. SCI. 186 (1998) (discussing different gambling laws across states and time). Without delving too far into the policy debate, one could plausibly argue that the prohibitions against gambling have been fading and that many of those prohibitions may not conform to the stated rationales for them. See *infra* Part III.A.

6. See, e.g., Anna Palmer, *Online-Gambling Interests Lose 10-Year Fight*, LEGAL TIMES, Oct. 9, 2006, at 13 (describing lobbying fight as a “huge victory for social conservative groups”).

7. Even after the bill, the furor over internet gambling continues, with the Department of Justice subpoenaing investment banks that had underwritten the initial public offerings of several overseas gambling companies. See Andrew Ross Sorkin & Stephanie Saul, *Gambling Subpoenas on Wall St.*, N.Y. TIMES, Jan. 22, 2007, at C1.

8. Tom W. Bell, *Prediction Markets for Promoting the Progress of Science and the Useful Arts*, 14 GEO. MASON L. REV. 37, 39 nn.18–21 (2006) (listing different terminology used for the markets). Although in this article we tend to use “prediction market” and “information market” interchangeably, the term “prediction market” may be less confusing, as “information market” potentially conjures the specter of the sale of personal information on the internet or data mining, which, while important issues, are wholly unrelated to our project.

9. See MICHAEL ABRAMOWICZ, PREDICTOCRACY 1–8 (forthcoming 2008) (draft on file with authors).

10. CASS R. SUNSTEIN, INFOTOPIA: HOW MANY MINDS PRODUCE KNOWLEDGE 103–45 (2006).

11. See *infra* Part III.

science, and technology.¹² Currently, more than a third of the publicly traded information markets work to predict the outcomes of elections and newsworthy issues.¹³ These subjects are all areas of public concern, as that term is traditionally used in First Amendment jurisprudence, and indeed, many of these subjects involve areas of core political speech. In addition to the speech rights of the individual participants, information markets as a whole generate predictions that are a form of “metaspeech” that should also be allowed to flourish.

Although several other commentators have offered preliminary identification of the existing regulatory regimes—commodities trading, securities regulation, and gambling laws—that might be applied to information markets,¹⁴ there has been little discussion of the interaction of prediction markets with the First Amendment.¹⁵ Certain characteristics of prediction markets, such as their reliance on information, skill, and knowledge, make them different from gambling or other games of chance, or even from games of mixed skill and chance, such as poker. Prediction markets are also different from traditional stock markets, which exist for the purpose of raising capital and sharing risk and reward among investors. And certain characteristics of information markets set them apart from commodities markets, which are designed to allow entities to engage in hedging strategies to manage their risk exposure.¹⁶

In Part I, we provide a brief background on the workings of prediction markets and an analysis of how the provisions of the recent Internet gambling bill might affect them. In Part II, we identify some of the expressive interests at stake in a prediction market, both by the individual participant and, intriguingly, by the market itself. Then, in Part III, we address the commodities, securities, and gambling laws—arguably areas

12. Miriam A. Cherry & Robert L. Rogers, *Markets for Markets: Origins and Subjects of Information Markets*, 58 RUTGERS L. REV. 339, 351–53, 372–75 (2006) [hereinafter Cherry & Rogers, *Markets for Markets*] (surveying topics of prediction markets).

13. *Id.*

14. Tom W. Bell, *Gambling for the Good, Trading for the Future: The Legality of Markets in Science Claims*, 5 CHAP. L. REV. 159, 164–77 (2002) [hereinafter Bell, *Legality of Markets*] (providing preliminary discussion of regulatory models); Tom W. Bell, *Prediction Markets for Promoting the Progress of Science and the Useful Arts*, 14 GEO. MASON L. REV. 37, 59–92 (2006) [hereinafter Bell, *Promoting the Progress*] (providing overview of regulatory models potentially applicable to scientific prediction markets, and concluding that common law contract and tort remedies would suffice in terms of regulation); Robert W. Hahn & Paul C. Tetlock, *A New Approach for Regulating Information Markets*, 29 J. REG. ECON. 265, 269–79 (2006) [hereinafter Hahn & Tetlock, *A New Approach*] (discussing models of regulation and advocating CFTC oversight for such markets); Paul Architzel, *Event Markets Evolve: Legal Certainty Needed*, FUTURES INDUSTRY MAG., Mar.–Apr. 2006, at 50, 53, available at <http://www.futuresindustry.org/fimagazi-1929.asp?a=1106> (advocating for CFTC oversight); Robert Hahn & Paul Tetlock, *Short Odds for Ignorance*, N.Y. TIMES, Oct. 9, 2006, at A17 (brief op-ed piece persuasively arguing for CFTC regulation). None of these articles, however, contains more than a passing mention of the expressive elements of prediction markets.

15. The discussion to date is a brief website post by Robin Hanson. Professor Hanson is a visionary in the field of information markets, and on his website he argues that participation in an information market should be considered expression. See Robin Hanson, *Policy Markets Should Be Free Speech*, <http://hanson.gmu.edu/iffreespeech.html> (last visited Nov. 15, 2007).

16. See *infra* Part III.

of law that some might regard as offering models for regulating information markets—but also, importantly, discuss the expressive elements that distinguish prediction markets from these regulated areas. In Part IV, we discuss two models of First Amendment regulation, expressive conduct and commercial speech, that might at first seem to be applicable. However, because prediction markets are different from the “usual” speech addressed by those doctrines, they call into question the traditional ways that the commercial speech doctrine has been conceptualized. Finally, in Part V, we explore how the legal uncertainties surrounding information markets could be alleviated—through regulatory, statutory, and judicial solutions.

I. BACKGROUND: A TRUE MARKETPLACE OF IDEAS

Oliver Wendell Holmes’s analogy of free speech as “a marketplace of ideas” is compelling because it describes an environment in which speakers and listeners in search of truth can place value upon and choose between competing thoughts.¹⁷ Through the technological advances that led to information markets, Holmes’s analogy is transformed into a setting where predictions compete in cyberspace, an aggregation of many individual ideas and thoughts into a market price that expresses the collective knowledge of the group.¹⁸ In this section, we provide a brief background on how prediction markets work and the various subjects that they cover. In the second section, we discuss the potential impact of the recent internet gambling bill on these markets.

A. *How Prediction Markets Work and the Subjects They Cover*

As noted previously, prediction markets organize and aggregate individual knowledge into a collective result. Each individual who is a trader in the information market acts to maximize his or her own reward. At the same time, the organizers of the market organize the results and harvest the valuable information that individuals have generated. In his popular book, *The Wisdom of Crowds*, James Surowiecki explains numerous ways in which such collective knowledge can be employed.¹⁹ Whether individuals are asked to estimate the location of a sunken submarine,²⁰ to guess the weight of an ox,²¹ or to help a contestant on the game show *Who Wants to Be a Millionaire*,²² groups provide accurate an-

17. *Abrams v. United States*, 250 U.S. 616, 630 (1919) (Holmes, J. dissenting).

18. For a broad overview of free speech rights in cyberspace, see MIKE GODWIN, *CYBER RIGHTS: DEFENDING FREE SPEECH IN THE DIGITAL AGE* 13–23 (1998) (listing and describing free speech rights in the digital age).

19. JAMES SUROWIECKI, *THE WISDOM OF CROWDS* xiv, 3–4 (2004).

20. *Id.* at xx–xxi.

21. *Id.* at xi–xiii.

22. On the television program *Who Wants to Be a Millionaire*, contestants had to answer trivia questions in a multiple-choice format. Each contestant had several “lifelines” that they could use, in-

swers to questions that most individuals would not be able to answer on their own. In a prediction market, individuals are given incentives to trade and contribute their knowledge in a formalized setting.

The theory behind prediction markets is loosely related to the semistrong version of the efficient market hypothesis (EMH), which holds that, in a properly functioning capital market, the prices of securities will reflect all relevant publicly available information.²³ The price of a security on the market encodes a significant amount of information, including beliefs about the efficacy of management, the potential for future products, or market expansions.²⁴ In other words, most markets have a “price discovery” function, aggregating information and predictions into the current price of that security.²⁵ In traditional capital markets, however, the information-seeking aspects are, to a certain degree, by-products of trading and raising capital. In contrast, this information seeking is the main reason for the prediction market’s existence.

At present, numerous information markets are successfully making predictions. Among the most notable, especially during the past two hotly contested presidential elections, is the Iowa Electronic Markets (IEM).²⁶ The IEM, started in 1988 by professors at the University of Iowa Business School, has been operating since that time to predict the outcomes of various elections.²⁷ An individual trader is limited to a \$500 investment, so although the financial stake of any one person in the outcome is modest, each still has a financial incentive for making a correct prediction.²⁸

cluding narrowing the options, telephoning a friend, and polling the audience. Although the first two options were often helpful, the audience for the television program was the most helpful of all, achieving a ninety-one percent success rate. *Id.* at 3–4; cf. Saul Levmore, *Conjunction and Aggregation*, 99 MICH. L. REV. 723, 734 n.22 (2001) (providing *Who Wants to Be a Millionaire* poll of the audience as illustration of the Condorcet Jury Theorem).

23. Eugene F. Fama, *Efficient Capital Markets: A Review of Theory and Empirical Work*, 25 J. FIN. 383, 383 (1970); Ronald J. Gilson & Reinier H. Kraakman, *The Mechanisms of Market Efficiency*, 70 VA. L. REV. 549, 552–53 (1984).

24. See Fama, *supra* note 23, at 383.

25. See generally Michael T. Chng, *A Model of Price Discovery and Market Design: Theory and Empirical Evidence*, 24 J. FUTURES MARKETS 1107, 1108–10 (2004) (describing price discovery function performed by derivatives markets).

26. See, e.g., Erin Jordan, *Iowa Electronic Markets Yield Near-Accurate Result*, DES MOINES REG., Nov. 10, 2004, at 5B. The IEM trades at <http://www.biz.uiowa.edu/iem/>.

27. Joyce Berg et al., *Results from a Dozen Years of Election Futures Markets Research 1* (Nov. 2000), http://www.biz.uiowa.edu/iem/archive/BFNR_2000.pdf [hereinafter Berg et al., *Results*]. The IEM has also expanded into predictions further afield from its base of political predictions. *Id.* at 7 n.10; Erin Jordan, *U of I Markets Tapped to Predict Flu Activity*, DES MOINES REG., Nov. 22, 2004, at B1.

28. See Saul Levmore, *Simply Efficient Markets and the Role of Regulation: Lessons from the Iowa Electronic Markets and the Hollywood Stock Exchange*, 28 J. CORP. L. 589, 589 (2003) [hereinafter Levmore, *Simply Efficient Markets*].

The IEM has predicted the outcomes of elections more accurately than polls have, beating the polls seventy-six percent of the time.²⁹ This accuracy occurs despite the fact that researchers at the University of Iowa have concluded that many of the market participants exhibit a strong bias toward one candidate or other.³⁰ Apparently, the market is able to correct for these biases through arbitrage.³¹ Sensing an opportunity for profit, arbitrageurs temper the ideological biases that some of the participants bring with them when they invest in the IEM.³²

Other similar political prediction markets have appeared to predict the outcome of elections in Austria,³³ Germany,³⁴ and Canada.³⁵ While the IEM is run by an educational institution, some election markets are run by for-profit companies. For example, Intrade, a commercial information market, correctly predicted the outcome of the 2006 congressional elections with more success than many television analysts.³⁶ Intrade is currently allowing participants to trade predictions about the outcome of the 2008 presidential election.³⁷ In addition to elections, a significant number of markets make predictions about current events, including politics, news, and the entertainment industry.³⁸

The scientific community also uses prediction markets to gauge everything from the progress of stem-cell research to the timetable for the availability of human cloning.³⁹ Public health experts, for example, are using a real-money information market to predict the likelihood of an

29. Joyce Berg et al., Accuracy and Forecast Standard Error of Prediction Markets 12–13, 33 tbl.3 (July 2003), <http://www.biz.uiowa.edu/iem/archive/forecasting.pdf> [hereinafter Berg et al., Accuracy].

30. Berg et al., Results, *supra* note 27, at 5. The average trader is younger, more likely to be a white male of a higher socioeconomic status than the average voter. Berg et al., Accuracy, *supra* note 29, at 12.

31. 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, 140 n.15 (2002) (defining arbitrage as the “process by which informed traders buy or sell in such a way as to eliminate any mispricing caused by uninformed trading,” so that, for example, “when a stock becomes overvalued because uninformed traders are bidding it up, informed traders would sell, hence moving the price back to its rational expectations equilibrium”).

32. Berg, et al., Results, *supra* note 27, at 5–6.

33. Austrian Political Stock Markets / Austrian Electronic Markets, <http://www.imw.tuwien.ac.at/apsm> (last visited Oct. 30, 2007) (information markets predicting outcomes of Austrian elections).

34. Int'l IT Mktg. Ltd., *Financial Times Deutschland State Interactive Online Prediction Markets*, May 17, 2007, <http://www.pr9.net/comp/development/5575.html> (last visited Mar. 11, 2008) (describing online prediction markets, including prediction markets for German political races, offered by Financial Times Deutschland).

35. Univ. of B.C. Sauder Sch. of Bus., Election Stock Market, <http://esm.ubc.ca> (last visited Oct. 30, 2007) (information market predicting outcomes of Canadian elections).

36. David Leonhardt, *Odds Are, They'll Know '08 Winner*, N.Y. TIMES, Feb. 14, 2007, at C1.

37. *Id.* at C6.

38. Cherry & Rogers, *Markets for Markets*, *supra* note 12, at 351–53, 372–75 (providing survey of the subject matter of prediction markets).

39. *Id.* at 348–49, 361, 374.

avian-flu epidemic; the Robert Wood Johnson Foundation has donated nearly \$250,000 to this effort.⁴⁰

Prediction markets can cover questions ranging from the narrow to the extremely broad. The software company Rite-Solutions, for instance, uses an internal prediction market for its business planning.⁴¹ And for truly big-picture topics—such as the survival of humanity until the year 2100—Long Bets, funded partly by Amazon.com's Jeff Bezos, lets anyone articulate a prediction and open it up to the market.⁴² (Although Long Bets uses real money, the awards go to a charity that the winner selects.)⁴³ Participants on Long Bets include Britain's astronomer royal Martin Rees, the computer scientist Mitchell Kapor, the physicist Freeman Dyson, and the *New York Times* journalist John Tierney.⁴⁴

Information markets, in short, are a legitimate undertaking, with reputable participants making predictions on subjects that matter. If these markets continue to develop, the future could bring remarkably accurate predictions in a number of areas of importance to the legal community, including Supreme Court decisions and administrative outcomes.⁴⁵ The potential subject matter for information markets may, ultimately, only be constrained by the limits of human collective knowledge.⁴⁶

B. Recent Internet Gambling Legislation

Unfortunately, recent legislation, to the extent that it applies to information markets, may create further legal uncertainty that could impede the growth of this important innovation. In October 2006, Congress passed the Unlawful Internet Gambling Enforcement Act of 2006 (Act).⁴⁷ The Act was meant to restrict the use of credit cards in Internet gambling. In general, it bans persons engaged in the business of betting or wagering from accepting, in connection with the participation of an-

40. Mike Stobbe, *Health Experts Bet on Spread of Bird Flu*, WASHINGTONPOST.COM, Mar. 1, 2007, <http://www.washingtonpost.com/wp-dyn/content/article/2007/03/01/AR2007030100164.html>.

41. William C. Taylor, *Here's an Idea: Let Everyone Have Ideas*, N.Y. TIMES, Mar. 26, 2006, at C3.

42. John Tierney, *Can Humanity Survive? Want to Bet on It?*, N.Y. TIMES, Jan. 30, 2007, at F1. Long Bets can be visited at www.longbets.org.

43. Tierney, *supra* note 42, at F1.

44. *Id.* at F1–F2.

45. See Michael Abramowicz, *Information Markets, Administrative Decisionmaking, and Predictive Cost-Benefit Analysis*, 71 U. CHI. L. REV. 933, 934 (2004) (proposing use of information markets to aid in administrative decision-making process); Miriam A. Cherry & Robert L. Rogers, *Tiresias and the Justices: Using Information Markets to Predict Supreme Court Decisions*, 100 NW. U. L. REV. 1141, 1142–43 (2006) [hereinafter Cherry & Rogers, *Tiresias and the Justices*] (proposing Supreme Court prediction market).

46. Cherry & Rogers, *Tiresias and the Justices*, *supra* note 45, at 1195. Prediction markets may also help establish the limits of that knowledge.

47. The Act was part of the Security and Accountability for Every Port Act of 2006, Pub. L. No. 109-347, 120 Stat. 1884, 1952 (codified at 31 U.S.C.A. §§ 5361–5367 West Supp. 2007).

other person in “unlawful Internet gambling,”⁴⁸ the use of credit cards, electronic funds transfers, and checks from a financial institution.⁴⁹ Remedies include civil actions by attorneys general, both state and federal, to obtain injunctive relief⁵⁰ and criminal penalties of fines and imprisonment up to five years.⁵¹ No explicit private right of action exists.⁵²

Many real-money prediction markets use credit cards, and to some observers, the activities may seem akin to gambling. (We later discuss why there are important differences that the law should recognize.) In light of these surface similarities, one might initially fear that the bill would significantly harm prediction markets. Indeed, some of the earliest commentary on the Act expressed exactly these sorts of fears.⁵³ Such concerns are understandable and may ultimately prove prophetic. Moreover, even if prediction markets ultimately are not covered by this law, the very fact such fears exist is significant because it may chill investment, development, and participation in such markets. The legal uncertainty is itself an impediment to the development of this field.

Fortunately, however, several statutory elements can give at least some relief to those who wish to see information markets develop, as well as make it less likely that federal prosecutors will unthinkingly treat prediction markets as just another form of gambling. And for the courts that may ultimately have to pass judgment on the constitutionality of the Act, this statutory language—if interpreted wisely—can avoid the constitutional issues that would otherwise result and thus potentially save the statute from what otherwise might be fatal First Amendment problems.

As one of the first limiting elements, the Act, as a rule of construction, provides that nothing in the Act “shall be construed as altering, limiting, or extending any Federal or State law or Tribal-State compact prohibiting, permitting, or regulating gambling within the United States.”⁵⁴ The term “gambling” is not defined in the act, so its definition may have to be worked out over time.⁵⁵ Yet, however “gambling” is ultimately de-

48. “Unlawful Internet gambling” is defined in general to mean “to place, receive, or otherwise knowingly transmit a bet or wager by any means which involves the use, at least in part, of the Internet where such bet or wager is unlawful under any applicable Federal or State law in the State or Tribal lands in which the bet or wager is initiated, received, or otherwise made.” 31 U.S.C.A. § 5362(10)(A) (West Supp. 2007). We discuss this definition in detail below.

49. *Id.*

50. *Id.*

51. *Id.*

52. With this bill we would be surprised to see the creation of a private right of action, if only because the statutory interests created seem to belong to governmental bodies rather than to any particular class of the public. See generally *Cort v. Ash*, 422 U.S. 66 (1975).

53. Robert Hahn & Paul Tetlock, Op.-Ed., *Short Odds for Ignorance*, N.Y. TIMES, Oct. 9, 2006, at A17 (“The bigger economic story is how this act, by effectively prohibiting Internet betting, could unintentionally slow the emergence of new tools that have the potential to improve the productivity of the private sector and the government. Sadly, this is an aspect of the measure that both its supporters and its opponents seem to have overlooked.”).

54. 31 U.S.C.A. § 5361(b).

55. One reasonable possibility is for a court to apply the definition of “unlawful Internet gambling” from 31 U.S.C. § 5362(10) to derive a definition of “gambling” for purposes of this act. Under

finer, the implication is that to the extent an information market was permissible under U.S. law before the passage of the act, the information market remains legal. This is significant because a large number of successful information markets such as the IEM came into existence under the pre-Act regulatory regime. For these markets, the Act may have no effect at all. Other markets have more to worry about,⁵⁶ but it is worth noting that a significant number of information markets may be able to continue operations unscathed, particularly if they appear to be academic undertakings or use play (virtual) money.⁵⁷

In addition, various definitions in the Act suggest that it should not apply to many common types of prediction markets. These include some of the markets of perhaps the greatest academic interest, including the IEM and proposed markets relating to Supreme Court decisions or administrative outcomes.⁵⁸ To reach this conclusion, we analyze the definition of “bet or wager” (a key term in the statutory prohibition, as discussed above) and address the various exemptions from this definition.

1. *Meeting the Definition?*

In key part, the law states that “bet or wager” means the staking or risking by any person of something of value upon the outcome of a contest of others, a sporting event, or a game subject to chance, upon an agreement or understanding that the person or another person will receive something of value in the event of a certain outcome.⁵⁹

What does this mean? Some types of contracts seem obviously covered, regardless of their occurrence in a setting denominated as a “prediction market.” Examples might include transactions, whether in tradable securities or otherwise, such as the following:

- “I will give you \$20 if Dartmouth beats the University of Texas in next Saturday’s football game, and you will give me \$20 if Dartmouth does not.”⁶⁰

such an attempt, the most likely definition of “gambling” would be “to place, receive, or otherwise knowingly transmit a bet or wager,” with “bet or wager” being defined by 31 U.S.C. § 5362(1).

56. Tradesports, for example, settled a regulatory challenge from the Commodities Futures Trading Commission, discussed in Part III, *infra*. For information markets that encountered problems under the pre-Act regime, the Act may well pose significant new problems.

57. If nothing else, the current legality of a market is an argument that may persuade a credit card company to continue processing payments or the Act’s enforcers at the Department of Justice to refrain from prosecutions.

58. See *supra* note 45.

59. 31 U.S.C.A. § 5362(1)(A). The law specifies that this general definition includes the purchase of a chance to win a lottery, the types of schemes in 28 U.S.C. § 3702 (that is, government-sponsored betting on sports games), and the instructions pertain to the establishment or movement of funds to an account with the business of betting or wagering. See 31 U.S.C.A. § 5362(1)(B)–(D).

60. We are aware, of course, that the two football teams of our alma maters, fine as they may be, are unlikely to ever engage in such a contest.

- “I bet \$20 that Boxer X will defeat Boxer Y in the fight next week.”
- I put down \$20 to spin a roulette wheel in cyberspace.

These sorts of transactions contain a person (1) staking or risking something of value (2) upon a contest of others, a sporting event, or a game subject to chance, (3) with the agreement that this person will get something of value in the event of a certain outcome. This may seem relatively straightforward, but it is important to recognize how much of the workings of many prediction markets do not meet at least one of these requirements, and thus would not be subject to regulation.

First, any market that does not risk “something of value” would not be included. Although the phrase “something of value” is undefined, most likely it means money or some other tangible good, not intangibles such as a person’s time, reputation, or emotional satisfaction.⁶¹ The use of “thing” in the phrase “something of value” suggests this conclusion, and were it otherwise, the law would dramatically expand to cover such activities as an athlete risking happiness on the outcome of playing basketball with friends, playing board games with one’s family, and other common activities that Congress almost certainly did not intend to regulate.⁶² Such an interpretation would dramatically expand the scope of the statute, lead to absurd results, and seems far removed from the common understanding of “gambling” that apparently motivated Congress. If the more limited interpretation is correct—and we think it is, both objectively and as a way to avoid constitutional problems that would result from a broader alternative—it follows that any prediction market that did not use money or another tangible form of reward would not fall under this legislation. Examples of such markets include Blogshares,⁶³ Celebdaq,⁶⁴ and the Foresight Exchange.⁶⁵

Second, any predictive guess that did not rest upon the outcome of “a contest of others, a sporting event, or a game subject to chance” would not be covered. This arguably excludes many of the most socially valuable prediction markets dealing with subjects of politics, economics, or current events. Of the three categories of activities that would be re-

61. Indeed, the statute itself specifies that “value” does not include “personal efforts” in playing the game or obtaining access to the Internet, 31 U.S.C.A. § 5362(1)(E)(viii), but this specific exclusion should not be able to create coverage not provided by the definition. In other words, this specific exemption seems best interpreted as an attempt to clarify specifically that personal efforts were not included, not as a suggestion that other nontangible rewards (such as emotional satisfaction, admiration of peers, sense of fulfillment, and the like) are covered within the meaning of “value.”

62. Congressional intent can be multifaceted, of course, but in this case, the legislative concern seems to have been about offshore gambling websites. See, e.g., 152 CONG. REC. E2152–53 (daily ed. Dec. 8, 2006) [hereinafter *Bachus Speech*] (statement of Sen. Bachus) (“We needed to pass this law because it is the only way we can effectively enforce State and Federal gambling laws when offshore Web sites offer illegal services to our residents.”).

63. <http://www.blogshares.com> (last visited Feb. 22, 2008).

64. <http://www.bbc.co.uk/celebdaq> (last visited Feb. 22, 2008).

65. <http://www.ideosphere.com> (last visited Feb 22, 2008).

stricted, the “sporting event” category is perhaps the easiest to understand and probably means athletic competitions: football games and boxing matches are clearly covered under this phrase, whereas chess tournaments and beauty pageants are probably not because they are not traditionally viewed as “sports” (but rather as contests that depend on mental skills or physical appearance, not primarily athletic performance). A “contest of others” seems to require some sort of a formal contest: chess tournaments and beauty pageants would be included under this phrase, but economic activity and political elections would probably not. Of course, a business’s performance on the stock market or the success of a presidential candidate on some level involve competing against other companies or would-be leaders, but although comparative judgments are involved in the rise of a stock or the election of a president, these do not seem to be the sort of formal “contests” that the statute envisions.⁶⁶ Likewise, a “game subject to chance” could on some level include political elections, but this almost certainly was not what Congress was trying to address, and a court wishing a modest and sensible scope for this statute might well construe the terms more narrowly, along the lines that we suggest. If so, and we think this outcome is more likely than the adoption of expansive alternatives, then information markets that do not involve these three categories, as more modestly defined, should escape consequences. Examples of such markets include the IEM and proposed markets to predict executive-branch administrative actions, scientific discoveries, and Supreme Court decisions.

It then seems that a substantial number of information markets may be able to escape the effects of this statute. Some, like the IEM, are exempt because they are not really engaged in contests, sporting events, or games subject to chance within the meaning of the statute.⁶⁷ Others, such as Blogshares and the Foresight Exchange, are not covered because they do not reward participants with “something of value” within the meaning of the statute.⁶⁸ Obviously regulations, and possibly litigation, will be necessary to clarify if this is indeed the true meaning of the statute, but the existence of such potentially limiting arguments should offer at least

66. If Congress had intended the statute to be this far-reaching, it arguably would have made note of it during the proceedings. Instead, the main concern seems to have been about the far more narrower subject of offshore Internet gambling sites. See, e.g., *Bachus Speech*, *supra* note 62, at E2153.

67. The IEM is also exempt because they received a no-action letter from the CFTC to run the market. We discuss the implications of this further in our section on CFTC jurisdiction over prediction markets. See *infra* Part III.

68. It is unclear at this point whether the statute will apply to information markets that reward participants not for the result of any one bet (“in the event of a certain outcome,” as the statutory language may mean) but rather for predictive success more generally. If so, a number of prediction markets that award prizes for general success, as opposed to payouts for any particular event, may escape the consequences of the law. The results of this interpretation could be significant. Prediction markets potentially affected by this interpretation include the Hollywood Stock Exchange, Innovation Futures, News Futures, and the Political Stock Exchange.

some hope to those who fear that the new law will devastate the development of information markets.

2. *Exemptions, Exemptions*

The statute also includes several exemptions that can offer even further protection for prediction markets. Should the previously mentioned arguments fail, prediction markets, depending on their characteristics, may yet obtain protection under these sorts of exemptions.

For example, the statute exempts from its definition of “bet or wager” any transaction that is “subject to the rules of a registered entity or exempt board of trade under the Commodity Exchange Act.”⁶⁹ Thus far, the Commodities Future Trading Commission (CFTC) seems to be one of the more aggressive agencies in seeking to regulate information markets. The CFTC’s enforcement action against Tradesports, and the CFTC’s issuance of a no-action letter to the IEM are examples of its aggressive assertion of authority.⁷⁰ To the extent that the CFTC does have jurisdiction over prediction markets—a matter that still seems not entirely clear—it would at least have the discretion to excuse prediction markets from the effect of this Act.⁷¹

Likewise, an exemption exists for participation in any game or contest where participants do not stake or risk anything of value other than “personal efforts of the participants in playing the game or contest or obtaining access to the Internet,”⁷² or “points or credits that the sponsor of the game or contest provides to participants free of charge and that can be used or redeemed only for participation in games or contests offered by the sponsor.”⁷³ As discussed above,⁷⁴ we think this provision is best understood as a safe harbor, rather than a carve-out of conduct that would otherwise be illegal, but to the extent that it is not, prediction markets that meet its conditions will be safe from prosecution. Significantly for academic purposes, the results of such markets may be just as accurate, at least according to research that finds that play-money markets perform as well as those with real-money payouts.⁷⁵

Another intriguing exemption is apparently intended for fantasy football leagues, but may apply to many prediction markets as well. The provision excludes participation not just in a fantasy or simulation sports game, but any “educational game or contest” that meets certain condi-

69. 31 U.S.C.A. § 5362(1)(E)(ii) (West Supp. 2007).

70. See *infra* Part III.

71. CFTC jurisdiction might also have other benefits, as Hahn and Tetlock have argued. See Robert Hahn & Paul Tetlock, *Short Odds for Ignorance*, N.Y. TIMES, Oct. 9, 2006, at A17. For an encapsulation of the debate, see *infra* Part III.

72. 31 U.S.C.A. § 5362(1)(E)(viii)(I).

73. *Id.* § 5362(1)(E)(viii)(II).

74. See *supra* note 68 and accompanying text.

75. See Emile Servan-Schreiber et al., *Prediction Markets: Does Money Matter?*, 14 ELECTRONIC MARKETS 243 (2004).

tions.⁷⁶ To the extent that an information market involves predictions on political, economic, and technological events, the activity is arguably such an “educational game or contest.” If so, these markets would even be able to offer monetary awards to successful participants, although with certain restrictions, such as not basing the payout on the number of participants or the amount of fees paid by those participants.⁷⁷

In short, although many prediction market entrepreneurs, participants, and supporters may understandably be concerned about the effect of the new Act, valid reasons exist for hope that information markets may be able to continue to develop without substantial harm. Of course, the legal uncertainty creates its own chilling effects, and whether prediction markets continue to develop will depend partly on what regulations are passed, what activities the Department of Justice chooses to prosecute, and how the courts interpret the statutory definitions. But all of these regulatory and statutory restrictions ultimately are subject to constitutional constraints under the First Amendment, and we now turn to identifying some of the expressive elements of prediction markets that, we argue, have First Amendment protection.

II. EXPRESSIVE ELEMENTS OF PREDICTION MARKETS

We expect most readers will be familiar with general First Amendment principles, and in this section we will not repeat a detailed exposition of material well covered elsewhere.⁷⁸ Instead, we want to explore how these traditional speech ideas apply in the new context of prediction markets. We start here by identifying the expressive elements present in prediction markets. We also posit that, in addition to the expression of those who participate in the markets, the market itself may be a speaker.

A. *Predictive Speech*

Under the First Amendment,⁷⁹ so-called pure speech receives the greatest constitutional protection, based on the conclusion that “the government may not prohibit the expression of an idea simply because society finds the idea itself offensive or disagreeable.”⁸⁰ As a result, regulations that target specific viewpoints or content are constitutionally suspect, warranting strict judicial scrutiny to ensure that the government

76. 31 U.S.C.A. § 5362(1)(E)(ix).

77. *See id.* § 5362(1)(E)(ix)(I)–(III).

78. *See generally* RODNEY A. SMOLLA & MELVILLE B. NIMMER, SMOLLA & NIMMER ON FREEDOM OF SPEECH (1994).

79. U.S. CONST. amend. I (Congress shall make no law “abridging the freedom of speech.”).

80. *Texas v. Johnson*, 491 U.S. 397, 414 (1989) (striking down ban on flag burning).

restriction on speech serves a compelling state interest and restricts the speech using the least restrictive means.⁸¹

As applied to prediction markets, we begin by considering a type of prediction market that involves perhaps the archetypal form of pure political speech—namely speech related to the outcome of a specific political election. The constitutional protection for such speech becomes more complicated when money is involved,⁸² so for the moment, let us envision an information market without financial incentives—something like the IEM, but without the \$500 of real money at stake.⁸³ In this market, individuals would indicate their choice for which candidate will win the next U.S. presidential election, with (nonmonetary) awards for successful predictions.

To see the constitutional values at stake in such a market, it is helpful to explore why people might participate. Although individuals might do so for a variety of reasons, in general, the participants probably can be grouped into two types: those who attempt to provide an objective prediction and those who let their political leanings influence their vote.

Some of the partisan participants in the information market might choose a particular candidate to win because the market participant favors the candidate, even if a more objective observer might question the likelihood of the candidate's success. Why? Perhaps this is simply a natural, mental tendency to think that a candidate you prefer should—and to some people, must—also be popular among the general populace, or at least the portion of the population who participate in a prediction market. Alternatively, the partisan participant may deliberately wish to create an impression that the candidate has popular support to sway other people to join an apparent crowd in supporting a popular candidate. In either of these scenarios, the vote in the information market is necessarily an expression of political opinion. The expression may not accurately predict the result, and its value in the information market may be debatable,⁸⁴ but it is undeniably a statement of one's political viewpoint about which candidate should win the election. In this sense, the virtual ballot in a prediction market has analogies both to opinion polling and to the casting of the physical ballot on Election Day, at least to the

81. See, e.g., *United States v. Playboy Entm't Group, Inc.*, 529 U.S. 803, 813 (2000) (stating strict-scrutiny test for content-based regulations).

82. The realm of campaign finance demonstrates how political speech and monetary funding interact, not always with perfectly consistent results. Compare *Buckley v. Valeo*, 424 U.S. 1, 23 (1976) (striking down spending caps on advocacy groups), with *McConnell v. FEC*, 540 U.S. 93 (2003) (upholding majority of congressional statute regulating soft-money contributions and electioneering communications). The topic will likely occupy the Supreme Court's docket for many years to come.

83. Such a market would not be fanciful, given that some research suggests that play money works as well as real money in ensuring accurate predictions. See *Servan-Schreiber et al.*, *supra* note 75, at 243.

84. We have explored elsewhere possibilities for screening out such "sheep" voters from participation in information. See *Cherry & Rogers, Tiresias and the Justices*, *supra* note 45, at 1169–70.

extent that both involve an expression of support for one's desired candidate.

In contrast, other participants in the prediction market might have nonpartisan motivations. These voters might dispassionately assess a candidate's likelihood of success and then translate those conclusions into a prediction. This is not speech expressing one's political preferences, but it is an informed prediction about a particular event. And while the First Amendment case law more frequently involves individuals trying to express their political desires,⁸⁵ the fact that speech is more dispassionate (less "partisan") does not render it less worthy of constitutional protection. Indeed, to the extent that the First Amendment's utilitarian purposes to find truth are helped more by light than heat, dispassionate speech might be worthy of more protection, not less.⁸⁶

This hypothetical about speech regarding political elections is one of the easiest areas in which to see the constitutionally protected functions. When one moves from this hypothetical to some of the other subjects traded on prediction markets, speech that in analogous contexts would be constitutionally protected also quickly appears. Consider, for example, the range of topics for trade on www.intrade.com.⁸⁷ One offered topic was the possibility of an air strike on Iran, on which an informed prediction would require a participant to evaluate the willingness of Iran to pursue nuclear capabilities despite international opposition, the resolve of the United Nations to use force to stop Iran, and the appetite of the Bush administration for engaging in another conflict in the Middle East despite the problems with the war in Iraq.⁸⁸ Another topic was the possibility of Hamas's recognition of Israel, a vote on which might entail assessments not just of Hamas's objections but also of Israeli reactions and the long-term possibilities for a peaceful resolution between Israelis and Palestinians.⁸⁹

If a citizen were to write a letter to a newspaper expressing an opinion about the likelihood of these events occurring in Iran and Israel, that prediction would clearly be protected under the First Amendment as political speech. A key question that this article presents is whether the expression should be any less protected if it is presented not in a newspaper but in a prediction market.

85. See, e.g., *Johnson*, 491 U.S. at 414 (protecting flag burning); *Spence v. Washington*, 418 U.S. 405 (1974) (reversing conviction for hanging a flag with a peace symbol to protest the invasion of Cambodia and killings at Kent State University); *Tinker v. Des Moines Sch. Dist.*, 392 U.S. 503 (1969) (protecting wearing black armbands as symbolic expression).

86. We do not mean to suggest that partisan speech does not deserve protection. Our point is merely that the relative dispassionateness of some participants in an information market does not thereby render the market less deserving of First Amendment protection.

87. Intrade Prediction Markets, <http://www.intrade.com> (last visited Feb. 22, 2008).

88. See *id.*

89. See *id.*

Prediction markets frequently include not just political topics, but economic ones as well. At first glance, political speech might seem different from economic topics such as whether the Federal Reserve will raise interest rates or whether the Standard & Poor's 500 index of stocks of large U.S. companies will rise or fall.⁹⁰ We submit, however, that inherent in such predictions are frequently the sorts of assessments of political leaders that traditionally receive First Amendment protection. For example, setting the federal funds rate involves judgments of the Federal Reserve Board about how best to attempt to manage the economy. If one trusts the governors to respond prudently, one might predict modest increases to combat perceived inflation or modest decreases to stimulate the economy in a perceived recession. Alternatively, if one mistrusts the judgment of the Federal Reserve, one might predict vastly different behavior (such as flooding the market with liquidity resulting in a housing bubble and the continued devaluation of the currency, for example).

Not every topic is political, of course, and economic predictions may also involve nonpolitical elements (such as statistical data). Yet in general, it still seems that not far below the surface of many economic predictions lies a type of assessment of political leaders that warrants First Amendment protection. And, indeed, courts have afforded First Amendment protection even to speech that involves economic rather than political topics.⁹¹

Of course, some subjects (such as the amount of snowfall in New York City)⁹² might not involve politics or economics at all. And some of these subjects, like entertainment predictions about a Hollywood movie's success, may seem far removed from the matters of democratic self-governance that the First Amendment assists.⁹³ Nevertheless, the courts have given First Amendment protections to areas far removed from political speech, including speech that is pornographic⁹⁴ or that involves largely nonpolitical activities such as a St. Patrick's Day parade.⁹⁵ Likewise, speech involving art, science, literature, and even lighthearted en-

90. Both the Federal Funds rate and the close of the Standard & Poor's 500 were topics available for prediction on February 5, 2006, at Intrade. *See id.*

91. *See, e.g.,* *Lindenbaum v. City of Phila.*, 584 F. Supp. 1190, 1194–95 (E.D. Pa. 1984) (“Although the right of association is most commonly conceived of in terms of political associations, the Supreme Court and other federal courts have recognized that economic speech and associations are not excluded from the guarantees of the First Amendment.”) (citations omitted).

92. A subject for prediction on February 5, 2006, at Intrade. Intrade Prediction Markets, *supra* note 87.

93. Movie box office receipts are predicted on The Hollywood Stock Exchange, <http://www.hsx.com> (last visited Feb. 22, 2008).

94. *Reno v. ACLU*, 521 U.S. 844 (1997); *Barnes v. Glen Theater, Inc.*, 501 U.S. 560 (1991) (protecting nude dancing as expression); *Miller v. California*, 413 U.S. 15 (1973).

95. *Hurley v. Irish-Am. Gay, Lesbian and Bisexual Group of Boston*, 515 U.S. 557, 570 (1995). The Court found that some expressive elements did exist in the parade, even though it was not primarily about political topics.

tainment has all received First Amendment protection.⁹⁶ Thus, the fact that a prediction market might involve a prediction about celebrities instead of presidential elections does not seem to mean that the speech is therefore unprotected. And snowfall in New York? Perhaps no government official would be so foolish to try to control talk about the weather, but we have little doubt that such a ban on predicting snowfall would not pass constitutional muster.⁹⁷

B. I Speak, We Speak: The Market as Speaker

In the last section, we were primarily concerned with analyzing the expressive interests of those individuals who decided to trade on their knowledge and opinions in a prediction market. In this section, however, we focus on the market itself. We argue that the market is, ultimately, a composite of its traders and that the aggregate prediction the market generates also deserves constitutional protection.

Although we do not wish to unduly anthropomorphize an economic construct unduly, in this instance we believe “speaker” accurately describes the prediction market itself. Recall, as discussed above, that prediction markets aggregate large numbers of trades, which are the results of numerous decisions made by individual participants.⁹⁸ Consequently, the market price and the resulting prediction is a summary, or a snapshot, of the collective knowledge of the market at a particular point in time. The price of the security encodes useful information about individuals’ trades, and therefore aggregates their opinions into a number. That number is the prediction about what is going to happen. In doing so, the market articulates a viewpoint and predicts the outcome of a future event.

Although prediction markets are relatively new constructs, the idea of mechanical devices or other inanimate objects being able to “speak” is not. There are many situations where meaning is encoded through mechanical devices. For example, a seismometer reads geologic activity and predicts earthquakes, and similar equipment functions to predict the eruption of volcanoes. The First Amendment protects scientific information, regardless of how dry or technical the scientific facts may be,⁹⁹ and that result should not change merely because the scientific facts happen

96. See, e.g., Daniel Mach, *The Bold and the Beautiful: Art, Public Spaces, and the First Amendment*, 72 N.Y.U. L. REV. 383, 385–86 (1997) (discussing the relationship of art and the First Amendment).

97. See, e.g., *Hill v. Colorado*, 530 U.S. 703, 768 (2000) (Kennedy, J., dissenting) (implying that the First Amendment would protect a citizen approaching another citizen to ask about a weather forecast); *People v. Hickman*, 988 P.2d 628, 642 (Colo. 1999) (stating that “forecasting a change in weather” is protected by the First Amendment).

98. See *supra* Part II.A.

99. *Universal City Studios v. Corley*, 273 F.3d 429, 446 (2d Cir. 2001) (“Even dry information, devoid of advocacy, political relevance, or artistic expression, has been accorded First Amendment protection.”).

to register on a machine. That is because an individual scientist could take all the factors into account (as a machine does automatically) and express an opinion about the likelihood of a volcanic eruption. If a scientist did this manually, that opinion would certainly constitute protected expression. If so, can reading the numbers off a predictive device lack such protection? Certainly our intuition seems to suggest otherwise.

Similarly, the fact that the market is speaking by making its predictions in the realm of cyberspace does not change the analysis. In a recent article, Professor David McGowan discusses the similarities and differences between speech in real and virtual worlds and explains a concept that he terms “social friction.”¹⁰⁰ According to McGowan, many of the traditional norms of behavior (for example, only being able to protest in one place at one set time) are different in cyberspace (where one could conceivably register disapproval in a number of different cyber venues almost simultaneously).¹⁰¹ At the same time, McGowan ultimately argues that judges are deciding the cases based on the context of the real world—which he argues, may mean that the distance between the real and virtual worlds will never be able to stray too far apart.¹⁰²

Courts that have considered the question have determined that computer code, like musical symbols or works written in a language other than English, do have an expressive interest, despite the fact that they may only be intelligible to a certain subset of the population.¹⁰³ In *Commodity Futures Trading Commission v. Vartuli*, the defendants marketed a computer program, Recurrence, that they claimed would automatically allow users to make money from currency trades.¹⁰⁴ The program would analyze the currency data, and then instruct the user to buy, sell, or hold.¹⁰⁵ Although the court determined that computer code itself could be expressive, in this case the court denied protection to the Recurrence system because the language in the computer program was not used to express opinion, but rather was used “to induce action without the intercession of the mind or the will of the recipient.”¹⁰⁶ While the facts in *Vartuli* were vastly different from the context of prediction markets (prediction markets rely entirely on the independent thoughts of traders), the test articulated in the case makes a good deal of sense.

Ultimately, the court in *Vartuli*, and other courts that have considered the question seem to be resolving the question of whether computer code is protected by looking at the substance and purpose of what is be-

100. David McGowan, *From Social Friction to Social Meaning: What Expressive Uses of Code Tell Us About Free Speech*, 64 OHIO ST. L.J. 1515 (2003).

101. *Id.* at 1517.

102. *Id.* at 1598–99.

103. *Corley*, 273 F.3d at 445–46; *see also* *Junger v. Daley*, 209 F.3d 481, 485 (6th Cir. 2000) (“Because computer source code is an expressive means for the exchange of information and ideas about computer programming, we hold that it is protected by the First Amendment.”).

104. *Commodity Futures Trading Comm’n v. Vartuli*, 228 F.3d 94, 111 (2d Cir. 2000).

105. *Id.*

106. *Id.*

ing communicated. Seemingly, if the material in question furthers the “pursuit of truth, the accommodation among interests, the achievement of social stability, the exposure and deterrence of abuses of authority, personal autonomy and personality development, or the functioning of a democracy” then it will obtain First Amendment protection.¹⁰⁷ Currently, prediction markets encompass matters that advance some or all of these goals. The fact that the market is speaking in cyberspace hardly changes the analysis.

The fact that the market is acting as a speaker becomes even clearer in the case where a founder might establish a market with a certain political purpose in mind. For example, the founder of a prediction market might want to call attention to the fact that human-rights violations still occur with regular frequency.¹⁰⁸ Participants in the market could be asked to predict the number of a certain type of human-rights violations per country (say, execution of political prisoners), or they might be asked to predict which country would improve its reputation by releasing political prisoners. In this instance the “point” of the market might go beyond the value of the prediction itself. By establishing the market, the founder would call attention to a particular problem in hopes of achieving a particular result. In that sense, the act of establishing and running the market, then, could be the expression of a particular opinion.

Moreover, because the overall market represents the aggregated judgment of the individual speakers, it would seem somewhat perverse if the judgment of the market itself enjoyed fewer constitutional rights than those enjoyed by its component participants. This is particularly true when a significant portion of the value of the information markets results precisely *from* the fact that the market provides an aggregate judgment that is more likely to be accurate than that of the individual participants.

But so what? Why should society care about protecting these sorts of predictions? One reason would be that such predictions are consistent with the “truth seeking” function of the First Amendment.¹⁰⁹ Another good reason is similarly utilitarian: we need to hear honest predictions about what the future holds—even when they tell us what we do not want to hear.

In Homer’s *Iliad*, the princess Cassandra had the power to predict the future, but suffered from an unusual curse: no one accepted her pre-

107. *Id.* (citing Kent Greenawalt, *Free Speech Justifications*, 89 COLUM. L. REV. 119 (1989)).

108. For additional information on human rights violations, see the website for advocacy group Amnesty International. Amnesty Int., <http://amnesty.org> (last visited Oct. 30, 2007).

109. See, e.g., *Hustler Magazine v. Falwell*, 485 U.S. 46, 52 (1988) (describing the lack of value of false and defamatory statements because “they interfere with the truth-seeking function of the marketplace of ideas”); see also Robert Post, *Reconciling Theory and Doctrine in First Amendment Jurisprudence*, in *ETERNALLY VIGILANT: FREE SPEECH IN THE MODERN ERA* 153, 161 (Lee C. Bollinger & Geoffrey R. Stone eds., 2002) (“The theory of the marketplace of ideas focuses on ‘the truth-seeking function’ of the First Amendment. It extends the shelter of constitutional protection to speech so that we can better understand the world in which we live.” (internal citation omitted)).

dictions.¹¹⁰ Like Cassandra, information markets have repeatedly been shown to make accurate predictions.¹¹¹ But as information markets become more widespread and familiar, they may begin to cover subjects that some people might find offensive. As the myth of Cassandra illustrates, not all predictions are welcome. The markets may foretell outcomes that we, as a society, would prefer not to contemplate. Further, certain subject areas may be controversial because they involve a sensitive topic, because a topic has important consequences for a particular group, or because of the seriousness of the rights at stake. Such controversy may be engendered either because of the substance of what the market is predicting about a particular area or the inherent aversion to the commodification of particular topics.¹¹² Yet, it is these unpopular markets that may be most in need of First Amendment protection.

As one example, consider the ill-fated Policy Analysis Market (PAM) of the Defense Advanced Research Projects Agency (DARPA) that addressed terrorism and Mideast policy.¹¹³ This market provoked considerable political controversy.¹¹⁴ Opponents feared that terrorists might “game the market,” either committing violent activities for profit or manipulating the market to hide their unlawful activities.¹¹⁵ Senators Ron Wyden and Bryon Dorgan claimed that PAM was “offensive” and “ridiculous,”¹¹⁶ while Senator Tom Daschle criticized PAM because it “could provide an incentive actually to commit terrorism.”¹¹⁷ Under such criticism, the project was terminated.

This market was government sponsored, and of course, the government has no affirmative constitutional obligation to fund it. But the animosity shown against PAM was striking, and we fear it may have impli-

110. See HOMER, *THE ILIAD* 353, 611 (Robert Fagles trans., Penguin Books 1990); see also THOMAS BULFINCH, *BULFINCH'S MYTHOLOGY* 250 (1948); EDITH HAMILTON, *MYTHOLOGY* 292 (1942).

111. See *supra* Part I.

112. See generally *RETHINKING COMMODIFICATION: CASES AND READINGS IN LAW AND CULTURE* (Martha M. Ertman & Joan C. Williams eds., 2005). Questions about morals and markets are fascinating and deserve further close study.

113. In the summer of 2003, DARPA announced a program, FutureMap, which proposed information markets to predict events in the Middle East as well as potential terrorist attacks. Tim Harford, *All Bets Are Off at the Pentagon*, *FIN. TIMES*, Sept. 2, 2003, at 14; *You Bet Your Life: Futures Markets Won't Solve a Real Intelligence Problem*, *FIN. TIMES*, Aug. 4, 2003, at 10. There were two markets comprising FutureMap: one was to be composed of policy experts and law enforcement officials, cutting across internal government agencies and relying on classified information. See SUROWIECKI, *supra* note 19, at 79. The second portion of FutureMap, the Policy Analysis Market (PAM), was to be open to the general public. See Robin Hanson, *Decision Markets for Policy Advice*, in *PROMOTING THE GENERAL WELFARE: NEW PERSPECTIVES ON GOVERNMENT PERFORMANCE* 151, 165 (Alan S. Gerber & Eric M. Patashnik eds., 2006).

114. *Harebrained Scheme to Bet on Terrorism Deserved to Die*, *DETROIT NEWS*, Aug. 2, 2003, at 6D; see also Carl Hulse & Thom Shanher, *Senators Want to Block Spending on Terrorist Initiatives*, *N.Y. TIMES*, Aug. 14, 2003, at A20.

115. See Harford, *supra* note 113.

116. Ken Guggenheim, *Pentagon Terrorism Market Riles Lawmakers*, *CHI. TRIB.*, Jul. 29, 2003, § 1, at 11.

117. Harford, *supra* note 113.

cations for other privately run prediction markets. Suppose a wholly private organization wanted to run a market on Middle East events and terrorism open to the general public without any type of government funding or support. If a government sought to quash it, such efforts would run into the First Amendment problems discussed above. And beyond the purely legal rights of free expression, such attempts risk depriving citizens and the nation of information it might vitally need.

The analogy to Cassandra is again apt. The Trojans needed to hear that, despite their ostensible victory over the Greeks, the giant horse was not what it appeared to be. Yet they shut their ears to the prophetess, and the result was disastrous.¹¹⁸ Similarly, information markets offer the promise of giving individuals and governments insights into an uncertain future, and it seems fundamentally unwise to reject this sort of knowledge because its creation may spark certain associations with gambling. It is to those associations—not only with gambling, but also with other regulated subjects such as securities and commodities trading, that we now turn.

III. EXPRESSION THROUGH MARKETS: THE DIFFERENCE FROM OTHER REGULATED ACTIVITIES

In this section, we seek to distinguish prediction markets from other forms of business activity that have traditionally been seen as subject to regulation without particular regard for their expressive qualities. Although on the surface commodities trading, securities trading, and gambling share similarities to the activity that takes place in a prediction market, we contend that information markets have certain unique characteristics that separate them from these other areas. After a careful examination of the characteristics of prediction markets, it becomes evident that they involve expression of opinions in a way that these other types of regulated activities do not. These differences should lead to increased First Amendment protection for information markets.

At the same time, we acknowledge that there are no clear bright-line tests regarding these various forms of regulated activities. If anything, an in-depth analysis indicates the difficulty of attempting clear categorization. Numerous commentators have argued—quite persuasively—that some of these categories blur together at the edges.¹¹⁹ To use a common example, stock day-trading—that is, executing a large number of stock trades in a short amount of time based on short-term in-

118. See HOMER, *supra* note 110.

119. See, e.g., Thomas Lee Hazen, *Disparate Regulatory Schemes for Parallel Activities: Securities Regulation, Derivatives Regulation, Gambling, and Insurance*, 24 ANN. REV. BANKING & FIN. L. 375 (2005); Hurt, *supra* note 3, at 403; Lynn A. Stout, *Are Stock Markets Costly Casinos? Disagreement, Market Failure, and Securities Regulation*, 81 VA. L. REV. 611 (1995); Lynn A. Stout, *Technology, Transactions Costs, and Investor Welfare: Is a Motley Fool Born Every Minute?*, 75 WASH. U. L.Q. 791 (1997).

creases or decreases—falls closer to gambling than to traditional investing.¹²⁰ Despite the somewhat fuzzy boundaries between these different activities, prediction markets have important distinguishing characteristics. First, to a greater extent than gambling, they involve the participant's expression of their knowledge, skill, and opinion about the likelihood of a particular outcome in the future. Second, prediction markets involve a transcendent expressive purpose—the generating of a conclusion about a future event—that goes above and beyond the mere results, i.e. the allocative gains or losses that take place in the market. We begin our examination with a discussion of gambling, as that seems to be the area that has created the most controversy, especially given the recent legislation on internet betting.¹²¹

A. Gambling

Games of chance, races, and other forms of gambling have existed as recreation and leisure activities for thousands of years.¹²² The law has tended to distinguish gambling from other forms of activity, such as investing in the stock market, based on the idea that gambling is a form of entertainment, perhaps even a vice, and that gambling involves elements of luck, randomness, or chance.¹²³ As other commentators have pointed out, however, some of these distinctions between gambling and investing are artificial, socially constructed, and largely based on socioeconomic class.¹²⁴ While the lower classes engage in (immoral) gambling, the upper classes engage in similar activities, but these activities are considered productive and denominated “investments.”¹²⁵

Historically, gambling in the United States has either been outlawed completely or highly regulated,¹²⁶ in part because gambling has traditionally been associated with vice, moral weakness, and poverty. Organized

120. See Hurt, *supra* note 3, at 403.

121. See *supra* Part I.B.

122. DAVID WEINSTEIN & LILLIAN DEITCH, THE IMPACT OF LEGALIZED GAMBLING 7–8 (1974) (noting that lotteries existed in ancient Rome, and that the Virginia Company used a lottery in 1612 to finance the Jamestown settlement).

123. *Finster v. Keller*, 96 Cal. Rptr. 241, 246 (Ct. App. 1971) (“It is the character of the game rather than a particular player’s skill or lack of it that determines whether the game is one of chance or skill. The test is not whether the game contains an element of chance or an element of skill, but which of them is the dominating factor in determining the result of the game.”).

124. See Hurt, *supra* note 3, at 403 (“Gambling threatens social order; in the throw of the dice, a commoner can become a wealthy citizen, a slave a freedman. Gambling is anathema to the Puritan work ethic, but it also violates unspoken values of knowing one’s place and living within one’s class. In addition, historically, financial speculation was engaged in by the elite; therefore, it was respectable. Gaming speculation, especially as engaged in by the poorer classes, was frowned upon and at times prohibited.” (internal citations omitted)).

125. *Id.*

126. See *Greater New Orleans Broad. Ass’n v. United States*, 527 U.S. 173, 176 (1999) (“Through most of the 19th and the first half of the 20th centuries, Congress adhered to a policy that not only discouraged the operation of lotteries and similar schemes, but forbade the dissemination of information concerning such enterprises by use of the mails, even when the lottery in question was chartered by a state legislature.”).

crime rings have long used gambling, bookmaking, and related activities as a way to launder money from other illegal activities, such as prostitution, loan sharking, and drug sales.¹²⁷ In addition, some individuals with susceptible personalities can become addicted to gambling, leading to emotional distress and, in extreme cases, financial ruin.¹²⁸ When gambling occurs in the form of state-sponsored lotteries, it has been criticized as imposing a regressive tax, disproportionately taking money from the poor and uneducated to subsidize the public fisc.¹²⁹ For all these reasons, gambling has historically been seen as an activity requiring a high level of policing and regulation.¹³⁰

Despite these deep-rooted views, restrictions on gambling have eased in recent years.¹³¹ Currently, gambling law in the United States is a patchwork of regulation.¹³² In some states, gambling is legal, in others it is outlawed, and in still others, there is a combination, with some forms of gambling allowed and some forbidden.¹³³ Within this patchwork, however, gambling has made recent and dramatic inroads. Native American tribes have been able to support lagging local economies through revenues generated from casinos located on reservations.¹³⁴ State governments have themselves moved toward a system where education and other vital services are often supported through state-sponsored lotter-

127. See William K. Rashbaum, *Kerik Described as Close to Deal on a Guilty Plea*, N.Y. TIMES, June 29, 2006, at A1 (describing continuing efforts to keep businesses with organized crime ties out of Atlantic City); Tom Troncone, *Gambling a Very Big Winner for the Mob; Sports Betting Finances Everything Else It Does*, RECORD, Feb. 19, 2006, at A18 (noting the link between the Lucchese family and illegal gambling in Atlantic City).

128. AM. PSYCHIATRIC ASS'N, DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS 671–74 (4th ed., text rev. 2000) (noting that lifetime prevalence of Pathological Gambling in adults ranges from 0.4% to 3.4% in adults and 2.8% to 8% in adolescents and college students). Gambler's Anonymous defines a compulsive gambler as “a person whose gambling has caused growing and continuing problems in any department of his or her life.” See Gamblersanonymous.org, Questions and Answers, <http://www.gamblersanonymous.org/qna.html> (last visited February 2, 2007).

129. See Todd A. Wyatt, *State Lotteries: Regressive Taxes in Disguise*, 44 TAX LAW. 867, 867, 875–76 (1991) (reprinting economic studies and arguing that “state-run lotteries are the most regressive means of taxation in existence in the United States today”).

130. See Ronald J. Rychlak, *Lotteries, Revenues and Social Costs: A Historical Examination of State-Sponsored Gambling*, 34 B.C. L. REV. 11, 14–20 (1992) (providing historical overview of gambling and its regulation).

131. *Greater New Orleans Broad. Ass'n*, 527 U.S. at 187 (“Whatever its character in 1934 when [the ban on casino advertising] was adopted, the federal policy of discouraging gambling in general, and casino gambling in particular, is now decidedly equivocal.”).

132. See *id.* at 186–87 (describing changing regulatory landscape for gambling).

133. See, e.g., State Gambling Law Summary for all U.S. States, <http://www.gambling-law-us.com/State-Law-Summary/> (last visited Oct. 30, 2007) (showing the differences between judicial tests, whether internet gambling is expressly forbidden, and whether violations are misdemeanors or felonies).

134. See, e.g., Indian Gaming Regulatory Act, Pub. L. No. 100-497, 102 Stat. 2467 (codified as amended at 25 U.S.C. §§ 2701–2721 (2000 & Supp. 2004)); *California v. Cabazon Band of Mission Indians*, 480 U.S. 202 (1987) (Supreme Court case clearing the way for tribal gaming); Kevin K. Washburn, *Federal Law, State Policy, and Indian Gaming*, 4 NEV. L.J. 285, 285–93 (2004) (providing an overview of history and authority for Native American gaming); Naomi Mezey, Note, *The Distribution of Wealth, Sovereignty, and Culture Through Indian Gaming*, 48 STAN. L. REV. 711 (1996).

ies.¹³⁵ These regulatory inconsistencies point, perhaps, to deeply conflicted cultural views toward gambling.

There have been several constitutional challenges to the regulation of advertising for gambling and lotteries, with varying results. In *Posadas de Puerto Rico Assocs. v. Tourism Co. of Puerto Rico*,¹³⁶ the Supreme Court considered a law that allowed casinos in Puerto Rico to advertise to tourists, but banned advertisements aimed at residents of Puerto Rico. Applying the *Central Hudson* test, the court upheld the ban, reasoning that the legislation advanced a state interest in promoting tourism and simultaneously limiting gambling among residents, especially given the link between gambling and crime.¹³⁷ In *United States v. Edge Broadcasting Co.*,¹³⁸ the Supreme Court considered the constitutionality of a prohibition against advertising the Virginia lottery on the radio in North Carolina, a state that had no lottery. The Supreme Court again upheld the advertising ban under the *Central Hudson* test, reasoning that otherwise states would have no ability to shield citizens from lottery advertisements.¹³⁹ However, in *Greater New Orleans Broadcasting Ass'n v. United States*,¹⁴⁰ the court struck down an advertising ban that prevented Louisiana casinos from advertising to Louisiana residents.¹⁴¹ After describing the changing regulatory landscape, the Supreme Court concluded that there was no principled distinction that would allow for advertisement of tribal gaming in Louisiana while simultaneously banning advertisement for nontribal casinos.¹⁴²

All of these constitutional challenges dealing with gambling and commercial speech arose in the same context—the First Amendment right to advertise casinos or other gambling. None of these lawsuits challenged the government's right to regulate gambling itself. In fact, the decisions rest on the conclusion that the government could decide to ban gambling activity altogether, and included in that power is the lesser abil-

135. Rycklak, *supra* note 130, at 11 n.2 (performing fifty-state survey and concluding that as of 1992 thirty-three states sponsored a lottery). It could be argued that the prevalence of state-sponsored lotteries undercut any notion of the state having a regulatory interest in any form of gambling, given that the state is promoting this type of activity, albeit in a monopolistic form in order to raise revenue. On the other hand, critics of the lottery have argued that this is one of the worst ways for states to raise revenue, as it preys on vulnerable populations and exacerbates the effect of income inequality. See, e.g., *id.* at 80–81 (advocating retaining the lottery, but restricting its advertising); Wyatt, *supra* note 129, at 875 (advocating other methods of raising revenue).

136. *Posadas de P.R. Assocs. v. Tourism Co. of P.R.*, 478 U.S. 328 (1986).

137. *Id.* at 341–42.

138. *United States v. Edge Broad. Co.*, 509 U.S. 418 (1993).

139. *Id.* at 435–36.

140. *Greater New Orleans Broad. Ass'n v. United States*, 527 U.S. 173 (1999).

141. *Id.* at 191.

142. *Id.* (“[The Government] presents no convincing reason for pegging its speech ban to the identity of the owners or operators of the advertised casinos. The Government cites revenue needs of States and tribes that conduct casino gambling, and notes that net revenues generated by the tribal casinos are dedicated to the welfare of the tribes and their members. Yet the Government admits that tribal casinos offer precisely the same types of gambling as private casinos.” (internal citations omitted)).

ity to regulate advertising.¹⁴³ First Amendment jurisprudence traditionally holds that ordinary business activity (absent an expressive element), and gambling in particular, because of its association with “vice activity,” is not entitled to First Amendment protection.¹⁴⁴ To some degree, this distinction makes some sense, as the act of putting money down on the outcome of a random event does not involve the expression of any particular thought or idea. If, for example, the outcome of a spin of a roulette wheel is that a ball lands on a particular number, the choice of a number does not involve expression. The same would be true of other games of pure chance—the outcome of the roll of the dice, or the flip of a card. The pull on the handle of a slot machine does not express anything other than a willingness to try one’s luck with a one-armed bandit.

Certain elements of recreational gambling, however, involve more than just pure chance. As other commentators have remarked, certain card games rely on a mix of chance and skill.¹⁴⁵ So, for example, a poker player will have to determine, based on an assessment of the risks and reward involved, whether they should continue to bet or fold their hand.¹⁴⁶ Other forms of recreational gambling, such as sports betting or horse racing, involve an element of chance or luck, and at the same time require, for a successful outcome, an element of knowledge. Is one team particularly good this year?¹⁴⁷ What is a horse’s—literal—track record?¹⁴⁸ All of this information is potentially available to gamblers and they may take advantage of this knowledge to increase their chances of winning.

Even in these instances, however, it becomes apparent that gamblers do not have a particular expressive interest in whether a particular card is turned over or in whether their horse wins. (There may be some affection for, or affiliation with, a home team, but we suspect that this expressive interest typically is, at most, of secondary importance to the gambler.) Furthermore, the subject of the betting—who wins the horse-race—is not of particular societal interest other than to those individuals

143. *Edge Broad. Co.*, 509 U.S. at 427.

144. *Id.*

145. MIKE CARO, CARO’S FUNDAMENTAL SECRETS OF WINNING POKER 108–20 (2002).

146. *Id.*; see also Steven Lubet, *Lawyers’ Poker*, 57 U. MIAMI L. REV. 283, 286–87 (1993) (describing skills involved in poker game and analogizing them to skills used in litigation).

147. A recent piece has examined sports betting, contending that there is no difference between such sports betting and online day trading. See Christopher T. Pickens, Note, *Of Bookies and Brokers: Are Sports Futures Gambling or Investing, and Does it Even Matter?*, 14 GEO. MASON L. REV. 227 (2006). The author conflates prediction markets and sports betting. See generally *id.* Further, the prediction markets analysis seems to almost be tacked on to the rest of the piece, for the author’s main argument is that the government should legalize sports betting. Pickens justifies this argument by disputing that there is any distinction between investing and gambling. *Id.* at 247–51. However, part of his argument rests on two extremely questionable assumptions, those being that betting functions as a hedging device and that it adds social value. See *id.* at 239–44.

148. Joan S. Howland, *Let’s Not “Spit the Bit” In Defense of “The Law of the Horse”: The Historical and Legal Development of American Thoroughbred Racing*, 14 MARQ. SPORTS L. REV. 473 (2004) (describing history of horseracing and its regulation in the United States).

who happen to have money at stake.¹⁴⁹ A significant percentage of prediction markets, on the other hand, involve larger-scale concerns about politics, whether certain scientific events will occur, and other questions that directly impact on core speech values.

We also wish to note that many of the concerns correlated with gambling do not exist with prediction markets. There is no indication, at present, that prediction markets have any link to organized crime, or have any affiliation with the vice-related activities that criminals engage in. Finally, there is no proof that participation in prediction markets is any more addicting than investing in the traditional capital markets. Accurate predictions of future events are unlikely to lead individuals into moral decay. With these thoughts in mind, we turn to another area, securities trading, that bears similarities to the activity that occurs in prediction markets.

B. Securities Trading

During the nineteenth century, the capital markets became the driving force behind the industrial revolution, the expansion of the railroads, and the increasing mechanization of the production of goods.¹⁵⁰ The modern view of securities regulation in the United States had as its genesis the Great Depression of the 1930s.¹⁵¹ After the stock market crash of 1929, Congress took action to protect the integrity of the capital markets, culminating in the 1933 and 1934 Securities and Exchange Acts.¹⁵² The overwhelming thrust of these acts was on the twin goals of disclosure and transparency, so that investors would be able to make informed choices regarding the allocation of resources.¹⁵³ Through initial public offerings, issuers receive money that may be needed for expansion, and investors are encouraged to put their money in the market through the ease of entry and exit available because of the liquidity of the secondary trading market.¹⁵⁴

149. Of course, there are exceptions to this too. See LAURA HILLENBRAND, SEABISCUIT: AN AMERICAN LEGEND (2001) (detailing inspirational story of popular racing horse).

150. See generally LOUIS LOSS & JOEL SELIGMAN, FUNDAMENTALS OF SECURITIES REGULATION 35–36 (5th ed. 2004); JOEL SELIGMAN, THE TRANSFORMATION OF WALL STREET: A HISTORY OF THE SECURITIES AND EXCHANGE COMMISSION AND MODERN CORPORATE FINANCE 39–72 (3d ed. 2003) (discussing the passage of the Securities and Exchange Acts of 1933 and 1934).

151. See SEC v. Capital Gains Research Bureau, Inc., 375 U.S. 180, 186 (1963) (describing the securities laws as “designed to eliminate certain abuses in the securities industry, abuses which were found to have contributed to the stock market crash of 1929 and the depression of the 1930’s”); LOSS & SELIGMAN, *supra* note 150, at 35–36.

152. Joel Seligman, *No One Can Serve Two Masters: Corporate and Securities Law After Enron*, 80 WASH. U. L.Q. 449, 450 (2002) (“[T]he primary policy of the federal securities laws involves the remediation of information asymmetries, that is, equalization of the information available to outside investors and insiders.”).

153. *Id.*

154. *Id.*

The traditional wisdom has generally been that securities may be regulated just as any other business activity is regulated, and that free speech arguments are inapplicable.¹⁵⁵ Several commentators have either explored or questioned this assumption,¹⁵⁶ but these types of arguments have had only limited success.¹⁵⁷ As described above, the system of securities regulation is predicated upon the issuer's disclosure of accurate information, especially because stocks themselves do not have an inherent fixed value.¹⁵⁸ The First Amendment concerns vis-à-vis securities law are broadly clustered in four areas: regulation of the provision of financial advice,¹⁵⁹ the quiet period and other speech restrictions surrounding the initial registration of securities,¹⁶⁰ mandatory disclosure,¹⁶¹ and rules regulating proxies.¹⁶²

Perhaps the most contentious clash of securities law and the First Amendment to date has been in the context of the provision of financial advice. In *Lowe v. SEC*, the petitioner, Lowe, was a financial advisor who was convicted of stealing from a bank, misappropriating funds from a client, and other equally nefarious activities.¹⁶³ After the SEC barred Lowe from providing clients with investment advice, he set up a newsletter that provided financial news and tracked certain stocks.¹⁶⁴ Lowe's

155. Aleta G. Estreicher, *Securities Regulation and the First Amendment*, 24 GA. L. REV. 223, 223 (1990) ("The received wisdom for fifty years has been that the first amendment is inapplicable to speech relating to the operation of securities markets. The assumption that speech by actors on the securities stage is simply another aspect of regulable business activity pervades the federal system of securities regulation . . .").

156. See Henry N. Butler & Larry E. Ribstein, *Corporate Governance Speech and the First Amendment*, 43 U. KAN. L. REV. 163, 194 (1994) (arguing that some securities regulation laws violated the First Amendment); Estreicher, *supra* note 155 (exploring the relationship between the First Amendment and the securities laws); Donald E. Lively, *Securities Regulation and Freedom of the Press: Toward a Marketplace of Ideas in the Marketplace of Investment*, 60 WASH. L. REV. 843, 843 (1985) (arguing that securities regulation laws must comply with the First Amendment); Antony Page & Katy Yang, *Controlling Corporate Speech: Is Regulation Fair Disclosure Unconstitutional?*, 39 U.C. DAVIS L. REV. 1, 84 (2005) (answering the question in the affirmative); Nicholas Wolfson, *The First Amendment and the SEC*, 20 CONN. L. REV. 265, 266 (1988) (arguing that securities regulation laws and other forms of commercial speech should be highly constitutionally protected); cf. David A. Hoffman, *The Best Puffery Article Ever*, 91 IOWA L. REV. 1395, 1426-27 (2006) (analyzing potentially misleading "puffing" statements in the context of securities fraud).

157. See Michael R. Siebecker, *Corporate Speech, Securities Regulation, and an Institutional Approach to the First Amendment*, 48 WM. & MARY L. REV. 613 (2006) (arguing that the Supreme Court's approach to commercial speech and to corporate disclosures are headed for a clash, but may be reconciled through an institutional approach, which would still allow for a robust system of corporate disclosure).

158. See Seligman, *supra* note 152.

159. See, e.g., Investment Advisers Act, 15 U.S.C.A. § 80b-6 (West Supp. 2007); *Lowe v. SEC*, 472 U.S. 181, 183 (1985).

160. See, e.g., 15 U.S.C. § 77e (2000 & Supp. 2004) (preventing "gun jumping," i.e. advertising before the registration statement has been approved); 17 C.F.R. § 240.10b-5 (2007) (famous Rule 10b-5, which broadly prevents fraud in the sale of securities).

161. A system of integrated disclosure is mandated by the Securities and Exchange Act of 1934. See 15 U.S.C. § 78m(a) (2000 & Supp. 2004).

162. See, e.g., 17 C.F.R. § 240.14a-9 (2007) (preventing fraud in the solicitation of proxies).

163. *Lowe*, 472 U.S. at 183.

164. *Id.* at 184-85.

newsletter also included a “hotline” readers could call to request more information.¹⁶⁵ In response, the SEC sought an injunction to prevent Lowe from participating in any further investment advisory publications.¹⁶⁶ The case turned on the question of whether Lowe was providing individualized investment advice (permissible for the SEC to regulate), or whether he was writing more broadly about finance (which would fall into an exemption in the statute).¹⁶⁷ The Supreme Court read the newsletter as a more general publication about finance, construed it within the exemption, and therefore resolved the issue without reaching the First Amendment issues.¹⁶⁸ However, as the concurrence rightly pointed out, the statutory result seemed to be compelled by constitutional considerations.¹⁶⁹

Although the Supreme Court’s decision in *Lowe* precipitated a good deal of academic discussion,¹⁷⁰ the decision failed to signal any significant shift with regard to the other areas that had been identified as potentially conflicting with the First Amendment, viz registration, disclosure, and proxy statements. Perhaps in part that is because these other areas are fundamentally concerned with protecting investors from fraud, and fraudulent speech does not receive protection under the First Amendment.¹⁷¹ Indeed, speech intended to defraud or mislead seems to run counter to the fundamental truth-seeking function of the First Amendment. Further, although it is relatively easy to criticize the existing structure of securities regulation in terms of pointing out its conflicts with the First Amendment, it is difficult to offer a less restrictive alternative that would still protect investors. Any effort to regulate the actual value or content of the security—an option that was debated during the New Deal period, and rejected¹⁷²—would seem to be more invasive to business, in many ways, than the current regulatory regime.

In any event, prediction markets and the securities markets function differently, and therefore the type of regulation applied to prediction markets would need to be tailored accordingly. The focus of traditional public stock markets is the rapid accumulation of capital, along with the accompanying liquidity and ease of trading available to investors. Although the price-discovery function certainly exists in the capital markets—revealing whether some companies, or indeed entire technologies or industries, are on the rise or in decline—the fact is that these information discovery functions are arguably secondary to any sort of predictive

165. *Id.* at 185.

166. *Id.* at 184–85.

167. *Id.* at 209–10.

168. *Id.* at 209–11.

169. *Id.* at 236 (White, J., concurring).

170. See, e.g., Butler & Ribstein, *supra* note 156, at 171; Estreicher, *supra* note 155, at 296–99.

171. KENT GREENAWALT, SPEECH, CRIME, AND THE USE OF LANGUAGE 132–38 (1989) (discussing slight value of fraudulent or false speech).

172. See SELIGMAN, *supra* note 150, at 39–72.

or expressive capacity. With prediction markets, there is no underlying investment in a company or any residual claim to a company's earnings or assets.

Prediction markets exist to collect and aggregate information that individuals have; thus, the periodic disclosures mandated by the 1934 Act¹⁷³ would be largely superfluous. The amounts of money involved are tiny, compared with investments in the traditional stock market. Although many of the same issues with insider trading might be of concern in information markets, certain parties could be barred from participation and there are other ways to prevent market manipulation.¹⁷⁴ Because these risks can be countered and controlled for in a properly designed prediction market, the worries that have led to extensive SEC oversight in the securities context do not seem applicable to prediction markets.

A final, but important, distinction is that most investors in the securities market buy stock to enrich themselves, not to express any particular viewpoint or make any sort of statement. Of course, just as with sports betting, there may be some sense of loyalty or support in an investor's choice of one stock over another. An investor might make the choice to support a business because it is located in a particular region of the country, because a particular firm evidences good management or employment practices, or because that firm otherwise engages in socially responsible choices.¹⁷⁵ Yet seemingly the vast majority of investors are in the market because they wish to increase the long-term value of their holdings and make money, not to express themselves.

All of these differences, and most notably the expressive element of prediction markets, make the existing SEC framework an awkward fit for prediction markets. Moving from this discussion of securities regulation, we turn to yet another regulatory framework that might lend useful insights, the framework governing commodities and futures trading.

C. *Commodities Trading*

Before wading into the argument over the propriety of regulating prediction markets through the Commodities Futures Trading Commission (CFTC), we first provide a brief overview of what commodities are, the purpose of commodities trading, how commodities trading has his-

173. A system of integrated disclosure is mandated by the Securities and Exchange Act of 1934. See 15 U.S.C. § 78m(a) (2000 & Supp. 2004).

174. See Cherry & Rogers, *Tiresias and the Justices*, *supra* note 45, at 1164–67 (describing methods of prediction market design that could reduce the potential for insider trading and market manipulation).

175. Indeed, the socially conscious investing movement is growing in popularity. See, e.g., Maria O'Brien Hylton, "Socially Responsible" Investing: *Doing Good Versus Doing Well in an Inefficient Market*, 42 AM. U. L. REV. 1 (1992); Andrew Leckey, *Conscience Investors Can Still Cash In: Socially Screened Funds Gain Assets*, CHI. TRIB., June 25, 2006, § 5, at 5 (explaining the growing appeal of socially conscious investing, especially after Enron and other corporate scandals).

torically been regulated, and how the CFTC has recently reached out to regulate prediction markets.

Commodities and futures trading primarily exist for the purpose of hedging risks.¹⁷⁶ The clearest and easiest example would be a futures contract for wheat. A wheat farmer would be concerned if he or she thought that the price of wheat would decline in the next year. On the other hand, a cereal-making company would be worried if they thought the price of wheat would increase in the next year. Commodities markets would allow either the farmer or the cereal maker to “lock in” a certain price at a future date. Through such “lock-ins,” farmers and cereal makers can protect themselves from market declines or increases.¹⁷⁷ Derivatives are a general term for investments that are often grouped with commodities and futures. In a contract for a derivative, the price depends on the action of another financial instrument.¹⁷⁸

Beginning in the late 1800s and early 1900s, states began forbidding futures trading conducted in storefronts commonly known as “bucketshops.”¹⁷⁹ As noted by other commentators, the trading that occurred in these bucketshops often resembled gambling, as do many modern-day commodity trades.¹⁸⁰ The modern regulatory approach that has largely been adopted has been the channeling of trading through exchanges approved by the CFTC, the administrative agency charged with oversight of commodities trading.¹⁸¹ In 2000, Congress passed a bill that effectively deregulated many areas of commodities trading.¹⁸² Another significant event in the industry occurred at the end of 2006 when the two leading commodities trading floors, the Chicago Mercantile Exchange and the Chicago Board of Trade merged, turned the city of Chicago into a clearinghouse for commodities and futures transactions.¹⁸³

In terms of the interaction of the commodities laws and prediction markets, in 2005, in an event significant for a number of reasons, the CFTC asserted jurisdiction over a prediction market. On October 4, 2005, the CFTC assessed a penalty against Tradesports,¹⁸⁴ an Irish com-

176. The example is based on one provided in Hazen, *supra* note 119, at 378.

177. *Id.*

178. Niall Ferguson, *Trading on Commodities*, WALL ST. J., Dec. 19, 2006, at A16.

179. Jerry W. Markham, “Confederate Bonds,” “General Custer,” and the Regulation of Derivative Financial Instruments, 25 SETON HALL L. REV. 1, 11 n.32 (1994) (describing origins of term “bucketshop”).

180. See Hurt, *supra* note 3, at 396.

181. Lynn A. Stout, *Why the Law Hates Speculators: Regulation and Private Ordering in the Market for OTC Derivatives*, 48 DUKE L.J. 701, 721–22 (1999) (describing origins of commodities and derivatives regulation).

182. Commodities Futures Modernization Act of 2000, Pub. L. No. 106-554, 114 Stat. 2763 (codified as amended at 7 U.S.C., 12 U.S.C., and 15 U.S.C.).

183. David Roeder, *A Frenzy for Futures*, CHI. SUN-TIMES, Jan. 1, 2007, at 43, 47 (“[I]n 2006, the Merc and the Board of Trade shook hands on a merger they hope to complete by the middle of this year. The \$8 billion deal, which longtime Merc leader Leo Melamed called a Don Quixote impossible dream, was made possible by the soaring stock prices of both markets’ parent companies.”).

184. <http://www.tradesports.com> (last visited Feb. 23, 2008). The United Kingdom and Ireland do not place restrictions on gambling and wagering.

pany that runs both prediction markets and sports betting, asserting that Tradesports was engaged in unauthorized commodities trading.¹⁸⁵ In response to the CFTC's action, Tradesports delisted the offending markets that the CFTC identified—Gold Futures, Daily Crude, and U.S. Dollars versus Yen—and settled the action for \$150,000 in civil monetary penalties.¹⁸⁶

At the same time, the CFTC's pronouncement is also significant for what it did not do. The Tradesports markets on other subjects—the political, sports, and current events markets—continued trading without agency interference. From the markets that the CFTC selected, one could logically make the argument that the CFTC was only taking action against the markets that either duplicated commodities trading or most resembled such trading.¹⁸⁷ The other markets were not tied to the delivery, production, or cost of physical goods or objects, but rather, were based on knowledge and information about politics or other newsworthy areas.

Meanwhile, among the commentators who have written about prediction markets and how they might be regulated, there is substantial disagreement about what role the CFTC should play. Professor Tom Bell, a long-time proponent of prediction markets, suggests that no regulation is currently needed, that exemptions take prediction markets out of the jurisdiction of the CFTC, and suggests that existing common-law tort and contract remedies may suffice to protect traders.¹⁸⁸ Hahn and Tetlock of the American Enterprise Institute, on the other hand, suggest that CFTC regulation would actually bring more stability and certainty to prediction markets, because then, at the very least, these markets would not be banned as illegal gambling or subject to criminal sanctions.¹⁸⁹ Architzel, a long-time lawyer for the CFTC, also suggests that the CFTC should have jurisdiction over information markets, again for some of the same reasons of regulatory certainty.¹⁹⁰

There is a certain pragmatism to Hahn and Tetlock's and Architzel's arguments in favor of CFTC regulation. Compared to either the SEC or gambling enforcers, the CFTC would certainly be the least intrusive in terms of regulation. To some degree, it is a potentially extreme position—and perhaps an isolating one—to assume that all market regulation is harmful, especially when the alternative might be a complete

185. Press Release, Commodity Futures Trading Comm'n, U.S. Commodity Futures Trading Comm'n Assesses Penalties Against Irish Co. Trade Exch. Network Ltd. for Offering Illegal Commodity Option Contracts (Oct. 14, 2005), *available at* <http://www.cftc.gov/opa/enf05/opa5124-05.htm> [hereinafter CFTC Press Release].

186. *Id.*

187. *See id.*

188. *See* Bell, *Promoting the Progress*, *supra* note 14, at 67–77 (discussing exemptions).

189. Hahn & Tetlock, *A New Approach*, *supra* note 14, at 272–79.

190. Architzel, *supra* note 14, at 50.

ban based on (superficial, yet potentially problematic) similarities between prediction markets and internet gambling.

Of course, any proposed regulation must be approached with thought and care. At the present time, prediction markets are still in an embryonic stage and the implications of the technology, as well as the best way to regulate it, have not been fully evaluated.¹⁹¹ There is enough of a surface similarity to futures contracts that prediction markets would fit within the CFTC's bailiwick, at least more so than the other regulatory regimes discussed.

At the same time, we would argue, that if the CFTC is to regulate, such regulation must take into account the unique expressive elements of prediction markets, which differentiate them from commodities trading. Those trading in the commodities markets are doing so in order to hedge risk and lower financial exposure and risk, not to express any particular opinion on science, politics, world events, or other matters of public concern. In other words, trading on ideas is not the same as trading on bushels of wheat, the movement of currency prices, or other fungible goods. This is a distinction with a difference that should be reflected in any regulatory structure that might be applied to prediction markets.

IV. CURRENT FIRST AMENDMENT MODELS: AN INAPT FIT

If regulatory areas such as gambling, securities, and commodities do not apply neatly to prediction markets, in part because of the expressive qualities of prediction markets, what First Amendment tests might be applicable? In this Part, we analyze the tests applied to expressive conduct and commercial speech to see how they might apply to prediction markets. Yet, none of these tests seem to be a particularly good match for the reasons discussed below. This tends to suggest that prediction markets can help us clarify and refine our thinking about the way traditional First Amendment doctrines surrounding expressive conduct and commercial speech have been constituted.

A. *Expressive Conduct*

The political topics at issue in prediction markets are not presented in traditional forums for political debates such as university classrooms or newspaper editorial pages. Instead, they typically occur on a website, and sometimes involve tradable securities with monetary rewards. Does this change the constitutional result?

191. In a future article we intend to discuss a comprehensive scheme for the regulation of information markets, one that will protect the development of this emerging field and at the same time further investor confidence. At this time, however, a full discussion of these issues is beyond the scope of this article.

The Supreme Court held in *United States v. O'Brien* that “when ‘speech’ and ‘nonspeech’ elements are combined in the same course of conduct, a sufficiently important governmental interest in regulating the nonspeech element can justify incidental limitations on First Amendment freedoms.”¹⁹² Such speech, called “expressive conduct” or “symbolic speech,” receives a balancing test more tolerant of government regulation.¹⁹³ The *O'Brien* test holds that for regulation of expressive conduct, a government regulation is sufficiently justified if it is within the constitutional power of the Government; if it furthers an important or substantial governmental interest; if the governmental interest is unrelated to the suppression of free expression; and if the incidental restriction on alleged First Amendment freedoms is no greater than is essential to the furtherance of that interest.¹⁹⁴

This test is typically applied in contexts that are “content neutral,” meaning that the speech restrictions are justified without reference to the content of the regulated speech.¹⁹⁵

The *O'Brien* test certainly has critics who have pointed to its analytical difficulties.¹⁹⁶ But taking the Court’s decision on its face, let us consider the initial question: if regulation of prediction markets would be “content neutral.” It would depend on the nature of the regulation, of course. A regulation that applied equally to all subjects on a prediction market—political and nonpolitical alike—certainly would be content neutral. An example might be a legal restriction against fraud, requiring full disclosure of the terms of the contract, and requiring all bidders to honor their contracts. A regulation that restricted only certain topics, however, seems more likely to be content based and thus subject to strict scrutiny. One example might be a restriction that attempted to prevent people from predicting the outcome of U.S. presidential elections, but allowed such predictions for congressional races, local elections, or elections in foreign countries. More broadly, a ban on predictions on any form of elections—while allowing contracts on other political events, such as the success of a Supreme Court nomination—also appears content based. And perhaps more broadly, laws that attempt to carve out entire areas of thought as impermissible for prediction markets seem to have elements of content-based discrimination.

Assuming regulation of prediction markets is deemed not to be content based, how might the *O'Brien* test apply? It obviously depends on

192. *United States v. O'Brien*, 391 U.S. 367, 376 (1968).

193. *See Texas v. Johnson*, 491 U.S. 397, 406 (1989) (“The government generally has a freer hand in restricting expressive conduct than it has in restricting the written or spoken word.”).

194. *O'Brien*, 391 U.S. at 377.

195. *See, e.g., Va. Pharmacy Bd. v. Va. Citizens Consumer Council, Inc.*, 425 U.S. 748, 771 (1976).

196. *See, e.g., James M. McGoldrick, Jr., United States v. O'Brien Revisited: Of Burning Things, Waving Things, and G-Strings*, 36 U. MEM. L. REV. 903, 905 (2006) (arguing that the *O'Brien* test should be “buried with finality”). *O'Brien*-level scrutiny may also be shifting over time. *See, e.g., Susan Dente Ross, Reconstructing First Amendment Doctrine: The 1990s [R]evolution of the Central Hudson and O'Brien Tests*, 23 HASTINGS COMM. & ENT. L.J. 723, 724–25 (2001).

the exact regulation at issue, but it still seems possible to discuss the types of regulations that would pass muster, as well as the kind that might not.

First, under *O'Brien*, the regulation must implicate “a sufficiently important governmental interest” in regulating “the nonspeech element” of the communication.¹⁹⁷ Here, the nonspeech element of an information market seems not to be (1) the actual choice of topics, which involves judgment about which topics are significant and worthy of discussion; (2) an individual’s vote on any particular topic, which as discussed previously, is close to classic political speech; or (3) the aggregated prediction of the participants in the prediction market, which represents a collective judgment worthy at least of the same degree of political protection as an individual’s prediction.¹⁹⁸ Rather, nonspeech elements would include the mechanics of voting in a prediction market, particularly whether money changes hands. Although some might note that donating money can be a form of expression,¹⁹⁹ traditional First Amendment doctrine draws a distinction between expression and commercial activities and allows greater regulation of commercial activities.²⁰⁰ We expect this distinction may also appear in the regulation of information markets. Thus, prediction markets that entail monetary stakes are more likely candidates for regulation.

In regulating nonspeech activities, the government under *O'Brien* must also have a “sufficiently compelling governmental interest.” This is likely to be a fact specific inquiry, depending upon the nature of the asserted government interest. Activities such as preventing fraud, requiring the enforcement of contracts,²⁰¹ preventing crime, protecting national security, and avoiding the subversion of other government activities might all qualify, depending upon the details of the situation. In other situations, the government interest seems more controversial, for exam-

197. *O'Brien*, 391 U.S. at 376.

198. To the extent that the collective judgment of the information market is more likely to be correct (as empirically appears to be true on many occasions), the utilitarian aims of the First Amendment in discovering truth would be served by providing even greater protection to the collective judgment than to the individual predictions. As a practical matter, the collective expression derives from the individual predictions, and so there is a need to protect the individual expressions as well, but it seems worth noting that under some policy rationales, the collective judgment represented in an information market seems to deserve heightened protection because of its increased likelihood of promoting the discovery of truth that the First Amendment at least partially is designed to achieve.

199. See, e.g., *FEC v. Mass. Citizens for Life, Inc.*, 479 U.S. 238, 251 (1986); *Buckley v. Valeo*, 424 U.S. 1, 19 (1976).

200. Butler & Ribstein, *supra* note 156, at 172.

201. As a matter of public policy, life insurance contracts require a degree of closeness to the insured individual to reduce the incentive for someone to take out life insurance on an unrelated person and then profit by their death. Contracts without this insurable interest are void as matter of law, even if the insured would consent to the agreement. See generally Mary Ann Mancini, *Trustworthy Insurance?*, LEGAL TIMES, Feb. 13, 2006, at 25.

ple, attempting to prevent citizens from criticizing government policy²⁰² or promoting certain forms of moral behavior.²⁰³

Although courts may be more likely to uphold the regulation of prediction markets in areas where money changes hands, it seems worthwhile to contemplate why money should matter so much. In other areas, at least, the presence of money does not seem to be of great constitutional significance. For example, newspapers sell subscriptions, they hire people to solicit and edit commentary, and many pay a nominal amount to op-ed contributors. None of this commercial activity places the commentary piece into the realm of *O'Brien's* level of intermediate scrutiny.²⁰⁴ Yet, the incentive structure in a prediction market may more effectively achieve First Amendment goals than payment for an op-ed. The reason is that, in contrast with the op-ed, the payout for the opinion in a prediction market is not guaranteed. Rather, the speaker receives money only if his or her prediction is correct. Moreover, at least in some prediction markets, the speaker profits to the extent that he or she is willing to invest money behind the prediction, so that small monetary investments—perhaps reflecting uncertainty about a prediction—receive small rewards, whereas greater monetary investments, perhaps indicating greater confidence, receive greater rewards if correct. In cases where the payout is directly linked to predictive accuracy, such a system seems more likely to fulfill the truth-seeking function of the First Amendment. Thus, under a utilitarian analysis of the First Amendment, prediction markets would merit at least as much (and perhaps even more) protection as a newspaper op-ed page. If finding truth is what matters, why should our regulatory system not encourage information markets to reward those most adept at predicting the truth about our future?

B. Commercial Speech

According to the Supreme Court, “commercial speech” is “expression related solely to the economic interests of the speaker and its audience.”²⁰⁵ To determine if commercial speech is constitutionally protected, the Supreme Court has adopted the so-called *Central Hudson* test, which requires that (1) the commercial speech concerns lawful activity and is not misleading, (2) the asserted governmental interest is substantial, (3) the regulation directly advances the governmental interest asserted, and (4) the regulation is not more extensive than is necessary to

202. See *Texas v. Johnson*, 491 U.S. 397 (1989) (upholding even inflammatory speech of burning American flag).

203. See, e.g., *Lawrence v. Texas*, 539 U.S. 558 (2003) (recognizing a liberty interest in homosexual activity); *Griswold v. Connecticut*, 381 U.S. 479 (1965) (striking down state statute preventing married couples from buying contraceptives).

204. See generally *Buckley*, 424 U.S. at 17 (noting that presence of money did not trigger *O'Brien* test).

205. *Cent. Hudson Gas & Elec. Corp. v. Pub. Serv. Comm'n*, 447 U.S. 557, 561 (1980).

serve that interest.²⁰⁶ In many Supreme Court cases, this definition of commercial speech, perhaps predictably, has been applied to commercial advertising,²⁰⁷ including advertisements for activities, such as drinking alcohol, that some have deemed vices.²⁰⁸

Although the doctrine certainly has its critics,²⁰⁹ let us take the Court's test on its face and consider if the Court's definition of commercial speech could apply to prediction markets. Advertising to promote a prediction market might seem to qualify as commercial speech, as it would solicit individuals to engage in an activity for their profit and the profit of the market organizers. But the actual votes in a prediction market frequently seem to involve expressions that are not solely related to one's economic gain. This is particularly true in the case of participants who consciously vote in the market to support their desired candidates or outcomes, even if such votes are not likely to result in monetary gain.

The fact that one has a financial stake in the result of that prediction does not seem to mean that the speech is solely related to one's financial gain, as the *Central Hudson* test seems to envision. Rather, the speech is a sort of hybrid, part political and part commercial, and it seems unclear at best if the *Central Hudson* test is truly applicable. Perhaps a good analogy for the prediction market participant is again to a newspaper op-ed columnist. The columnist engages in pure political speech by writing a column yet simultaneously hopes to win a public following by making accurate political assessments and thus, presumably, eventually make additional money. Such newspaper columns—and, we think, prediction markets as well—seem far closer to the pure political speech than to the advertisements that frequently constitute commercial speech addressed in cases before the Supreme Court.²¹⁰

Nevertheless, if the *Central Hudson* test was applied to a prediction market, what would be the result? On some level, this question is impos-

206. *Id.* at 566.

207. See, e.g., *Lorillard Tobacco Co. v. Reilly*, 533 U.S. 525 (2001) (tobacco advertising); *Greater New Orleans Broad. Ass'n v. United States*, 527 U.S. 173 (1999) (broadcast advertising of casino gambling); *44 Liquormart Inc. v. Rhode Island*, 517 U.S. 484 (1996) (advertising price of alcoholic beverages); cf. Frederick Schauer, *Commercial Speech and the Architecture of the First Amendment*, 56 U. CIN. L. REV. 1181, 1183–84 (1988) (listing types of commercial speech other than advertising).

208. See Michael Hoefges & Milagros Rivera-Sanchez, "Vice" Advertising Under the Supreme Court's Commercial Speech Doctrine: The Shifting Central Hudson Analysis, 22 HASTINGS COMM. & ENT. L.J. 345, 349 (2000) (concluding that the Court is applying greater protection to advertising for so-called vices).

209. See, e.g., Brian J. Waters, Comment, *A Doctrine in Disarray: Why the First Amendment Demands the Abandonment of the Central Hudson Test for Commercial Speech*, 27 SETON HALL L. REV. 1626, 1630 (1997) (arguing that the *Central Hudson* test should be abandoned).

210. NAN LEVINSON, OUTSPOKEN: FREE SPEECH STORIES 4 (2003) ("Because the law has been defined in response to specific cases, our understanding of free speech is haphazard and partial—extensive on government censorship but sparse on commercial speech, for instance."); see also Post, *supra* note 109, at 153 ("First Amendment doctrine veers between theory and the exigencies of specific cases. . . . Doctrine becomes confused when the requirements of theory make little sense in the actual circumstances of concrete cases, or when doctrine is required to articulate the implications of inconsistent theories. First Amendment doctrine has unfortunately suffered from both these difficulties.").

sible to answer in the abstract because the results will depend upon the specific structure of the information market at issue and the asserted government interest in regulation. Yet despite this limitation, it is possible to make some general comments about how the test might apply.

First, the *Central Hudson* analysis begins by requiring that the commercial speech “concern lawful activity and not be misleading.”²¹¹ Under the traditional commercial speech doctrine, this seems fairly straightforward. The state is free to prohibit advertisements for cocaine, for example, because it is an illegal drug, just as it is free to prohibit deceptive advertising practices such as “bait and switch” or false claims that a new drug will simultaneously cure cancer, reduce weight, and improve one’s sex life. Notably, these restrictions involve commercial transactions (such as the purchase of a drug) with at least some distance from the speech act, as opposed to the purchase of a newspaper or an advertisement.

In contrast, the act of participating in a prediction market has more elements of expression. Consider, for example, a market devoted to predicting the street price of marijuana, both now and in the future. On one level, this market would undeniably concern unlawful activity, and thus arguably fail the first prong of the *Central Hudson* test; yet it simultaneously would be predicting the efficacy of government policy because effective drug-enforcement efforts tend to raise the street price of illegal drugs. Could such a prediction market be outlawed consistent with the First Amendment? Certainly a general prediction—“I think the street price of marijuana will increase ten percent in the coming year”—would seem constitutionally protected, and we remain skeptical that the aggregation of this prediction by a prediction market renders it less deserving of constitutional protection. If nothing else, we think the hypothetical shows the difficulty of mechanically trying to apply the *Central Hudson* test to prediction markets.

In any event, the “misleading” part of *Central Hudson*’s first prong seems easier to apply, at least if a situation arose where a topic on a prediction market was somehow misleading enough to constitute a type of consumer fraud. One difficulty, of course, is that, in most cases, a topic for prediction that is vague or unclear enough to give rise to complaints would be so unclear on its face that participants would seem unlikely to place money on an issue that they did not comprehend. A more realistic possibility for regulation might be a prediction market that misled consumers by manipulating the results or the contract, failing to disclose the fee system in advance, or otherwise failing to disclose material information. A government would be able to prohibit such activities (either under Congress’s commerce clause authority or a state’s police powers to

211. *Central Hudson*, 447 U.S. at 566.

enact consumer-protection statutes), and the First Amendment should pose no bar to such regulatory enforcement.

Second, the *Central Hudson* test also requires that the asserted government interest in regulation be “substantial.” In the context of prediction markets, what might qualify as a substantial government interest? The most obvious possibilities are the types of consumer-protection statutes mentioned above; similar federal consumer-protection restrictions on speech or data gathering have already occurred on topics ranging from enforcement actions by the Federal Trade Commission to the Do Not Call List restrictions on telemarketers to mandatory disclosures on drug and food packaging.²¹²

Beyond consumer protection, the possibility of achieving a “substantial” government interest appears murkier. Would saving the government from embarrassment qualify if a prediction market gave predictions that undercut government statements? Intuitively, we think not, and a substantial body of Supreme Court precedent prohibiting viewpoint-based discrimination²¹³ would seem to protect unfavorable predictions by an information market. To establish a substantial government interest, some real negative externality, not simply a dislike of the prediction, will probably be necessary.

Third, the *Central Hudson* test requires that the regulation must directly advance the governmental interest asserted.²¹⁴ Here, again, the outcome will be fact specific, depending on how closely does the regulation, as applied to a prediction market, advance the government interest. In this context, perhaps the most immediate observation is that analyses of governmental interests developed in different areas may not easily apply to the new field of prediction markets. For example, as discussed above, a key rationale for certain commodities restrictions may be to avoid disruptions among commodities traders exchanging large sums of money. Such a regulation, although a legitimate government interest in that context, may not be of much use in achieving that same interest when applied to an information market. Likewise, a rationale for prohibiting private lotteries might be to reduce competition to the state-run lottery, but we suspect prediction markets would not pose such competitive challenges to a state’s gambling and revenue-raising operations.

Fourth, under the *Central Hudson* test, the regulation may not be more extensive than is necessary to serve the governmental interest.²¹⁵ In this regard, it seems noteworthy that many of the government rationales for regulation of prediction markets occur only because of the presence of money. When money is not involved, however, it is far more difficult

212. See, e.g., *Mainstream Mktg. Serv., Inc. v. FTC*, 358 F.3d 1228 (10th Cir. 2004) (upholding federal Do Not Call List from attack).

213. See, e.g., *Texas v. Johnson*, 491 U.S. 397, 414 (1989) (striking down ban on flag burning).

214. *Central Hudson*, 447 U.S. at 566.

215. *Id.*

to imagine a governmental regulation that might satisfy the *Central Hudson* test. Thus, at the very least, government regulations ultimately may have to carve out exceptions for moneyless information markets. And information markets such as the IEM that involve relatively small amounts of money, such as \$500, would seem more likely to receive constitutional protection because the types of interests that justify regulation when large amounts of money are involved may seem to be overbroad when applied to small-scale financial stakes. In short, although there are good reasons to question whether information markets are commercial speech, to the extent that they are, the *Central Hudson* test is still likely to impose significant constraints on the ability of government to regulate prediction markets, particularly when the markets involve little or no real money changing hands.

In sum, we have concluded that much of the activity that occurs in a prediction market is comparable to the type of activity that traditionally receives First Amendment protection, in that it encompasses expression and furthers truth seeking.²¹⁶ At the same time, the traditional tests that have been developed are not an exact fit for this new technology. In a sense, this points out that First Amendment theory needs to be reconceptualized to accommodate a situation where money is needed in a different way to facilitate expression. Be that as it may, the next question is how should the government respond?

V. SOLUTIONS: BACKING AWAY FROM THE CLASH

In this section, we explore ways that all three branches of the federal government might work to reduce and resolve this tension between regulation and the Constitution, so that legitimate governmental regulatory concerns can be satisfied while still allowing prediction markets to do their work. In doing so, we present a new legal test, adapted from obscenity law, that may prove useful to courts grappling with these issues.

A. Executive-Branch Action

In many ways, the executive branch is the least-cost avoider capable of preventing any conflict between prediction markets and the First Amendment. Because the executive branch will initiate any enforcement action, its discretion and judgment alone may resolve the tensions without any intervention by the legislative and judicial branches. With regard to online gambling restrictions, for example, applicable regulations could make clear that prediction markets are not being targeted.

More broadly, the exercise of prosecutorial discretion by the Department of Justice and regulatory agencies such as the Commodities Fu-

216. See Frederick Schauer, *Towards an Institutional First Amendment*, 89 MINN. L. REV. 1256, 1274–76 (2005) (describing institutions that advance core First Amendment values).

tures Trading Commission can help prevent conflicts with protected speech. To date, the record of judgment in this area seems mixed. On the one hand, the CFTC no-action letter to the Iowa Electronic Markets seems a sensible recognition that the type of activity occurring when people predict the next president is far different from the traditional trading of wheat and currency. Likewise, the CFTC's apparent limitation of the Tradesports enforcement action to contracts involving what appear to be traditional commodities suggests at least some recognition of the statutory limits of authority, although perhaps not of the constitutional limits. On the other hand, Department of Justice subpoenas directed at commercial banks that had underwritten the initial public offerings of several overseas gambling companies may suggest an overly aggressive approach to enforcement,²¹⁷ particularly if it extends beyond traditional gaming activities, such as online poker, to reach the type of conduct that contains an expressive, predictive element. And more generally, neither the Department of Justice nor the CFTC have made clear their intention to respect the type of First Amendment activity incorporated in most prediction markets.

As initially discussed above, one solution for the current legal uncertainty regarding the legal status of prediction markets is for one federal agency, most likely the CFTC, to become the sole regulator of the field.²¹⁸ Although it remains open to dispute whether such regulation is necessary (or even always within the agency's statutory jurisdiction, depending upon the nature of the prediction market), a clear regulatory system would clear up much of the uncertainty. Moreover, to the extent that the regulation respected the First Amendment values involved in the prediction markets and preempted other less enlightened interference, such governmental involvement could conceivably allow prediction markets to develop faster than they would in an environment of regulatory uncertainty.

B. Congressional Action

If the executive branch does not resolve the conflict, congressional action offers another way of dealing with the tensions between enforcement actions and constitutionally protected activity. But this poses special problems. If the executive branch is the least-cost avoider, Congress is perhaps the highest-cost avoider. Any law would require attention from a legislative body with many pressing matters on its hands, and it seems unclear at best if Congress would devote time to passing legislation to protect what is at the moment the narrow and specialized area of prediction markets. Worse, at least some members had a negative reaction to a proposed information market that was deemed (rightly or

217. See Sorkin & Saul, *supra* note 7, at A1.

218. See *supra* Part III.

wrongly) as allowing bets on terrorism,²¹⁹ and these negative legislative views, even if unwarranted, may present a substantial barrier to finding the consensus to protect information markets. This may be especially true when the protection is being sought, after all, from laws that Congress itself recently passed.

A legislative solution is not impossible, of course. The online gambling bill was passed by a Republican Congress partly to satisfy the concerns of social conservatives.²²⁰ With a new Democratic majority in both houses, the antigambling lobby may have less influence, and there may be a willingness to modify what might be perceived as the excess of a prior legislature. Yet this possibility seems uncertain at best, and at this point, there is little-to-no evidence that such legislation is imminent.

Nevertheless, if Congress were to pass legislation to protect prediction markets, what should it look like? Professor Tom Bell has proposed a draft bill that would protect prediction markets that address scientific developments.²²¹ We certainly think that congressional protection of prediction markets would be a positive development. But we note that if Congress is going to invest the time and attention to protect prediction markets, it may be unlikely to do so for this narrow field more than once. Consequently, it is important that any protective legislation cover the bulk of existing markets containing constitutionally protected speech, and it is also important that such protective legislation be broad enough to allow prediction markets to flourish as broadly as possible. Unfortunately, Bell's proposed legislation protects only scientific predictions—not those involving other important areas such as law, politics, culture, and economics that also enjoy constitutional protection.²²² These are valuable areas in which prediction markets can develop, and predictions in these areas also involve elements of free speech. They also deserve protection, along with scientific speech, and thus any protective legislation should sweep more broadly than Bell's proposed bill.

Congressional legislation covering prediction markets with broad protection against prosecution and governmental interference might provide significant political advantages. The United States would have a regulatory regime for prediction markets more comparable to the freedom present in many other nations, which would keep the United States from being burdened by a competitive disadvantage in the development of this new predictive technology. Keeping prediction markets based in the United States may even ultimately aid regulatory efforts because, if markets are driven to more hospitable environments in Europe or Asia, U.S. authorities will suffer diminished control over a technology that has

219. See *supra* note 114.

220. See, e.g., Anna Palmer, *Online-Gambling Interests Lose 10-Year Fight*, LEGAL TIMES, Oct. 9, 2006, at 13 (describing lobbying fight as “a huge victory for social conservative groups”).

221. Bell, *Promoting the Progress*, *supra* note 14, at 86–87.

222. *Id.*

much of its origins in this nation. If Congress looks, it will find many reasons that prediction markets should be promoted, not stifled.

C. Judicial Action

If the executive branch is the least-cost avoider and the legislative branch is the greatest-cost avoider, the judicial branch may be the least-likely avoider. By that, we mean that ultimately courts probably will have to resolve the constitutional challenge. Before that legal clash occurs, it will be helpful for legal scholarship to begin analyzing the issues that courts will face and how judges might successfully resolve them.

The task will likely prove to be novel. As discussed above, none of the most common classifications of speech seem a perfect match for this new system of collaborative information gathering. But we think that, surprisingly, legal guidance can be found from an unexpected source—obscenity law. At first glance, the fields may seem dissimilar, if only because pornography and prediction markets appeal to very different interests. But because prediction markets and gambling are often lumped together (and gambling, for good or ill, has traditionally been associated with vice), some of the tests developed in connection with another vice may potentially be useful. Perhaps the way the Supreme Court has addressed sexually offensive material intermixed with constitutionally protected expression might offer guidance for dealing with expression that is intermixed with what some might view as gambling.

The key legal test for regulating obscenity is set forth in *Miller v. California*.²²³

Here, the Supreme Court concluded that [t]he basic guidelines for the trier of fact must be:

- (a) whether “the average person, applying contemporary community standards” would find that the work, taken as a whole, appeals to the prurient interest;
- (b) whether the work depicts or describes, in a patently offensive way, sexual conduct specifically defined by the applicable state law; and
- (c) whether the work, taken as a whole, lacks serious literary, artistic, political, or scientific value.²²⁴

How might such a test appear if translated into the field of prediction markets? An analogous test might ask

- (a) whether the average person would find that the activity, taken as a whole, appeals primarily to an interest in gambling for profit;

223. 413 U.S. 15 (1973).

224. *Id.* at 24 (internal citations omitted).

- (b) whether the activity violates conduct specifically outlawed by state or federal law; and
- (c) whether the activity, taken as a whole, lacks serious artistic, political, economic, or scientific value.

Obviously this test requires definition and application by the courts, just as the task of trying to apply the *Miller* test has resulted in no shortage of litigation.²²⁵ Nevertheless, the importance of the First Amendment interests at stake may make such judicial intervention inescapable, just as it was in the case of obscene and pornographic images (a form of speech that arguably lacks the significant social value that can be obtained from prediction markets). And given the difficulty in applying other First Amendment categories to this new technology, we think that the *Miller* test offers a useful analogy for discussion.

How might this test work in practice? As one of the harder cases (at least compared to a play-money or university-sponsored prediction market), let us consider the application of the test to a prediction market (1) that uses real money to purchase tradable securities, (2) that is run by a for-profit institution and not an academic institution, and (3) that involves trading predictions about political events such as who will win the 2008 presidential election or whether the Supreme Court will strike down state-sponsored affirmative action.

This test's first prong, requiring that the activity taken as a whole appeals primarily to an interest in gambling for profit, is at least partially satisfied by the profit motive of both the participants and the organizers. Unlike the many prediction markets that use play money, this type of market can find no easy escape by its noncommercial nature. The remaining question is if these sorts of activities—predicting the outcome of presidential elections and Supreme Court rulings, for example—constitute “gambling.” On the one hand, the activity consists in placing a monetary wager on the outcome of events not within one’s control, arguably analogous to placing a bet on which football team will win the Super Bowl next year. On the other hand, the outcome does not depend on chance, as much casino gambling does, and the expressive elements of political speech embodied in the topics should, by this point, be clear.

But let us concede for purposes of this hypothetical that the activity in the prediction market constitutes “gambling.” As indicated above, we think that if a court were to balance the harms of the activity against the advantages of the type of political speech at issue, the balancing test would overwhelmingly favor constitutional protection. Yet these sorts of

225. See, e.g., *Ashcroft v. ACLU*, 535 U.S. 564 (2002); *Ashcroft v. Free Speech Coalition*, 535 U.S. 234 (2002); *Reno v. ACLU*, 521 U.S. 844 (1997).

balancing tests are frequently, and perhaps inevitably, subjective,²²⁶ and they may not provide the sort of legal predictability that appears important for the development of information markets. If a *Miller*-type test could prevent this uncertainty, it might overall be best for the information markets, even if their predictive activities are labeled with the tawdry-sounding description of gambling. So, let us assume that a court will deem the prediction to be gambling and then continue on with the constitutional analysis.

This test's second prong, which requires activity that violates conduct specifically outlawed by state or federal law, might indeed be satisfied, either under current law (as discussed above) or by future, more stringent legislation. Granted, as discussed above, it does not appear at this point that the legislation directed at gambling necessarily targeted information markets, and particularly given the expressive elements present in prediction markets, courts might well wish to wait until the will of the legislature or executive-branch administrative agencies are more clearly expressed. But let us assume that an intention to restrict or ban prediction markets did exist. What then?

This test's third prong, perhaps in practice the most important, is whether the information market, taken as a whole, lacks serious artistic, political, economic, or scientific value. We think this prong will be extremely difficult to satisfy for any prediction market that predominantly focuses on political, economic, cultural, or scientific topics. Efforts to predict future outcomes of important questions, such as elections, Supreme Court decisions, or scientific discoveries, seem to have inherent value, even if ultimately unsuccessful. And if these predictions from information markets prove accurate, as they frequently have in the past, then the value of the market seems even more evident.

What activities might fail this third prong? We think the prime candidate might be games of pure chance, such as casino-type slot machines, because the purely recreational value of such activities is unlikely to outweigh a state or federal legislative interest in restricting such activities under a constitutional analysis.²²⁷ Likewise, although the matter is perhaps less certain, we would not be surprised to see courts conclude that predictions on sporting events lack the societal value to justify overriding legislation on constitutional grounds. Admittedly, sports prediction can certainly be an activity of skill, in that sense it is qualitatively different than the spin of a roulette wheel determined by pure chance.²²⁸ Nevertheless, to the extent that government authorities wish to restrict or eliminate such activities, we do not think that sports predictions posses

226. See, e.g., *City of Ladue v. Gilleo*, 512 U.S. 43, 60 (1994) (O'Connor, J. concurring) (noting that content regulations of speech may be an area where "fairly precise rules are better than more discretionary and more subjective balancing tests").

227. See *supra* Part III.A.

228. See *supra* Part III.A.

such evident social value that courts would be willing to grant sports forecasts constitutional protection instead of deferring to the legislative branches.

So what result from this regulatory regime? The answer, we think, is that the prediction markets on most academic subjects—politics, economics, and science—would be constitutionally protected, whereas prediction markets on entertainment and sports would be left to the mercies of the political branches. Is this ideal? The answer partly depends on the reader's political desires, of course. We personally might wish that anything even remotely resembling a prediction market be free to thrive, in order that this important field might enjoy the optimal conditions for growth. But the result of this regulatory regime at least presents a sort of compromise that would protect the most crucial aspects of prediction markets, while permitting government regulation in areas with arguably less social value. Even if this result does not completely satisfy either government regulators or those seeking to protect all prediction markets, it strikes us at least as a reasonable compromise that will allow (many, if not most) prediction markets to develop with greater legal certainty. Given the importance of prediction markets and the need to preserve their development, we think that even this compromise result is well worth achieving.

VI. CONCLUSION

Prediction markets offer the potential to shape the way that we collect knowledge and understand future events. In an earlier survey of information markets and discussions with market founders, we documented government regulation as one factor that was inhibiting the growth of this field.²²⁹ Since then, especially with the October 2006 gambling legislation, the regulatory atmosphere has arguably worsened.

Because of the expressive interests at stake in a prediction market, we argue that this regulatory zeal is not only misplaced, but potentially unconstitutional. Participating in an information market involves sharing one's knowledge, skills, and insights with the rest of the market. Such expression is constitutionally protected, just as writing a predictive opinion article in the newspaper or giving one's views to a pollster is protected. The mere addition of money (either real or virtual) into the equation should not change the constitutional conclusion, particularly when there seem to be few negative externalities.

Although some amount of sensible regulation may be in order to protect the participants, the wholesale outlawing of prediction markets through a mistaken analogy to gambling should be rejected. Prediction markets offer significant potential for a glimpse into our future, and we

229. E-mail from Emile Servan-Schreiber, CEO, NewsFutures, to Robert L. Rogers (Aug. 3, 2005) (on file with author).

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need this knowledge. The law should allow this new Cassandra the chance to speak.

