XBRL and the SEC: How the Commission Uses Interactive Data to Investigate Illegal Stock Options Backdating and What Interactive Data Means for the Future of Federal Securities Law Enforcement

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I. INTRODUCTION

As Chairman of the United States Securities and Exchange Commission (SEC), Christopher Cox has prioritized converting registered companies' periodic filings from static, obtuse disclosures to a more interactive format.¹ Since Cox became Chairman in 2005,

the Commission has hosted three roundtables on interactive data in the securities industry and has issued fifteen separate releases on the issue. The SEC website now even features a “Spotlight on Interactive Data and XBRL [Extensible Business Reporting Language] Initiatives” on its homepage. Cox has called interactive data a “powerful new capability,” a “big, new, and exciting enterprise,” and a “revolution[] [in] financial reporting and corporate disclosure

has been one of Mr. Cox's top priorities since he became chairman last year.”); Ellen M. Heffes, Interactive Data: Is the SEC’s Priority Your Priority?, FIN. EXEC., Mar. 1, 2007, available at http://www.thefreelibrary.com/Interactive+data:+is+the+SEC's+priority+your+priority%3F+Experiences...-a0160874707 (“if Commissioner Cox gets his way, history will indeed record his tenure as the time when financial statements were made easier to access by analysts and ordinary investors [through the interactive model].”); Louise A. Klusek, XBRL Changes Financial Reporting, INFO. OUTLOOK, Dec. 1, 2006, at 10 (“[C]ox is a champion of investor education”); Christopher Cox, Chairman, SEC, Fiscal 2007 Appropriations Request (Apr. 27, 2006), available at http://www.sec.gov/news/testimony/ ts042706cc.htm (“I have been very public in my belief that investors can benefit greatly from 'interactive data.' . . In fiscal 2007, I intend to expand our activities in interactive data.”) [hereinafter Appropriations Testimony]; Christopher Cox, Chairman, SEC, Testimony Before the U.S. House Committee on Financial Services, May 3, 2006, available at http://www.sec.gov/news/ testimony/ts050306cc.htm (“[t]hose of you who know me know that I have a great interest in how we can use technological advances to advance the welfare of our citizens—in the present case, individual investors.”).


worldwide.'" With interactive data, Cox says, companies and investors "can slice and dice the information like a chef at Benihana with a cube of Kobe beef." Cox has repeatedly urged registered corporations to take the next step into "real-time" disclosure and adopt the new technology in their required periodic filings.

However, despite Cox's cheerleading, the interactive data trend has been slow to catch on. While Cox has "'use[d] honey not vinegar'" to attract registrants to file their data in XBRL format, few corporations seem to want Cox's honey. As of April 2007, fewer than fifty "test group" registrants had fully participated. Admittedly, these corporations include brand names such as 3M, Bristol-Myers Squibb, Ford Motor Company, Microsoft, PepsiCo, and Xerox—behemoths of the corporate world. Yet, while these corporations represent over $1 trillion in market value, even Cox has admitted that they are really "only a handful of early adopters" hardly representative of the volume and breadth of the entities registered with the Commission. The Commission receives over 700,000 filings

8. Id.; see also Remarks at Third Roundtable, supra note 6 ("users will be able to slice and dice . . . executive compensation information any way they like.").
9. See Promise of Interactive Data, supra note 5.
13. Id.
annually from its tens of thousands of registrants, and sec.gov users conduct over 528 million searches per year using the SEC’s current Electronic Document Gathering, Analysis, and Retrieval (EDGAR) system. Analysts further disseminate that EDGAR information, accounting for millions more searches of company data.

While Cox certainly expected other registered entities to follow 3M and Microsoft’s lead, widespread voluntary adoption of interactive data reporting requirements has not occurred. Meanwhile, several observers have wondered if a rule mandating interactive data is in the offing. The Commission has issued no such rule; in fact, before spring 2007, interactive data seemed to have been a backburner topic. Interactive data was an ongoing effort for a select few large corporations, but it remained a lofty goal—or non-concern—for thousands of remaining registrants.

In February, however, Cox addressed interactive data as it pertains to the recent wave of stock-options backdating scandals. Specifically, Cox stated that the Division of Enforcement caught many corporations’ illegal stock options backdating only by analyzing the companies’ executive compensation disclosures with XBRL. In other words, were it not for the interactive data technology, the Commission may not have instigated many of its stock options backdating investigations. As Cox stated:


17. See id.

18. See Karey Wutkowski, SEC’s Cox—XBRL Conversion Doesn’t Need an Audit, REUTERS, Mar. 19, 2007, http://www.reuters.com/article/governmentFilingsNews/idUSN1929390220070319 (last visited Aug. 30, 2007). This article focuses on the adaptation of the XBRL technology to a specific enforcement context. While the article endorses the Commission’s XBRL initiative, see infra Part V, it does not address whether the SEC should mandate interactive disclosure.

19. Id.

It was especially fortunate that this real-time interactive data technology was adopted just as the SEC put into effect new rules requiring real-time reporting of option awards within two days of the grant. . . . Not surprisingly, once real time disclosure was combined with interactive data to give the Commission and the public almost instant access to information about stock option grants in immediately analyzable form, we began to find clues that had previously gone undetected. That led directly to the discovery of what we now know were billions of dollars of backdated stock option awards.21

Cox’s statement is an important glimpse into the origin of the stock options backdating scandal, which now reaches over 170 companies.22 Cox explicitly states that the introduction of interactive data to executive compensation disclosures led directly to increased stock options backdating investigations.23 Once the SEC was able to

21. Id. Chairman Cox here refers to section 403 of the Sarbanes-Oxley Act of 2002. See infra Part II.A.1. Note that Cox does not use the term “XBRL” in his comments about interactive data catching stock options backdating. It is possible that the Commission used some predecessor to XBRL, such as an XML-based database of stock options facts, to spot the illegal activity. This would explain the Commission’s investigations of Peregrine Systems, Symbol Technologies, and other early companies, discussed in Part II.A.2. However, whether the SEC discovered stock options backdating through an XML- or XBRL-based database is largely immaterial; the consequence was the same. By converting executive compensation data to a richer, more interactive format, SEC reviewers were able to spot illegal options backdating that had previously gone undetected. Note also that Cox anticipates “mak[ing] improvements to the enforcement case management system” in fiscal year 2007. Appropriations Testimony, supra note 1.


How did we get here? . . . First, on the SEC front, our investigations are born of a conscious effort to proactively think about where problems might be . . . . Our Office of Economic Analysis then analyzed data and refined the areas of concern. And in the Enforcement Division, we gathered information and data regarding specific cases to bring the issues into focus, culminating in our enforcement actions over the last several years.
more quickly and effectively analyze executive compensation disclosures, it stepped up its enforcement and investigation procedures with respect to illegal stock options backdating. The Commission’s use of interactive data has already changed the way the SEC investigates stock options backdating; in essence, the new technology has changed federal securities law enforcement. The increased efficiency and transparency of interactive data make the Commission’s enforcement mechanisms more responsive to illegal stock options backdating disclosed in the filings.

In the wake of these recent increased investigation and enforcement procedures, Cox recently reannounced the SEC’s commitment to a $54 million initiative to, in part, update and support the EDGAR\textsuperscript{24} system so that it will be amenable to the new interactive format.\textsuperscript{25} Originally announced in September 2006,\textsuperscript{26} discussion of the initiative is useful in light of the project’s recent “landmark progress.”\textsuperscript{27} On September 25, 2007, Cox announced “the completion of all work on developing data tags for the entire system of U.S.


24. The EDGAR system takes registered companies’ filings with the SEC and “performs automated collection, validation, indexing, acceptance, and forwarding” to ensure compliance with the federal securities laws. SEC, Important Information About EDGAR, \url{http://www.sec.gov/edgar/aboutedgar.htm} (last visited Aug. 30, 2007) [hereinafter EDGAR Information]. The SEC phased in EDGAR filing for companies beginning in 1993. See \textit{id.} As of May 1996, “all public domestic companies were required to make their filings on EDGAR, except for filings made in paper because of a hardship exemption. Third-party filings with respect to these companies, such as tender offers and Schedules 13D, are also filed on EDGAR.” \textit{Id.}


27. \textit{Id.}
generally accepted accounting principles,” calling it a “great step toward making SEC reporting easier for registrants and easier to understand for every investor.”

After describing the stock options backdating scandal and the XBRL technology in Part II, Part III of this article details how the SEC has used XBRL to prosecute stock options backdating. Part IV then discusses Cox and the Commission’s initiative to adopt the XBRL technology for executive compensation disclosures. Finally, the SEC initiative is endorsed in Part V. There are pitfalls to the Commission’s push toward XBRL, and this article does not take those potential concerns lightly. For example, registrants could find loopholes in the XBRL reporting language. More likely, the Commission’s rapid responses to data in interactive filings could become knee-jerk reactions, leading to over-investigation. While SEC over-investigation remains a prime concern in this initiative, the merits of converting executive compensation disclosures to an interactive format outweigh the dangers.

Converting the EDGAR system to XBRL technology would accomplish three main goals. First, interactive disclosure would provide more transparent data for analysts, investors, and law enforcement investigators. Second, the conversion would discourage registrant double-speak, promote the use of plain English (or, at least, terms in the XBRL taxonomy) and would encourage more concise filings. Third, using interactive data would promote the public policy goal of the SEC as the investor’s advocate and would increase public confidence in the U.S. capital markets and their regulatory system.


29. Id. (quoting Chairman Cox).
II. OVERVIEW: STOCK OPTIONS BACKDATING AND INTERACTIVE DATA

A. Stock Options Backdating—Introduction, History, and Investigations

In addition to salaries and bonuses, many corporations grant their employees stock options as a form of non-cash compensation. During the economic boom of the 1990s, “[o]ptions to buy shares at a preset ‘strike’ price—a point at which recipients can convert them to shares—became a widespread form of compensation . . . . Along the way they attracted controversy, in part because some executives made huge fortunes off them as their stock prices soared.”

Stock options backdating refers to the practice of rewriting the issue date of a stock option granted to an employee, usually a high-level executive, to reflect a date earlier than the actual issue date. Several academic studies in the 1990s indicated that companies were

30. Wikipedia, Employee Stock Option, http://en.wikipedia.org/wiki/Employee_stock_option#ref-0 (last visited Aug. 30, 2007). Companies may grant employees stock options for several reasons. “Traditionally, stock option plans have been used as a way for companies to reward top management.” Nat’lCtr. for Employee Ownership, Employee Stock Options Fact Sheet, http://www.nceo.org/library/optionfact.html (last visited Aug. 30, 2007). Companies may also use stock option grants to link employees’ interests with company and shareholder goals. Id. Companies with high growth potential but few liquid assets may grant stock options to incentivize long-term employment with the company. Id. An option can be either a call option or a put option. RICHARD A. BREALEY & STEWART C. MYERS, PRINCIPLES OF CORPORATE FINANCE 558 (5th ed. 1996). Call options give an investor “the option to buy an asset at a specified exercise price on or before a specified exercise date.” Id. at G2. A put option, meanwhile, gives the investor “an option to sell an asset at a specified exercise price on or before a specified exercise date.” Id. at G10.


32. Erik Lie, Backdating of Executive Stock Option (ESO) Grants, http://www.biz.uiowa.edu/faculty/elie/backdating.htm (last visited Aug. 30, 2007). Lie explains that executive stock options are normally granted “at-the-money,” meaning that the exercise price is equal to the market value of the underlying stock on the grant date. Id. However, “[b]ecause the option value is higher if the exercise price is lower, executives prefer to be granted options when the stock price is at its lowest. Backdating allows executives to choose a past date when the market price was particularly low, thereby inflating the value of the options.” Id.
“systematic[ally]” backdating stock options. Professor David Yermack of NYU’s finance department explained, “[t]he whole point of a stock option is that you only profit if the stock goes up . . . . If you fix it in advance so that it’s already deep in the money, it eliminates a lot of the risk.” These “in-the-money” stock options are not illegal in themselves; however, companies who grant these options without properly disclosing the terms of the transaction violate periodic reporting rules under the Securities and Exchange Act of 1934. “Companies have a right to give executives lavish compensation if they choose to, but they can’t mislead shareholders about it. Granting an option at a price below the current market value, while not illegal in itself, could result in false disclosure.” Backdated stock options

33. Maremont, supra note 31. Professor David Yermack of New York University is credited with the first comprehensive analysis of stock options backdating, beginning in 1994. Id. Yermack analyzed the timing of CEO stock option awards, concluding that “the timing of awards coincides with favorable movements in company stock prices.” David Yermack, Good Timing: CEO Stock Option Awards and Company News Announcements, 52 J. Fin. 449, 449 (1997). After rejecting alternative theories and explanations, Yermack concludes that “managers’ stock option awards are favorably timed relative to releases of good and bad news.” Id. This practice is called options “spring-loading.” INSTITUTIONAL SHAREHOLDER SERVS., AN INVESTOR GUIDE TO THE STOCK OPTION TIMING SCANDAL 1 (2006), available at http://www.issproxy.com/pdf/OptionTiming.pdf. In a 1998 working paper, Yermack and two colleagues examined the “resetting” of previously-issued executive stock options. Menachem Brenner, Rangarajan K. Sundaram & David Yermack, Altering the Terms of Executive Stock Options (N.Y. Univ., Working Paper No. FIN-98-010, 1998), available at http://www.stern.nyu.edu/fin/workpapers/wpa98010.htm. That working paper found that “in [a] sample of 396 executives whose options had terms reset in the 1992-95 period, a large majority had exercise prices reset to the market price. This resulted in a reduction of the typical option’s exercise price by about 40%.” Id. Professor Lie found similar results, including that stock prices tend to decrease just before grants and that the “pre- and post-grant price pattern has intensified over time.” Lie, supra note 32; see also Erik Lie, On the Timing of CEO Stock Option Awards, 51 MGMT. SCI. 802 (2005).

34. Maremont, supra note 31.

35. See INSTITUTIONAL SHAREHOLDER SERVS., supra note 33, at 1–2. Note that a company’s backdating may be legal “when the company maintains accurate records, treats those options as discounted, and accounts for those grants in its earning reports and tax filings.” Id. at 2.

that were (1) not disclosed, (2) only partially disclosed, or (3) falsely reported could violate the securities laws because the company’s periodic reports to shareholders would contain material omissions or material misstatements of fact.

In 2006, Professors Randall Heron of the Indiana University School of Business and Erik Lie of the University of Iowa released findings that “[m]ore than 2,200 U.S. companies may have tampered with the timing of executive stock-option grants between 1996 and 2005.”

Looking at stock option grants made between 1996 and August 2002, Heron and Lie’s study found that twenty-three percent of all grants made were at low market prices for the stock. The study used August 2002 as the cut-off date, since new SEC rules regarding reporting of stock options took effect that month. Numerous articles have credited Heron and Lie’s study with the first wave of stock options backdating investigations.

1. Stock Options Reporting—History

Until 2002, companies registered with the SEC had until forty-five days after the end of the fiscal year to report option grants made during the year; this delay made it virtually impossible to track options backdating, let alone whether the backdating had been disclosed to shareholders. Section 403 of the Sarbanes-Oxley Act of 2002 shortened this reporting period drastically, allowing only two


38. Bilodeau & Weiss, supra note 23.

39. Id.


business days for the reporting of an option grant. The SEC released its final rule in response to section 403 on August 27, 2002. While section 403’s two-day requirement has created opportunities for the Commission to review executive compensation disclosures more quickly for stock options backdating, this article focuses on the interactive data aspect of the stock options backdating scandal. At least one observer has speculated that companies are not complying with the regulation. If companies are not complying with the two-day rule for the reporting of option grants, one of the actual ways the Commission has been able to spot such illegal options backdating has been through the use of interactive data. Therefore, this article focuses on the interactive data portion of Cox’s statement and the current SEC initiative to convert its filings to the XBRL format.

2. Stock Options Backdating Investigations—A 21st Century Phenomenon

The SEC first looked into stock options backdating in 2003-2004, when the Commission investigated executive compensation practices at firms including Peregrine Systems and Symbol Technologies. Peregrine Systems, a software maker, “awarded executives stock options and pretended they were granted on the day the company’s stock touched its lowest price for the quarter,” without notifying investors in its periodic filings. Symbol Technologies, meanwhile, faced SEC charges that a top executive “allegedly had his staff backdate transactional documents and use the phony exercise dates in

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43. Final Rule: Ownership Reports and Trading By Officers, Directors and Principal Security Holders, Rel. No. 34-46421, available at http://www.sec.gov/rules/final/34-46421.htm. As Cox notes in his statement, the Commission’s increased ability to prosecute illegal stock options backdating owes as much to the Sarbanes-Oxley two-day reporting requirement as it does to interactive data reporting. SEC Speaks, supra note 20. For further reading on the two-day reporting requirement, see Stephanie Saul, Study Finds Backdating of Options Widespread, N.Y. TIMES, July 17, 2006, at C1.
44. Saul, supra note 43 (quoting University of Iowa Professor Erik Lie’s analysis of stock option grant study results as reflecting share price manipulation).
45. See Thomsen, supra note 23.
46. Bilodeau & Weiss, supra note 23.
the forms on which the executives reported their acquisitions to the SEC and the public.\textsuperscript{47} Both Peregrine and Symbol Technologies settled with the SEC without admitting guilt.\textsuperscript{48} In early 2006, a \textit{Wall Street Journal} article headlined "The Perfect Payday"\textsuperscript{49} raised questions about option granting practices at companies such as: Affiliated Computer Services Inc.; UnitedHealth Group Inc.; Mercury Interactive Corp.; Analog Devices Inc.; and Comverse Technology Inc., among others. The SEC later investigated and/or charged several of these companies with illegal options backdating.\textsuperscript{50}

While academic studies and newspaper articles may have initially discovered many instances of illegal stock options backdating, Cox's statement at the Corporate Counsel Institute indicates that interactive data played a direct role in the investigation of these companies' practices. In order to better understand how the SEC uses XBRL to catch illegal options backdating, it is necessary to describe how the technology works.

\textbf{B. Interactive Data and XBRL}

\textit{1. XBRL—Technical Introduction, Definition, and Terms}

XBRL is an Extensible Markup Language (XML)-based standard language used in computer programming.\textsuperscript{51} XBRL claims to be "a standard means of communicating information between businesses and . . . the internet."\textsuperscript{52} XBRL International Incorporated, a non-profit

\begin{itemize}
\item \textsuperscript{47} Pender, \textit{supra} note 23.
\item \textsuperscript{48} \textit{Id.}; Bilodeau & Weiss, \textit{supra} note 23.
\item \textsuperscript{49} Forelle & Bandler, \textit{supra} note 36.
\item \textsuperscript{52} XBRL International, \textit{An Introduction to XBRL}, http://www.xbrl.org/ WhatIsXBRL/ (last visited Sept. 1, 2007).
\end{itemize}
international consortium, runs the XBRL “to define and exchange business and financial performance information.”

The XBRL consortium currently has over 450 members, including government agencies, vendors, and other regulators. According to XBRL International, the goal of XBRL is simple: “Instead of treating financial information as a block of text—as in a standard internet page or a printed document—it provides an identifying tag for each individual item of data. This is computer readable. For example, company net profit has its own unique tag.” Yet, all this tagging does not appear as one big jumble in front of the user. Each piece of financial information appears as it normally would; however, each financial fact tagged in the XBRL format contains a hidden “barcode” that allows it to communicate with other computer programs. “We are used to seeing information presented in documents that use HTML to control how data looks on a Web page.” But Web sites also employ another meta language called XML . . . [in which] [d]ata is tagged so that static documents can function as interactive reporting tools. XBRL is an extension of XML created to conform to the requirements of financial reporting.

Creating a unique tag for each piece of business information would seem costly. However, the XBRL consortium insists that now that it has created the taxonomy, or dictionary, of business-related terms, tagging financial data and using XBRL is simple:

The introduction of XBRL tags enables automated processing of business information by computer software, cutting out laborious and costly processes of manual re-entry and comparison. Computers can treat XBRL data “intelligently:” they can recognise the information in a XBRL document, select it, analyse it, store it, exchange it with other computers and present it automatically in a variety of ways for users.

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54. Id.
55. XBRL International, supra note 52.
56. SEC, supra note 12.
58. Id.
59. XBRL International, supra note 52.
By eliminating entering and re-entering of financial data, the XBRL consortium hopes to cut down on hours spent transcribing financial data and money wasted correcting human errors in that transcription.\(^6\)

In order to facilitate this business-to-business and business-to-Internet communication, XBRL uses its main component, called an "instance document," which contains the business facts that the user is reporting as well as a collection of taxonomies.\(^6\) These taxonomies define "metadata" about the facts the user is reporting; different jurisdictions have different taxonomies. Within the United States, there are generally accepted accounting principle taxonomies for Commercial and Industrial, Banking and Savings, Insurance, Investment Management, Brokers and Dealers, and Pensions.\(^6\) Metadata in these taxonomies might include "what the facts mean and how they relate to one another."\(^6\) Esoteric descriptions of the XBRL format are helpful but incomplete without an example. The next section describes how one agency has put interactive data to work.

2. **XBRL in Action—The FFIEC Example**

Several entities have already employed XBRL in their reports and filings, including the Federal Financial Institution Examination Council (FFIEC).\(^6\) The FFIEC is an "interagency body empowered to prescribe uniform principles, standards, and report forms for the federal examination of financial institutions."\(^6\) Five separate agencies govern the examination of these institutions, including the Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation (FDIC), the Office of the Comptroller of the Currency (OCC), the National Credit Union Administration, and the

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60. Id.
63. Wikipedia, supra note 51.
Office of Thrift Supervision. The FFIEC is also charged with "mak[ing] recommendations to promote uniformity in the supervision of financial institutions."66 One of the FFIEC’s top recommendations was to convert the collection of quarterly bank financial statements (Call Reports) to the XBRL system.67 Over 8300 banks issue these Call Reports at four quarterly reports per year: these banks produce roughly 33,200 paper filings annually.68

Recognizing the "demands of the financial industry for more timely, accurate, and usable information,"69 the FFIEC worked with the FDIC, the OCC, and the Federal Reserve Board to create an XBRL-based Central Data Repository (CDR) for all Call Reports. The program became mandatory in 2005. The CDR stores and manages Call Report data for all financial institutions; in addition, its “[i]ntegrated metadata repository . . . contains the rules, calculations, edits, and instructions for every Call Report quarter.”70

Response to the first and largest XBRL system71 has been overwhelmingly positive; the FFIEC’s Call Report Modernization Program garnered a 2006 Government Computer News Agency Award72 and a Computerworld Honors Program Case Study.73 While previous quarterly banking submissions under the old regime suffered from a sixty-six percent “clean” rating, submissions under the new CDR system were up to standards about ninety-five percent of the

66. Id.
67. See Wikipedia, supra note 51.
68. Id.
time.\textsuperscript{74} Under the old system, the agencies took more than three weeks to digest banking filings; the new CDR system cuts that time down to days.\textsuperscript{75} The new CDR system has also lightened the regulatory load: "[i]n the past . . . bank regulators would have to chase down errors in the call reports via phone calls, e-mails, or faxes. ‘Now, if you have a [bank executive] on the phone, you can have them submit the information, and you can see it on your screen immediately.’"\textsuperscript{76}

The FFIEC’s Call Report Modernization Program resulted in filer, agency, and regulatory improvements. Issuers submitted cleaner reports, agencies took less time to digest filings, and regulators spent less time fixing errors in quarterly statements. The question remains whether the SEC will be able to effectively implement this technology. FDIC Chief Information Officer Mike Bartell, and former CIO at the SEC, expressed concern over the SEC’s ability to implement interactive data effectively: "[w]e had over 350 unique form types [at the SEC] . . . I don’t think it’s as straightforward as it is in the banking area, where everything that’s submitted is financial, tabular, and lends itself to tagging in a certain way.”\textsuperscript{77}

Meanwhile, a new SEC administration, including Cox and a new CIO, Corey Booth, has begun the $54 million initiative to convert EDGAR filings to XBRL.\textsuperscript{78} I discuss this initiative in greater detail in Parts IV and V. The following section deals with the Commission’s preliminary benefits from using XBRL. Even though the initiative is less than a year old, Cox has claimed that the Commission has already used interactive data to spot securities law violations.\textsuperscript{79} Specifically,

\begin{itemize}
\item \textsuperscript{74} Dizard III, supra note 71.
\item \textsuperscript{76} Dizard III, supra note 71 (quoting Martin D. Henning, associate director of FDIC’s Statistics Branch in the Division of Insurance and Research, and a project director for the Call Report Modernization Project) (alteration in original).
\item \textsuperscript{77} Ivy Schmerken, Regulators to Launch Call Report Modernization Project, FINANCETECH, June 1, 2005, http://www.financetech.com/news/bank/showArticle.jhtml?articleID=163702583 (alteration in original).
\item \textsuperscript{78} See Booth, supra note 15; SEC to Rebuild, supra note 15.
\item \textsuperscript{79} SEC Speaks, supra note 20.
\end{itemize}
Cox has attributed the latest stock option backdating investigations to the new technology. The question is, how did the SEC do it?

III. HOW THE SEC USES INTERACTIVE DATA TO CATCH ILLEGAL STOCK OPTIONS BACKDATING

In a recent interview with Geoffery Picard, Publishing Director for the Journal of Accountancy, Cox responded to questions about the Commission’s use of XBRL in reviewing periodic filings. First, Cox lauded the potential of interactive data as “a hallmark of our much-improved and qualitatively superior disclosure for ordinary investors.”

Cox was quick to point out benefits to other users as well. For Cox, the Commission’s own ability to use and interpret the XBRL data was a close secondary reason for implementing the initiative. In fact, Cox responded in the interview that XBRL would be useful not just to the Division of Enforcement but would also help the Commission “with respect to the SEC’s internal work in the areas of corporation finance, market regulation, investment management, examinations and enforcement, and accounting, interactive data is going to help us do a much better job of analyzing the massive amounts of information that are filed with the commission.” When the Division of Enforcement is able to “do a much better job of analyzing” data, a greater number of Enforcement actions could not be far behind. Cox stated in March that the SEC has used this data in researching stock options grants. If the SEC is using the new interactive format to search executive compensation disclosures, and there are now hundreds of pending stock options backdating

80. Id.  
82. Id.  
83. Id.  
84. See id. Note that the SEC’s Chief Information Officer, Corey Booth, considers the SEC a “tertiary beneficiary” of interactive data. Booth, supra note 15, at 6. Booth describes investors and analysts as primary beneficiaries, while companies and mutual funds benefit secondarily. Id.  
85. Getting it Right, supra note 81.  
86. See supra notes 19–28 and accompanying text.
investigations, how is the SEC using XBRL to catch illegal options backdating?  

A. Division of Corporation Finance Demonstration Examines Interactive Filings and Executive Compensation Disclosures

At the third Interactive Data Roundtable, Division of Corporation Finance Director John W. White demonstrated how the Commission would look at interactive filings, in particular executive compensation disclosures, to catch inaccuracies or misstatements in reports. A self-proclaimed “enthusiastic supporter of all this [initiative],” White demonstrated that “teams of reviewers” in Corporation Finance could view a company’s data just as easily as the preparer itself. First, White illustrated that users “can automatically compare information from various sections within a single disclosure document.” To do this, White claimed that the structure of the XBRL taxonomies enables users to “view the underlying authority of accounting literature . . . associated with each piece of tagged information.”

SEC reviewers could view information from issuers across quarters with a simple mouse click. White said “[t]his [is primarily] a tool for senior management as they are getting ready for the earnings conference call. . . . [If] this disclosure . . . [is] inconsistent [or] confusing . . . they will be able to make the corrections and the

87. Note that at least one SEC official disclaims the ability of interactive data to affect the enforcement process. See, e.g., Debra D’Agostino, CIO Interview: Corey Booth of the SEC on Catching the Bad Guys, CIO INSIGHT, June 2, 2006, http://www.cioinsight.com/article2/0,1540,1971039,00.asp (last visited Sept. 14, 2007) (SEC CIO Booth stated that “since most investigations are multi-month or multiyear affairs, a few weeks on the front end doesn’t really affect us one way or another.”).


89. Id.

90. Id. For example, “revenue recognition” will appear as a box and users clicking on that box would be able to view the underlying authoritative literature for that item. Id.

91. Id.
clarifications before they file." Users, including regulators, having difficulty comparing disclosures across periods would be able to use Microsoft's CompareRite feature immediately to highlight changes between the filings. White further demonstrated that regulators would need only a few mouse clicks to pull up three windows comparing revenue recognition information between related companies.

Using the example of a company investigated for stock option backdating, White stated that the company—and presumably regulators—"could easily go back very quickly and look at all the past disclosures [the company] made concerning option grants." In addition, the company and the SEC "could easily and quickly look at what other companies were saying and how they were handling the problem." In other words, imagine that a fruit basket represents all the elements of an SEC filing: an orange for executive compensation, a pineapple for earnings, a banana for management’s discussion and analysis, and so on. Pre-XBRL, regulators had to sift through each basket to spot a bad apple, and it was difficult to take an apple from one basket and compare it to an apple from another. The interactive data technology, in a sense, turns the basket into a compartmentalized crate: the new fruit crate allows regulators to find and pull an orange out of each basket quickly and easily to see which one has mold.

B. Specific Techniques the SEC Uses in Interactive Data to Catch Stock Options Backdating

There is nothing novel about the methods that the SEC is using to discover stock options backdating using interactive data. Investigators still examine grant dates, execution dates, and reporting dates for executive stock options; all that has changed is the format of the information. However, this interactive data format allows investigators to cull and compare information more quickly. Twenty-five years ago, comparisons of stock option issue dates and execution

92. Id.
93. Id.
94. Id.
95. Id.
96. Id.
dates were done on paper. Under EDGAR, such information was available, but because the filings simply provide the information in an electronic format, it follows that an SEC staff investigator would still have to search each file manually for the correct information.

For example, an SEC staff member might examine Coca-Cola Company’s grant of stock options to its President made on April 26, 2007. Investigators may easily view the options’ exercise price under Column 2 of Table II; they may also readily see the transaction date. The filing date is displayed at the top of the page, and a quick glance at the desk calendar reveals that the filing date is within two business days of the transaction date. However, under the column “Date Exercisable,” Coca-Cola refers readers of its Form 4 to a series of footnotes explaining that several different grants authorized the grant and the date on which it became effective. This format is confusing. The investigator is left searching footnotes which read, “[o]ption (with tax withholding right) granted on October 17, 2001, under The Coca-Cola Company 1999 Stock Option Plan. One-fourth of the grant became exercisable on the first, second, third, and fourth anniversaries of the grant date.” The form does not list a specific date. Under the new interactive data format, SEC investigators are able to quickly examine the issue dates and execution dates of stock options within a company or across several companies; the XBRL taxonomies prevent the obfuscation of data in footnotes. The interactive data format forces companies to tag the information associated with their filings. At the same time that this capability produces more transparency for investors and analysts, it also provides

97. This is true if the SEC was able to conduct the comparisons at all, given the lax reporting requirements. See supra Part II.A.1.
100. Id.
101. Id.
102. Id. at n.5.
103. See infra Part V.C.
a quicker, more efficient method for SEC investigators to examine executive compensation disclosures.

The interactive format also allows SEC staff to search for stock options backdating using enhanced searching parameters. Unlike the EDGAR system, in which a user looking for a specific piece of data would have to search for the requested term on each page, the XBRL technology provides enhanced searching capabilities. SEC staff may run searches looking for stock option filing dates that occur within a specified date range, and the staff may likewise search for stock option execution dates that fall within a certain range. This combination of searches allows investigators to spot filing dates that occur more than two business days after the execution date of the filing, a red flag for stock options backdating.

Overall, it appears that the SEC simply is able to spot internal inconsistencies more quickly and easily under the new program. In addition, where cross-company comparison of various issues previously involved sifting through hundreds of pages, or dozens of screens, of financial data, the XBRL technology makes it possible to pull up several companies' disclosures on a particular area within seconds. The change in the way the SEC investigates stock options backdating in the wake of the XBRL technology is not entirely new, either. The SEC is just making the fruit basket a compartmentalized crate.

This section has demonstrated how the SEC uses the XBRL technology to catch federal securities law violations such as illegal stock options backdating; the next section deals with how the SEC plans to expand its current XBRL test program into a comprehensive filing system for all registrants.

IV. CURRENT DEVELOPMENTS: THE SEC'S INITIATIVE TO CONVERT FILINGS TO INTERACTIVE DATA

On September 25, 2006, Cox hosted a press conference at which he announced that the Commission had awarded three contracts worth

104. See White Demonstration, supra note 88; Third Interactive Data Roundtable, supra note 2.
105. See id.
106. See supra note 42 and accompanying text.
$54 million "to transform the 20-year-old EDGAR database that now houses corporate regulatory filings, into an interactive database that uses the XBRL programming language, within a year." According to the press release, conversion of the EDGAR system into XBRL "presage[d] widespread adoption of interactive data filing by companies that report their financial information to the SEC—a development that until now has only been a voluntary pilot program." The initiative is enormous. The Commission’s budget for fiscal year 2007 is $881.6 million. If Cox’s interactive data initiative were included as a one-time expense in the fiscal 2007 budget, the cost of the initiative would represent over 6.1% of the agency’s total expenses.

In its September 2006 press release, the Commission broke the initiative down into three distinct parts. First, the Commission allocated $48 million “to modernize and maintain the Commission’s EDGAR database” to use interactive data. The Commission recognized that although the EDGAR system now allows full-text searches, “[i]nformation is hard to find unless one knows which form to search. Even then, the data on the forms must be re-keyed before it can be downloaded into spreadsheets or other applications software.” In fact, the Commission noted that the current EDGAR system has done little to change the filing format since the advent of Form A-1 in 1934, and that the system “does little to take advantage

107. Leone, supra note 11; see also SEC to Rebuild, supra note 15.
111. See SEC to Rebuild, supra note 15. Note that the Commission extended this portion of the initiative to Keane Federal Systems, Inc. Id. Keane sub-contracted with five other companies, including BearingPoint then under SEC investigation for inaccuracies in its financial statements. Marie Leone, SEC Hires Company it’s Investigating, CFO, Sept. 27, 2006, available at http://www.cfo.com/article.cfm/7963665/c_8310234 (Keane representative Danielle Wuschke stated "frankly, [BearingPoint's] financial compliance issues have nothing to do with the project.” (alteration in original)). Id.
112. SEC to Rebuild, supra note 15.
of the power of today’s office and home computers.”\textsuperscript{113} The new XBRL-based system would be completely interactive, with three distinct advantages over the current EDGAR system. First, users of the interactive data system could “search not only forms, but the information within them.”\textsuperscript{114} For example, investors would be able to search not just for “stock option,” but “stock options issued between August 15 and August 16, 2007.”

Second, the initiative would “permit information to be immediately downloaded into applications software.”\textsuperscript{115} Currently, EDGAR information must be downloaded, copied, and/or pasted in order to make the information available to other programs.\textsuperscript{116} Third, the XBRL system would “enable anyone to get real-time, streaming data using . . . automated Web tools, which could automatically search for newly filed SEC disclosures and deliver the desired data directly to one’s desktop.”\textsuperscript{117} In other words, an investor using a spreadsheet to reflect her current portfolio could link her data to current SEC filings. When companies in her portfolio issued new XBRL-formatted filings, the information would be automatically reflected in her database. Thus, the $48 million portion of the Commission’s initiative provides for many significant, interactive improvements to an XBRL-based system that should soon be available.

The second part of the Commission’s $54 million initiative allocated $5.5 million to complete XBRL code writing for U.S. GAAP financial statements.\textsuperscript{118} This part of the initiative involves completing the taxonomy, or dictionary, of securities industry terms and tags that the XBRL system will need in order to make the information more effective. Thus, giving every fact in a financial statement a unique, computer-readable label is, according to the Commission, a

\begin{footnotesize}
\footnote{113. \textit{Id}; see also Steven Syre, \textit{Greener Pastures}, BOSTON GLOBE, Sept. 26, 2006, at C1 (“[T]o call the SEC’s 1980s-vintage Edgar database quaint by today’s standards is an understatement.”).}
\footnote{114. SEC to Rebuild, supra note 15.}
\footnote{115. \textit{Id.}}
\footnote{117. SEC to Rebuild, supra note 15.}
\footnote{118. \textit{Id.}}
\end{footnotesize}
multimillion dollar project. However, once the taxonomy is complete, "the data that companies file with the SEC can then be immediately used to analyze and compare any aspect of a company's financial performance. At the same time, the task of preparing the reports can be automated for the companies who file them."\textsuperscript{119}

Third, the Commission set aside half a million dollars to develop interactive data tools for investors.\textsuperscript{120} While this last part of the initiative received little press attention, it promises to be the most visible part of the XBRL initiative. With these yet-unnamed software tools, investors would be able to analyze company data by downloading specific data within company filings—not the entire filing.\textsuperscript{121} The tools would be free of charge, available on the sec.gov website,\textsuperscript{122} and would "relieve[] [investors] of having to re-key data to make it useful in software applications, or having to pay others to translate the data to more usable formats."\textsuperscript{123} Cox stated at the third Interactive Roundtable that preliminary versions of the software tools would be available in April 2007, free and in open source format "so that software developers can use it, and build on it, improve it, enhance it for their own products and projects. . . . [T]here is no doubt that it is the private market and private software developers who will lead the way in driving innovations in interactive data."\textsuperscript{124} Cox stated that in providing this software, the SEC does not seek to become an information portal itself or to supplant the already-saturated software development market.\textsuperscript{125} Instead, the SEC's software tools' "aim is to

\textsuperscript{119} Id.
\textsuperscript{120} Id.
\textsuperscript{121} This "selective downloading" option under the new XBRL format poses a potential problem; if investors are able to pick and choose the information they like from a filing, and download that to the exclusion of all other filed information, aren't investors willfully blinding themselves to potential red flags elsewhere in company reports? The question is interesting but premature. Time will tell whether this problem becomes an issue. The important fact is that companies disclose all required information. It is up to the user to decide what to value in making an investment decision. In addition, one would expect that industry analysts—and regulators—are already trained to be on the lookout for such hidden information.
\textsuperscript{122} SEC to Rebuild, supra note 15.
\textsuperscript{123} Id.
\textsuperscript{124} Remarks at Third Roundtable, supra note 6.
\textsuperscript{125} Id.
offer prototypes for the free use of all, with the hope that people outside our building will quickly improve upon our offerings and surpass anything available on sec.gov."  

While this last component of the SEC’s initiative is the least costly, it represents the end product: how investors will use, interpret, and download filings from September 2007 forward. While the government will spend tens of millions of dollars developing the software and taxonomies for the new XBRL system, the costs of implementing new software tools for end users is relatively low. Given this trend, it should be expected that maintenance of the new XBRL system will be correspondingly inexpensive. This section has described the current push to interactive data. The next section evaluates the usefulness of the system and advocates its widespread adoption.

V. THE SEC INTERACTIVE DATA INITIATIVE WILL AID INVESTORS, COMPANIES, AND THE SEC

A. The Initiative Provides More Transparent and Comparable Data

The SEC’s initiative to convert its filings to the XBRL format has several direct consequences. Immediately, the conversion to the interactive data format will change corporate disclosures. As a result of the XBRL format, these disclosures will become more transparent, more comparable across companies and industries, and more accessible to users—whether those users are investors, companies, or members of law enforcement.

1. SEC Initiative Will Make Corporate Disclosures More Transparent

Converting corporate disclosures to XBRL will make company filings more transparent. A recent Google search for “XBRL” and “transparent” yielded approximately 134,000 hits,127 of which very little appeared to be negative information. Cox mentions the term repeatedly in his speeches.128 However, what do Cox and other SEC

126. Id.
128. See supra note 1 and accompanying text.
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officials mean by "transparency?" Will the new XBRL format enable viewers to literally "see through" company filings?

Of course not. The SEC adopts a dictionary definition of transparency. Corporation Finance Director White rejected the standard "see through" definition of transparency in a February 2007 speech:

I think "seeing through something" may have a certain negative connotation. I was actually given a dictionary for Christmas—I won't speculate about what those close to me think of my command of the English language. But when I looked up the word "transparent," I found a whole string of useful meanings—"easily detected or seen through" but also "free from pretense or deceit" and "readily understood." These are admirable, and necessary, goals for good disclosure.129

Dictionary gift-giving aside, White's statement illustrates that White does not define transparency as the ability to "see through" corporate filings; i.e., the Commission does not view XBRL as a type of x-ray vision to turn up corporate misdeeds. Instead, the SEC's primary goal is to deliver more accessible, readily understood, true and accurate information.

The SEC interactive data initiative would encourage more readily understood, true and accurate information. XBRL users—whether private investors, analysts, companies, or regulators—could search XBRL much more quickly than in the current EDGAR system. Users could search by any number of interactive data tags, not just by keyword. For example, a user could search for a company's options whose issue date occurred in the last six months. The initiative would dramatically reduce the amount of time users currently spend culling hundreds of keyword searches. This capability indicates that the XBRL system would allow more nuanced and direct searches than the 528 million searches currently run on the EDGAR system.131

130. Id.
131. See supra Part III.A.1.
Because XBRL-enriched documents can be formatted more like a database, each field may be more descriptive of the actual contents. While a standard filing’s section on Accounting Policies would list subsections a, b, and c, XBRL would describe the items as Revenue Recognition, Use of Estimates, and Income Taxes—terms that an investor, analyst, or regulator could much more easily find and understand. In addition, users could expand or collapse the description of any term in order to tailor their presentation. XBRL provides more transparent corporate disclosure to users by providing more readily understandable and tailored information.

2. The XBRL Format Allows Users to Compare Data Easily

The XBRL format allows users to readily absorb and individually customize their understanding of individual company filings. However, another direct, short-term benefit of XBRL is that the format allows users to compare data. A calorie-counter studying Lean Cuisine boxes in the grocery freezer section faces the same dilemma as an investor trying to analyze company earnings; both parties are trying to choose based on comparison of data. While Lean Cuisine might post a table of nutritional facts on its website to allow dieters to compare meals, the securities industry has yet to produce a table that would allow investors to compare corporate disclosures across time and industry. It seemed too broad an endeavor, until now.

XBRL allows users to compare trends across a single document, a specific time frame, specific companies, or even an entire industry. At the third Interactive Data Roundtable, White used the example of a company facing a stock options backdating investigation to illustrate XBRL’s ability to compare data across time and entities. Using XBRL, he said, a company with stock options backdating issues could easily compare (1) its own data and past disclosures, (2) its facts with those of other companies, and (3) different sections within its filings:

133. See id.
134. Remarks at Third Roundtable, supra note 6.
As [the company] began to wrestle with those questions [regarding timing and disclosure], how could it use XBRL? .. [F]irst, it could easily go back very quickly and look at all the past disclosures ... concerning option grants....

Second, it could easily and quickly look at what other companies were saying and how they were handling the problem ... .

... Third, when it came to preparation of its own disclosure, it could ... mak[e] sure that its disclosure[s] [are] complete and consistent in [financial statements, MD&A, CD&A, litigation section]....

... [Y]ou could put all those four or five different places up on the screen at the same time ... 135

The ability to review and compare different sections of a securities filing on one screen is itself a big step forward. The ability to compare, for example, issue dates of options across several companies is astounding. The XBRL initiative would enable users to compare data, whether within a filing, across companies, or across an industry, quickly and easily.

B. The Initiative Encourages Plain English and Concise Filings

In addition to providing more transparent, comparable, real-time data to investors, the SEC interactive data initiative will aid investors, companies, and regulators alike by encouraging more concise, understandable filings. The XBRL initiative discourages registrant double-speak in periodic filings through its use of a standard taxonomy. While registrants maintain final control over the presentation of their reports, 136 companies will be using the same concepts in their financial reports. The EDGAR system merely reproduces what companies have said; the XBRL system would standardize and streamline financial reports by converting text to interactive language comparable across registered entities and industries. In other words, once companies are talking in the same language, they may have less to explain; this means shorter, more concise filings for analysts, investors, and regulators.

135. White Demonstration, supra note 88.
136. See infra notes 153–54, 155 and accompanying text.
However, Cox has expressed hope that regulators' workload will actually decrease as a result of these streamlined filings.\(^\text{137}\) Companies speaking the same language of XBRL taxonomy means there will be less data to review. Ideally, companies using XBRL will realize how transparent their filings are to regulators and will better comply with the securities laws. To that end, Cox has expressed a specific goal that the number of stock options backdating investigations will decrease due to more transparent XBRL reporting.\(^\text{138}\) Therefore, adoption of the interactive data initiative would lead to more concise, streamlined filings, with the possibility of less work for registered entities, investors, and regulators attempting to decipher the financial reports. This succinct data, in turn, could lead to fewer regulatory actions.

*C. Interactive Data Prevents Obfuscation of Required Corporate Disclosures*

In addition to providing more transparent, comparable, and concise filings, the interactive data initiative introduces a new standard of registrant liability. The XBRL format, with its embedded tags, makes it considerably more difficult for registered companies to escape corporate reporting requirements of required data. The XBRL language deters errant companies from lying in their corporate disclosures because they cannot escape the interactive data tags. Companies seeking to avoid or obfuscate their required corporate disclosures either cannot escape the XBRL tags or are forced to lie through the tags.

The interactive format introduces two new ways in which a company may commit fraud under Section 10(b) of the Securities and Exchange Act.\(^\text{139}\) First, a company may be liable because it failed to provide an XBRL tag for required information, such as the "exercisable date" in the Coca Cola example above.\(^\text{140}\) Arguably, failure to tag an important piece of corporate disclosure data would result in a material omission of fact. Second, a company may commit fraud by "lying through the tags,"—specifically mistagging or

\(^{137}\) See Promise of Interactive Data, supra note 5.

\(^{138}\) See id.


\(^{140}\) See supra Part III.A.2.
presenting patently false information through the use of the interactive data. Of course, liability for undertagging or mistagging is not automatic: the SEC must demonstrate that in failing to provide or obfuscating this data, the company acted willfully or recklessly.\footnote{141} In fact, in the coming months, the SEC may look more leniently on companies who adopt XBRL technology at the outset of the initiative and whose undertagged or mistagged information is a result of attempted compliance with the new system, not intent to evade or violate reporting requirements.

However, it is unlikely that a company that remembered to tag information for all required fields except executive compensation data would have done so without the requisite intent. Similarly, a court is not likely to find that a company that gave truthful disclosures in every area but the grant date of an executive stock option did not act with scienter. Because companies would be liable under Section 10(b) for untagged or mistagged data under the new format, the introduction of XBRL data tags will help prevent the obfuscation of important, required corporate disclosures.

\textit{D. The Initiative Promotes Valid Policy Goals of the SEC and Federal Securities Laws}

Finally, the initiative to convert EDGAR filings to the new XBRL system would serve valid policy goals of the SEC and federal securities laws. According to the SEC, the Securities and Exchange Act of 1934 “empowers the SEC with broad authority over all aspects of the securities industry.”\footnote{142} In addition to endowing the Commission with the power to “register, regulate, and oversee” self-regulatory organizations, brokers, dealers, clearing agencies, and transfer agents,\footnote{143} “[t]he Act also identifies and prohibits certain types of conduct in the markets and provides the Commission with disciplinary powers over regulated entities and persons associated with them. The
Act also empowers the SEC to require periodic reporting of information by companies with publicly traded securities. 144 If "sunlight is said to be the best of disinfectants," 145 these broad powers given to the Commission indicate that the SEC speaks softly and carries a large flashlight.

According to John C. Coffee, Jr., securities law professor at Columbia University Law School, there are six underlying policy goals of federal securities regulation: (1) to protect consumers; (2) to serve the informational needs of investors; (3) to correct inadequate incentives to disclose; (4) to allocate efficiency and ensure accurate prices; (5) to address "agency cost" problems between stock promoters and investors; and (6) to encourage economic growth, innovation, and access to capital. 146

The XBRL initiative serves both the stated purpose of the Commission and the agency's underlying policy goals. First, the Commission clearly has the power to regulate the periodic reporting of financial information from its registered entities; it prohibits materially false, misleading, or omitted facts in those disclosures. The Commission has a duty to bring these violations to light and to punish the offenders; neither Congress nor the Act prohibit making this enforcement easier for the agency, and therefore, U.S. taxpayers.

Second, the XBRL initiative supports the underlying goals of securities regulation. The XBRL initiative protects consumers because "investors [are] vulnerable in a manipulated marketplace" 147 such as when companies materially misstate their executives' earnings, they manipulate the stock price to the detriment of investors. More than this paternalistic argument, the initiative most serves the informational needs of investors. As outlined above, 148 the XBRL initiative makes data easily accessible and more transparent for every user, not just investors. Even if the XBRL format does not protect investors from companies violating the securities laws, at the very least the format provides investors with a more readily understood and comparable

144.  Id.
145.  LOUIS BRANDEIS, OTHER PEOPLE'S MONEY, AND HOW BANKERS USE IT 62 (1914).
146.  COFFEE & SELIGMAN, supra note 141, at 1–7.
147.  Id. at 2.
148.  See supra Part V.A.2.
data on which to base their decisions. Importantly, the SEC’s push toward interactive data also corrects inadequate disincentives to disclose information. Where executives might have any number of self-interested reasons for non-disclosure of information, the XBRL format keeps required disclosures mandatory and in an easier-to-use format. Looking at the securities industry as a whole, the switch to XBRL may help allocate efficiency in the markets by encouraging more accurate pricing of securities. For example, analysts and shareholders who know how much their company’s top executives are really being paid through stock options may more accurately price the stock.

Next, the XBRL initiative reduces “agency costs” that would be associated with shareholders investigating corporate governance practices on their own; that is, the interactive data model replaces Wall Street Journal articles and academic studies with more readily understood data about how companies actually govern and compensate their directors. Finally, the XBRL initiative promotes economic growth, innovation, and access to capital. According to Coffee, there is evidence that “[a]ctive stock markets experience more rapid economic growth.” Making regulatory filings more accessible; easier to understand; and more comparable across similar filings, companies, and industries cannot help but create a more active market, promoting economic growth. The degree to which the SEC’s XBRL initiative would influence economic growth—or, indeed, would affect the markets at all—remains to be seen. However, the

149. Of course, companies may not want to disclose corporate information for completely legal reasons. For example, a manager may fear that revelation of adverse information could “cause proprietary injury to [his] firm by alerting competitors, as well as investors, to important developments.” COFFEE & SELIGMAN, supra note 141, at 5.

150. Of course, scholars hotly debate the theory that securities regulation promotes allocative efficiency. A particularly viable counterargument is that the industry is rife with speculative trading undermining accurate pricing. Id. at 5–6. However, I do not contend that the XBRL format is a cure-all for problems in the securities market, only that the SEC’s initiative promotes the policy goals already inherent in the regulation of the industry. A cure for speculative trading remains elusive.

151. Id. at 7 (citing J. Robert Brown, Jr., Of Brokers, Banks and the Case for Regulatory Innovation in Russian Securities Markets, 32 STAN. J. INT’L L. 185 (1996)).
E. Evaluation of Arguments Against the SEC Initiative

The SEC initiative to convert all its periodic filings to XBRL format has its drawbacks. There are three apparent drawbacks to the SEC initiative. First, it may cost issuers too much to implement. Second, regulators and observers may worry about registrant exploitation of loopholes in the XBRL taxonomy. Third, detractors would point out that increased analysis of interactive data could lead to SEC over-investigation. Like figures in an impressionist painting, these criticisms appear solid from far away; on closer inspection; however, these attacks are mere brushstrokes.

1. Costs of Implementing XBRL

First, some companies have expressed "concerns about [XBRL’s] maturity and . . . costs." The cost of implementing the XBRL technology and training employees to use it seemed to be the X factor determining whether interactive data would move forward. However, if companies were waiting for the other shoe to drop, it never did. Two companies in particular have indicated that their costs associated with implementing XBRL were minimal. United Technologies, an early adopter of the XBRL system, spent $40,000 to convert its financial reporting system to the interactive format. Compared with its $43 billion in sales, the expense seems infinitesimal. In a September 2006 roundtable, PepsiCo CEO Indra Nooyi claimed the company spent just $5,000 in initial costs for its first filing, including outsourcing the XBRL coding of its financial reports, since which time costs dropped dramatically.

Costs in time and human resources are also a valid concern, at least at first blush, for XBRL opponents. Peggy Smyth, Vice President

152. Wutkowski, supra note 22.
153. Leone, supra note 11.
154. Id.
and Chief Accounting Officer for 3M, expected burdensome time and resource start-up costs with respect to filing in XBRL. In fact, 3M admitted that it did experience significant costs in the conversion process, but Smyth added that “[t]he biggest investment in time is getting up to speed with the technology, exploring the alternatives for implementation, selecting to do it in-house or outsource, mapping our financial statements, putting them in XBRL language, and finalizing and filing the XBRL documents.” 156 3M reduced these costs by outsourcing its XBRL conversion. According to Smyth, working with a third-party source to upgrade to XBRL filings took several hundred hours while “doing it internally would have taken several thousand hours.” 157 Gary Kabureck, Vice President and Chief Accounting Officer for Xerox Corporation, reported that “the first quarter took approximately 125 person-hours. Since then, it’s been about eight to [ten] person-hours a quarter.” 158 Frank H. Brod, Corporate Vice President, Finance and Administration, Chief Accounting Officer of Microsoft, stated that while “[t]he first-time conversion was a significant effort, requiring 175 hours . . . approximately [twelve] hours a quarter are spent to tag, update and review financials for the current quarter.” 159 PepsiCo’s Nooyi explained that human resources costs “dropped dramatically” as well. 160 PepsiCo, Microsoft, Xerox, and 3M, among other companies already using XBRL, report that conversion costs are significant but worth the effort. In other words, initial outlay of time and human resources is significant, but long-term XBRL expenses are relatively minimal, even for companies of a massive scale.

In addition, allowing companies the discretion to convert their own filings to XBRL format empowers registered entities. As Brod notes in his discussion of Microsoft’s XBRL conversion, “[t]he

156. Id.
157. Id. Note that Smyth's estimate of “several thousand hours” is an approximation. Id. Additionally, 3M is one of the largest corporations in the country with approximately $23 billion in sales and is one of the thirty companies comprising the Dow Jones Industrial Average. 3M, 3M Facts: Year-End 2006, http://solutions.3m.com/wps/portal/3M/en_US/our/company/information/financial-facts/ (last visited Sept. 14, 2007).
158. Heffes, supra note 1.
159. Id.
160. Johnson, supra note 155.
benefit of tagging our own financials is that we retain control of the financial statement presentation.\textsuperscript{161} While companies implementing XBRL bear the initial cost of the conversion, such costs represent several thousand dollars at best.\textsuperscript{162} Moreover, allowing firms to convert their own filings into XBRL allows registered corporations some flexibility and control in their financial reports.

2. Registrant Exploitation of the XBRL

A second attack on the XBRL system is that registrants could easily circumvent the XBRL taxonomy. While proponents of the interactive data revolution tout its transparency, a company could get away with murder, or at least securities fraud, by finding loopholes in the system. For example, a registered company could fail to tag a piece of data, or it could incorrectly tag the data instead. Perhaps a company could attempt to overload its statements with too many tags. Worse still, an unscrupulous company could fail to file a piece of data altogether.

This is a valid concern. If the Commission mandates the use of XBRL, registered companies may try to circumvent the XBRL technology, whether in undertagging, mistagging, overtagging, or just not tagging at all. Just as burglars find ways around alarm systems, would-be securities fraudsters will always try to find a loophole in the reporting requirements. The argument that companies will circumvent the interactive reporting language is nothing new; it is simply another way to say that companies with illegal practices will attempt to evade their federal reporting requirements. To combat this problem, enforcement is essential. White cautioned attendees at the latest Interactive Data Roundtable: "don’t forget that, later, we have teams of reviewers in Corporate Finance that might also have these [XBRL] tools and could be [reviewing company filings] also."\textsuperscript{163}

\textsuperscript{161} Heffes, supra note 1.

\textsuperscript{162} Admittedly, the degree to which costs will differentiate based on small companies’ adoption of the interactive data format is unknown. The only way to tell whether the XBRL format is cost-effective for small companies will be for small companies to attempt the switch. Cox, Booth, and other SEC staff seem eager to assist small businesses in this regard. See Booth, supra note 15; Remarks at Third Roundtable, supra note 6.

\textsuperscript{163} White Demonstration, supra note 88.
Teams of reviewers in Corporate Finance, and their counterparts in the Division of Enforcement, will review XBRL filings with extra care for two reasons. First, on average, XBRL filings are shorter and more maneuverable than standard filings.\textsuperscript{164} There is less for reviewers to look at and more for them to play with. Second, the XBRL technology is new, and the SEC clearly advocates its use. No doubt the teams of government reviewers are anxious to see what the new reports look like. The concise maneuverability of the interactive filings, as well as the SEC’s excitement at their use, indicate that the Commission will closely evaluate the new XBRL reports. No doubt, the reviewers will compare the new filings to what companies have previously filed under the EDGAR system and will note any changes. Close scrutiny of the new interactive data means that SEC reviewers will be able to spot most, if not all, undertagging, mistagging, overtagging, or failures to tag financial information.

XBRL opponents worrying about registrants finding loopholes in the new system should also recall that material omissions or misstatements of material fact are illegal no matter what technology is used.\textsuperscript{165} Burglary is illegal whether the house has an alarm system or not. If teams of reviewers are looking at the XBRL filings, those teams are looking at the filings for one primary purpose: to review the documents’ legality. Opponents to interactive data who think that companies will easily circumvent the new technology should remember two things: any criminal will look for ways to dodge safeguards, and law enforcement is on the lookout for all criminals, not just those exploiting or thwarting new technology.

3. \textit{SEC Over-Investigation in the Wake of XBRL}

Third, opponents of the interactive data initiative fear the government will give increased attention to XBRL filings, leading the SEC to open more investigations. Needless to say, companies, even law-abiding ones, fear any change that would expose them to the

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notoriety of an SEC investigation. As one commenter put it, "[w]hy would companies want to make it easier for the government to catch their mistakes?" 166 Scott A. Taub, the SEC's former acting chief accountant, stated last year that well over half of corporate restatements were due to "'errors . . . caused by ordinary books and records deficiencies or by simple misapplications of the accounting standards,'"167 not securities fraud. If "what really excites the SEC is the ability to automate the detection of reporting mistakes, be they accidents or willful fraud,"168 there seems to be little incentive for companies to volunteer for such a regime.

However, it is important to note that many of the companies participating in the voluntary program have heralded its effects.169 As 3M's CAO Smyth declared, "'[t]here is no downside.'"170 If companies have nothing to hide, they should not be afraid of merely changing the format of their financial statements to a more accessible version—even if this version leads other less scrupulous companies into investigations.

Also, Taub's statement that over half of corporate restatements were due to filing or simple accounting errors leaves open the possibility that up to 49% of corporate restatements are due to prior material misstatements or omissions, violations of the federal securities laws. If this is true, the automation and streamlining of a process to better detect violations of the federal securities laws is downright necessary to reduce the number of restatements and catch securities laws violators—whatever the discomfort to registrants.

The Commission's definition of transparency in regulatory filings also neutralizes this argument. As mentioned above,171 the Director of the Division of Corporation Finance rejects the definition of "transparent" filings as something to be "seen through."172 Corporate

168. Weisenthal, supra note 166.
169. See supra notes 150-55 and accompanying text.
170. Heffes, supra note 1.
171. See supra notes 124-25 and accompanying text.
172. White Speech, supra note 129.
disclosures are not presumed guilty until proven innocent; SEC regulators are not trying to see through them. Instead, the Commission is actively pursuing the most "readily understood" method of delivering this information.\footnote{173}{Id.}

It is also important to note that the Commission does not punish pure, harmless mistakes—those errors Taub described in his presentation. The level of scienter necessary for a securities fraud violation is intent or recklessness at the very least\footnote{174}{See COFFEE & SELIGMAN, supra note 141, at 1128-29.} and the omission or misstatement must be material.\footnote{175}{TSC Indus., Inc. v. Northway, Inc., 426 U.S. 438, 449 (1976).} Presumably, the Commission does not punish mere typos. Even if the SEC did investigate a company on the basis of its new XBRL filing, there is no guarantee that such an investigation would proceed to the level of a formal order, subpoena, or civil complaint.

Overall, law-abiding companies have no reason to fear or oppose the SEC interactive data initiative. Costs for participants in the interactive data test group have been nominal, both financially and in terms of time.\footnote{176}{See supra Part V.E.1.} While some registrant exploitation of the XBRL format is inevitable, the Division of Enforcement should be quick to catch such violators. Finally, while more streamlined, transparent data may lead to SEC investigation of greater numbers of entities in the short-term, companies should remember that initial investigations are not the same as final judgments and that the Commission does not punish pure mistake. In short, the main arguments in opposition to the interactive data initiative are illusory.

VI. CONCLUSION

Given the hundreds of newspaper articles, press releases, and speeches on interactive data, it is easy to get caught up in the excitement surrounding XBRL technology and the SEC’s interactive data initiative. Dozens of SEC press releases and Commission speeches tout the initiative’s benefits. At the same time, some commentators claim the new format will lead to increased costs, registrant circumvention, and over-investigation. Based on Cox’s
public statements, all observers are keenly aware that the SEC has already used the interactive data technology to prosecute stock options backdating.\textsuperscript{177}

Meanwhile, the investing public awaits the initial outcome of the $54 million initiative to convert SEC filings to the new system. It is important to remember that this initiative, whatever its costs and benefits, is merely a change in format. The SEC's XBRL initiative owes its fame to the fact that it portends the first change in filing configuration in seventy years. However, the fact remains that it is just that: a change in format. Unlike other recent media blitzes regarding Sarbanes-Oxley rules,\textsuperscript{178} rules under Regulation NMS\textsuperscript{179} or anti-money laundering rulemaking,\textsuperscript{180} the interactive data initiative thus far does not involve any substantive change to existing laws. If "a rose [b]y any other name would smell as sweet,"\textsuperscript{181} a corporate disclosure in any other format would retain its essential characteristics as well: the delivery of accurate information to investors.

The XBRL format would provide even more accurate, readily comparable data to its users. The format will ease regulators' duties in recognizing material omissions or misstatements in company filings, including with respect to stock options backdating. However, enhanced enforcement capabilities will not necessarily translate to increased enforcement actions. Likewise, the benefit that the SEC derives from the XBRL format does not undermine the numerous advantages of the new format to all users.\textsuperscript{182} The SEC's adoption of the interactive data initiative, though merely a change in format, will greatly benefit all securities industry participants.

\textsuperscript{177} See supra Part III.
\textsuperscript{181} WILLIAM SHAKESPEARE, ROMEO AND JULIET act 2, sc. 2.
\textsuperscript{182} See supra Parts V.A, B.