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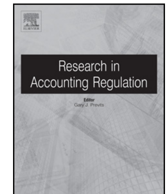

Regular Paper

Developments in accounting regulation: A synthesis and annotated bibliography of evidence and commentary in the 2013 academic literature

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ABSTRACT

In this article, we synthesize in annotated bibliography form, recent regulation-related findings and commentaries in the academic literature. This annotated bibliography is one in a series of bibliographies that summarizes regulation-related academic research. We reviewed articles published in *The Accounting Review*, *Journal of Accounting Research*, *Journal of Accounting and Economics*, *Contemporary Accounting Research*, *Accounting Horizons*, *The Journal of Accounting, Auditing & Finance*, *Journal of Accounting and Public Policy*, *Journal of Business, Finance & Accounting*, *Auditing: A Journal of Practice and Theory*, and *Research in Accounting Regulation*. We annotate results of regulation-related research studies and key points from regulation-related commentaries. The literature featured some strong regulation-related threads in 2013 including the foundations of financial reporting, the role of financial reporting in the financial crisis, accounting disclosure, financial reporting choices, International Financial Reporting Standards, and Sarbanes–Oxley and its impact on accounting and audit quality.

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Introduction

In this article, we develop an annotated bibliography of research findings in the 2013 academic literature that relate to accounting regulation. We reviewed key academic outlets including *The Accounting Review, The Journal of Accounting Research*, *The Journal of Accounting and Economics*, *Accounting Horizons*, *The Journal of Accounting, Auditing & Finance*, *The Journal of Accounting and Public Policy*, *The Journal of Business, Finance & Accounting*, *Auditing: A Journal of Practice and Theory*, and *Research in Accounting Regulation*. While research in these journals is aimed primarily at informing the academic audience, the findings are often relevant to the regulatory debate. To this end, our paper provides a convenient and detailed summary and analysis of the regulation-related literature for the benefit of practitioners and regulators, and a comprehensive literature overview for academics.

Our time period for this article is 2013. Obviously, we could not review every article related to the regulatory debate. However, we have tried to identify and discuss the articles that are particularly relevant to key regulatory topics during the year. As such, our annotations are categorized as follows:

- Accounting and financial reporting quality
- Financial reporting topics
  - Recognition and disclosure
  - Fixed asset disclosures
  - Fair value

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  - Cash flow from operations
  - Regulation Fair Disclosure
  - Options backdating
- International Financial Reporting Standards
- Audit
- Sarbanes–Oxley

Accounting and financial reporting quality

Much academic research examined the foundations of accounting quality. Zhang produced a theoretical piece that demonstrates how high quality accounting standards increase real investment in the economy and improve the overall welfare of society. Allen and Ramanna examined the extent to which characteristics of individual FASB members and the SEC Director impact the quality of accounting guidance issued during their tenure. McEnroe and Sullivan find survey evidence that audit firm partners and company CFOs believe that a move away from rules-based guidance would hinder accounting quality. Bryant-Kutcher et al. demonstrate that quicker deadlines can lead to reductions in accounting quality. Hope et al. show that public firms generally have higher quality accounting than private firms. Both Cassell et al. and Boone et al. examine characteristics of companies that receive accounting-related comment letters from the SEC and factors associated with the difficulty that the company has in remediating the issues discussed in the comment letter. Among the factors that Boone et al. identified as associated with SEC comment letters is more rules-based guidance, which is interesting since research discussed earlier suggests that accounting experts are not in favor of a move away from such guidance. Finally, Christensen et al. examine the impact that data availability via EDGAR has had on the efficiency and effectiveness of the market operations (Table 1).

Zhang (2013)

Zhang develops a theoretical model that demonstrates the impact of accounting standards on real investment and welfare. The impact on investment and societal welfare is a function of the impact of accounting standards on investors required rates of return on investment. The theory is that if investors get more high quality information, they will provide capital to companies at relatively lower rates. Zhang first links accounting quality and the real economy via an extended version of the Capital Asset Pricing Model. The author then models an economy with fixed real investment and shows that improving accounting standards leads to lower costs of capital for individual firms. The value increments are shown to be higher for firms with heavy sensitivity to accounting quality or heavy exposure to a particular standard. From an aggregate economy perspective, the higher firm values increase personal welfare by increasing the expected utility of individual investors. Zhang also demonstrates that improved accounting standards do not affect all firms similarly. In fact, the risk premium for firms with certain characteristics can increase as a result of higher quality standards.

Allen and Ramanna (2013)

Allen and Ramanna develop a model to understand the role of individual FASB and SEC regulators in standard setting. The authors analyze 149 exposure drafts proposed from 1973 through 2007. Their analyses assess the nature of each exposure draft given the background profile of the FASB and SEC regulators serving at that time.

The nature of the exposure draft involves primarily whether it emphasizes relevance or reliability. To accomplish this, the authors develop a measure of the relative emphasis of relevance versus reliability based on findings in the comment letters submitted by the Big (N) audit firms. The authors find support for their measure via an alternative assessment conducted by two seasoned research assistants with heavy accounting experience but with no knowledge of the objectives of the study.

The authors also developed a database of background characteristics of the 39 FASB members and 41 SEC commissioners that served during these years. The authors are interested in the professional and political background of the individuals. Professional characteristics include the number of years the individual worked in regulatory positions, whether the individual has a background in auditing, and whether the individual has served in the investment banking or investment management industry. The political background involves whether the individual is associated with either the Democratic or Republican parties in the U.S.

Table 1
Accounting and financial reporting quality.

Zhang (2013)	Develops a theoretical model that demonstrates that high quality accounting standards increase real investment in the economy and the overall welfare in society
Allen and Ramanna (2013)	Examine the impact of personal characteristics of individual FASB members and SEC commissioners on the quality of accounting guidance exposure drafts
McEnroe and Sullivan (2013)	Find that U.S. audit partners and CFOs believe that elimination of rule-based guidance would hinder accounting quality
Bryant-Kutcher et al. (2013)	Find that requiring quicker filing can negatively impact the quality of disclosures
Hope et al. (2013)	Find that public firms on average have higher quality financial reporting and report more conservatively
Cassell et al. (2013)	Identify factors that increase the probability of receiving a comment letter from the SEC, increase the number of topics discussed in the comment letter, and increase the cost of remediating the issues in the letter
Boone et al. (2013)	Find that more rules-based accounting guidance and accounting guidance requiring significant accounting estimation are more frequently the subject of an SEC comment letter and that the time to resolution is longer for guidance requiring more estimation
Christensen et al. (2013)	Examine the impact of data availability through the Electronic Data Gathering and Retrieval System (EDGAR) on individual investors' efficiency and effectiveness in pricing and forecast revision decisions.

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The authors find that FASB and SEC regulators with longer tenure are associated with Exposure Drafts perceived by the audit firms to decrease reliability. The authors find no relation between regulator tenure and a tendency toward more or less relevance. To the extent that decreased reliability is a negative characteristic of regulation, this suggests that longer regulator tenure may lead to less high quality standards.

Regarding professional background, the authors express an expectation that regulators with an auditing background will tend toward standards that emphasize reliability and regulators with a financial services background will tend toward standards that emphasis relevance. The authors find no evidence that exposure drafts issued by auditing background-heavy regimes are perceived by the audit firms to emphasize either reliability over relevance or relevance over reliability. They do find that exposure drafts issued by financial services-heavy regimes are perceived by audit firms as decreasing reliability. Further, exposure drafts issued by financial services-heavy FASB regimes are perceived by audit firms as increasing accounting relevance. Additional analysis demonstrates that the finding of a relevance emphasis is heavily associated with the tendency for financial services-heavy FASB regimes to propose fair value methods.

The authors find that the average political party affiliation of the FASB regimes and the SEC commissioner are not associated with a relevance or reliability emphasis beyond that explained by the financial services background.

Overall, the authors interpret these results as suggesting that characteristics of individual regulators can impact the substance of regulation issued. Further, the authors conclude that their findings are more consistent with accounting regulators demonstrating more ideology tendencies than tendencies of captured regulators. The authors conclude by providing avenues for future research.

McEnroe and Sullivan (2013)

McEnroe and Sullivan measure perceptions in the U.S. regarding rules- versus principles-based accounting guidance. The authors surveyed auditors in large public accounting firms and Chief Financial Officers in the Fortune 1000 regarding 10 situations in which specific rules are used under U.S. GAAP. For each situation, the authors summarized the rule under U.S. GAAP and then asked whether elimination of the detailed rule and allowance for professional adjustment would improve financial reporting.

The authors deem financial reporting to improve if the resulting accounting more reflects the qualitative characteristics of useful accounting information (e.g., relevant, representationally faithful, verifiable, comparable, and understandable). The respondents indicated on a Likert Scale the degree to which they believe such improvements would be observed were particular rules relaxed in favor of judgments.

In only one scenario, leases, did respondents believe relaxation of rules would result in higher quality information. The authors were not surprised that respondents would indicate that elimination of the more rules-based guidance would hinder verifiability and comparability. However, the authors express surprise that respondents also perceived that elimination of specific rule-based guidance would also hinder relevance and representational faithfulness with the underlying economics.

Bryant-Kutcher, Peng, and Weber (2013)

More timely reporting is generally a positive quality for financial reporting. However, it can produce costs. One such cost is potential errors due to less fully researched and reviewed accounting processes and less time for audit procedures to be conducted. Bryant-Kutcher et al. use an accelerated 10-K filing requirement as a natural experimental setting for obtaining evidence about the impact of the timing of disclosure on the quality of the disclosure. A 2003 SEC requirement reduced the reporting time from 90 to 75 days for many registrants. Quality is measured as the observed rate of subsequent restatement of these more quickly filed reports relative to reports filed in the 90 day window. The experimental groups were mandatory 75 day filers under the revised guidance that formerly used the full 90 day window for reporting. The control group included firms that traditionally reported within the 75 day window even before the new regulation. These two groups had a similar restatement rate before the 2003 acceleration requirement. However, after the mandatory accelerators made the more timely reports, the restatement rates increased significantly with no corresponding increase observed in the control group. The increase was even more profound for firms that were issuing during the traditional audit busy season. This suggests that reduced audit quality played a role in the reduced accounting quality. Overall, the findings suggest that while more timely information is generally a positive for efficiently functioning markets, requiring an acceleration in filing time could impact the relative quality of the information.

Hope, Thomas, and Vyas (2013)

Hope et al. use a large database provided by Sageworks Inc. to examine the relative financial reporting quality of a large sample of public and private firms. The "demand" hypothesis predicts that public firms will provide higher quality information to minimize their cost of capital. However, capital providers for private firms will rely less on publicly available information. Hence, private firms may not have as strong an incentive to provide the highest quality information. Conversely, the "opportunistic behavior" hypothesis would predict that reporting incentives faced by managers of publicly-held firms will lead to distortions not found with privately held firms.

Via multiple measures of financial reporting quality (e.g., total accrual quality, estimation error in the accrual process, revenue-accrual quality, and the ratio of magnitude of accruals to cash flows) and research designs, the authors provide evidence that on average, public firms have higher accrual quality and report more conservatively. Thus, the results strongly support the "demand" hypothesis in favor of the "opportunistic behavior" hypothesis. The authors do find however, that the higher quality financial reporting quality for public firms is less strong in a subset of public firms that are more likely to manage earnings (e.g., just beat

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earnings benchmarks, obtain financing in the next year, do not have a Big 4 auditor) or have relatively lower demand for their financial information (no analyst following). Further, the greater conservatism of public firms is less profound for public firms that just beat benchmarks, have lower leverage, do not issue debt in the subsequent year, or operate in less litigious industries.

Cassell, Dreher, and Myers (2013)

The SEC will send a comment letter to a company to provide feedback on the clarity of disclosures and/or the extent to which that company's accounting complies with U.S. GAAP and with SEC accounting and reporting regulations. Cassell et al. investigate factors that increase the probability of receiving an SEC comment letter on the 10-K, factors related to the number of comments received, and factors related to the length of time and number of review rounds taken to remediate the issues identified in the comment letter. The SEC review process is distracting to a company's financial executives. Hence, understanding factors related to the process is important for companies and their auditors.

The authors find that between 23 and 37 percent of their sample companies complete a three-year SEC review period without receiving a comment letter on the 10-K. Firms with high stock price volatility, firms that restated financial statements, and firms audited with second-tier firms (non-Big Four but inspected by the PCAOB) were more likely receive a comment letter. Other characteristics of companies more likely to receive a comment letter include older companies, companies that reported a net loss, companies with a higher probability of bankruptcy, companies involved in merger and acquisition activity, companies with less external financing, and companies with weaker governance structures (measured as having a dual CEO and Chairman of the Board).

The average company receiving a comment letter had a mean (median) of 12 (10) topics discussed in the letter. The number of topics in letters ranged from 1 to 42. Topics discussed were more numerous for companies that conducted restatements, companies with smaller independent audit firms, companies with net losses, complex companies, companies that changed auditors relatively recently, and companies with more inside directors on the Board.

The authors estimate the cost of remediation as the number of days from receipt of the letter to receipt of notice that the SEC has "no further comment" on the matter(s) and the number of letters received from the SEC before the "no further comment" notice. The mean (median) number of days to remediate was 80 (61) with a range of 2–1192. The mean (median) number of rounds is 3 (3) with a range of 2–14. Factors increasing the cost include reporting a material weakness in reporting controls, restating financial statements, stock price volatility, employing a smaller independent audit firm, larger company size, companies reporting a net loss, and companies with a weaker governance structure. Older companies, companies with a higher bankruptcy probability, and companies with merger and acquisition activity require more rounds to remediate but did not on average, require more time.

The authors also examined what topics were relatively more costly to remediate. They find that comments on rule and disclosure issues are more costly than non-accounting topics such as internal control disclosure issues, management discussion and analysis issues, regulatory filing issues, and risk factors. Within the accounting rule and disclosure topics, comments on classification issues and fair value issues had the highest remediation costs. Overall, the authors view their findings as valuable for firms as they seek to minimize costs while realizing the benefits of the SEC oversight process.

Boone, Linthicum, and Poe (2013)

Boone et al. examine whether the nature of accounting guidance is related to the probability that a particular standard will be the subject of an SEC review comment, the length of time it takes to resolve the SEC's comment, and whether the issue leads to enforcement activities. The authors focus on two characteristics of accounting guidance: whether it is more rules-based and whether the guidance requires significant accounting estimates.

For each SEC registrant receiving an SEC comment letter, the authors assess whether: (1) the guidance is more rules- or principles-based; and (2) the extent to which that guidance requires significant accounting estimates. The authors find that the SEC is more likely to challenge company's accounting for accounts which feature more rules-based accounting and for accounts that require significant accounting estimates. The relative importance of the standard for that company, the age of the standard, and the accounting complexity also influence the likelihood of an SEC challenge. The time to resolution of the SEC challenge is influenced by the magnitude of accounting estimation required under the standard, but not by whether the standard is more rules-based. The likelihood of subsequent enforcement action is not significantly associated with the characteristics of the standard.

Christensen, Heninger, and Stice (2013)

Christensen et al. examine whether investors use SEC 10-K and 10-Q filings more efficiently and effectively for pricing and forecast revision decisions after the reports became available via the Electronic Data Gathering and Retrieval System (EDGAR). A complaint in the pre-EDGAR era was that sophisticated investors had access to the content of filings before individual investors.

The authors examine price reactions and forecast revisions following SEC filings pre- and post-EDGAR for analysts and for the market in general. For analysts, they find significant forecast revisions after SEC filings before and after EDGAR. Hence, the authors conclude that analysts' use of SEC filings did not significantly change post-EDGAR. However, before EDGAR there was little price movement around the SEC filing date. Post-EDGAR, much price movement is observed around the SEC filing that was not present pre-EDGAR. This suggests wide use of the filing by institutional and individual investors and more information conveyed by the filing rather than other sources in advance of the filing.

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The authors then examine forecast revisions (sophisticated investors) and abnormal returns (the market as a whole) in situations when demand for information would likely be higher. The five settings examined are: (1) when the earnings surprise in the preceding earnings announcement is large; (2) when investor disagreement is high (high trading volume); (3) when financial statement credibility is less (large abnormal accruals); (4) when analyst following is light; and (5) when the SEC filing is late. They find higher abnormal returns suggesting that EDGAR filings were especially valuable when a firm is followed by fewer analysts and when investor disagreement is high. SEC filings were valuable both pre- and post-EDGAR when the earnings surprise in the earnings announcement was high. Hence, investors actively sought out these paper-based filings in the pre-EDGAR period despite the relatively high cost of doing so. The authors find larger forecast revisions by analysts in the EDGAR period after a large earnings surprise and in the presence of large abnormal accruals. Interestingly, the authors do not find the forecast revisions after the SEC filing before EDGAR suggesting that analysts were not generally incurring that cost in the pre-EDGAR era.

Overall, the authors interpret their findings as demonstrating that EDGAR has enhanced the efficiency of markets and has helped individual investors to get access to information in a timely manner.

Financial reporting topics

During 2013, Financial Reporting topics covered a broad spectrum. Recognition versus disclosure research highlighted the usefulness of disclosures. Chuk found evidence of changes in pension asset allocations and expected rates of return estimates following the mandatory disclosure of the allocations and Bratten et al. found that market participants do not differentiate between recognized and disclosed lease obligation information when the disclosed information is reliable. Cheng et al. examined the change in the market participant's view of disclosures following an SEC rule that reduced the level of mandated disclosure for small firms and Bauman analyzed current financial statements and found that information previously required in fixed asset disclosures is no longer found elsewhere in the financial statements.

Regarding the impact of fair value measurement, Blankespoor et al. find that financial statement ratios calculated using fair value measurements of financial assets and liabilities provide a better representation of banks' credit risk. Bryan and Lillien focus on some unintended consequences of fair value measurements in accounting standards transitions.

Hale and Orpurt produced an insightful synthesis of the literature surrounding the direct method statement of cash flows from operations and highlighted several fruitful avenues for future research. In another timely literature analysis, Koch et al. synthesize the research on Regulation Fair Disclosure (Reg FD), providing a picture of general support for the SEC's objective of leveling the playing field between investors and securities market professionals. In addition to the literature reviewed by Koch et al. the work of Hahn and Song focused on analysts' response to their limited information environment in the post-Reg FD period as did Lo and Xu in their analysis of information weighting by investors and analysts following enactment of Reg FD. Rounding out the financial reporting area, Efendi et al., added to the research on options backdating in their analysis of executive turnover following backdating allegations, finding that the regulatory response is complemented by the private-sector penalties imposed upon perceived wrongdoers (Table 2).

Table 2
Financial reporting topics.

Panel A: Recognition versus disclosure	
Chuk (2013)	Finds evidence that firms increased equity holdings and/or decreased Expected Rates of Returns following mandatory disclosure of Pension Plan Asset allocation
Bratten et al. (2013)	Find that market participants do not treat recognized amounts differently from disclosed amounts in a setting where disclosed information is reliable
Cheng et al. (2013)	Provide evidence that voluntary disclosure cannot replace mandatory disclosure in terms of the commitment effect on information asymmetry.
Panel B: Fixed asset disclosures	
Bauman (2013)	Finds that the detail required in the pre-1994 disclosures is seldom disclosed elsewhere in the financial statements.
Panel C: Fair Value	
Blankespoor et al. (2013)	Find evidence that financial statements including financial instruments measured at fair value are more descriptive in terms of the credit risk inherent in the business model of banks
Bryan and Lillien (2013)	Demonstrate how fair values and accounting structures can lead to counting income multiple times
Panel D: Cash flow from operations	
Hales and Orpurt (2013)	Find through a synthesis of prior research that information from a direct method statement of cash flow from operations is economically significant and that the benefits of preparing the direct method statement most likely exceed the costs.
Panel E: Regulation Fair Disclosure (REG FD)	
Koch et al. (2013)	Synthesize evidence from prior research and find support of the SEC's objective of reducing selective disclosures through Regulation Fair Disclosure (Reg FD) and find evidence of a chilling effect on information for small firms.
Hahn and Song (2013)	Find increased forecast activity around the earnings announcements in the Post-Reg FD period relative to the Pre-Reg FD period.
Lo and Xu (2013)	Provide evidence that there is reduced information asymmetry between financial professionals and individual investors in the Post-Reg FD period, in support of a leveling of the playing field.
Panel F: Options backdating	
Efendi et al. (2013)	Find evidence that the private-sector discipline of executives serves as a complement to regulatory sanctions in the face of adverse publicity

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Chuk (2013)

Chuk investigates firms' responses to mandated disclosures in a study of defined benefit pension asset allocation. SFA132R, *Employers' Disclosures about Pensions and Other Postretirement Benefits*, became effective for fiscal year-end 2003 for most firms and expanded the disclosure requirements for pension plan assets to include the percentage allocation of plan assets among major investment categories. The information about pension plan asset allocation is useful because it allows the reader to assess the reasonableness of the expected rate of return (ERR) assumed by the reporting firm in its calculation of pension expense (a net amount based on service costs, interest costs and return on existing plan assets calculated using the ERR). The higher the ERR the lower the pension expense. The disclosure requirement was in response to concerns that the ERRs used by firms may be unrealistic, given the actual allocation of plan assets. Chuk explains how the quick release of SFAS132R combined with a requirement that in the year of adoption firms also report the prior year's asset allocations led to firms having to report allocations that existed before the disclosure was required. This unique circumstance allowed an empirical analysis of firms' reactions to the increased transparency afforded users under SFAS132R.

Chuk hypothesizes that firms that used inflated ERRs prior to SFAS 132R are more likely to increase the percentage allocation to equity securities following SFAS 132R and are more likely to reduce ERRs after adoption of SFAS132R. She constructs a prediction model for the ERR in the period prior to FAS132R using the post SFAS132R reporting periods to estimate parameters of the model, which includes the allocation percentages of equities, bonds, real estate, other investments, the actual return averaged over 3 years, and industry indicators. The prediction errors from the model are then used in the hypothesis testing of changes in equity holdings and changes in ERR. The results indicate that firms increased equity holdings and/or reduced ERRs following SFAS132R. The author concludes that there are economic consequences to disclosure requirements, namely that in this situation firms moved to increase equity holdings, increasing the riskiness of the plan assets and increasing the interdependence of firms within the economy that hold equities of the other in pension plan investments.

Bratten, Choudhary, and Schipper (2013)

Bratten et al. provide evidence on the role of reliability in market participants' use of disclosed rather than recognized values. The authors use the information found in footnote disclosures of capital and operating leases to examine whether users process the information differently and if so, under what circumstances. This setting is conducive to this analysis because capital and operating leases are economically similar but treated differently for accounting purposes.

The authors use firm-year observations from 1980 to 2008 with capital and operating leases. Footnote disclosures include future lease payments for both capital (the recognized lease arrangements) and operating leases (the disclosed lease arrangements). The authors develop an obligation estimation methodology and test it against recognized capital leases. They find that their methodology does reliably estimate the recordable obligation. The authors then use their methodology to construct "as-if recognized" obligations for the disclosed leases.

The authors then examine the association between both the recognized and disclosed obligations and the costs of debt and equity. Results indicate no significant differences on how creditors value the recognized versus disclosed obligations when establishing costs of new debt. Similarly, the results indicate that equity investors do not distinguish between recognized and disclosed lease obligations. The authors provide alternative tests and additional analyses that support their main conclusions.

The authors conclude that market participants do not treat recognized amounts differently from disclosed amounts in a setting in which the disclosed information is reliable, readily identifiable, and easily processed. The authors note that the findings should be of interest to the FASB in its Disclosure Framework project.

Cheng, Liao, and Zhang (2013)

Cheng et al. examine how the removal of a mandatory disclosure impacts the market liquidity of a reporting firm. There are two potential effects. The commitment effect of disclosure refers to the market's expectation that certain disclosures will continue because the firm is committed (by regulations) to make those disclosures and thus, information asymmetry is reduced and the cost of capital and market illiquidity are reduced. The information effect of disclosure refers to the market's response to a firm's voluntary disclosure, also theorized to be an information asymmetry reducing action. While both effects reduce information asymmetry in theory, this study exploits a setting in which the strength of the two effects can be examined. In December 2007, the SEC simplified disclosure requirements for companies with public debt totaling between $25 million and $75 million by making disclosure voluntary on ten items previously required to be disclosed (SRC rule). This regulatory change provided the authors with an opportunity to examine the market liquidity of firms under the required disclosure regime and under the voluntary disclosure regime.

The authors rely on theoretical literature showing that a commitment to a high disclosure level is associated with lower market illiquidity (Baiman & Verrecchia, 1996) to predict that the move away from required disclosure will result in higher market illiquidity for firms that choose to maintain their disclosure level after passage of the SRC rule. The market illiquidity is also predicted to increase further for firms that reduce their disclosure level, relative to firms that maintain their disclosure level after passage of the SRC rule. The authors use a sample of 283 reporting companies, including 109 firms that chose to maintain their disclosure level at the pre-SRC level ("maintainers") and 174 firms that reduced the disclosure level ("reducers"). In the empirical tests, market illiquidity measures are constructed following prior literature and the changes in the illiquidity measures are compared between the "maintainers" and a control sample of firms not subject to the SRC. Results from this test indicate that the illiquidity level increases

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significantly for smaller reporting companies that maintain their level of disclosure, indicating that the voluntary disclosure is not a substitute for mandated disclosure and revealing the significance of the commitment effect. The changes in illiquidity measures are also constructed for the "reducers" sample and then the changes in illiquidity measures are compared for the Maintainers and Reducers sample. The results indicate that the illiquidity level increases more for the "reducers" than for the "maintainers", consistent with the authors' predictions.

Together these results are interpreted by the authors as evidence that voluntary disclosure cannot replace mandatory disclosure in terms of the commitment effect on information asymmetry. This evidence should be useful to regulators contemplating changes to existing disclosure requirements.

Bauman (2013)

Are fixed asset disclosures under IFRS more informative than those currently required by the SEC? Are the fixed asset disclosures more or less informative currently than under previous SEC requirements? These are the questions addressed in this analysis of fixed asset disclosures. The SEC discontinued requiring firms to prepare detailed supplemental schedules of PP&E activity. Firms reporting under IFRS, however, are required to provide details similar to the pre-1994 SEC disclosures. Bauman uses analysis of one firm's 1993 required disclosures of PP&E balances as reported in the 10-K and one firm's 2010 required disclosures under IFRS to show the similarities between the two sets of requirements. Then a sample of 1993 firms' 10-k PP&E disclosures and a sample of 2010 firms' 10-k PP&E disclosures are analyzed to demonstrate the differences in information available for analysis between the two time periods. He finds that the detail required in the pre-1994 disclosures is seldom disclosed elsewhere in the financial statements. Bauman concludes that these findings have implications for disclosure quality and the international convergence of accounting standards.

Blankespoor, Linsmeier, Petroni, and Shakespeare (2013)

Blankespoor et al. investigate the association between alternative measures of a bank's leverage and its credit risk. As the FASB and IASB continue to deliberate fair value accounting for financial assets and financial liabilities, critics in the banking industry voice concerns about the usefulness of fair values for evaluation of banks' financial condition. The primary concern is that the interim swings in fair value are not relevant for investments and debt held to maturity and thus, financial statements built upon those interim swings are less useful. The authors include background on the debate surrounding fair value accounting and highlight the basic arguments of the American Bankers' Association.

Blankespoor et al. focus on credit risk (measured as bond yield spreads) as a representation of the bank's financial condition. Leverage is measured using a common leverage ratio under three different financial instrument measurement approaches: Fair Value, GAAP (a mixed-model), and Tier 1 capital (a mixed-model with fewer fair values than GAAP). The final sample includes 80,393 yield observations for 1861 bonds. The authors use univariate analysis to examine the correlations between leverage measures and bond yield spreads, and multivariate analysis to address which leverage measure is most useful in a model explaining bond yield spreads. The results provide evidence that the association between credit risk and leverage is strongest when Fair Value is used, followed by GAAP and then Tier 1 capital. The authors interpret these findings as indicative of fair value's usefulness in explaining credit risk. Additional analyses are provided, including an analysis of the association between bank failures and the three leverage measures. This additional analysis indicates that the fair value-based leverage measure had the highest failure prediction ability of the three.

The authors conclude that the findings provide evidence to standard-setters that financial statements including financial instruments measured at fair value are more descriptive in terms of the credit risk inherent in the business model of banks. The authors also suggest that the results may be useful to banking regulators as they suggest that the current adjustments being made to arrive at regulatory capital may in fact be hampering bank regulator ability to detect credit risk problems.

Bryan and Lillien (2013)

Bryan and Lillian examine whether fair value measurements and securitizations caused reduced transparency. Under US GAAP, firms report a particular securitization (the raising of cash through the transfer of an illiquid asset, such as receivables or mortgages) as either a sale (sales treatment) or as a borrowing (financing treatment), depending on the terms of the arrangement. Sales treatment requires more stringent separation of transferor and transferee, but is preferred over the financing arrangement treatment which requires recognition of a liability by the transferor. Prior to the financial crisis, many securitizations were accomplished through off balance sheet entities set up to act as the middleman between the transferor and the cash source (QSPEs or qualified special purpose entities). In response to scandals in the early 2000's, the FASB issued standards (ultimately SFAS167 in 2009) that greatly reduced the attractiveness and use of the QSPEs and led to the consolidation of the QSPEs or re-classification of securitizations from "sales treatment" to "financing treatment" in many cases.

It is the transition period that Bryan and Lillien focus on in their analysis of how the fair value measurement rules could be used to manage earnings and in some cases, triple count income. The authors construct a simple case where receivables are transferred and treated as a sale initially and then reclassified to financing arrangements using each of the three allowable approaches under U.S. GAAP. As shown in the case, the transition rules allow the company to recognize the income effects of the initial sale (under the old rules), interest income on the receivables once reclassified (under the transition to the new rules), and gains on reversals of loan loss provisions (provisions are established upon reclassification directly from retained earnings without

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any income statement impact, but any subsequent reversals go through the income statement). Thus, the triple income counting possibility exists. The authors examine the implications of their simple case study using 10-K information regarding Discover's 2009 consolidation of its securitizations. As part of the analysis, the authors discuss the disclosures made by Discover to explain the adjustments, including a discussion of the difference between non-GAAP and GAAP numbers reported to investors. In the final section, the impacts of the adjustments from "sales treatment" to "financing treatment" are presented for 11 other companies.

Bryan and Lillien conclude with a challenge to regulators, standard setters, and academic researchers to be leery of the usefulness of fair values and some ideas for future considerations.

Hales and Orpurt (2013)

Hales and Orpurt review research to provide evidence about whether the direct method (DM) of cash flows is incrementally beneficial for users. The authors pose a series of questions at the beginning of their review then present a useful background of cash flow reporting developments before examining each question through review of the existing literature. Throughout the study, Hales and Orpurt provide suggestions for future research.

The first two questions examined are whether or not the incremental DM information is useful when the Indirect Method (IM) is used and whether or not users utilize the DM components when they are disclosed. The review of literature related to the first question is divided between studies that used DM to predict future Cash Flows from Operations (CFO) and those that used DM to predict future Earnings. In the numerous empirical studies reviewed related to future predictions of CFO, DM is found to be incrementally useful beyond IM information with some evidence that the improvement in CFO forecasts are economically significant. In the empirical studies of future predictions of earnings, the DM information was also found to be incrementally useful in most of the studies reviewed. The authors suggest that additional research could concentrate on the determinants of DM information usefulness and that the models used in the past could be expanded to include additional information that is available to financial statement users. In addition, the authors note that none of the studies reviewed use DM forecasts of CFO in valuation models to assess the valuation impacts of the improved forecast accuracy. Evidence relating to the second question of whether or not users utilize the DM components indicates that DM statements contain incremental information that is useful in predicting earnings. The authors suggest that future work could focus on a better understanding of how the DM information affects investor decision making. Another question examined the accuracy of estimated DM components as compared to disclosed DM components. The review of the empirical studies to date found that substantial estimation errors continue, even with sophisticated DM estimation models.

Existing research is reviewed for evidence that the DM is easier to use than the IM. The authors found little academic research regarding this commonly held belief. A few surveys found evidence that respondents preferred the DM but there was not much research that clearly indicated that the DM made decision making easier. The authors suggest more experimental work in this area, citing experimental results to date that the DM statement is more useable than the IM statement in a setting where subjects needed to extract information about both cash flows and accruals but not any more or less useable in another setting.

The questions then turn to the circumstances and decisions in which DM information is most beneficial. The authors summarized the research as providing evidence that forecasting cash flows or earnings as well as ratio, sensitivity, and trend analyses would all be simpler with DM information.

The existing literature is then analyzed for evidence about the incremental usefulness of IM information, the usefulness of the IM reconciliation, and the cost/benefit tradeoff of providing a DM statement. The research reviewed included empirical and experimental studies and indicated that IM information is incrementally useful to users, that additional disaggregation of information in the IM reconciliation would be useful, and that there is some evidence that the benefits of the DM statement exceed the costs.

The authors conclude with a statement in support of providing a DM statement incrementally to an IM reconciliation to improve transparency for capital market participants.

Koch, Lefanowicz, and Robinson (2013)

Regulation FD (Reg FD) was enacted by the SEC in 2000 in response to concerns that firms were releasing information to selective outlets and thus putting other market participants at a disadvantage. The rule prohibits managers from privately disclosing material information to securities market professionals. The rule does not prohibit the private release of non-material non-public information. There has been much academic research into its impact on the information environment of the market. Koch et al. review this research to provide evidence regarding whether Reg FD has "leveled the playing field" for market participants. The authors also look for evidence of unintended consequences of Reg FD, such as reduced disclosure, the "chilling effect" predicted by Reg FD critics before its passage.

The authors organize the studies into five categories: (1) studies that deal with returns, trading volumes, and trade size; (2) information asymmetry studies; (3) research on stock analyst effects; (4) studies on alternate disclosure channels; and (5) studies that evaluate the continuing private access to management.

The evidence regarding Reg FD's impact on returns, trading volumes, and trade size has shown mixed results with most studies indicating a more level playing field without a significant chilling effect. The chilling effect has been consistently found to be the dominant effect of Reg FD in samples of smaller firms. Koch et al. interpret the collective evidence as indicating that Reg FD has leveled the playing field between individual and institutional investors, but with some costs to small firms.

The evidence Koch et al. present from the research on information asymmetry suggests that there are costs to small

firms in terms of the chilling effect, but the results appear to be sensitive to methodologies and the authors conclude that the issue is not settled.

Studies of effects on stock analysts focus on changes in accuracy and forecast dispersion following Reg FD enactment and studies on the impact of the rule on analyst effort. The papers reviewed present mixed results regarding the accuracy and dispersion of forecasts and the authors provide suggestions for future research into this area. The research into analysts' effort reveals an increase in effort as the analyst works to bring value to the investor's in the more level playing field environment.

The authors then review empirical evidence related to the changing importance of alternate disclosure channels, such as credit-rating agency reports (because Reg FD allows firms to continue providing private information to credit agencies), open conference calls, and publicly announced earnings guidance. The results indicate an increased role in equity pricing for credit agency reports relative to the pre-Reg FD periods, and an increase in open conference calls. The evidence on earnings guidance announcements is mixed. The authors conclude that evidence from these studies is mixed regarding the chilling effect and make suggestions for future research into the properties of disclosures by firms that first disclosed in the Reg FD era.

Koch et al. then turn their attention on research surrounding private access to management and note that this type of research requires novel approaches such as utilizing the "mosaic" theory that analysts piece together non-material information to create a mosaic of material information and innovative datasets such as corporate flight logs to money centers that provide dates for event studies. The studies reviewed provide compelling evidence that private access to management continues to provide value-relevant information to securities market professionals.

The authors summarize the collective evidence reviewed as supportive of the SEC's objective of reducing selective disclosures through Reg FD. However, the authors point out that the adverse effects of Reg FD are reflected in evidence generally supportive of a chilling effect for small firms and an increase in costs to analysts. The authors conclude with a discussion of future research opportunities.

Hahn and Song (2013)

Hahn and Song explore the question of whether public firm disclosures became more important to analysts following Regulation FD. The authors examine the relative importance of earnings announcements for a sample of firms in the 1996–2004 time period, excluding the quarter immediately following implementation of Reg FD. Their tests focus on analysts' forecasts and revisions in response to these earnings announcements.

The results indicate increased forecast activity around the earnings announcements in the Post-Reg FD period relative to the Pre-Reg FD period. The results also indicate higher convergence of pairs of analysts' forecast revision, evidence the authors attribute to increased analyst herding behavior in the post-Reg FD era. Overall, the authors interpret their findings as evidence supporting the effectiveness of Reg FD in leveling the playing field for smaller investors.

Lo and Xu (2013)

The authors explore the effects of Reg FD via empirical analysis of inappropriate weightings of the cash flow components of earnings. Prior research suggest that investors under or overreact to certain publicly available information, but historically analysts have not had as significant under or overreactions to the same information. The implication from the prior research is that the private information analysts obtained through pre-Reg FD private disclosures allowed them to more accurately process the publicly available information. If this indeed was the reason for the smaller mis-weighting by analysts, then the post-Reg FD period should show a more similar amount of mis-weighting between analysts and investors if Reg FD has successfully leveled the playing field.

The authors' predictions are tested for a sample of firms across a pre-Reg FD time period of 1985–1999 and a post-Reg FD period of 2001–2008. The results indicate that while investor's weightings of the cash flow components of annual earnings are closer to historical weightings in the post-Reg FD period (indicating a reduction in the investors' mis-weightings), the analyst weightings are further from the historical relation in the post-Reg FD (indicating an increase in the analysts' mis-weightings). Consistent with the predictions, the evidence indicates that the investors' and analysts' weightings are closer in the post-Reg FD period. The authors conclude that there is reduced information asymmetry between financial professionals and individual investors, in support of a leveling of the playing field.

Efendi, Files, Ouyang, and Swanson (2013)

Efendi et al. investigate the reaction of boards to option backdating allegations. The authors present rationale that would lead to a decreased likelihood of board action and rationale that would lead to an increased likelihood of board action and then empirically examine the executive turnover following firm backdating news.

Option backdating made headlines following a series of *Wall Street Journal* articles supported by academic researchers' discovery that executive option grant date prices were frequently abnormally low, leading to a conclusion that the grant date choice was not random. Efendi et al. use the newswires and popular press to identify firms alleged to be backdaters. They match this sample of backdater firms with a control firm for each, chosen based upon a propensity-score procedure that is explained in detail in the paper. The authors track the CEO and CFO departures following the backdating news and categorize them as forced or voluntary.

The results indicate that executive turnover is higher in backdating firms than in the control firms. Further, the evidence shows that subsequent employment for backdating executives is significantly worse than those in the control firm. Results also indicate that the board responds to the backdating by relying less upon stock options. The authors extend their tests to include the General Counsel (GC) of the backdating firms to investigate the question of whether the counsel, often closely involved in construction of the

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compensation contracts, was similarly impacted by the backdating news. The results indicate that GCs turnover is significantly higher for the backdating firms.

International Financial Reporting Standards

In 2013, several studies examined the economic effects of International Financial Reporting Standards (IFRS) adoption. Christensen et al. provide evidence that the benefits of IFRS adoption are more likely to be attributable to changes in financial reporting enforcement than changes in accounting standards. Barth and Israeli discuss the findings of Christensen et al. and offer a different interpretation of the evidence. They suggest that changes in accounting standards have benefits, but that benefits of IFRS adoption are greatest when changes in standards are bundled with changes in enforcement. Daske et al. contribute to the evidence by documenting predictable variation in the benefits of IFRS adoption related to differences in firm-level financial reporting incentives. Chen et al. investigate benefits from improved comparability of financial information under IFRS. They find improvements in investment efficiency following IFRS adoptions. Chan et al. find that foreign firms cross-listed in the U.S. benefit from credit rating improvements following IFRS adoption in their home countries.

The above 2013 studies provide evidence of benefits to IFRS adoption. However, other studies document costs of IFRS adoption. DeGeorge et al. find significant increases in audit costs following mandatory adoptions of IFRS in Australia. Joos and Leung investigate the stock market response to events that affected the likelihood of IFRS adoption in the U.S. and find evidence of a market expectation of higher costs (likely litigation related) from IFRS adoption. Selling discredits arguments made in support of IFRS adoption in the U.S. and Kaya and Pillhofer point to evidence that foreign firms listed in the U.S. rarely choose to report under IFRS. Finally, Huerta et al. provide evidence that translating IFRS into other languages may be more costly when standards are principles-based. They find greater translation differences for IFRS words and phrases that are generic than for accounting specific phrases (Table 3).

Christensen, Hail, and Leuz (2013)

Christensen et al. investigate whether capital market benefits attributed to IFRS adoption are in fact due to the change in financial reporting standards. The authors suggest that time period clustering of IFRS adoption events, economic events occurring at the same time as IFRS adoption and/or changes in financial reporting enforcement accompanying IFRS adoption may have confounded the results in earlier studies. The authors focus on the effect of IFRS adoption on measures of market liquidity. Bid-ask spreads and other measures of market liquidity adjust quickly allowing the authors to use within-year differences in the timing of IFRS adoptions to isolate effects of IFRS adoption. To investigate whether substantive changes in financial reporting enforcement occurred concurrent with IFRS adoption, the authors survey national securities regulators and technical partners at PwC and consult academics and public sources. The authors collect survey evidence from 56 countries between 2001 and 2009. They find substantive changes in enforcement concurrent with IFRS adoption in five European Union (EU) countries: Finland, Germany, the Netherlands, Norway and the United Kingdom.

The authors find a significant increase in market liquidity following IFRS adoption for EU countries but no significant change in market liquidity in non-EU countries. This evidence suggests that increases in market liquidity around IFRS adoption are likely not solely due to changes in accounting standards. The authors further find that only the five EU countries with substantial changes in enforcement benefit from increases in market liquidity following IFRS adoption. The authors find no evidence that other economic shocks or concurrent directives in the EU are driving their results. The authors partition their sample into high and low regulatory quality. For EU countries with high regulatory quality but without substantial changes in enforcement, the authors do not find any significant decreases in bid-ask spread. This evidence highlights the importance of supporting IFRS adoption with improved enforcement of financial reporting. The authors perform a battery of empirical tests and conclude that liquidity benefits

Table 3
International Financial Reporting Standards.

Christensen et al. (2013)	Investigate whether liquidity benefits around IFRS adoption are due to changes in accounting standards or changes in enforcement of the standards
Barth and Israeli (2013)	Discuss the contribution, methodology and findings of Christensen, Hail and Leuz
Daske et al. (2013)	Find benefits of IFRS adoption vary predictably with differences in firm-level financial reporting incentives
Chen et al. (2013)	Find improvements in investment efficiency following adoption of IFRS consistent with improved comparability of information between a firm and its foreign peers
Chan et al. (2013)	Find that foreign firms cross-listed in the U.S. have higher credit ratings following IFRS adoptions in their home countries.
De George et al. (2013)	Examine the effect of IFRS adoptions in Australia on audit fees
Joos and Leung (2013)	Investigate the stock market response to events that affected the likelihood of IFRS adoption in the U.S.
Selling (2013)	Discusses the history of IFRS convergence efforts in the U.S. and refutes arguments made in support of U.S. adoption of IFRS
Kaya and Pillhofer (2013)	Provide a discussion of potential adoption of IFRS in the U.S. that includes support from data on the reporting choices of foreign firms listed in the U.S.
Huerta et al. (2013)	Examine whether study participants' translation differences are more pronounced for generic IFRS phrases than for accounting-specific phrases

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attributed to IFRS adoption are unlikely to result primarily from the change in standards.

Barth and Israeli (2013)

Barth and Israeli comment on the findings of Christensen et al. (2013). The authors note that earlier studies had implicitly assumed that IFRS were enforced. CHL contribute to the literature by explicitly measuring changes in financial reporting enforcement and disentangling the effects of IFRS adoption from the accompanying changes in enforcement. Barth and Israeli point out similarities between CHL and studies by Daske, Hail, Leuz, and Verdi (2008, 2013). CHL partition their sample based on whether the country had substantial changes in financial reporting enforcement whereas the Daske et al. studies identify "strong legal enforcement" and "serious adopter" respectively. Barth and Israeli stress the importance of considering whether these classifications capture the same effect. The authors find CHL's evidence on the effect of enforcement convincing. However, they challenge CHL's conclusion that changes in standards have little effect on market liquidity.

Barth and Israeli point out that the majority of CHL's empirical tests do not isolate the effect of the change in standards. They discuss the difference-in-differences research design and note that disentangling effects of standard changes from enforcement changes requires observations with enforcement changes but without IFRS adoption. In their final table of empirical results, CHL provide evidence for countries with non-concurrent changes in adoption and enforcement and for Japan, a country that did not adopt IFRS but had substantial financial reporting enforcement changes. Barth and Israeli note from the evidence that liquidity benefits are highest in EU countries with IFRS and concurrent enforcement changes and lowest in Japan. Barth and Israeli conclude that the difference in the observed liquidity benefits between Japan and the EU countries suggests changes in accounting standards play an important role. Barth and Israeli disagree with the statement in CHL that "… the change in accounting standards seems to have had little effect on market liquidity…"

Daske et al. (2013)

Daske et al. investigate variation in liquidity and cost of capital effects around IFRS adoption. Prior studies on the benefits of IFRS adoption provide mixed results. Further, these studies do not provide definitive evidence that IFRS adoption benefits are due to the change in standards. Daske et al. investigate how differences in firm-level reporting incentives lead to predictable variation in the observed benefits of IFRS adoption. Using a sample of voluntary IFRS adopters between 1990 and 2005, the authors measure changes in firms' reporting incentives, reporting behavior and reporting environment around IFRS adoptions. The authors capture firm-level reporting incentives based on firm characteristics, such as size, profitability, international operations and dispersed ownership, that are likely to provide strong incentives for transparency in financial reporting. The authors measure firm reporting behavior based on the absolute value of accruals to cash flows and reporting environment based on the number of analysts following the firm. The authors use these three proxies to identify firms that are committed to successful adoption of IFRS, the "serious" adopters, and to identify firms that adopt IFRS in name only, the "label" adopters. The authors predict and find that improvements in market liquidity following IFRS adoption are larger for "serious" adopters than "label" adopters. They also find some evidence that "serious" adopters have lower cost of capital following IFRS adoptions than "label" adopters. The authors conclude that researchers should be careful in attributing economic outcomes of IFRS adoptions to the change in standards. Heterogeneity in reporting incentives around IFRS adoption creates predictable variation in the observed benefits.

Chen, Young, and Zhuang (2013)

Chen et al. investigate whether over and under-investment problems are reduced when a firm's financial statements become more comparable to those of its foreign peers. The authors use the setting of mandatory IFRS adoptions for their investigation. Prior research suggests that a benefit of mandatory IFRS adoption is improved comparability of financial information across countries. In 2005 and 2006, 17 European countries had mandatory adoptions of IFRS. The authors use a sample of firms from these 17 European countries over the 2000–2009 period to examine changes in investment efficiency across the pre and post-IFRS adoption periods. Investment efficiency is defined as over and under-investment and is measured in two ways. The first method is based on the firm's cash balance and leverage. Firms with high (low) cash balances and low (high) leverage are more likely to suffer from over (under)-investment problems. The second method is using residuals from a regression of current investment levels on the prior period change in sales and Tobin's Q. Positive (negative) residuals are used to identify over (under) investment. The sample is partitioned based on these measures of over and under-investment.

The authors expect that the difference between a firm's average return on assets (ROA) and that of its foreign peers will have a greater effect on changes in investment after the adoption of IFRS because information is more comparable. The authors also expect that additional disclosure will have a greater effect on changes in investment after the adoption of IFRS. The authors find, for the under-investment sample, that ROA differences and additional disclosures are associated with larger increases in investment in the post-IFRS adoption period. Similarly, for the over-investment sample, ROA differences and additional disclosure are associated with larger decreases in investment in the post-IFRS adoption period. These results are consistent with reductions in over and under-investment problems following the adoption of IFRS. The authors also show that the investment changes from increased comparability of financial statements and additional disclosures are value relevant. The authors conclude that mandatory IFRS adoption creates positive cross-border spillover in the form of improvements in investment efficiency.

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Chan, Hsu, and Lee (2013)

Chan et al. investigate whether mandatory IFRS adoption by foreign firms cross-listed in the U.S. is associated with improvements in credit ratings. While prior studies on the impact of mandatory IFRS adoption focus mainly on equity and effects in domestic markets, this study's focus is debt markets and foreign firms cross-listed in the U.S. The authors identify a sample of cross-listed foreign firms from home countries that have the same mandated start date for IFRS adoption (starting from Dec. 31, 2005). The sample period extends from June 2003 to November 2007. Using a difference-in-differences research design, the authors find that credit ratings are incrementally higher in the post-IFRS period for cross-listed foreign firms than for matched U.S. firms. They further find that credit rating improvements are more pronounced for cross-listed foreign firms with large differences between prior standards and IFRS and for foreign firms with weaker legal enforcement and investor protection. The results suggest that U.S. investors following foreign firms can benefit from IFRS adoption especially when prior differences between IFRS and the home country GAAP are large and when legal enforcement and investor protection are weak. The results are consistent with perceived improvements in transparency and creditworthiness following mandatory IFRS adoption in the cross-listed firm's home country.

De George, Ferguson, and Spear (2013)

De George et al. examine changes in audit fees around IFRS adoption in Australia. Evidence from the adoption of IFRS in Australia may be more generalizable to the U.S. than other settings because of similarities in the capital markets, investor protections, and auditing services. The authors use a sample of publicly traded Australian firms over the 2002–2006 time period. All firms publicly traded on the Australian Stock Exchange were required to use IFRS for financial periods beginning on or after January 1, 2005. The authors investigate changes in audit fees across the pre and post-IFRS adoption periods. They find an estimated 23% increase in mean audit fees post-IFRS adoption. The authors also investigate whether changes in audit fees vary based on the extent of the firm's exposure to IFRS. A firm's exposure to IFRS is measured as the difference between reported total equity before and after IFRS adoption and is hand-collected from financial statement disclosure notes in the year of adoption. The authors find that firms with the greatest exposure to IFRS have the largest increases in audit fees. The authors also investigate a firm's exposure to specific IFRS standards. The authors identify six standards under IFRS that are perceived to be the most costly to audit. The authors find that firms with the greatest exposure to these standards have the largest increases in audit fees following IFRS adoption.

To provide evidence on the cost of IFRS adoption for small firms, the authors partition the sample based on firm size. The authors find that the smallest firms bear the largest increases in audit fees following IFRS adoption. This evidence provides support for claims that IFRS adoption is particularly onerous for small firms. The authors conclude that higher audit fees following IFRS adoption reflect greater audit effort, use of audit resources and/or increased audit risk.

Joos and Leung (2013)

Joos and Leung examine the U.S. stock market response to events that affected the likelihood of IFRS adoption in the U.S. The authors identify 15 events between April 24, 2007 and January 15, 2009. The first event identified is the date the SEC announced a plan to allow IFRS for U.S. issuers and the last event is the date that SEC Chairwoman, Mary Schapiro, expressed concern about plans regarding IFRS. The authors identify 13 of the 15 events as increasing the likelihood of IFRS adoption in the U.S., one event as unclear, and the last event as decreasing the likelihood of IFRS adoption. Prior studies have documented positive market responses to IFRS adoption in Europe. However, it is not obvious that U.S. markets would respond similarly.

The authors use U.S. data and examine cumulative returns around the IFRS adoption events. They document a positive market response to the events suggesting that, on average, the market expects the benefits of IFRS adoption to outweigh the costs. The authors further examine whether the market responds more favorably for firms more likely to receive benefits from IFRS adoption and more negatively for firms more likely to incur costs. The authors expect the market to respond more negatively for firms in insurance and extractive industries, high litigation risk firms, and firms using LIFO. For these firms, the lack of industry-specific guidance, greater reliance on management's judgments, and loss of tax benefits are likely to make IFRS adoption more costly. For firms likely to receive benefits from IFRS adoption, the authors expect a stronger positive market response around the IFRS adoption events. Firms in industries with broad adoption of IFRS and firms with significant sales in IFRS reporting countries are expected to benefit from cost reductions under IFRS. The authors find that the market responds more negatively when firms have high litigation risk but do not find such evidence for insurance and extractive industries or for firms using LIFO. They find that the market responds more positively to firms in industries broadly using IFRS but not for firms with significant sales in IFRS reporting countries. The authors provide evidence that contributes to the debate over IFRS adoption in the U.S. and provide insight into how U.S. market participants perceive IFRS adoption.

Selling (2013)

In this commentary, Selling provides a brief review of the history of IFRS adoption, convergence, and "condorsement" efforts in the U.S. from 2002 through 2011. The author argues that these efforts have not been in the best interest of U.S. market participants. He suggests any efforts toward IFRS convergence in the U.S. should be halted and reversed. Selling draws from speeches made by the IASB chairman, Hans Hoogervorst, and CAQ board member, Harvey Goldschmid, in 2011 to identify a "Top Ten" list of false statements regarding U.S. adoption of IFRS. Selling's top ten list is:

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1. Some large U.S. corporations want to switch to IFRS.
2. A move to IFRS would restore the public trust in accounting standards.
3. U.S. GAAP is not superior to IFRS.
4. IFRS is already widely adopted elsewhere.
5. Even though IFRS may not be consistently applied elsewhere, the SEC can enforce compliance with IFRS as it sees fit.
6. Costs of conversion to IFRS can be spread out over a long transition period.
7. The U.S. will not experience a loss of sovereignty over its ability to set accounting standards.
8. Bad things will happen to the rest of the world if the U.S. does not adopt IFRS.
9. Bad things will happen to the U.S. if it does not adopt IFRS.
10. All nations share the same goals for accounting standards.

The author believes each of the above statements is false. To dispel the claims on the list, Selling points to evidence in SEC comment letters, examples of potentially politically motivated revisions to IFRS, questionable actions by Mr. Hoogervorst in relation to a letter he sent to the European Securities and Markets Authority, misrepresentation of evidence in academic research, and costs, effects and experiences from IFRS adoption in other countries. Selling stresses that IFRS adoption in the U.S. would not result in the claimed benefits and would not have the claimed repercussions. He argues that current "condorsement" efforts are unlikely to result in improved financial reporting standards.

Kaya and Pillhofer (2013)

Kaya and Pillhofer discuss IFRS adoption in the U.S. by highlighting evidence in prior research, documenting the recent U.S. convergence and "condorsement" efforts, and providing descriptive data on the reporting choices of foreign issuers. The authors review the evidence provided in prior literature on the effect of IFRS on reporting quality, market liquidity and cost of capital. They conclude that the evidence is mixed but note that prior research identifies factors likely to affect the outcomes from IFRS adoption such as reporting incentives, enforcement of the standards and whether the adoption is voluntary or mandatory. The authors provide an overview of the events related to IFRS adoption in the U.S. that occurred between 2002 and 2012. They document the many twists and turns across the 10 years, from positive efforts in 2002 toward convergence to the final SEC staff report released in 2012 providing no recommendation for incorporation of IFRS in the U.S.

To provide insight into preferences and demand for IFRS financial reporting, the authors examine the reporting decisions of foreign firms listed in the U.S. The authors collect the 2009 and 2010 annual reports of foreign firms reported on form 20-F filings with the SEC. Foreign issuers may choose to report under IFRS, U.S. GAAP, or to reconcile their domestic GAAP to U.S. GAAP. During 2009 (2010), the authors find that only 19(23) percent of foreign issuers chose to report under IFRS. The authors sort foreign firms based on how IFRS is applied in the firm's home country. The authors find that 7% of foreign firms from home countries that allow IFRS but have not mandated it, choose to report using IFRS. The authors find a preference for U.S. GAAP reporting among foreign filers from home countries not mandating IFRS and conclude these foreign issuers may prefer reporting under U.S. GAAP to allow comparability with U.S. firms.

The authors continue their discussion by considering how adoption of IFRS could result in a single standard setting body for promulgating global standards. The arguments and evidence point to a reduction in the quality of standards when standard setters do not have to compete. The authors also discuss organizational problems with the IASB such as the lack of independent funding, inability to implement, audit and enforce IFRS and political pressures on the IASB. The authors conclude that arguments against IFRS adoption in the U.S. are valid and the SEC should proceed with caution.

Huerta, Petrides, and Braun (2013)

Huerta et al. analyze how auditors translate words and phrases in IFRS from English to Spanish. Prior translation research suggests that differences in IFRS translations may lead to reduced financial statement comparability. The authors investigate whether the specificity of the IFRS words and phrases results in predictable translation differences. Specifically, the authors classify 47 words and phrases from five IFRS as either generic or accounting specific. The authors identify 24 (23) of the words and phrases as accounting specific (generic). The authors ask accounting professionals enrolled in a graduate or professional course at a Mexican university to translate the 47 words and phrases into Spanish. The authors also have participants rate their proficiency in English and provide demographic information. Using a sample of 38 participant responses, the authors investigate whether translation differences are more pronounced for generic words relative to accounting specific words. The authors find lower inter-rater agreement and higher relative dispersion in the participants' translations of the generic words and phrases than for the accounting-specific translations. The words and phrases with the highest inter-rater agreement and with no dispersion (perfect values of 1 and 0 respectively) are the accounting-specific words: amortized, provision and recognized. The words and phrases with the greatest dispersion and with low inter-rater agreement are the generic words: virtually certain, settle the obligation and carryforward. This evidence on translation differences is important given standards that are principles-based are more likely to use more generic wording than standards that are rules-based.

Auditing

In 2013, two studies provide evidence about the value of partner personal sign-off on the audit opinion. Carcello and Li use the initiation of signature requirements in the United Kingdom to investigate the impact of the signature requirement on audit quality and audit fees. Gul et al. use Chinese data to investigate the role of individual auditor

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Table 4
Auditing.

Carcello and Li (2013)	Find that the audit engagement partner signature requirement in the United Kingdom is associated with increased audit quality and audit fees
Gul et al. (2013)	Examine the role of individual audit effects on audit quality using Chinese data

effects in explaining variation in audit quality. The signature requirement in China has been in effect for many years, allowing the authors to compile a large sample for measuring individual auditor fixed effects (Table 4).

Carcello and Li (2013)

The United Kingdom (U.K.) adopted an audit signature requirement for financial years ending in April 2009 or later. Carcello and Li use this setting to investigate changes in audit quality and audit fees around the implementation of an audit engagement partner signature requirement. Given similarities between the U.K. and U.S., this research has the potential to inform standard setting as regulators in the U.S. consider implementing a similar audit signature requirement.

The authors measure audit quality using three proxies for earnings quality and a measure of the audit outcome. The four measures are the absolute value of abnormal accruals, whether the firm reports a small earnings increase, the earnings responsiveness coefficient (ERC), and whether the firm receives a qualified audit opinion. Decreases in the first two measures and increases in the latter two suggest improvements in audit quality. The authors find evidence consistent with increased audit quality in the year following the implementation of the audit signature requirement. Specifically, they find that abnormal accruals and the likelihood of a small earnings increase are significantly lower following the signature requirement and ERCs and the propensity to issue qualified audit opinions are significantly higher. The authors also investigate whether these audit quality improvements come at additional cost. They find significantly higher audit fees in the year following the implementation of an audit signature requirement. These results are not driven by other events, such as the financial crisis, occurring over the 2008–2010 sample period.

Gul, Wu, and Yang (2013)

Gul et al. investigate whether variation in audit quality can be explained by individual auditor fixed effects. The authors use Chinese data from 1998 to 2009 for their investigation. Under Chinese auditing standards, the audit engagement partners are required to sign the audit. As a result, the authors are able to compile a sample of 861 individual auditors who have audited multiple clients over multiple years. The authors capture audit quality using various measures: the unexpected propensity to issue modified audit opinions, abnormal accruals, below the line items, and the likelihood of small profits.

The authors estimate audit quality regression models and find that adding individual fixed effects significantly improves the explanatory power of these models. They also find that the frequency of significant individual fixed effects in these regression models is much greater than would be expected under a null of no effect. The authors provide evidence that individual auditor effects are significant in explaining audit quality across both large and small audit firms. The authors also investigate whether demographic characteristics of the auditor explain the individual auditor effects. The demographic characteristics investigated are education, gender, Big N audit experience, birth year, rank in the audit firm, and Chinese political affiliation. The coefficient on graduate education is positive and significant in three of the five regression specifications suggesting that auditors who hold advanced degrees are more aggressive. The explanatory power of the models is low, ranging from 1.83% to 3.22%. The authors conclude that individual auditor effects are significant in explaining audit quality but only a small portion of variation in the individual fixed effects is explained by observable demographic characteristics of the signing auditor.

Sarbanes–Oxley

In the decade following the enactment of the Sarbanes–Oxley Act of 2002 (SOX), there has been much academic research investigating various aspects of its impact, effectiveness, costs and benefits. The Public Company Accounting Oversight Board (PCAOB) was created by (SOX) to oversee the accounting industry. Gunny and Zhang find that PCAOB inspections, the central feature of the accounting profession's shift from self-regulation to independent regulation, are associated with audit quality of triennially inspected and annually inspected auditors. Abbott et al. find that clients of triennially inspected auditors react differently to the PCAOB inspection reports contingent upon the inspection report severity and find that a GAAP-deficient PCAOB inspection report is more likely to prompt an auditor dismissal. Palmrose contributes a commentary examining the articulated principles of the PCAOB and provides suggestions to build on the PCAOB's vision of the future.

Gupta et al. review the past six decades of legislative proposals (bills introduced by the House and Senate, regulatory efforts by the SEC and recommendations from private sector commissions) to dispel the belief that SOX, particularly Section 404, was written and enacted in haste. Kinney et al. also produce a thought piece and state that although there are common attributes, the objects, values and approaches used for audits of internal control processes are fundamentally different from audits of financial statements.

Graham and Bedard, Alexander et al., and Chen et al. investigate the effects of Section 404. Graham and Bedard investigate factors associated with the remediation of deficiencies in internal controls over financial reporting (ICFR) and identify the importance of client factors such as coordination of IT personnel and an early start to the organization of the Section 404 process. Alexander et al. find survey evidence that is consistent with a causal link between Section 404 and improvements in the quality of the firms' information environments. Chen et al. focus on firms with clean

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Section 404 and 302 reports and conclude that although the costs of compliance with Section 404 are high and disproportionate for small firms, first-time internal control reports have increased earnings informativeness.

Internal control weakness (ICW) firms have been investigated by Mitra et al. and Cheng et al. Mitra et al. investigate the level of conservatism in ICW firms and note that accounting conservatism is considered to be part of an efficient reporting strategy and find that SOX most likely put pressure on firms with greater agency problems. Cheng et al. provide direct evidence for the causal relationship between financial reporting quality and investment efficiency.

Franzen et al. and Carter examine consequences of specific aspects of SOX. Franzen et al. investigate an unintended consequence of SOX Section 403: the reversal in the sequencing of the disclosure of Form 4 and Form 144. This reversal inhibits the usefulness of Form 144 to the public since trade details were previously publically disclosed via Form 4. Carter uses SOX to examine the effects of information environment on capital structure and finds that after SOX, firms that are based and listed in the U.S. have higher book long-term debt ratios compared to control firms.

Finally, Schroeder and Hogan investigate changes in portfolio risk following AS5 and an economic recession that began in December 2007 and find that the Big 4 firms have been successful in balancing their portfolios and continue to reduce the percentage of mismatched clients. Eilifsen and Knivsflå contribute to the literature by providing an international perspective surrounding investor perceptions and auditor-provided NAS. Their findings illustrate that investors react negatively to the disclosure of NAS violations, but that investor concerns are eased by new regulations (Table 5).

Gunny and Zhang (2013)

The Public Company Accounting Oversight Board (PCAOB) was created by the Sarbanes–Oxley Act (SOX) to oversee the accounting industry in response to high-profile corporate governance failures and has four core program areas: registration, inspections, standard setting, and enforcement. The authors examine whether PCAOB inspections, the central feature of the accounting profession's shift from self-regulation to independent regulation, are associated with actual audit quality of triennially inspected and annually inspected auditors. Specifically they examine three client-specific measures of audit quality: abnormal current accruals, the propensity to restate, and the auditor's propensity to issue a going concern opinion.

To test their hypotheses the authors obtain all of the inspection reports from the PCAOB website for the time period 1/31/2005 to 12/31/2009 for the triennially and annually inspected auditors. Triennially inspected firms are public accounting firms that issue audit reports for 100 or fewer public companies while those public accounting firms that issue audit reports for more than 100 public companies are inspected annually. The PCAOB inspection reports are auditor-specific rather than client-specific. Their sample includes 527 PCAOB inspection reports: of those reports 278 reveal one or more audit deficiencies and are classified as deficient and 249 reveal no audit deficiencies and are therefore classified as clean. Of the 278 deficient reports, 100 refer directly to an outright audit failure and a severe direct financial reporting implication and are thus classified as seriously deficient.

The authors find that triennially inspected auditors are associated with lower audit quality. Triennially inspected

Table 5
Sarbanes–Oxley.

Gunny and Zhang (2013)	Find that on average audit quality is lower for triennially inspected auditors that receive a seriously deficient report from the PCAOB
Abbott et al. (2013)	Find that clients of triennially inspected auditors react differently to the PCAOB reports depending on their severity
Palmrose (2013)	Explores the status of audit regulation under the discretionary choices of the PCAOB under SOX, Dodd–Frank and the JOBS Acts
Gupta et al. (2013)	The authors review precursors to SOX Section 404 and show that the debate over public reporting of internal controls is more than six decades old
Kinney et al. (2013)	Examine observations about material weaknesses identified via control audits and alternative ways that firms and their auditors can provide internal controls effectiveness information to investors
Graham and Bedard (2013)	Investigate a sample of 3990 internal control deficiencies during 2004 and 2005 for remediation prior to the balance sheet date
Alexander et al. (2013)	Survey 2901 corporate insiders to assess the costs and benefits of compliance with Section 404 of SOX
Chen et al. (2013)	The authors use a difference-in-differences approach to compare the changes in earnings informativeness and find that earnings informativeness for companies with clean internal control reports was greater in the year of Section 404 adoption
Mitra et al. (2013)	Examine the effect of enhanced regulations and corporate oversight in the post-SOX period on the association between internal control quality and accounting conservatism and find that the relationship between accounting conservatism and internal control quality significantly changes in the post-SOX period of enhanced regulations and corporate oversight
Cheng et al. (2013)	Link SOX's internal control weakness disclosure requirements to increased real investment efficiency
Franzen et al. (2013)	Find that Section 403 of SOX increased the timeliness of insider trading reporting, but adversely affected restricted stock disclosures
Carter (2013)	Finds that although firms anticipated a higher cost of debt following the implementation of SOX, debt was still safer and less costly than equity
Schroeder and Hogan (2013)	Document that when compared to the 2006 portfolio, the Big 4 public client portfolio in 2009 has greater exposure to client financial risk but lower exposure to audit risk
Eilifsen and Knivsflå (2013)	Examine how the 2003 regulatory changes in Norway affected the relationship between the provision of NAS and earnings quality

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auditors receiving deficient or seriously deficient reports are associated with significantly higher abnormal current accruals and those receiving seriously deficient reports are associated with a greater propensity to restate. These results imply that deficient and seriously deficient PCAOB inspection reports of triennially inspected firms are associated with lower audit quality. These results do not extend to annually inspected firms. Since none of the annually inspected firms received a clean PCAOB inspection report the authors use the triennially inspected firms as a control group. When compared to the control sample, the authors find conflicting evidence of an association between deficient and seriously deficient reports of annually inspected firms and lower audit quality. When comparing annually inspected auditors to all classifications of triennially inspected auditors the authors find that deficient and seriously deficient annually inspected auditors appear to have higher audit quality using abnormal accruals and the propensity to restate, but lower audit quality using the propensity to issue a going concern report.

Currently there is an ongoing regulatory discussion surrounding the expansion of the PCAOB inspection process to include auditors of broker-dealers and foreign registrants. The results of this study imply that PCAOB inspection reports may be used as an auditor specific proxy for audit quality for these auditors as they would be classified as triennially inspected firms.

Abbott, Gunny, and Zhang (2013)

Due to the independence and experience of the PCAOB inspectors, the specificity variation and accessibility of their reports, the authors examine the PCAOB in the context of whether GAAP-deficient PCAOB inspection reports of triennially inspected auditors are enough of an audit quality signal to cause auditor dismissal.

The study sample contains all inspection reports from the PCAOB website from January 2005 to December 2007. The authors classify inspection reports into three levels of increasing severity: "clean", "GAAS-deficient", and "GAAP-deficient". In a clean report, the PCAOB finds no audit deficiencies. In a GAAS-deficient report, the PCAOB states that the financial statements audited by the auditor are free from material error, but that the audit process did not fully follow GAAS-recommended audit procedures. In a GAAP-deficient report, the PCAOB states that the auditor "failed to identify a material departure from GAAP" or that the audited company "restated certain of its financial statements to make changes relating to" matters/audit deficiencies uncovered by the PCAOB inspection (PCAOB, 2005). The authors' analysis includes governance variables, agency based variables and auditor based variables related to auditor switching.

The authors find that clients of triennially inspected auditors react differently to the PCAOB inspection reports contingent upon the inspection report severity. The authors find that a GAAP-deficient PCAOB inspection report is more likely to prompt an auditor dismissal relative to an auditor that did not receive a GAAP-deficient PCAOB report. They find sources of agency conflicts such as inside ownership, leverage, proceeds from securities placements and firm size increase the positive relation between the receipt of a GAAP-deficient PCAOB inspection report and the likelihood of dismissing a triennially inspected auditor in favor of an auditor who has not received a GAAP-deficient report. Independent and expert audit committees are also found to impact the reaction to GAAP-deficient auditor reports. Finally, outside block holdings and securities issuances also increase the positive relation between the receipt of a GAAP-deficient PCAOB inspection report and the likelihood of dismissing a triennially inspected auditor.

Palmrose (2013)

This Commentary assesses the status of audit regulation under the PCAOB, discusses how discretionary choices in implementing the PCAOB's legislative mandates under SOX, the Dodd–Frank Wall Street Reform and Consumer Protection Act of 2010 (Dodd–Frank) and the 2012 Jumpstart Our Small Business Startups (JOBS) Act have shaped the Board. Finally it explores what the future might hold.

Palmrose begins by stating that the PCAOB was established by SOX to oversee the audit of public companies and protect the interests of investors and further the public interest in the preparation of informative, accurate and independent audit reports. This mission focuses the PCAOB on maintaining and improving public company audit quality. Palmrose points out that although the mission of the PCAOB is to maintain audit quality, the number of CPAs that can serve on the board is restricted to two. Further, the PCAOB was devoid of a member with any audit experience until recently. When continuing to describe the factors that shape the board, Palmrose notes that the nature and process by which the board is funded are a source of strength. Additionally, SOX gives the PCAOB the authority to establish quality control, auditor independence and performance standards. Palmrose notes that of late the PCAOB has been moving toward more prescriptive auditing standards and that the impact of that move is an open question.

Palmrose discusses a couple of notable complications related to the PCAOB: developing a meaningful broker-dealer inspection program as articulated in Dodd–Frank and the SOX mandate for the inspection of registered foreign accounting firms. Additionally, the JOBS Act contains provisions designed to lessen the regulatory burden on smaller companies and requires the PCAOB to engage in economic analysis to consider the impact of any actions taken. These provisions signal that Congress is willing to constrain the PCAOB.

In the final section of the commentary, Palmrose discusses the determinants of the future for the PCAOB. This discussion begins with the PCAOB's vision statement: the PCAOB seeks to be a model regulatory organization using innovative and cost effective tools, the PCAOB aims to improve audit quality, reduce the risk of auditing failures in the U.S. public securities market and promote public trust in both the financial reporting process and auditing profession. Palmrose states that this vision statement provides a framework for considering the future of audit regulation and suggests several steps for enhancing the implementation through adopting traditional regulatory provisions for accountability and transparency, applying a comprehensive

and rigorous cost–benefit analysis and judiciously choosing initiatives.

Gupta, Weirich, and Turner (2013)

In their review of the past six decades of legislative proposals, bills introduced by both the House and Senate, regulatory efforts by the SEC as well as recommendations from private sector commissions, Gupta et al. work to dispel the belief that SOX, particularly Section 404, was written and enacted in haste. The authors examine and interpret the history surrounding the debate around public reporting on internal controls by the independent auditor and firm management.

Their examination is divided into sections ordered chronologically and begins with the 1917 Federal Reserve Bulletin prepared by the American Institute of Accountants and ends with a discussion of the of the current opposition and debate surrounding Section 404. The 1917 bulletin, "Approved Methods for the Preparation of Balance Sheets," in its revised state established the first conceptual foundation for internal control. As the authors trace the internal control reporting practices up to the 1970s they site references to independent auditor internal check (control) responsibilities in such notable documents as the Securities Acts of 1933 and 1934, the Cohen Commission, the 1939 Committee on Auditing Procedure Statement on Auditing Procedure (SAP) and the 1949 Committee on Auditing Procedure internal control analytical study on internal controls. These salient examples are meant to illustrate a timeline which establishes the independent auditor's review of internal controls prior to the end of the 1970s. The authors also examine the impact of the Foreign Corrupt Practices Act (FCPA) of 1977. The FCPA made it clear that it was illegal for a public company to have an inadequate system of internal control. However, the FCPA did not require either management or the independent auditor to report on the effectiveness of internal controls. Following the passage of the FCPA, the SEC proposed that management should be required to maintain an adequate system of internal controls and report to shareholders on it its effectiveness. Additionally, the AICPA through a number of committees and commissions impacted the debate and contributed to a number of companies voluntarily issuing management reports on internal controls for a brief period of time.

The historical commentary provided by the authors is designed to illustrate the lengthy debate surrounding the public reporting on internal control by management and independent auditors. The authors acknowledge the costly nature of Section 404 implementation, but reject the notion that the enactment of SOX was "hasty."

Kinney, Martin, and Shepardson (2013)

Sox Sections 404(a) and 404(b) were implemented in late 2004. Section 404(a) requires management evaluation and reporting on internal controls for financial reporting (ICFR). Section 404(b) requires an independent audit of ICFR effectiveness. As implemented, Section 404(b) applied to all public companies trading in the U.S., but smaller U.S. issuers were subsequently exempted.

The authors reflect upon and synthesize their experiences with ICFR audits and compile several observations. First, the authors find that although there are common attributes, the objects, values and approaches used for audits of internal control processes are fundamentally different from audits of financial statements. While the PCAOB standards require three sources of control audit evidence, these sources vary in incremental costs, audit expertise required and the ability to identify material weaknesses. Auditors are effective and efficient at identifying control weaknesses that have resulted in known accounting misstatements. However, without the knowledge of accounting misstatements auditors find it difficult to identify weaknesses in control process design. Additionally, gaging the appropriate scope of operating effectiveness testing is difficult. The authors also note that there are no international equivalents to the U.S. mandated control audits. Although other countries do provide some control information to investors, their requirements fall short of a legislative mandate and at much lower cost of production.

Finally, the authors note that since there is little data regarding how control audits are produced, how effective audit staff and partners are at implementing the requirements of Section 404(b) audits, and the relative effectiveness of alternatives to 404(b), the public actually knows little about what it gets from 404(b) audits. The authors call for more transparency and independent analysis of extant audit production.

Graham and Bedard (2013)

Graham and Bedard investigate factors associated with the remediation of deficiencies in internal controls over financial reporting (ICFR) discovered by companies and external auditors under Section 404. SOX Section 404 was designed to improve corporate controls by requiring company management and external auditors to document and test ICFR. Furthermore, Section 404 requires that company management and external auditors independently evaluate, test, and present an assertion/opinion as to their effectiveness. The ICFR must be disclosed as ineffective if there is at least one material weakness (MW) as of the balance sheet date. Under regulatory requirements the MW should be remediated in the fiscal year following the MW disclosure. If that MW is successfully remediated prior to the next balance sheet date the disclosure of the MW will not be repeated. Specifically, the authors investigate determinants of ICD remediation prior to the balance sheet date, study the remediation of ICDs that are publically reported and those that are not among companies with effective and ineffective controls, and address the benefits of Section 404(b) by measuring the impact of auditor activity in the remediation process, and at the time of the auditors' assessment, the flawed control had already failed to prevent a misstatement.

The authors obtain, under confidentiality agreements that restrict certain firm level information, a unique data set of randomly selected clients from 2004 to 2005 engagements in non-regulated industries from several large audit firms. The final sample consists of 3990 internal control deficiencies (ICDs) identified in 76 engagements on 44

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companies with revenues of less than $1 billion that are non-accelerated filers not yet subject to Section 404(b). The mean number of ICDs per engagement was 52.2, with a range of fewer than ten to almost 300. A "clean" company is a one that does not have an uncorrected ICD meeting the MW criteria. The authors found that the mean number of ICDs detected among companies with effective controls was 42.9 while the mean number of ICDs detected for firms with ineffective controls was 90.5. The overall remediation rate of ICDs prior to the balance sheet date is 25.7 percent. Furthermore, the authors find that sample companies with effective controls do not remediate significantly more ICDs (26.2 percent) than firms with ineffective internal controls (18.5 percent). Using logistic regressions the authors find a positive association between client processes and increased remediation. Better integration of IT personnel and an earlier start to control testing both had a positive impact on remediation. In further testing, however, improved IT personnel integration only improves remediation for client discovered ICDs. They find lower remediation among auditor-discovered ICDs and discovery through substantive testing. Additionally, they find that remediation is negatively associated with related financial misstatements. The authors complete supplemental analysis that implies a combination of auditor discovery and an associated misstatement makes remediation particularly challenging.

Their results suggest that client factors such as coordination of IT personnel and an early start to the organization of the Section 404 process are the most important factors affecting remediation of ICDs.

Alexander, Bauguess, Bernile, Lee, and Marietta-Westberg (2013)

Section 404 of SOX requires management to assess the effectiveness of its internal control over financial reporting (ICFR) and have an independent auditor attest to and report on management's assessment. Between December of 2008 and January of 2009, the SEC administered a survey to 2901 managers of U.S. public companies. In this survey participants responded to detailed questions about the impact of compliance with various aspects of their firms' information environments, compliance costs, and perceived benefits of those costs. Nearly two-thirds of the respondent firms were publically traded when SOX was enacted, but more than a quarter of had not yet complied with the Section 404(b) requirements at the time of the survey. Along with information about the most recently completed fiscal year, respondents were also asked to report costs and perceived net benefits of compliance for the prior year and the year-in-progress. The authors analyze these survey data to answer the following questions: Do insiders perceive that Section 404 compliance has benefits? Do the benefits outweigh the costs? Do the effects of compliance vary systematically across respondent firms? Does Section 404 compliance require significant fixed setup costs? Are there incremental benefits from Section 404(b) compliance?

The authors find that evidence is consistent with a causal link between Section 404 and improvements in the quality of the firms' information environments and that 80% of respondents recognize some benefits to Section 404 compliance. However, only 19% of respondents perceive a net benefit from Section 404 compliance in the most recently completed fiscal year. Firms did, however, attribute an increasingly higher net benefit to Section 404 compliance in recent years. The results of tests on this data suggest that learning and lower regulatory uncertainly contributed to enhancing the perceived benefits of Section 404 compliance. The authors also find that an analysis of compliance costs normalized by the firm asset base reveals that fixed compliance costs decrease with firm size and that fixed compliance costs decline in more recent years across all firms, but decline at a faster rate for smaller firms. The authors also assess the determinants of the reported effects of Section 404 compliance and find that the perceived compliance benefits increase with firm size and geographical dispersion of operations. Additionally, they find that longer compliance experience and remediation of internal control deficiencies identified through the compliance process are also associated with greater perceived benefits. However, firms with multiple business segments or research and development expenditures exhibited lower perceived compliance benefits. The authors go on to examine the firms' lobbying behavior following the passage of SOX in the context of the survey responses and find that firms that lobbied against SOX were more likely to recognize compliance benefits.

Finally, the authors examined how survey responses varied with investors' reactions to the adoption of the Section 404 rules. To measure investor reactions the authors use firm abnormal returns around the events leading to the passage of SOX, abnormal returns around Section 404 implementation events, equity betas and stock liquidity. The results imply that investor expectations are correlated with manager assessments regarding the effects of Section 404 compliance and that already compliant firms benefited the least from Section 404 implementation. Additionally, the authors find that when the firm information environment improved following implementation, the perceived benefits of compliance were higher.

Chen, Krishnan, Sami, and Zhou (2013)

Section 404 is one of the most controversial provisions of the Sarbanes–Oxley Act. Section 404 requires integrated audits of firms' internal controls and their financial reporting. Beginning with year ends following November 15, 2004 firms are required to have auditors provide one opinion for the financial statement audit and another opinion for the internal control audit. The provision of these two opinions was expected by the SEC to improve the reliability of the financial statements and the reported annual earnings.

In this study the authors examine the expectation that Section 404 would increase the quality and reliability of financial reporting. The authors focus on firms with clean Section 404 reports and clean Section 302 reports. While Section 404 requires that the auditor opine on whether its client has maintained effective internal controls over financial reporting, Section 302 was introduced two years prior to section 404 and requires corporate officials to certify the effectiveness of their disclosure controls on a quarterly basis.

In order to complete their examination, the authors specifically examine the association between earnings and stock returns during the pre-SOX Section 404 year in comparison to the first year of SOX Section 404 compliance. They therefore examine the incremental change in earnings informativeness due to Section 404 internal controls over financial reporting (ICFR) reports.

To perform their study the authors begin with a sample of 1545 accelerated filers with clean Section 404 reports in the year of Section 404 adoption and clean Section 302 reports in both the year of Section 404 adoption and the previous year. They also use a control sample of non-accelerated filers that were not subject to Section 404 requirements. The authors find that first time joint ICFR-financial reporting audit reports provide greater earnings informativeness than the previous year's financial-reporting only audit reports. Further, the authors find that the firms that benefitted the most are those with a higher likelihood of material weakness. Additionally, firms with both low and high changes in audit fees experienced an increase in earnings informativeness.

Although the costs of compliance with Section 404 are high and disproportionate for small companies, the authors find that first-time internal control reports have increased earnings informativeness.

Mitra, Jaggi, and Hossain (2013)

Effective internal controls lead to firms adopting a reporting strategy based on more accounting conservativism. Accounting conservatism is considered to be part of an efficient reporting strategy that helps assuage agency problems and benefits financial statement users in various contracting situations. A lack of adequate monitoring and control over executive behavior in the internal control weakness (ICW) firms gives managers an incentive to make aggressive accounting policy choices. However, increased post-Sox regulatory oversight with an expectation of higher quality financial reporting, audit standards and audit quality inspection by the PCAOB could help correct for weak controls and constrain managerial discretion to make opportunistic accounting choices. Additionally, post-SOX disclosure requirements are likely to increase the flow of information to outside stakeholders.

The authors investigate the effects of SOX on ICW firms and non-ICW firms and whether accounting conservatism varies with severity and pervasiveness of ICW. Further they investigate whether there is a difference in the post-SOX conservatism between the firms with company-level ICW and account-specific ICW relative to the firms with effective internal controls (non-ICW) firms.

The authors begin their sample selection process with the 2004–2009 Audit Analytics database and arrive at 3492 total firm observations their post-SOX analysis. Out of 1746 ICW firms the authors identify 756 firms with company-level ICWs and 990 firms with account-specific ICWs. To facilitate their investigation into the conservative reporting practices of ICW and non-ICW firms the authors utilize a propensity score matching process. They use a matched-pair sample of ICW and non-ICW firms and use the following measures of conservatism: timeliness of earnings to news, persistence of earning changes, and accrual-based loss recognition.

The authors find that non-ICW firms have higher conservatism than the ICW firms in the pre-SOX period, the difference in conservatism between ICW and non-ICW firms decreases post-SOX. Additionally, post-SOX accounting conservatism is significantly greater for ICW firms with company-level ICW. However, the authors do not find any difference in the accounting conservatism of account-specific ICW and the non-ICW firms. Finally, the authors find that the difference in conservatism between ICW and non-ICW firms is larger and more significant in the earlier part of the post-SOX period (2004–2006) versus the latter part (2007–2009).

The authors state that the enhanced scrutiny and regulatory oversight as a result of SOX most likely put pressure on firms with greater agency problems, ICW firms, to respond to the need for conservative information and ensure efficient contracting. However, the authors point out that although conservativism is an important factor in resolving agency conflicts it does not necessarily imply higher quality financial reporting.

Cheng, Dhaliwal, and Zhang (2013)

In their study Cheng et al. provide direct evidence for the causal relationship between financial reporting quality and investment efficiency. Specifically, the authors investigate the changes in investment behavior of internal control weakness (ICW) firms prior to the disclosure of the ICW and following the disclosure. The authors predict that ICW firms will either over or under invest relative to non-ICW firms and that the investment inefficiencies experienced by the ICW firms will dissipate following disclosure. Firms' investment behavior is measured as the sum of research and development, capital and acquisition expenditures less the sale of property, plant and equipment multiplied by 100 and scaled by the lagged total assets.

The authors create their sample beginning with the information on firms' Section 302 and 404 internal control disclosures from the Audit Analytics database between 2004 and 2007. Section 302 mandates that a firm's CEO and CFO certify in periodic SEC filings that they have evaluated and presented their conclusions regarding the effectiveness of the firm's internal controls. Section 404 requires that each annual report contains an internal control report that includes an assessment of the effectiveness of the issuer's internal control structure and procedures with respect to financial reporting. The authors do not differentiate between Section 302 and Section 404 disclosures. The authors begin with a sample of 1696 firms that disclosed material ICWs for the first time via a Form 10-K or 10-Q. As a result of their data requirements and matching procedure 282 matched pair firms remain in each event year.

The authors find that in the year prior to the initial disclosure of a firm's ICW they experience significant investment inefficiencies relative to control firms. Specifically, financially constrained ICW firms under-invest by about 1.79% of total assets, while financially unconstrained ICW firms over-invest by about 2.53%. Additionally, the authors find that following the disclosure of a material weakness

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the investment efficiency of the ICW firms becomes small and insignificant relative to control firms. The results of their regression analyses suggest that SOX disclosures of ICWs and the changes that follow reduce investment inefficiency.

Franzen, Li, and Vargus (2013)

The authors investigate whether the SOX Section 403 requirements for decreased delays in the electronic filing of Form 4, insider trades, impacted the filing timeliness of Form 144, intent to sell restricted stock. Prior to SOX, insiders were required to file Form 4 with the SEC within 10 days following the transaction. In an effort to increase the transparency of trades executed by insiders, Section 403 of SOX required corporate insiders to file Form 4 with the SEC within 2 business days of the transaction. Restricted stock transactions require the filing of an additional form: Form 144. Insiders selling restricted stock are required to file both Form 4 and Form 144. Form 144 filings could not be delayed pre-SOX and were required to be filed prior to or concurrently with the date of sale. SOX did not change the filing requirements for Form 144.

To investigate their question the authors obtain Form 4 and Form 144 filings for the period 1996–2007 from the Thompson Financial Insider Trading database. The authors then match on company name and insider identity. Additionally, the matching process requires the to-be-sold and transaction dates to be within one trading day. Following the matching process the authors separate the sample into a pre-SOX and post-SOX periods consisting of 78,870 and 101,930, respectively.

The authors find that in the pre-SOX period Form 144 is filed with the SEC prior to Form 4 approximately 94% of the time. Specifically, the public disclosure of Form 144 occurs a median of four days following the transaction while the filing of Form 4 occurs a median of 23 days following the transaction. The authors find that post-SOX the median disclosure delay for Form 4 was two days, consistent with the Section 403 requirements. However, the authors find an increase in the median disclosure delay for Form 144. Specifically, the median Form 144 disclosure delay increased to six days.

The authors conclude that an unintended consequence of the Section 403 filing requirements is the reversal in the sequencing of the disclosure of Form 4 and Form 144. This reversal inhibits the usefulness of Form 144 to the public since trade details were previously publically disclosed on Form 4.

Carter (2013)

One of the purposes of SOX was to increase financial reporting transparency and reduce the information asymmetry between managers and investors. Carter examines the effects of SOX on firms' capital structure. Specifically, Carter investigates whether lower information asymmetry or firm specific characteristics as a result of SOX are associated with lower leverage or if post-SOX leverage increases because the cost of debt is still less than the cost of equity.

The author uses a sample of quarterly firm observations from 2000 to 2004 of U.S. and Canadian firms listed in Compustat. The sample is separated into four categories: a control group consisting of Canadian firms listed in Canada, U.S. firms listed in the U.S., Canadian firms cross-listed in the U.S., and the union of the firms in the second and third categories. Difference-in-difference regressions are used to compare the long-term debt ratios of test firms to those of control firms before and after SOX.

Carter finds that U.S. listed firms post-SOX have long-term debt ratios 2–3 percentage points higher than Canadian firms listed in Canada for the same time period. Alternately, firms that are based in Canada but listed in the U.S. do not adjust their capital structures. The author goes on to test the impact of SOX's increased disclosure requirements. Using the Kothari, Leone, and Wasley (2005) model to measure earnings management, Carter observes a post-SOX decrease (increase) in leverage for firms that aggressively (modestly) managed their earnings pre-SOX.

The author uses SOX to examine the effects of information environment on capital structure and finds that after SOX, firms that are based and listed in the U.S. have higher book long-term debt ratios compared to control firms. The use of SOX to represent an exogenous change in firm information environment allows the author to address the potential endogeneity between information environment and capital structure.

Schroeder and Hogan (2013)

Schroeder and Hogan use logistic regression to investigate the questions: was there a change in the Big 4 public client portfolio and was there a change in the degree of the mismatched clients included in the Big 4 public client portfolio associated with Auditing Standard 5 (AS5) and the economic recession. To investigate changes in portfolio risk the authors incorporate measures for audit risk, auditor business risk and financial risk. Auditor client mismatch measures whether the client is properly matched with a Big 4 audit firm or whether they would actually be predicted to use a non-Big 4 firm based on firm specific characteristics.

AS5, approved by the SEC on July 27, 2007 (PCAOB, 2007; SEC, 2007), was intended to improve both the efficiency and effectiveness of integrated audits. An economic recession began in December 2007 coincident with the effective date of AS5. Both AS5 and the economic recession had the potential to impact the portfolios of Big 4 firms. First, AS5 reduced the total hours necessary to perform an integrated audit of accelerated filers. Additionally, due to the reduction in hours there was an anticipated decrease in future revenue prospects on Section 404 clients.

To investigate their research questions the authors utilize the Audit Analytics opinion file to identify the prior year, current year and next year audit firm year and to construct the Big 4 portfolios for fiscal years 2001–2009. Their final sample consists of 20,736 firm-year observations. The authors define and investigate two specific time periods: January 1, 2002 to November 14, 2007 (pre-AS5/recession) and November 15, 2007 to December 31, 2009 (post-AS5/recession). Using principal component analyses the authors find that during the post-AS5/economic recession period the Big 4 firms continue to experience a net loss of clients to non-Big 4 firms. However, the loss rate was lessened:

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potentially due to increased retention efforts by Big 4 firms or due to an increase in the number of non-Big 4 clients switching to Big 4 firms. The authors find that the public client portfolio of the Big 4 firms have greater financial risk, but lower audit risk and auditor business risk for 2009 relative to 2006. Additionally, they find that the overall portfolio has a lower percentage of mismatched clients in 2009 when compared to 2006.

Overall, the results imply that the Big 4 firms have not assumed overall greater risk in an effort to utilize the excess capacity created by AS5 and economic recession. To the contrary, the Big 4 firms have been successful in balancing their portfolios and continue to reduce the percentage of mismatched clients.

Eilifsen and Knivsflå (2013)

Many researchers have investigated how the joint provision of audit and non-audit services (NAS) impact auditor independence and investor confidence. Eilifsen and Knivsflå investigate whether investor perceptions of auditor-provided NAS and the effects of regulatory oversight are affected by auditor quality. Specifically, they investigate the how the disclosure of NAS regulation violations by the Financial Supervisory Authority of Norway (FSA) in 2003 followed by a period of stricter regulations in 2004–2008 affect the relation between NAS and earning response coefficient (ERC) and determine whether the effects of regulatory oversight depend on audit firm quality. The authors utilize the 1999–2008 Norwegian regulatory environment which was characterized by its strong investor protections and low litigation rate.

To test their hypotheses they use a sample of 1646 company-year observations for 293 companies listed on the Oslo Stock Exchange (OSE) for the time period 1999–2008. The authors split this ten-year span into two periods: pre-disclosure (1999–2002) and the new regulation period (2004–2008). Using ERC as their proxy for investor perceptions of earnings quality they find that for small, non-industry specialized (low quality) audit firms the relationship between NAS and ERC is negatively affected after the disclosure of violations in legal NAS restrictions in 2003. Additionally they find that this relationship is more negatively affected in 2003 than the new regulation period. For big 5 firms, however, audit quality serves to moderate the negative effects on investor perceptions. Alternately, the authors find that industry specialization among audit firms amplifies investor concerns regarding auditor independence in 2003.

Eilifsen and Knivsflå's findings illustrate that investors react negatively to the disclosure of NAS violations, but that investor concerns are eased by new regulations. Additionally, non-Big 5 firms are a major source of independence concerns. Big 5 firms are associated with audit quality even when NAS violations are disclosed to investors.

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