Financial Statement Comparability and Investor Responsiveness to Earnings News

Matthew A. Stallings University of St. Thomas

This study investigates the role of financial statement comparability in the stock price sensitivity to firmspecific earnings news. Results suggest that information content of earnings is greater for firms with higher comparability, suggesting that comparability contributes to information usefulness for investors in equity valuation decisions. Further support indicates that comparability enhances usefulness through increased response to positive earnings surprises. This influence is pronounced for the earnings news of small firms, high volatility firms, growth/value firms, and firms with low return on assets, suggesting that comparability is more informative for more speculative stocks.

INTRODUCTION

This study investigates whether financial statement comparability impacts the usefulness of information through its effect on the cross-sectional variation in the earnings-return relationship. The Financial Accounting Standards Board (FASB) defines financial statement comparability as the quality of information enabling users to identify similarities in and differences between two sets of economic phenomena in order to enhance usefulness (FASB [1980, 2010]). Because decisions of financial statement users involve choosing between alternatives, relevant and faithfully represented information about a reporting entity is most useful if it can be compared with similar information reported by other entities and by the same entity in other periods (FASB [2010], QC20). Following De Franco et al. [2011] and Francis et al. [2014], I conceptually define financial statement comparability as how closely similar economic events map into the financial statements of firms due to the consistency with which accounting rules are applied across the firms. From an empirical framework, firm-pairs in the same industry and fiscal year are expected to have similar earnings and accruals structures, implying comparability, all else being equal (De Franco et al. [2011]; Francis et al. [2014]).

I extend the financial statement comparability literature to the setting of earnings announcements and information content of earnings to examine whether comparability contributes to information usefulness, with investor responsiveness to earnings being a direct proxy for earnings informativeness (Holthausen and Verrechia [1988]; Liu and Thomas [2000]).³ Because earnings news is correlated with equity market characteristics that occur when investors revise their equity valuations, information in earnings is correlated with the information used by investors in the equity valuation decisions (Beaver [1968]; Ball and Brown [1967, 1968]). Overall, earnings announcements provide information about future firm earnings and cash flows, where stock price response to the announcement leads to investor valuation of these incremental cash flows (Kasznik and McNichols [2002]). If financial statement comparability helps investors better understand firm-specific earnings news/information, then based on the FASB definition and qualitative objective, comparability should be useful in evaluating alternative investments.

To investigate the role of financial statement comparability in the cross-section of the earnings-return relationship, I use the standard event study methodology to compute abnormal returns around the annual earnings announcement date to measure stock price sensitivity to earnings news for the years 1985–2012. The behavior of security prices is an operational test of usefulness of information in financial statements (Ball and Brown [1968]), where positive capital markets research uses changes in security prices as an objective, external outcome to infer whether information in accounting reports is useful to market participants (Kothari [2001]). Using accounting system variation, earnings covariation, and discretionary accruals differences as measures of comparability, I examine the impact of comparability on the sensitivity of stock prices to both good and bad earnings surprises (Earnings Response Coefficients [ERCs]). Initial results indicate higher information content of earnings for firms with greater accounting system comparability and earnings covariation comparability. Further results suggest greater magnitude in ERC for firms with positive unexpected earnings news and higher levels of accounting system comparability, earnings covariation comparability, and discretionary accruals comparability.

To examine the possibility that the higher ERC for positive earnings news when financial statement comparability is introduced may reflect the greater information content of the news during periods with higher average comparability, I control for the informativeness of earnings news and how the estimates of the information content of earnings may vary with comparability. Using the measure of information content of earnings developed by Kasznik and McNichols [2002], I find no evidence in support of this alternative as the incremental effect of all three comparability measures on positive unexpected earnings is statistically indistinguishable from zero when examining past and current earnings predictability for future earnings. I also control for risk-based explanations for the results by computing the abnormal return over a narrow window around the earnings announcement, where the variation of risk over time is less likely to be evidence for such a short return accumulation period (Mian and Sankaraguruswamy [2012]).

In additional analyses, I form portfolios based on firm characteristics used as controls in De Franco et al. [2011] to investigate whether the effect of accounting system comparability on the valuation of stocks is uniform across these attributes. By focusing on firm characteristic extremes and the effect of comparability, I am controlling for potential skewness in the distribution of comparability to examine whether comparability remains useful. Because financial statement comparability lowers the cost of acquiring information and increases the overall quantity and quality of firm information (De Franco et al. [2011]), it is possible that the effect of comparability on the assessment of stocks is greater for speculative stocks whose expected cash flows are more uncertain and more difficult to value. In addition, both extreme growth and distressed firms are prone to speculation and are also difficult to arbitrage (Baker and Wurgler [2006]) and so could be more affected by financial statement comparability, through a reduction in the propensity to speculate. Considering that the earnings of speculative stocks are often also less persistent (Baginski et al. [1999]), it can make the identification and valuation of the associated incremental cash flows more difficult and more subjective, leading to a greater effect of comparability in the pricing of the earnings of such stocks. Therefore, I investigate and find that the impact of comparability on the pricing of positive earnings is greater for small firms, high volatility firms, growth/value firms, and firms with low return on assets. These results indicate that financial statement comparability exhibits greater usefulness for more speculative stocks, implying that comparability increases informativeness for firms with cash flows that are more uncertain and difficult to assess, thereby reducing the propensity to speculate. Overall, results suggest that financial statement comparability enhances the usefulness of information to capital markets participants.

This paper advances the capital markets literature in the following ways. The results bridge two research streams by providing evidence on the cross-sectional effect of financial statement comparability on the stock price sensitivity to firm-specific earnings news. Specifically, this study utilizes newly developed firm-specific, output-based measures of comparability to investigate additional benefits of comparable information to financial statement users through enhanced usefulness in influencing the ability of current share prices to reflect the information in current earnings announcements. This paper

also answers the call from Schipper [2003] for more research investigating comparability usefulness and presents additional evidence to support claims that comparability is useful in evaluating alternative investing opportunities (FASB [1980]).⁵ In addition, the results are important to the International Accounting Standards Board (IASB) because the primary objective of the International Financial Reporting Standards (IFRS) is to develop a single set of global standards that are transparent and comparable (IASB [1989, 2008]). Overall, this study contributes to the accounting literature by identifying a factor that influences the ability of current stock prices to reflect the information in current earnings and provides evidence supporting the FASB contention that financial statement comparability enhances the decision usefulness of accounting information (FASB [1980]).

This study complements another concurrent paper on the impact of financial statement comparability and the relationship between stock returns and earnings information. Choi et al. [2013] examine whether financial statement comparability affects the ability of current period stock returns to reflect information in future earnings. They find that future earnings response coefficients (FERCs) are higher for firms issuing financial statement that are more comparable with those of their industry peers. This paper is different from the Choi et al. [2013] study in that I examine how comparability affects the initial pricing of earnings information. Although Choi et al. [2013] report that the ERC increases with comparability, they use a multiple-year valuation model with the emphasis on FERCs. This study focuses on cumulative abnormal returns using a narrower window around the earnings announcement date to control for riskbased explanations. In addition, I use a larger sample, a longer sample period, three measures of comparability, and earnings surprises defined relative to analyst forecasts. I also control for future earnings and examine stock price response to good and bad earnings news, separately.

The remainder of the paper proceeds as follows. Section 2 reviews relevant literature and develops the hypothesis. Section 3 describes the research design and defines the variables used in the empirical tests. Section 4 presents the sample selection and provides descriptive statistics. Section 5 reports results from the empirical analyses. Section 6 conducts additional analyses and Section 7 concludes.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Financial Statement Comparability

Rational investing decisions fundamentally involve evaluating alternative opportunities and are not possible if comparable information is unavailable, where comparability is defined as the quality of information that enables users to identify similarities and differences between two sets of economic phenomena (FASB [1980]). The FASB specifically argues that demand for comparable information drives accounting regulation. Additionally, when market participants ascertain the comparability of investments, efficient allocation of capital is facilitated (SEC [2000]). Further, financial statement analysis textbooks frequently illustrate techniques to adjust accounting numbers and increase comparability across financial statements in order to better assess individual firm performance (e.g., Revsine, Collins, and Johnson [2004]; Penman [2006]; Wild, Subramanyam, and Halsey [2006]; Palepu and Healy [2007]). In addition, enhancing comparability of disclosures across firms is likely to result in more accurate valuations of individual firm performances (Dye and Sunder [2001]).

Despite the apparent importance of financial statement comparability, empirical research in this area is somewhat limited. Current studies have responded to this demand by developing new comparability measures and applying those measures in a financial accounting context. Several recent papers focus on IFRS adoption and financial statement comparability effects. For example, Barth et al. [2012] examine comparability between U.S. firms and IFRS firms and find that IFRS adoption enhances financial statement comparability with U.S. firms. Brochet et al. [2013] examine whether IFRS leads to capital market benefits through increased comparability and find that mandatory IFRS adoption improves comparability and leads to capital market benefits by reducing the ability of insiders to exploit private information. Lang et al. [2010] examine cross-country comparability changes surrounding mandatory IFRS adoption and find that financial statement comparability is increased with IFRS adoption. DeFond et al. [2011] provide evidence that foreign mutual fund ownership increases when mandatory IFRS adoption leads to improved financial statement comparability.

Other studies in the comparability literature focus on financial statement comparability association with capital market decisions and alternative determinants of comparability. For example, Francis et al. [2014] find that auditor style increases earnings comparability within Big 4 auditor clientele. De Franco et al. [2011] provide evidence that financial statement comparability lowers the cost of acquiring information and increases the overall quantity and quality of information available to analysts about the firm. Kim et al. [2013] predict and find that increased comparability is associated with lower bid-ask spreads for traded bonds, lower credit spreads for bonds and credit default swaps, and steeper credit default swap term structures, essentially reducing debt market participants' uncertainty about and pricing of credit risk. Bradshaw et al. [2011] study financial analysts and suggest that similar accounting policy choices persuade analyst coverage. Wang [2011] shows that comparability brings economic benefits by allowing investors to extract additional information from one firm's information signal for another firm's valuation. Overall, if comparability helps investors to understand firm-specific information, then it should be useful to investors in evaluating alternative investments.

Stock Market Response to Earnings News

Financial statement information allows capital providers to evaluate the return potential of investment opportunities (FASB [1980]). Accounting research studies have long focused on the valuation implications of corporate earnings, presupposing that accounting information is efficiently compounded into stock prices by rational agents in well-functioning capital markets.⁶ In many instances, this research relies on the assumption of efficient pricing of information and uses stock price variation around an information event to capture the effect of that event on shareholder value. The behavior of security prices is an operational test of usefulness of information in financial statements (Ball and Brown [1968]), where positive capital markets research uses changes in security prices as an objective, external outcome to infer whether information in accounting reports is useful to market participants (Kothari [2001]). These stock prices reflect the market's expectations about firm performance (Collins et al. [1994]; Haw et al. [2012]) and are more informative when they better anticipate earnings realizations.

Research contends that the correlation between accounting numbers and security returns is a function of the objectives of financial statements, in which there is a demand for objective, verifiable information that is useful for performance evaluation purposes (Watts and Zimmerman [1986]). Typically, capital-markets research assumes that an accounting performance measure serves the valuation information role with the measure designed to provide information useful for valuation gives an indication of the firm's economic income or the change in shareholders' wealth (Kothari [2001]). The relation between abnormal stock returns and unexpected earnings is commonly labeled the earnings response coefficient (ERC) and is widely used as a proxy for the informativeness of earnings. The measure directly links earnings to decision usefulness, which is quality in the context of equity valuation decisions, as investors respond to information that has value implications. Therefore, a higher correlation with value implies that earnings better reflect fundamental performance (i.e., more informative components of earnings will have a higher response coefficient). Overall, investor responsiveness to earnings has been used to test a variety of predictions about the determinants of earnings informativeness including the effects of accounting methods, governance, firm fundamentals, and leverage.

Hypothesis

Financial statement comparability has the potential to influence ERC magnitudes because comparability expands the information set available to investors, arguably increasing usefulness. De Franco et al. [2011] suggest that financial statement comparability lowers the cost of acquiring information, and increases the overall quantity and quality of information available. In addition, enhancing comparability of disclosures across firms can result in efficiency gains by reducing investors' duplication of information production (Dye and Sunder [2001]). Further, Haw et al. [2012] provide evidence that more information about the transactions and judgments underlying a firm's current

performance can facilitate accurate prediction of future performance. Similarly, investors can rely on comparable financial statements to obtain more information about the transactions and judgments underlying the financial statements (Campbell and Yeung [2012]). Using comparable accounting information, investors can identify similarities and differences among firms to make more meaningful comparisons (Chen et al. [2013]). As a result, investors are likely to set optimistic valuations on the incremental cash flows embedded in earnings announcements for firms with more comparable financial information.

Based on the above arguments, if information is enhanced through greater financial statement comparability, I expect higher earnings response coefficients for firms that have more comparable financial statements with those of their industry peers. Since the earnings response coefficient is a measure of earnings quality (Liu and Thomas [2000]), comparability should increase information quality through an incremental effect on the earnings-return relationship.¹² Because financial statement comparability enhances the usefulness of information (FASB [1980, 2010] and lowers the cost of acquiring and processing information (De Franco et al. [2011]), the hypothesis examines whether financial statement comparability enhances the informativeness of earnings through increased earnings response coefficient magnitude. Hypothesis H1, in alternative form, is stated as follows:

H1: Ceteris paribus, earnings response coefficients are higher for firms with greater financial statement comparability.

RESEARCH DESIGN

Previous literature establishes financial statement comparability from inputs such as similar accounting methods and related policy choices (e.g., DeFond and Hung [2003]; Bradshaw and Miller [2008]). Additional comparability proxies are based on correlations in cross-sectional levels of contemporaneous measures, designed to estimate variation across countries (e.g., Joos and Lang [1994]; Land and Lang [2002]; Brochet et al. [2013]). Further studies focus on financial statement output covariation across time (e.g., De Franco et al. [2011]; Barth et al. [2012]; Francis et al. [2014]), argued to hold advantages over input based methods.¹³ To test the hypothesis, I build upon this research and utilize three measures of financial statement comparability based on variation in firm accounting systems, earnings covariation over time, and differences in discretionary accruals.

Accounting System Variation

The first financial statement comparability measure follows De Franco et al. [2011], where the accounting system is defined as a mapping from economic events to financial statements. The following equation represents this mapping:

Financial Statements_i =
$$f_i(Economic\ Events_i)$$
 (1)

where $f_i()$ represents firm i's accounting system and similar mappings indicate that two firms have comparable accounting systems. Equation (1) declares that a firm's financial statements are a function of economic events and the accounting for these events. De Franco et al. [2011] conceptually define financial statement comparability as two firms having comparable accounting systems if the systems deliver similar financial statements for an analogous set of economic events.

To apply this conceptual definition of financial statement comparability, I follow De Franco et al. [2011] to develop an understandable empirical model of the firm's accounting system, using earnings as a proxy for financial statements and stock return as a proxy for the net effect of economic events on the financial statements. 14 I estimate the following equation for each firm-year, using the 16 previous quarters of data:

$$IBO_{ii} = \beta_{0i} + \beta_{1i}RET_{ii} + u_{ii}$$
 (2)

where IBQ is firm i's income before extraordinary items for quarter t, scaled by market value of equity at the beginning of quarter t. RET is calculated as firm i's cumulative stock return over quarter t. The estimated coefficients, $\hat{\beta}_{0i}$ and $\hat{\beta}_{1i}$, from equation (2) proxy for firm i's accounting function, $f(\bullet)$. In addition, I estimate $\hat{\beta}_{0j}$ and $\hat{\beta}_{1j}$ for J firms, using the earnings and stock return for firm j.

Conclusively, I use the estimated accounting functions of firm i and firm j to predict their earnings, while holding their economic events constant. Specifically, I project firm i's expected earnings utilizing the accounting functions of firm i and firm j as follows:

$$E(IBQ)_{iit} = \hat{\beta}_{0i} + \hat{\beta}_{1i}RET_{it} \tag{3}$$

$$E(IBQ)_{ijt} = \hat{\beta}_{0j} + \hat{\beta}_{1j}RET_{it} \tag{4}$$

where $E(IBQ)_{iit}$ is the expected earnings for firm i given firm i's accounting function and firm i's stock return in quarter t, and $E(IBQ)_{ijt}$ is the expected earnings for firm j given firm j's accounting function and firm i's stock return in quarter t.

To define financial statement comparability between firms i and j in quarter t, I follow De Franco et al. [2011] and calculate:

$$aCOMP_{ijt} = -1/16 \times \sum_{t=15}^{t} |E(IBQ)_{iit} - E(IBQ)_{ijt}|$$
(5)

where aCOMP is the negative value of the average absolute difference between the projected earnings using firm i's and firm j's accounting functions. Greater $aCOMP_{ijt}$ values signify greater financial statement comparability. Consistent with De Franco et al. [2011], I estimate financial statement comparability for each firm i – firm j combination within the same two-digit Standard Industry Classification (SIC) and with fiscal years ending in March, June, September, or December. ¹⁵

De Franco et al. [2011] generate alterations based upon a firm-year measure of accounting comparability by combining the firm i – firm j comparability measure for a given firm i and ranking all of the comparability measure values for each firm i. Following this methodology, I define $ACOMP_{ii}$ as the mean $aCOMP_{iji}$ for all firms in the same industry as firm i during period t. Therefore, firms with greater ACOMP values have accounting systems that are more congruent with those in their industry. I also estimate the regression models using the mean of both four and ten different firms with the highest comparability in a particular firm-year to capture peer group comparable accounting systems and report findings if the results are similar to those with industry congruency.

Earnings Covariation

Because the accounting system comparability measure is established by the distance between accounting earnings for two firms while holding economic events constant, De Franco et al. [2011] argue that the advantage to this measure is its isolation of financial statement comparability by explicitly controlling for economic effects. However, because of the possibility that accounting earnings could achieve comparability in the eyes of investors without firms having identical accounting systems, a specific and estimated accounting system may not be necessarily required.¹⁷

Therefore, the second comparability measure is the magnitude of earnings covariation for firm-pairs in the same industry across time (De Franco et al. [2011]; Barth et al. [2012]; Francis et al. [2014]). Following the De Franco et al. [2011] methodology, I use 16 quarters of earnings data to estimate the following model for all firm-pairs in the same industry:

$$IBQ_{it} = \beta_{0ij} + \beta_{1ij}IBQ_{jt} + u_{ijt} \tag{6}$$

where IBQ is income before extraordinary items for firm i or firm j in quarter t, scaled by market value of equity at the beginning of quarter t. I define the firm i – firm j correlation measure of comparability $(eCOMP_{ijt})$ as the adjusted R^2 from the regression. Following De Franco et al. [2011], I compute a firm-year comparability measure and define $ECOMP_{it}$ as the average $eCOMP_{ijt}$ for the four firms j in the same industry as firm i during period t with the highest R^2 s, where higher values of ECOMP indicate higher financial statement comparability.

Because *ECOMP* could be driven by differences in economic shocks, I control for cash flow correlations across firms (De Franco et al. [2011]; Francis et al. [2014]). Specifically, I parallel the construction of *ECOMP*, replacing income before extraordinary items with operating cash flows in estimating model (6) as follows:

$$CFO_{it} = \beta_{0ij} + \beta_{1ij}CFO_{jt} + u_{ijt} \tag{7}$$

where CFO is the ratio of quarterly cash flows from operations to the beginning of period market value. I define $cfoCOV_{it}$ by taking the average adjusted R^2 from the regression for all firms in the same industry as firm i during period t. By performing analyses on firm-pairs within the same industry and year, I control for common economic shocks and fundamentals, and through including cfoCOV I capture near-term economic shock covariation associated with cash flow expectations.

Discretionary Accruals Differences

The third proxy for comparability follows the Francis et al. [2014] approach to testing accounting comparability by examining the similarity of discretionary accruals for pairs of firms in the same industry, at a common point in time. The analysis adheres to this methodology and examines discretionary accruals under the argument that two firms in the same industry and year are more likely to possess similar accrual adjustments in utilizing the same set of accounting choices and judgments in implementing GAAP.

I follow Jones [1991] and Kothari et al. [2005] to estimate discretionary accruals cross-sectionally for each firm-year, using 16 quarters of previous data in the same two-digit SIC code as follows:

$$TA_{it} = \beta_0 + \beta_1(1/ATQ_{i-1}) + \beta_2 \Delta SALE_{it} + \beta_3 PPE_{it} + \beta_4 ROA_{it} + u_{it}$$
(8)

where TA is firm i's total accruals for quarter t, defined as the change in non-cash current assets minus the change in current liabilities excluding the current portion of long-term debt, minus depreciation and amortization, scaled by lagged total assets. Using lagged total assets as a deflator proposes to mitigate heteroskedasticity in residuals. Prior research typically does not hold a constant in the discretionary accruals model, but Kothari et al. [2005] include the inverse of lagged total assets (ATQ_{it-1}) in the estimation. The variable, $\Delta SALE$, is the change in firm i's sales for quarter t, scaled by lagged total assets, ATQ_{it-1} . Observing Kothari et al. [2005], I follow previous research and subtract the change in firm i's accounts receivable for quarter t from $\Delta SALE_{it}$ prior to model estimation (e.g., DeFond and Park [1997]; Subramanyam [1996]; Guidry et al. [1999]). The variable, PPE, is firm i's net property, plant, and equipment for quarter t, scaled by lagged total assets, ATQ_{it-1} . The variable, ROA, is firm i's net income divided by total assets for quarter t, used to control for contemporaneous performance.

Similar to Francis et al. [2014], the model for discretionary accruals differences as a measure of financial statement comparability is as follows:

$$dCOMP_{ijt} = 1/16 \times \sum_{t=15}^{t} |DACC_{it} - DACC_{jt}|$$
(9)

where dCOMP is the average absolute value of the difference between signed discretionary accruals for firm-pairs in the same two-digit SIC code in period t. Residuals from the regression model (8) are the modified-Jones model discretionary accruals (DACC). Lower $dCOMP_{ijt}$ values signify greater financial

statement comparability. I estimate the Francis et al. [2014] financial statement comparability metric for each firm i – firm j pairwise combination within the same industry and fiscal year. Similar to Francis et al. [2014], I define $DCOMP_{ij}$ as the average $dCOMP_{ij}$ for all firms in the same industry as firm i and period t, where lower values of DCOMP indicate firms with accounting systems that are more consistent with those in their industry.

Earnings Surprise

Consistent with prior studies (eg., Conrad et al. [2002], Mian and Sankaraguruswamy [2012]), I define the earnings surprise as actual earnings minus expected earnings, scaled by stock price. Specifically, I calculate unexpected earnings, *UE*, which represent the news component associated with the earnings announcement, as follows:

$$UE_{it} = \left(ACTUAL_{it} - FORECAST_{it}\right) / P_{it} \tag{10}$$

where $ACTUAL_{it}$ is the primary earnings per share of firm i for year t. $FORECAST_{it}$ is the median of analyst forecasts for firm i prominent within nine months prior to the day before the year t earnings announcement (Gu and Wu [2003]). 21 P_{it} is firm i's share price at the end of forecasted year t. The actual earnings, forecasted earnings, and share price are adjusted for stock splits using the method described in Payne and Thomas [2003]. In addition, I delete observations where a firm reports a loss because prior research finds that the earnings response coefficients are essentially zero for negative earnings (Hayn [1995]; Lipe et al. [1998]).

Because the prediction as to whether earnings are overpriced or underpriced for different levels of financial statement comparability may depend on whether the news is good or bad, I also split earnings news into good news and bad news. First, I follow Mian and Sankaraguruswamy [2012] and create two indicator variables, *UP* and *DOWN*, where *UP* equals one if the unexpected earnings is positive, and zero otherwise, and *DOWN* equals one if unexpected earnings is negative, and zero otherwise. Then, I multiply *UE* by these indicator variables to generate *UEUP* and *UEDOWN*, which are the measures of good and bad earnings news, respectively (Conrad et al. [2002]).

Comparability and Stock Price Sensitivity to Earnings News

I measure stock market sensitivity to earnings news by the elasticity of stock prices to unexpected earnings at announcement dates. The primary hypothesis is that the ERC is higher for firms with greater financial statement comparability. To investigate the role of comparability in stock price sensitivity to earnings news, I estimate the following OLS regression models:

$$CAR_{ii} = \beta_{0} + \beta_{1}UE_{ii} + \beta_{2}COMP_{ii} + \beta_{3}[UE_{ii} \times COMP_{ii}] + \beta_{4}NLIN_{ii} + \beta_{5}SIZE_{ii}$$

$$+ \beta_{6}BTM_{ii} + \beta_{7}EVOL_{ii} + \beta_{i}Industry FE + \beta_{i}Year FE + u_{ii}$$

$$CAR_{ii} = \beta_{0} + \beta_{1}UEUP_{ii} + \beta_{2}UEDOWN_{ii} + \beta_{3}COMP_{ii} + \beta_{4}[UEUP_{ii} \times COMP_{ii}]$$

$$+ \beta_{5}[UEDOWN_{ii} \times COMP_{ii}] + \beta_{6}DOWN_{ii} + \beta_{7}NLINUP_{ii} + \beta_{8}NLINDOWN_{ii}$$

$$+ \beta_{9}SIZE_{ii} + \beta_{10}BTM_{ii} + \beta_{11}EVOL_{ii} + \beta_{i}Industry FE + \beta_{i}Year FE + u_{ii}$$

$$(12)$$

where CAR_{ii} is the cumulative abnormal return surrounding the earnings report date for firm i at time t. I follow Conrad et al. [2002] and define the announcement period event window, extending from day -5 through day 0 of the earnings announcement to account for pre-announcement leakage of information. I follow Collins and Kothari [1989] and calculate the abnormal return as the firm's return less the value-weighted market return around the event date. UE_{it} in Model (11) is unexpected earnings and is as defined above. $UEUP_{it}$ and $UEDOWN_{it}$ are as defined above and represent good and bad earnings news,

respectively. The specification in Equation (12) allows the coefficient for UE to be different, conditional on the sign of the earnings surprise. $COMP_{it}$ is one of the three firm-year comparability measures, ACOMP, ECOMP, or DCOMP, as defined above. I estimate each model three times, one for each of the three financial statement comparability measures.

I multiply the earnings surprise announced for firm i in year t with firm i's comparability in year t in Model (11) to create the interaction variable, $UE \times COMP$. This allows me to test whether the ERC varies with comparability. If comparability enhances information usefulness through investor response to earnings, I expect the coefficient on this interaction term, β_3 , to be positive. I multiply the positive earnings surprise announced for firm i in year t with firm i's comparability in year t in Model (12) to create the interaction variable, $UEUP \times COMP$. This allows me to test whether the ERC of good earnings news varies with comparability. If comparability enhances information usefulness through investor response to good earnings news, I expect the coefficient on this interaction term, β_4 , to be positive. This result would indicate that the market reacts more to good news when comparability is high. Similarly, I multiply the negative earnings surprise announced for firm i in year t with firm i's comparability in year t to create the interaction variable, $UEDOWN \times COMP$, allowing me to test whether the ERC of bad earnings news varies with comparability.

Kothari (2001) expresses that firm-level characteristics systematically affect the relation between unexpected returns and unexpected earnings. Based on prior research, I include several control variables to mitigate these influences on the measurement of the ERC. 22 *DOWN* is an indicator variable equal to one if the unexpected earnings are negative, zero otherwise, to account for the difference in the intercepts of good and bad earnings news (Bartov et al. [2002]). I also include nonlinearity controls in the model because the occurrence of large earnings surprises causes nonlinearity in the ERC (Freeman and Tse [1992]). Specifically, *NLIN* is the square of *UE*, *NLINUP* is the square of *UEUP*, and *NLINDOWN* is the square of *UEDOWN* multiplied by -1. $SIZE_{ii}$ is the logarithm of the market value of equity measured at the end of the year and controls for risk differences not reflected in excess returns (Fama and French [1992, 1993]) and for potential scale differences (Barth and Kallapur [1996]). BTM_{ii} is the ratio of the book value of equity to the market value of equity. $EVOL_{ii}$ is the standard deviation of four quarterly earnings, scaled by total assets. I include industry fixed effects, Industry FE, at the two-digit SIC industry classification and year fixed effects, Year FE. Finally, I control for potential firm effects by using robust standard error estimates clustered at the firm i level in all regression models (Petersen [2009]; Gow et al. [2010]).

SAMPLE SELECTION AND DESCRIPTIVE STATISTICS

Sample Selection

I use Standard & Poor's Compustat database to collect firm-level data and earnings report dates for the period 1985 through 2012 for the accounting system variation and discretionary accruals differences samples. The earnings covariation sample is for the period 1992 through 2012 because the operating cash flow data used to construct the cash flow covariation control variable became available in 1987. I use the Center for Research in Security Prices (CRSP) database to obtain share price and stock return data for calculation of cumulative abnormal returns and construction of the accounting system variation comparability measure. I use the Institutional Brokers' Estimate System (I/B/E/S) database to gather realized earnings and earnings forecasts from the unadjusted tables and follow the Payne and Thomas [2003] method for calculating split-adjusted unexpected earnings. Finally, I require that firms have sufficient data to calculate all regression variables and I eliminate loss firms from the samples.

The sample selection for the three comparability samples is reported in Table 1, where Panel A provides the sample attrition. Of the 305,898 firm-year observations on the Compustat file for the sample period, I eliminate 227,549 observations without necessary data to construct *ACOMP*, 257,507 observations without necessary data to construct *ECOMP*, and 243,166 observations without necessary data to construct *DCOMP*. I exclude 36,977, 18,085, and 36,898 observations because of insufficient I/B/E/S data needed to construct abnormal earnings for the *ACOMP*, *ECOMP*, and *DCOMP* samples,.

TABLE 1 SAMPLE SELECTION

Panel A: Sample Attrition

	Firm	1-Year Observa	tions
	ACOMP	ECOMP	DCOMP
Firm-year observations for sample period	305,898	305,898	305,898
Observations not included because:			
Missing necessary data for comparability measure	(227,549)	(257,507)	(243,166)
Missing necessary I/B/E/S data	(36,977)	(18,085)	(36,898)
Missing necessary CRSP data	(1,079)	(802)	(1,073)
Missing necessary Compustat data	(309)	(18)	(81)
Firms report an earnings loss	(6,524)	(5,359)	(4,821)
Firm-year observations for final sample	33,460	24,127	19,859

Panel B: Industry Composition

	1-Digit	Fi	irm-Year Observatio	ons
Industry	SIC	ACOMP	ECOMP	DCOMP
Agriculture	0	0	0	0
Mining and Construction	1	1,401	1,243	1,136
Manufacturing	2	5,081	3,901	3,378
Manufacturing	3	10,153	8,032	7,354
Transportation and Utilities	4	3,368	1,959	2,750
Wholesale and Retail Trade	5	2,098	1,744	1,698
Financial Firms	6	7,058	3,682	238
Services	7	3,285	2,736	2,426
Services	8	1,015	830	866
Other	9	1	0	13
Total		33,460	24,127	19,859

This table shows the sample selection. Panel A presents the sample attrition for the three comparability measure samples. Panel B presents the 1-digit SIC industry composition for the three comparability measure samples. ACOMP is the average firm i – firm j accounting system comparability measure for all firms in the same industry as firm i. ECOMP is the average firm i – firm j earnings covariation comparability measure of the four firms with the highest comparability to that of firm i. DCOMP is the average firm i – firm j discretionary accruals comparability measure for all firms in the same industry as firm i.

respectively. I exclude 1,079, 802, and 1,073 observations because of insufficient CRSP data needed to construct abnormal returns for the *ACOMP*, *ECOMP*, and *DCOMP* samples, respectively. I exclude 309, 18, and 81 observations because of insufficient Compustat data needed to construct control variables for the *ACOMP*, *ECOMP*, and *DCOMP* samples, respectively. Finally, I exclude 6,524, 5,359, and 4,821 observations where firms report an earnings loss for the *ACOMP*, *ECOMP*, and *DCOMP* samples, respectively. The final samples comprise 33,460 firm-year observations for the *ACOMP* sample, 24,127 firm-year observations for the *ECOMP* sample, and 19,859 firm-year observations for the *DCOMP* sample.

Panel B in Table 1 reports industry composition by 1-digit SIC code for the three comparability samples. For the ACOMP sample, the largest concentrations are in manufacturing (45.53 percent), financial (21.09 percent), and services (12.85 percent) industries. For the ECOMP sample, the largest concentrations are in manufacturing (49.46 percent), financial (15.26 percent), and services (14.78 percent) industries. For the DCOMP sample, the largest concentrations are in manufacturing (54.04 percent), services (16.58 percent), and transportation and utilities (13.85 percent) industries. Overall, a wide variety of industries is represented in all three comparability samples.

Descriptive Statistics

Table 2 presents summary statistics of the key variables used for the overall sample. The mean of the six-day abnormal announcement return, CAR (-1 to +1), is 0.22 percent, which represents the average response to positive, negative, and no-news surprises. The mean difference in accounting systems between firm-pairs, ACOMP, is a magnitude of 2.725, similar to the 2.5 reported in De Franco et al. [2011]. The mean difference in earnings covariation between firm-pairs, ECOMP, is 0.057. The mean difference in discretionary accruals between firm-pairs, DCOMP, is 0.031. The negative mean of -0.001 for abnormal earnings, UE, indicates that the earnings news has, on average, been more negative. When I divide the samples into positive and negative earnings surprises, 55 percent, 57 percent, and 57 percent of the earnings announcements represent positive news for the ACOMP, ECOMP, and DCOMP samples, respectively. Alternatively, 37 percent, 34 percent, and 35 percent of the earnings announcements represent negative news for the ACOMP, ECOMP, and DCOMP samples, respectively, consistent with excluding loss firms from the sample.

Table 3 provides a Pearson correlation matrix for the variables used in the study. Both cumulative abnormal returns measures are positively and significantly correlated at a magnitude of 6.2 percent. Consistent with De Franco et al. [2011], the accounting system comparability measure is positively correlated with the earnings covariation comparability measure. Consistent with Francis et al. [2014], the earnings covariation comparability measure is negatively correlated with the discretionary accruals comparability measure. Also of note in Table 3 and consistent with De Franco et al. [2011], accounting system comparability is negatively correlated with unexpected earnings and firms with greater earnings volatility tend to have lower levels of accounting system comparability.

EMPIRICAL RESULTS

Comparability and Stock Price Sensitivity to Earnings News

The primary investigation of this study is the role of financial statement comparability in stock price sensitivity to earnings news in order to determine whether comparability enhances the usefulness of financial information. Table 4 reports the estimates of Equation (11). The coefficient for the variable UE, β_1 , which captures the ERC of earnings news, is positive and statistically significant for all three comparability samples. This is consistent with the accounting literature that documents that earnings surprises evoke significant response from share prices. The main focus in Table 4 is on the interaction variable that captures the effect of financial statement comparability on ERC for earnings surprises. The coefficient of the interaction variable $UE \times COMP$, β_3 , is 0.337 and statistically significant for the ACOMP sample, and 0.441 and significant for the ECOMP sample. These results suggest that accounting system comparability and earnings covariation comparability increase ERC magnitudes for earnings surprises by enhancing the usefulness of financial information. Specifically, the total effect on the information content of earnings for the ACOMP sample is a 4.75 percent increase and the total effect on the information content of earnings for the ECOMP sample is a 6.58 percent increase. Therefore, I reject the null form of hypothesis H1 and offer support to the alternative form that financial statement comparability enhances usefulness through increased response to earnings news, where the information content of earnings is higher for firms with greater comparability.

TABLE 2
DESCRIPTIVE STATISTICS

		Standard			
Variable	Mean	Deviation	Q1	Median	Q3
$CAR_{-5,0}$	0.22%	6.63%	-2.30%	0.05%	3.26%
ACOMP	-2.725	2.262	-3.210	-2.300	-1.600
ECOMP	0.057	0.068	0.010	0.040	0.080
DCOMP	0.031	0.011	0.020	0.030	0.040
UE	-0.001	0.019	-0.002	0.000	0.002
UE [> 0]	0.006	0.013	0.001	0.002	0.005
UE [< 0]	-0.009	0.022	-0.009	-0.003	-0.001
UEUP	0.003	0.010	0.000	0.000	0.002
UEDOWN	-0.004	0.015	-0.002	0.000	0.000
NLIN	0.001	0.011	0.000	0.000	0.000
NLINUP	0.000	0.001	0.000	0.000	0.000
NLINDOWN	-0.000	0.008	-0.000	0.000	0.000
SIZE	6.627	1.797	5.332	6.566	7.839
BTM	0.574	0.417	0.320	0.499	0.736
EVOL	0.010	0.033	0.002	0.005	0.010
cfoCOV	0.249	0.148	0.130	0.230	0.350
	ACOMP		ECOMP		DCOMP
# of total (UE) obs	33,460		24,127		19,859
Percent of > 0 UE	55%		57%		57%
Percent of < 0 UE	37%		34%		35%

This table presents descriptive statistics for the multivariate analyses. CAR is the cumulative abnormal return around the earnings announcement date. ACOMP is the average firm i – firm j accounting system comparability measure for all firms in the same industry as firm i. ECOMP is the average firm i – firm j earnings covariation comparability measure of the four firms with the highest comparability to that of firm i. DCOMP is the average firm i – firm j discretionary accruals comparability measure for all firms in the same industry as firm i. UE is the unexpected earnings calculated as the difference between actual earnings and forecasted earnings, scaled by share price. UE [> 0] is positive unexpected earnings. UE [< 0] is negative unexpected earnings. UEUP is the continuous positive unexpected earnings, zero otherwise. UEDOWN is the continuous negative unexpected earnings, zero otherwise. NLIN is UE squared. NLINUP is UEUP squared. NLINDOWN is UEDOWN squared and multiplied by –1. SIZE is the logarithm of the market value of equity measured at the end of the year. BTM is the ratio of the book value of equity to the market value of equity. EVOL is the standard deviation of four quarterly earnings, scaled by total assets. cfoCOV is the average firm i – firm j cash flow covariation for all firms in the same industry as firm i.

Table 5 reports regression results from model (12), where the earnings surprise is split into good news and bad news to examine the effect of comparability on both types of firm information. The coefficient for the variable UEUP, β_1 , which captures the ERC of good earnings news, is positive and statistically significant for all comparability samples. The coefficient for the variable UEDOWN, β_2 , which captures the ERC of bad earnings news, is positive and statistically significant for the ACOMP and ECOMP samples. The larger UEUP coefficient follows the literature and suggests that positive earnings news is more informative than negative news (Conrad et al. [2002]). The primary focus in Table 5 is on the interaction variables that capture the effect of financial statement comparability on ERC for the positive

TABLE 3
PEARSON CORRELATION MATRIX

		(II)	(III)	(IV)	(V)	(VI)	(VII)	(VIII)	(IX)	(X)	(XI)	(XII)	(XIII)
CAR_5, 0	(I)	0.001	- 0.010	0.020	0.069	0.083	0.029	0.020	0.033	- 0.009	-0.048	0.046	0.016
ACOMP	(II)		0.024	-0.126	-0.019	-0.104	0.049	-0.045	-0.070	0.039	-0.054	-0.025	-0.116
ECOMP	(III)			-0.186	-0.003	0.024	-0.021	0.031	0.041	-0.005	0.046	0.082	0.017
DCOMP	(IV)				-0.017	0.060	-0.067	0.017	0.034	-0.032	-0.259	-0.060	0.134
UE	(V)					0.613	0.835	-0.129	0.477	0.589	0.036	-0.030	0.015
UEUP	(VI)						0.076	0.330	0.829	0.014	-0.155	0.191	0.086
UEDOWN	(VII)							-0.392	0.024	0.734	0.154	-0.171	-0.041
NLIN	(VIII)								0.496	-0.532	-0.053	0.063	0.061
NLINUP	(IX)									0.004	-0.076	0.120	0.067
NLINDOWN	(X)										0.043	-0.049	-0.015
SIZE	(XI)											-0.353	-0.049
BTM	(XII)												-0.030
EVOL	(XIII)												

This table reports Pearson correlations for the variables used in the multivariate analyses. Bold font indicates significance at a p-value < 0.05. CAR is the cumulative abnormal return around the earnings announcement date. ACOMP is the average firm i – firm j accounting system comparability measure for all firms in the same industry as firm i. ECOMP is the average firm i – firm j earnings covariation comparability measure of the four firms with the highest comparability to that of firm i. DCOMP is the average firm i – firm j discretionary accruals comparability measure for all firms in the same industry as firm i. UE is the unexpected earnings calculated as the difference between actual earnings and forecasted earnings, scaled by share price. UEUP is the continuous positive unexpected earnings, zero otherwise. UEDOWN is the continuous negative unexpected earnings, zero otherwise. NLIN is UE squared. NLINUP is UEUP squared. NLINDOWN is UEDOWN squared and multiplied by -1. SIZE is the logarithm of the market value of equity measured at the end of the year. BTM is the ratio of the book value of equity to the market value of equity. EVOL is the standard deviation of four quarterly earnings, scaled by total assets.

and negative earnings surprises. The coefficient of the interaction variable $UEUP \times COMP$, β_4 , is 0.014 and statistically significant for the ACOMP sample, 0.280 and statistically significant for the ECOMP sample, and -0.078 and statistically significant for the DCOMP sample. The coefficient of the interaction variable $UEDOWN \times COMP$, β_5 , is not statistically different from zero for all three comparability measures. The results suggest that accounting system comparability, earnings covariation comparability, and discretionary accruals comparability increase ERC magnitudes for positive earnings surprises by enhancing information usefulness. Specifically, the total effect on the information content of positive earnings is a 2.08 percent increase for the ACOMP sample, a 34.27 percent increase for the ECOMP sample, and a 24 percent increase for the DCOMP sample. Therefore, I offer further support that financial statement comparability enhances usefulness through increased response to positive news.

TABLE 4 COMPARABILITY AND STOCK PRICE SENSITIVITY TO EARNINGS NEWS

 $CAR_{ii} = \beta_0 + \beta_1 U E_{ii} + \beta_2 COM P_{ii} + \beta_3 [U E_{ii} \times COM P_{ii}] + \beta_4 N L I N_{ii} + \beta_5 S I Z E_{ii}$ $+ \beta_6 B T M_{ii} + \beta_7 E V O L_{ii} + \beta_i I n dustry Fixed Effects + \beta_i Y ear Fixed Effects + u_{ii}$ (11)

Dependent Variable = $CAR_{(-5,0)}$

Independent	ACO.	MP	ECO.		DCO.	MP
Variables	Estimate	<i>p</i> -value	Estimate	<i>p</i> -value	Estimate	<i>p</i> -value
Intercept	-0.023***	0.000	-0.006	0.144	0.033***	0.001
UE	0.337***	0.000	0.441***	0.000	0.449***	0.001
COMP	0.000	0.517	-0.000	0.780	0.051	0.450
$UE \times COMP$	0.016**	0.024	0.029***	0.007	- 5.156	0.210
NLIN	0.174*	0.066	0.075	0.510	0.044*	0.062
SIZE	-0.001***	0.000	-0.001**	0.015	-0.001**	0.017
BTM	0.009***	0.000	0.006***	0.000	0.080***	0.000
EVOL	0.025*	0.097	0.021	0.403	0.019	0.347
cfoCOV			0.010**	0.014		
N	33,4	60	24,1	27	19,8	59
Adjusted R ²	1.73	%	1.65	%	1.43	%

*,**,**** Significantly different from zero at 0.10, 0.05, and 0.01 levels, respectively. Statistical significance based on firm-level robust standard error estimates. CAR is the cumulative abnormal return around the earnings announcement date. ACOMP is the average firm i – firm j accounting system comparability measure for all firms in the same industry as firm i. ECOMP is the average firm i – firm j earnings covariation comparability measure of the four firms with the highest comparability to that of firm i. DCOMP is the average firm i – firm j discretionary accruals comparability measure for all firms in the same industry as firm i. UE is the unexpected earnings, calculated as the difference between actual earnings and forecasted earnings, scaled by price. NLIN is UE squared. SIZE is the logarithm of the market value of equity measured at the end of the year. BTM is the ratio of the book value of equity to the market value of equity. EVOL is the standard deviation of four quarterly earnings, scaled by total assets. cfoCOV is the average firm i – firm j cash flow covariation measure for all firms in the same industry as firm i.

ADDITIONAL ANALYSES

Controlling for the Informativeness of Current Earnings for Future Earnings

To control for the informativeness of current earnings for future earnings, I examine how the estimates of the information content of good and bad earnings news very with comparability. Average financial statement comparability varies across the sample period.²⁴ As a result, the positive abnormal earnings that appear during periods with higher average comparability could indicate higher growth in future earnings than the positive abnormal earnings that appear during periods with lower average comparability. Alternatively, if negative abnormal earnings that occur in periods with lower average comparability suggest a greater decline in future earnings than the negative abnormal earnings in periods with higher average comparability, share prices should rationally respond more to negative abnormal earnings during the low comparability periods. As a result, comparability would then have nothing to do with the differential response of stock prices to positive and negative earnings news across different periods.

TABLE 5 COMPARABILITY AND STOCK PRICE SENSITIVITY TO GOOD AND BAD EARNINGS NEWS

$$CAR_{ii} = \beta_0 + \beta_1 U E U P_{ii} + \beta_2 U E D O W N_{ii} + \beta_3 C O M P_{ii} + \beta_4 [U E U P_{ii} \times C O M P_{ii}]$$

$$+ \beta_5 [U E D O W N_{ii} \times C O M P_{ii}] + \beta_6 D O W N_{ii} + \beta_7 N L I N U P_{ii} + \beta_8 N L I N D O W N_{ii}$$

$$+ \beta_9 S I Z E_{it} + \beta_{10} B T M_{ii} + \beta_{11} E V O L_{it} + \beta_i I n d u s t r y F E + \beta_i Y e a r F E + u_{ii}$$

$$(12)$$

Dependent Variable = $CAR_{(-5,0)}$

Independent	ACO.	MP	ECO.	MP	DCO.	MP
Variables	Estimate	<i>p</i> -value	Estimate	<i>p</i> -value	Estimate	<i>p</i> -value
Intercept	-0.029***	0.000	-0.002	0.718	0.041***	0.000
UEUP	0.672***	0.000	0.817***	0.000	0.325*	0.099
UEDOWN	0.135**	0.013	0.156**	0.042	0.232	0.133
COMP	-0.000	0.922	0.001	0.936	-0.004	0.950
$UEUP \times COMP$	0.014**	0.043	0.280**	0.012	-0.078*	0.087
$UEDOWN \times COMP$	-0.010	0.247	0.306	0.211	0.039	0.292
DOWN	-0.013***	0.000	-0.015***	0.000	-0.017***	0.000
NLINUP	-3.616***	0.002	-6.114***	0.000	-3.449***	0.007
NLINDOWN	-0.574***	0.000	-0.603***	0.002	-0.236	0.240
SIZE	-0.001***	0.000	-0.001***	0.005	-0.001***	0.003
BTM	0.008***	0.000	0.006***	0.000	0.008***	0.000
EVOL	0.026*	0.095	0.011	0.624	0.023	0.254
cfoCOV			0.009***	0.006		
N	33,4	60	24,1	27	19,8	59
Adjusted R ²	2.92	2%	3.05	%	2.94	%

*,***,*** Significantly different from zero at 0.10, 0.05, and 0.01 levels, respectively. Statistical significance based on firm-level robust standard error estimates. CAR is the cumulative abnormal return around the earnings announcement date. CAR is the cumulative abnormal return around the earnings announcement date. ACOMP is the average firm i – firm j accounting system comparability measure for all firms in the same industry as firm i. ECOMP is the average firm i – firm j earnings covariation comparability measure of the four firms with the highest comparability to that of firm i. DCOMP is the average firm i – firm j discretionary accruals comparability measure for all firms in the same industry as firm i. UEUP is the continuous positive unexpected earnings, zero otherwise. UEDOWN is the continuous negative unexpected earnings, zero otherwise. DOWN is an indicator variable equal to one if unexpected earnings are negative, zero otherwise. NLINUP is UEUP squared. NLINDOWN is UEDOWN squared and multiplied by -1. SIZE is the logarithm of the market value of equity measured at the end of the year. BTM is the ratio of the book value of equity to the market value of equity. EVOL is the standard deviation of four quarterly earnings, scaled by total assets. cfoCOV is the average firm i – firm j cash flow covariation measure for all firms in the same industry as firm i.

To control for potential information content of earnings surprises, I follow the Kasznik and McNichols [2002] methodology. Specifically, to test for the informativeness of earnings news and how the estimates of the information content of good and bad earnings surprises vary with financial statement comparability, I estimate the following equation:

$$EARN_{it+1} = \beta_0 + \beta_1 EARN_{it-1} + \beta_2 UEUP_{it} + \beta_3 UEDOWN_{it} + \beta_4 COMP_{it} + \beta_5 [UEUP_{it} \times COMP_{it}]$$

$$+ \beta_6 [UEDOWN_{it} \times COMP_{it}] + \beta_7 DOWN_{it} + \beta_8 NLINUP_{it} + \beta_9 NLINDOWN_{it}$$

$$+ \beta_{10} SIZE_{it} + \beta_{11} BTM_{it} + \beta_{12} EVOL_{it} + \beta_i Industry FE + \beta_i Year FE + u_{it}$$

$$(13)$$

where $EARN_{it+1}$ is firm *i*'s actual earnings per share before extraordinary items for year t+1. $EARN_{it+1}$ is firm *i*'s actual earnings per share before extraordinary items for year t-1. Following Kasznik and McNichols [2002] and Mian and Sankaraguruswamy [2012], I use $EARN_{it+1}$ in Model (13) as the proxy for expected earnings in year t+1. UEUP, UEDOWN, COMP, DOWN, NLINUP, NLINDOWN, SIZE, BTM, and EVOL are as previously defined.

Because the previous results suggest higher ERC for good news firms with higher comparability, the coefficient of interest in Model (13) is the coefficient for $UEUP \times COMP$, β_5 . Specifically, if good news has higher information content for future earnings where average comparability is higher contrasted with lower comparability, β_5 should be positive. However, if β_5 is insignificant then the differential information content of news across comparability is unlikely to be an alternative explanation for the results. Table 6 reports results from the estimation of Model (13). The reported estimates of β_5 are statistically indistinguishable from zero for all three comparability samples. For earnings informativeness to account for the main results, this coefficient should be significant rather than insignificant. The results in Table 6 suggest that the time variation in the information content of earnings cannot explain the results in Tables 4 and 5 because the information content of earnings appears unrelated to comparability.

Cross-Sectional Variation in the Role of Comparability

Financial statement comparability may have greater effects on stocks with varying firm-specific economic characteristics. De Franco et al. [2011] use variables such as size, book-market, volume, return on assets (ROA), and the volatility of returns to control for variation in economic characteristics in their tests. ²⁵ As an example, De Franco et al. [2011] find evidence that skewness in *ACOMP* is greater for firms that are smaller and have lower book-to-market ratios. Specifically, when two firms are in the same extreme size quintile, De Franco et al. [2011] report that the mean *ACOMP* value is greater than it is for two firms in the opposite extreme size quintiles. Similarly, De Franco et al. [2011] report that the mean *ACOMP* value for two firms in the same extreme book-market quintile is greater than it is for two firms in opposite extreme book-market quintiles. By focusing on extremes of the firm characteristics and the effect of comparability, I am controlling for potential skewness in the distribution of comparability to examine whether comparability remains useful.

Because financial statement comparability lowers the cost of acquiring information and increases the overall quantity and quality of firm information (De Franco et al. [2011]), it is also possible that the effect of comparability on the assessment of stocks is greater for speculative stocks whose expected cash flows are more uncertain and more difficult to value. In addition, both extreme growth and distressed firms are prone to speculation and are also difficult to arbitrage (Baker and Wurgler [2006]) and so could be more affected by financial statement comparability, through a reduction in the propensity to speculate. Considering that the earnings of speculative stocks are often also less persistent (Baginski et al. [1999]), it can make the identification and valuation of the associated incremental cash flows more difficult and more subjective, leading to a greater effect of comparability in the pricing of the earnings of such stocks.

Because firm-specific economic characteristics can potentially affect the financial statement comparability measures, I examine whether the comparability effect on the relationship between unexpected earnings and abnormal returns is more pronounced for these varying firm characteristics.

TABLE 6
COMPARABILITY AND INFORMATIVENESS OF CURRENT EARNINGS FOR FUTURE
EARNINGS

$$EARN_{it+1} = \beta_0 + \beta_1 EARN_{it-1} + \beta_2 UEUP_{it} + \beta_3 UEDOWN_{it} + \beta_4 COMP_{it} + \beta_5 [UEUP_{it} \times COMP_{it}]$$

$$+ \beta_6 [UEDOWN_{it} \times COMP_{it}] + \beta_7 DOWN_{it} + \beta_8 NLINUP_{it} + \beta_9 NLINDOWN_{it}$$

$$+ \beta_{10} SIZE_{it} + \beta_{11} BTM_{it} + \beta_{12} EVOL_{it} + \beta_i Industry FE + \beta_i Year FE + u_{it}$$

$$(13)$$

Dependent Variable = $EARN_{it+1}$

Independent	ACO	MP	ECO	MP	DCO.	MP
Variables	Estimate	<i>p</i> -value	Estimate	<i>p</i> -value	Estimate	<i>p</i> -value
Intercept	-0.176	0.292	-0.221	0.186	0.579	0.148
$EARN_{it-1}$	0.319***	0.000	0.285***	0.000	0.281***	0.000
UEUP	3.106	0.276	2.252	0.558	-1.818	0.647
UEDOWN	6.022***	0.001	3.470	0.562	0.589	0.942
COMP	-0.018**	0.024	-0.037	0.744	- 2.823	0.147
$UEUP \times COMP$	-0.098	0.696	7.754	0.237	-2.276	0.977
$UEDOWN \times COMP$	0.187	0.314	4.752	0.536	6.862	0.592
DOWN	-0.418***	0.000	-0.420***	0.000	-0.412***	0.000
NLINUP	-18.217	0.216	-11.319	0.107	5.573	0.695
NLINDOWN	-7.520***	0.000	- 7.252	0.112	-7.117**	0.018
SIZE	0.244***	0.000	0.244***	0.000	0.236***	0.000
BTM	-0.632***	0.000	-0.614***	0.000	-0.622***	0.000
EVOL	-0.979	0.453	-3.550***	0.000	-1.473	0.364
cfoCOV			0.486***	0.001		
N	31,7	70	22,7	81	18,7	52
Adjusted R ²	24.79)%	23.80)%	23.3	7%

*,***,**** Significantly different from zero at 0.10, 0.05, and 0.01 levels, respectively. Statistical significance based on firm-level robust standard error estimates. EARN is the earnings per share before extraordinary items. CAR is the cumulative abnormal return around the earnings announcement date. ACOMP is the average firm i – firm j accounting system comparability measure for all firms in the same industry as firm i. ECOMP is the average firm i – firm j discretionary accruals comparability measure for all firms in the same industry as firm i. UEUP is the continuous positive unexpected earnings, zero otherwise. UEDOWN is the continuous negative unexpected earnings, zero otherwise. DOWN is an indicator variable equal to one if unexpected earnings are negative, zero otherwise. NLINUP is UEUP squared. NLINDOWN is UEDOWN squared and multiplied by –1. SIZE is the logarithm of the market value of equity measured at the end of the year. BTM is the ratio of the book value of equity to the market value of equity. EVOL is the standard deviation of four quarterly earnings, scaled by total assets. cfoCOV is the average firm i – firm j cash flow covariation measure for all firms in the same industry as firm i.

To investigate, I classify stocks into groups that are potentially more or less affected by comparability based on five individual firm characteristics. Similar to the variables used in De Franco et al. [2011], and identified as speculative attributes in the literature (Baker and Wurgler [2006]), these characteristics are size, trading volume, stock return volatility, return on assets, and book-to-market ratio. *Size* is the logarithm of the market value of equity. *Volume* is the logarithm of trading volume in millions of shares during the year. *Stock return volatility* is the standard deviation of monthly returns over the preceding

twelve months. *Return on assets* is earnings before extraordinary items divided by total assets for the year. *Book-to-market ratio* is the ratio of the book value of equity to the market value of equity.

I use each individual firm characteristic to identify one portfolio that is likely to be affected more by comparability and a second portfolio that is likely to be affected less. I classify firms that fall in the bottom quintile based on size as small firms and classify their counterparts in the top quintile as large firms. I classify firms that fall in the bottom quintile based on trading volume as low volume firms and classify their counterparts in the top quintile as high volume firms. I classify firms that fall in the bottom quintile based on stock return volatility as stable and classify their counterparts in the top quintile as volatile. For ROA, I classify firms that fall in the bottom quintile as low ROA and classify their counterparts in the top quintile as high ROA. Finally, I classify firms that fall in the bottom quartile based on book-to-market ratio as growth/value and classify their counterparts in the top quartile as staid firms.

To investigate the cross-sectional differences in the role of comparability, I estimate Equation (12) separately for the subsamples of stocks classified on the five individual firm characteristics. Results of the cross-sectional analyses are reported in Table 7. Each panel of Table 7 reports the estimates of Equation (12) for two sub-groups of stocks sorted on one of the firm characteristics. Specifically, Panels A through E classify stocks based on size, trading volume, stock return volatility, return on assets, and book-to-market, respectively. Results indicate that the ERC for good news is statistically no different from zero with comparability for all characteristics except dividend payout. The ERC for good news firms increases with comparability for small, volatile, low return on assets, and growth/value firms. These results indicate that financial statement comparability exhibits greater usefulness for more speculative stocks, implying that comparability increases informativeness for firms with cash flows that are more uncertain and difficult to assess. Overall, the results in Table 7 provide general support for the notion that the effect of comparability on the stock price sensitivity to news varies cross-sectionally with different firm-specific economic characteristics.

SUMMARY AND CONCLUSION

The Financial Accounting Standards Board (FASB) defines financial statement comparability as the quality of information enabling users to identify similarities in and differences between two sets of economic phenomena in order to enhance usefulness (FASB [1980, 2010]). This study investigates whether financial statement comparability impacts the usefulness of information through cross-sectional variation in the earnings-return relationship. Specifically, I use three measures of financial statement comparability to examine the role of comparability in the stock price sensitivity to firm-specific earnings news. Since the earnings response coefficient captures earnings usefulness, I test whether financial statement comparability enhances the informativeness of earnings through increased earnings response coefficient magnitude.

Initial results suggest the information content of earnings is higher for firms with financial statements that are more comparable to those of their industry peers. Additional results indicate that the impact of comparability on stock price sensitivity to earnings news is more prominent when abnormal earnings are positive. This influence is especially pronounced for the earnings news of small firms, high volatility firms, growth/value firms, and firms with low return on assets, implying that comparability increases informativeness for firms with cash flows that are more uncertain and difficult to assess. Overall, this study contributes to the accounting literature by identifying a factor that influences the ability of current stock prices to reflect the information in current earnings and provides evidence supporting the FASB contention that financial statement comparability enhances the decision usefulness of accounting information.

TABLE 7 CROSS-SECTIONAL VARIATION IN THE ROLE OF COMPARABILITY ON STOCK PRICE RESPONSE TO EARNINGS NEWS

$$CAR_{ii} = \beta_0 + \beta_1 U E U P_{ii} + \beta_2 U E D O W N_{ii} + \beta_3 C O M P_{ii} + \beta_4 [U E U P_{ii} \times C O M P_{ii}]$$

$$+ \beta_5 [U E D O W N_{ii} \times C O M P_{ii}] + \beta_6 D O W N_{ii} + \beta_7 N L I N U P_{ii} + \beta_8 N L I N D O W N_{ii}$$

$$+ \beta_9 S I Z E_{ii} + \beta_{10} B T M_{ii} + \beta_{11} E V O L_{ii} + \beta_i I n d u s t r y F E + \beta_i Y e a r F E + u_{ii}$$

$$(12)$$

Panel A: Small versus Large Firms

Characteristics

Independent	Small			Large		
Variables	Estimate	<i>p</i> -value	Estimate	<i>p</i> -value		
UEUP	0.925***	0.000	0.323	0.231		
UEDOWN	0.127	0.314	0.094	0.623		
COMP	-0.001	0.232	-0.000	0.205		
$UEUP \times COMP$	0.074**	0.036	-0.036	0.198		
$UEDOWN \times COMP$	-0.027	0.417	0.026	0.174		
N	6,69	92	6,69	92		
Adjusted R ²	4.08	3%	2.34	.%		

Panel B: Low Trading Volume versus High Trading Volume Firms

Characteristics

Independent	Low Volume		High Vo	olume
Variables	Estimate	<i>p</i> -value	Estimate	<i>p</i> -value
UEUP	0.537***	0.008	0.017	0.965
UEDOWN	0.206*	0.067	-0.176	0.413
COMP	-0.000	0.973	-0.000	0.508
$UEUP \times COMP$	-0.003	0.870	-0.028	0.499
$UEDOWN \times COMP$	0.018	0.389	0.025*	0.074
N	6,68	1	6,68	31
Adjusted R ²	3.36	%	2.35	%

Panel C: Stable versus Volatile Firms

Characteristics

Independent	Stabl	'e	Volati	ile
Variables	Estimate	<i>p</i> -value	Estimate	<i>p</i> -value
UEUP	0.500***	0.001	0.656***	0.002
UEDOWN	0.137	0.458	0.094	0.435
COMP	-0.000	0.613	0.000	0.982
$UEUP \times COMP$	0.002	0.982	0.026**	0.045
$UEDOWN \times COMP$	0.024	0.214	-0.025	0.501
N	6,68	1	6,68	1
Adjusted R ²	2.91%	0	3.269	½ 0

TABLE 7 (CONTINUED)

Panel D: Low ROA versus High ROA Firms

Characteristics

Independent	Low I	High I	High ROA		
Variables	Estimate	<i>p</i> -value	Estimate	<i>p</i> -value	
UEUP	0.460*	0.062	0.822***	0.000	
UEDOWN	0.236*	0.067	-0.297*	0.081	
COMP	-0.001	0.286	-0.000	0.744	
$UEUP \times COMP$	0.070*	0.074	-0.016	0.571	
$UEDOWN \times COMP$	-0.045	0.250	-0.016	0.488	
N	6,69	92	6,69	92	
Adjusted R ²	3.33	%	3.58	3%	

Panel E: Growth/Value versus Staid Firms

Characteristics

Independent	Grov	Staid						
Variables	Estimate	<i>p</i> -value	Estimate	<i>p</i> -value				
UEUP	0.581**	0.018	0.446**	0.017				
UEDOWN	-0.095	0.406	0.290***	0.002				
COMP	-0.001*	0.067	0.000	0.504				
$UEUP \times COMP$	0.016*	0.051	0.022	0.376				
$UEDOWN \times COMP$	-0.064**	0.038	0.015	0.107				
N	6,69	92	6,69	92				
Adjusted R ²	2.39	0%	4.89	9%				

*,***,*** Significantly different from zero at 0.10, 0.05, and 0.01 levels, respectively. CAR is the cumulative abnormal return around the earnings announcement date. ACOMP is the average firm i – firm j accounting system comparability measure for all firms in the same industry as firm i. ECOMP is the average firm i – firm j earnings covariation comparability measure of the four firms with the highest comparability to that of firm i. DCOMP is the average firm i – firm j discretionary accruals comparability measure for all firms in the same industry as firm i. UEUP is the continuous positive unexpected earnings, zero otherwise. UEDOWN is the continuous negative unexpected earnings, zero otherwise. DOWN is an indicator variable equal to one if unexpected earnings are negative, zero otherwise. NLINUP is UEUP squared. NLINDOWN is UEDOWN squared and multiplied by –1. SIZE is the logarithm of the market value of equity measured at the end of the year. BTM is the ratio of the book value of equity to the market value of equity. EVOL is the standard deviation of four quarterly earnings, scaled by total assets.

ENDNOTES

- 1. Characteristics of desirable information can be viewed as a hierarchy of qualities, where decision making usefulness is the most important (FASB [1980], Paragraph 111).
- 2. The FASB ([1980], Summary of Principal Conclusions) states that "Comparability between enterprises and consistency in the application of methods over time increases the informational value of comparisons of relative economic opportunities or performance. The significance of information, especially quantitative information, depends to a great extent on the user's ability to relate it to some benchmark."
- 3. The FASB ([1978], paragraph 43) states that "The primary focus of financial reporting is information about an enterprise's performance provided by measures of earnings and its components. Investors, creditors, and others

- who are concerned with assessing the prospects for enterprise net cash flows are especially interested in the information. Their interest in an enterprise's future cash flows and its ability to generate favorable cash flows leads primarily to an interest in information about its earnings."
- 4. Speculative stocks can be defined as stocks with a high degree of risk, low predictability of fundamentals, and a high degree of volatility (Lui, Markov, and Tamayo [2007]).
- 5. The FASB [2010, BC3.33] states that "one of the most important reasons that financial reporting standards are needed is to increase the comparability of reported financial information."
- 6. See Holthausen and Watts [2001] and Kothari [2001] for a review of the literature.
- 7. Previous studies suggest that high quality disclosure helps investors to better predict firm performance (e.g., Gelb and Zarowin [2002]; Lundholm and Myers [2002]; Orpurt and Zang [2009]; Choi et al. [2011]; Haw et al. [2012]).
- 8. Researchers' use of the term "earnings quality" is usually in the context of examining whether earnings information is useful to investors for valuation (Kothari [2001]). The general definition of earnings quality suggests that quality could be evaluated with respect to any decision that depends on an informative representation of financial performance and is not limited solely to the context of equity valuation decisions (Dechow et al. [2010]).
- 9. See Kothari [2001] and Dechow et al. [2010] for a review of the earnings quality literature.
- 10. This may generate economies of scale in terms of understanding and evaluating disclosures for investors. Mahoney [1995] and Dye and Sridhar [2008] argue that disclosure regulation can provide market-wide cost savings and efficiency gains when the optimal disclosure level is comparable across firms.
- 11. Information transfer among comparable firms should be greater, where studies document the effect of one firm's financial statement information on the financial statements and operating decisions of other related firms, with the net result being a set of higher-quality information for more comparable firms (e.g., Ramnath [2002]; Gleason et al. [2008]; Durnev and Mangen [2009]).
- 12. Liu and Thomas [2000] provide evidence on the ERC as a proxy for earnings quality and define quality as overall decision usefulness for equity valuation.
- 13. Potential advantages include employing actual weights firms use when calculating reported earnings, holding economic events constant while focusing on accounting system differences, and using widely available financial statement and market return data.
- 14. This measure is consistent with the empirical financial accounting literature reviewed by Kothari [2001] and Beyer et al [2010].
- 15. To avoid matching parent and subsidiary companies, I exclude holding firms from the Compustat sample. In addition, American Depository Receipts (ADRs) and limited partnerships are excluded in order to focus on corporations domiciled in the United States.
- 16. These permutations consist of taking the average of a decided number of firms with the highest comparability in a particular firm-year to capture accounting systems that are more congruent to their peer group, or taking the average or median comparability for all firms in the same industry in a particular firm-year to capture accounting systems that are more congruent to those in their industry.
- 17. De Franco et al. [2011] offer an example of two firms with accounting earnings varying over time where information about the earnings of one firm is useful in forecasting earnings of another firm.
- 18. White [1980] statistics for the Kothari et al. [2005] annual cross-sectional, industry models show reduced but not eliminated heteroskedasticity.
- 19. Including a constant in the estimation provides an additional control for heteroskedasticity unalleviated by using assets as a deflator (Kothari et al. [2005]) and mitigates problems potentially arising from an omitted size (scale) variable (Brown et al. [1999]).
- 20. Kothari et al. [2005] calculate ROA using net income instead of net income including net-of-tax interest expense in order to avoid possible problems associated with tax rate estimation.
- 21. Gu and Wu [2003] argue that if analysts' objective is to provide the most accurate forecast by minimizing the mean absolute forecast error, then the optimal forecast is the median instead of the mean earnings.
- 22. See Subramanyam (1996), Blouin et al. (2003), Wilson (2008), and others.
- 23. Cluster-robust standard errors are also known as Huber-White or Rogers standard errors and are a generalization of the heteroscedasticity-robust standard errors of White [1980].
- 24. For example, average annual *ACOMP* comparability fluctuates from a high of -4.410 to a low of -1.802 throughout the sample period, a range of 2.608, where the function is non-monotonic.

25. For some tests in De Franco et al. [2011], these variables have an established relation with the dependent comparability variables. In other tests, these variables represent natural controls, as their comparability measures are influenced by the characteristics.

REFERENCES

- Baginski, S., Lorek, K., Willinger, G. & Branson, B. (1999). The relationship between economic characteristics and alternative annual earnings persistence measures. *The Accounting Review*, 74: 105–120.
- Baker, M. & Wurgler, J. (2006). Investor sentiment and the cross-section of stock returns. *Journal of Finance*, 61: 1645–1680.
- Ball, R. & Brown, P. (1967). Some preliminary findings on the association between the earnings of a firm, its industry, and the economy. *Journal of Accounting Research*, 55–80.
- Ball, R. & Brown, P. (1968). An empirical evaluation of accounting income numbers. *Journal of Accounting Research*, 6: 159–178.
- Barth, M. & Kallapur, S. (1996). Effects of cross-sectional scale differences on regression results in empirical accounting research. *Contemporary Accounting Research*, 13: 527–567.
- Barth, M., Landsman, W., Lang, M. & Williams, C. (2012). Are IFRS-based and US GAAP-based accounting amounts comparable? *Journal of Accounting and Economics*, 54: 68–93.
- Bartov, E., Givoly, D. & Hayn, C. (2002). The rewards to meeting or beating analyst expectations. *Journal of Accounting and Economics*, 33: 173–204.
- Beaver, W. (1968). The information content of annual earnings announcements. *Journal of Accounting Research*, 6: 67–92.
- Beyer, A., Cohen, D., Lys, T. & Walther, B. (2010). The financial reporting environment: Review of the recent literature. *Journal of Accounting and Economics*, 50: 296–343.
- Bradshaw, M., Miller, G. & Serafeim, G. (2009). Accounting method heterogeneity and analysts' forecasts. Working paper. University of Chicago.
- Brochet, F., Jagolinzer, A. & Riedl, E. (2013). Mandatory IFRS adoption and financial statement comparability. *Contemporary Accounting Research*, 30: 1373–1400.
- Brown, S., Lo, K. & Lys, T. (1999). Use of R^2 in accounting research: Measuring changes in value relevance over the last four decades. *Journal of Accounting and Economics*, 28: 83–115.
- Campbell, J. & Yeung, P. (2012). Comparability, investor sophistication, and contagion effects. *Working Paper*. University of Georgia.
- Chen, C., Collins, D., Kravet, T. & Mergenthaler, R. (2016). Financial statement comparability and the efficiency of acquisition decisions. *Working Paper*. University of Iowa.
- Choi, J., Myers, L., Zang, Y. & Ziebart, D. (2011). Do management EPS forecasts allow returns to reflect future earnings? Implications for the continuation of management's quarterly earnings guidance. *Review of Accounting Studies*, 16: 143–182.
- Choi, J., Choi, S., Myers, L. & Ziebart, D. (2017). Financial statement comparability and the informativeness of stock prices about future earnings. *Working Paper*. Seoul National University.
- Collins, D. & Kothari, S. P. (1989). An analysis of intertemporal and cross-sectional determinants of earnings response coefficients. *Journal of Accounting and Economics*, 11: 143–181.
- Collins, D., Kothari, S. P., Shanken, J. & Sloan, R. (1994). Lack of timeliness and noise as explanations for the low contemporaneous return-earnings association. *Journal of Accounting and Economics*, 18: 289–324.
- Conrad, J., Comell, B. & Landsman, W. (2002). When is bad news really bad news? *Journal of Finance*, 57: 2507–2532.
- Daniel, K. & Titman, S. (1997). Evidence on the characteristics of cross-sectional variation in common stock returns. *Journal of Finance*, 52: 1–33.
- Daniel, K., Grinblatt, M., Titman, S. & Wermers, R. (1997). Measuring mutual fund performance with characteristic-based benchmarks. *Journal of Finance*, 52: 1035–1058.

- De Franco, G., Kothari, S. P. & Verdi, R. (2011). The benefits of financial statement comparability. Journal of Accounting Research, 49: 895–931.
- DeFond, M. & Park, C. (1997). Smoothing income in anticipation of future earnings. Journal of Accounting and Economics, 23: 115–139.
- DeFond, M. & Hung, M. (2003). An empirical analysis of analysts' cash flow forecasts. Journal of Accounting and Economics, 35: 73–100.
- DeFond, M., Hu, X., Hung, M. & Li, S. (2011). The impact of mandatory IFRS adoption on foreign mutual fund ownership: The role of comparability. The Journal of Accounting and Economics, 51: 240–258.
- Durney, A. & Mangen, C. (2009). Corporate investments: Learning from restatements. Journal of Accounting Research, 47: 679–720.
- Dye, R. & Sunder, S. (2001). Why not allow FASB and IASB standards to compete in the U.S.? Accounting Horizons, 15: 257–271.
- Dye, R. & Sridhar, S. (2008). A positive theory of flexibility in accounting standards. *Journal of* Accounting and Economics, 46: 312–333.
- Fama, E. & French, K. (1992). The cross-section of expected stock returns. Journal of Finance, 47: 427–465.
- Fama, E. & French, K. (1993). Common risk factors in the returns on stocks and bonds. Journal of Financial Economics, 33: 3–56.
- Fama, E. & French, K. (1996). Multifactor explanations of asset pricing anomalies. Journal of Finance, 51: 55-84.
- Financial Accounting Standards Board. (1980). Qualitative Characteristics of Accounting Information. Statement of Financial Accounting Concepts No. 2.
- Financial Accounting Standards Board. (2010). Conceptual Framework for Financial Reporting. Statement of Financial Accounting Concepts No. 8.
- Francis, J., Pinnuck, M. & Watanabe, O. (2014). Auditor style and financial statement comparability. The Accounting Review, 89: 605-633.
- Freeman, R. & Tse, S. (1992). A nonlinear model of security price responses to unexpected earnings. Journal of Accounting Research, 30: 185–209.
- Gelb, D. & Zarowin, P. (2002). Corporate disclosure policy and the informativeness of stock prices. Review of Accounting Studies, 7: 33–52.
- Gleason, C., Jenkins, N. & Johnson, W. (2008). The contagion effects of accounting restatements. The *The Accounting Review*, **83–110**.
- Gow, I., Ormazabal, G. & Taylor, D. (2010). Correcting for cross-sectional and time-series dependence in accounting research. The Accounting Review, 85: 483–512.
- Gu, Z. & Wu, J. (2003). Earnings skewness and analyst forecast bias. Journal of Accounting and Economics, 35: 5-29.
- Guidry, F., Leone, A. & Rock, S. (1999). Earnings-based bonus plans and earnings management by business unit managers. Journal of Accounting and Economics, 26: 113–142.
- Haw, I., Hu, B., Lee, J. & Wu, H. (2012). Investor protection and price informativeness about future earnings: International evidence. Review of Accounting Studies, 17: 389–419.
- Hayn, C. (1995). The information content of losses. Journal of Accounting and Economics, 20: 125–153.
- Holthausen, R. & Verrecchia, R. (1988). The effect of sequential information release on the variance of price changes in an intertemporal multi-asset market. Journal of Accounting Research, 26: 82-106.
- Holthausen, R. & Watts, R. (2001). The relevance of value relevance. Journal of Accounting and *Economics*, 31: 3–75.
- International Accounting Standards Board. (1989). Framework for the preparation and presentation of financial statements. International Accounting Standards Board.
- International Accounting Standards Board. (2008). Exposure draft of an improved conceptual framework for financial reporting. International Accounting Standards Board.

- Jegadeesh, N. & Titman, S. (1993). Returns to buying winners and selling losers: Implications for stock market efficiency. Journal of Finance 48: 65-91.
- Jones, J. (1991). Earnings management during import relief investigations. Journal of Accounting Research, 29: 193-228.
- Joos, P. & Lang, M. (1994). The effects of accounting diversity: Evidence from the European Union. Journal of Accounting Research, 32: 141–68.
- Kasznik, R. & McNichols, M. (2002). Does meeting earnings expectations matter? Evidence from analyst forecast revisions and share prices. Journal of Accounting Research, 40: 727–759.
- Kim, S., Kraft, P. & Ryan, S. (2013). Financial statement comparability and credit risk. Review of Accounting Studies, 18: 783–823.
- Kothari, S. P. (2001). Capital markets research in accounting. Journal of Accounting and Economics, 31: 105-231.
- Kothari, S., Leone, A. & Wasley, C. (2005). Performance matched discretionary accrual measures. Journal of Accounting and Economics, 39: 163–197.
- Land, J. & Lang, M. (2002). Empirical evidence on the evolution of international earnings. The Accounting Review, 77: 115–33.
- Lang, M., Maffett, M. & Owens, E. (2010). Earnings comovement and accounting comparability: the effects of mandatory IFRS adoption. Working Paper. University of North Carolina – Chapel Hill.
- Lipe, R., Bryant, L. & Widener, S. (1998). Do nonlinearity, firm-specific coefficients, and losses represent distinct factors in the relation between stock returns and accounting earnings? Journal of Accounting and Economics, 25: 195-214.
- Liu, J. & Thomas, J. (2000). Stock returns and accounting earnings. Journal of Accounting Research, 38:
- Lui, D., Markov, S. & Tamayo, A. (2007). What makes a stock risky? Evidence from sell-side analysts' risk ratings. Journal of Accounting Research, 45: 629–665.
- Lundholm, R. & Meyers, L. (2002). Bringing the future forward: The effect of disclosure on the returns-earnings relation. Journal of Accounting Research, 40: 809-839.
- Mahoney, P. (1995). Mandatory disclosure as a solution to agency problems. University of Chicago Law Review, 62: 1047-1112.
- Mian, G. & Sankaraguruswamy, S. (2012). Investor sentiment and stock market response to earnings news. The Accounting Review, 87: 1357–1384.
- Orpurt, S. & Zang, Y. (2009). Do direct cash flow disclosures help predict future operating cash flows and earnings? The Accounting Review, 84: 893–935.
- Palepu, K. & Healy, P. (2007). Business Analysis & Valuation Using Financial Statements. Fourth edition. Mason, OH: Thomson/South-Western.
- Payne, J. & Thomas, W. (2003). The implications of using stock-split adjusted I/B/E/S data in empirical research. The Accounting Review, 78: 1049–1067.
- Penman, S. (2006). Financial Statement Analysis and Security Valuation. Third edition. Boston, MA: McGraw-Hill Irwin.
- Petersen, M. (2009). Estimating standard errors in finance panel data sets: Comparing approaches. The Review of Financial Studies, 22: 435–480.
- Ramnath, S. (2002). Investor and analyst reactions to earnings announcements of related firms: An empirical analysis. Journal of Accounting Research, 40: 1351–1376.
- Revsine, L., Collins, D. & Johnson, W. (2004). Financial Reporting and Analysis. Third edition. Upper Saddle River, NJ: Prentice Hall.
- Schipper, K. (2003). Principle-based accounting standards. Accounting Horizons, 17: 61–72.
- Securities and Exchange Commission. (2000). International Accounting Standards. SEC Concept Release,
- Subramanyam, K. (1996). The pricing of discretionary accruals. Journal of Accounting and Economics, 22: 249-282.

- Wang, C. (2011). Financial statements comparability: Definition and implication for equity valuation. Working Paper. Northwestern University.
- Watts, R. & Zimmerman, J. (1986). Positive Accounting Theory. Prentice-Hall, Englewood Cliffs, NJ.
- White, H. (1980). A heteroscedasticity-consistent covariance matrix estimator and a direct test for heteroscedasticity. Econometrica, 48: 817–838.
- Wild, J., Subramanyam, K. & Halsey, R. (2006). Financial Statement Analysis. Ninth edition. Boston, MA: McGraw-Hill Irwin.