

Information asymmetry and the FASB's multi-period adoption policy: The case of SFAS No. 115

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ABSTRACT

This paper examines Statement of Financial Accounting Standard No. 115 with respect to the Financial Accounting Standards Board's (FASB's) common practice of permitting multi-period adoption for its standards. The banking industry was selected for analysis based on the significance of this standard to that industry. The sample consists of 118 banks, of which sixty-one adopted this standard early compared to fifty-seven that adopted on the effective date. This study posits that adoption timing differences across the two groups of firms created information asymmetry between their financial statements. It is hypothesized that the lack of comparability between the financial statements of the two groups would lead to a differential market reaction surrounding the release of their annual financial statements. The results of this study indicate that adoption timing did not explain firm abnormal returns; however, adoption timing was significant in explaining changes in firm trading volume. The major implication of this study is to provide evidence that the FASB may need to consider retracting its policy of allowing multi-period adoption for the initial application of its standards.

Keywords: Information asymmetry, FASB's multi-period adoption policy, SFAS No. 115

INTRODUCTION

This paper examines the permission of multiple initial adoption periods for new accounting pronouncements issued by the Financial Accounting Standards Board (FASB). The standard examined here is Statement of Financial Accounting Standard No. 115 (SFAS No. 115) entitled, "Accounting for Certain Investments in Debt and Equity Securities." SFAS No. 115 was issued in May, 1993 and was effective for fiscal years beginning after December 15, 1993. However, the FASB allowed enterprises the option to adopt this standard as of the end of an earlier fiscal year. Therefore, the initial adoption period for calendar year-end firms that chose to be "early adopters" was December 31, 1993. The remaining "late adopter" calendar year-end firms were required to adopt the standard's provisions as of January 1, 1994.¹

The FASB's primary justification for multi-period adoption is to mitigate the implementation costs for firms (Langer and Lev, 1993). Previous research that has examined the adoption timing issue has primarily focused on the characteristics of early and late adopter firms. However, this paper examines whether multi-period adoption across firms creates differential market reactions. Specifically, differences in adoption timing subject investors to differing levels of information content in both the financial statements and related footnotes, thus resulting in information asymmetry across firms. This paper posits that the lack of cross-sectional comparability in the financial statements created by adoption timing differences may lead to differences in security returns and trading volume between early and late adopters.

The sample for this study consists of 118 publicly-traded banks. This sample was chosen primarily due to the relevance of this standard to the banking industry since investment securities represent a relatively higher percentage of total assets for banks than for firms in most other industries. Also, SFAS No. 115 can significantly impact the stockholders' equity account for firms holding debt and equity instruments. This is of particular importance in the banking industry due to the regulatory capital requirements they must maintain.

The primary results of this paper indicate that differences in adoption timing did not significantly explain firm security returns at the initial adoption date of SFAS No. 115. However, as hypothesized, adoption timing did significantly explain changes in firm trading volume at the initial adoption period. Three implications related to these findings are suggested. First, SFAS No. 115 disclosures provide relevant and useful information to the market as evidenced by their significance in explaining changes in trading volume. Second, the market response to the SFAS No. 115 disclosures was not a consensus since adoption timing was not significant in explaining firm returns. Finally, the FASB may need to reconsider permitting multi-period adoption for the initial implementation of its standards due to the information asymmetry that this policy creates.

The findings from this research imply that the lack of comparability created by adoption timing differences across firms impairs market liquidity. Also, previous research has shown that, contrary to the FASB's primary motive related to multi-period

¹ Readers should be aware that the "late adopter" description is used here for expositional purposes. It may be more accurate to classify firms that adopted SFAS No. 115 on January 1, 1994 as "on-time adopters" since they adopted the standard's provisions by the required deadline.

adoption, reducing firms' implementation costs is not a significant factor in the adoption timing choice. Rather, prior studies have revealed that financial statement effects from adoption (e.g., effects on income) primarily drive firms' adoption timing decisions.

Taken together, the FASB's multi-period adoption policy does not appear to be serving its intended purpose, and to make matters worse, this policy is impeding market efficiency due to the information asymmetry that it creates. Based on these findings, it appears that the FASB should discontinue its practice of allowing multiple adoption periods for its standards and require initial adoption to occur in one period alone.

The remainder of this paper is organized as follows. The following section reviews previous literature pertinent to this study. The subsequent section formally develops and states this paper's hypotheses. The next section describes the research design, and the following section provides and analyzes the results. The final section concludes the paper.

PRIOR LITERATURE

The majority of prior studies that have examined multi-period adoption have focused on identifying the characteristics of early and late adopter firms for individual financial accounting standards. For example, Ayres (1986) examined the characteristics of companies that elected early adoption of SFAS No. 52. Senteney and Strawser (1990), Langer and Lev (1993), Ali and Kumar (1994), and Tung and Weygandt (1994) performed similar studies related to the characteristics of firms adopting SFAS No. 87. Gujarathi and Hoskin (2003) and Eakin (1996) investigated firms' adoption decision for SFAS No. 96. Amir and Livnat (1996) analyzed firms' adoption motives for SFAS No. 106, and Long (2005) examined adoption timing related to SFAS No. 142. The primary findings from these studies indicated that a respective standard's financial statement effects and contracting costs were significant in explaining the adoption period choices made by management.

Lee and Stiner (1993) conducted a study related to the adoption timing of SFAS No. 96, but their focus was on analyzing stock price reactions for nineteen banks that adopted SFAS No. 96 early. They examined four pertinent announcement dates relevant to the standard and found a significant stock price reaction for two of the dates for early adopter firms.

The focus of this research is to measure the differential market response related to the reporting, or lack thereof, of information required by SFAS No. 115 at the earliest adoption period. Unlike the study by Lee and Stiner (1993), this study focuses on the most relevant date related to the initial adoption of SFAS No. 115 -- the date firms released their financial statements at the earliest adoption period. Furthermore, this research tests for differences in the market's response between early and late adopter firms, in contrast to examining the market's response for early adopter firms only. Therefore, the incremental contribution and impetus for this research is to address the FASB's current policy of permitting multi-period adoption of its standards. If this policy results in the reduction of market liquidity, as evidenced by differences in the market's response to the financial statements of early and late adopter firms upon initial adoption

of SFAS No. 115, then the viability of the FASB's multi-period policy comes into question.

HYPOTHESES

Accounting information should provide useful and relevant information to financial statement users. Therefore, it follows that the FASB believes SFAS No. 115 provides more useful and relevant information than the standard that it superseded. Specifically, SFAS No. 115 requires new measurement methods and disclosures for investments in equity securities that have readily determinable fair values and for all debt securities. It requires that each of these investment securities be classified into one of the three following categories: 1) held-to-maturity, 2) trading, or 3) available-for-sale. Held-to-maturity securities are debt securities that an enterprise has the positive intent and ability to hold to maturity. Trading securities are debt and equity securities that are held principally for the purpose of selling in the near term. Available-for-sale securities are debt and equity securities that are not classified in either of the first two categories (FASB, 1993, para. 6-12).

SFAS No. 115 superseded SFAS No. 12 and related FASB interpretations, which primarily required these investments to be carried at the lower of aggregate cost or market value with unrealized losses presented as a valuation allowance that was deducted from stockholders' equity. In a significant departure from the historical cost model, SFAS No. 115 requires securities classified as either trading or available-for-sale be recognized on the balance sheet at their fair values (FASB, 1993, para. 12). The standard also requires that any unrealized gains or losses during the period that are attributable to trading securities be included in earnings, while those related to available-for-sale securities be excluded from earnings and reported as a separate component of stockholders' equity (FASB, 1993, para. 13). Transfers between the classifications are permitted. However, transfers from the held-to-maturity classification are to be rare, except for transfers which meet stringent guidelines specified by the FASB.²

The focus of this study is on the differential market reaction to either the adoption or non-adoption of SFAS No. 115 by banks at the earliest adoption period. The banking industry was chosen for this study due to the comparatively large concentration of banks' assets in debt and equity instruments. These investments are typically used by banks to manage interest rate risk, provide a significant source of liquidity, and generate interest income. This standard is also relevant to banks because of its potential impact on stockholders' equity. Specifically, banks have various regulatory capital adequacy requirements; therefore, the regulatory capital adequacy of banks could be significantly affected by market fluctuations in investment securities resulting from adherence to this standard.

² Examples of such circumstances include deterioration in the issuer's creditworthiness, changes in statutory or regulatory requirements, and a major business combination or major disposition that justifiably necessitates sales or transfers from the held-to-maturity category. The FASB specifically stated that firms could not sell these securities prior to maturity simply in response to changes in interest rates or due to liquidity needs (FASB, 1993, para. 9).

The hypotheses are developed to test the market's response to the new information provided by SFAS No. 115 as detailed in the banks' financial statements. Based on the requirements of SFAS No. 115 noted above, there exist two primary sources of new information disclosed to the market for banks. First, the fair values of investment securities classified as available-for-sale are recognized on the balance sheet. This results in the recognition of unrealized gains and losses as a separate component of stockholders' equity, thus impacting the total bank capital.³ Prior to the issuance of SFAS No. 115, banks had disclosed the fair values of investment securities for many years, as these disclosures were either included in the footnotes or as an annotation to the balance sheet. The required recognition of fair values by SFAS No. 115 indicates the FASB's belief that fair value recognition for certain investment securities is more useful and relevant to financial statement users than disclosure. Second, a bank's allocation of securities among the three classifications is disclosed. This allocation provides information to the market regarding the bank's flexibility in managing the institution's asset-liability position in addition to its exposure to balance sheet volatility. Specifically, significant holdings in held-to-maturity securities would tend to limit a bank's flexibility while significant holdings in available-for sale securities would tend to increase a bank's exposure to market fluctuations.⁴

Dating back to the pioneer work of Ball and Brown (1968) and Beaver (1968) and the related studies that followed, empirical research has documented both a return and trading volume reaction at the time of earnings announcements. Their research is the foundation upon which other studies have expanded to illustrate price and volume reactions upon the occurrence of many "events" or informational disclosures other than earnings announcements. The hypotheses of this paper focus on a specific event, namely the release of information required under SFAS No. 115 at the earliest adoption period. Since the financial statements and related footnotes are the source of information regarding the adoption timing and related disclosures for SFAS No. 115, their release serves as an informational "event" upon which a price and volume response can be measured.

It is hypothesized that the new information provided by the SFAS No. 115 disclosures will help explain abnormal firm security returns and changes in firm trading volume. Since the initial adoption period of SFAS No. 115 for calendar year-end firms was December 31, 1993, the two hypotheses, stated in the null form, follow:

Ho₁: The stock price reaction to the release of the December 31, 1993 annual report/10-K is the same for early and late adopters of SFAS No. 115.

³ The "trading" classification was not new to the banking industry. Banks had been using a similar classification, "held for trading," and recorded these securities at market values even prior to the issuance of SFAS No. 115. Therefore, this standard did not impact the treatment of these securities for banks.

⁴ A bank with significant holdings in held-to-maturity securities has less flexibility to transact with these securities in the future due to the restrictions imposed by the FASB with respect to transfers out of this category. The increase in balance sheet volatility is a result of the fair value accounting treatment required for securities classified as available-for-sale. Changes in the balances of these securities and stockholders' equity will occur whenever the fair values of the securities change. Changes in the fair values for investment securities held by banks are typically a function of interest rate changes.

Ho₂: The trading volume reaction to the release of the December 31, 1993 annual report/10-K is the same for early and late adopters of SFAS No. 115.

RESEARCH DESIGN

Sample

The sample consists of 118 banks listed on the 1994 Compustat Bank Tape whose annual report and/or 10-K was microfilmed by Q-Data Corp.⁵ A summary of the sample selection is provided in Table 1 (Appendix). The identification of early and late adopter banks was accomplished through analysis of footnote disclosures in the banks' financial statements. Of the 118 sample banks, sixty-one chose to adopt SFAS No. 115 early compared to fifty-seven late adopters.

Methodology

The Center for Research in Security Prices (CRSP) database was used to extract return and volume data for the sample banks. Since the adoption period choice, recognition, and disclosure requirements of SFAS No. 115 are detailed in a bank's financial statements, it is reasonable to assume that this information was not available to the market until a bank released its annual report or 10-K. Therefore, the earlier of the filing dates for the annual report or 10-K serves as the "event date" for this analysis.

With respect to the returns analysis, abnormal returns were computed using the following market adjusted returns model, as shown in Brown and Warner (1985):

$$AR_{jt} = R_{jt} - R_{mt} \quad (1)$$

where:

AR_{jt} = the abnormal return for firm j on trading day t .

R_{jt} = the return for firm j on trading day t .

R_{mt} = the return on the CRSP value-weighted portfolio for the respective NYSE/AMEX and NASDAQ firms on trading day t .

The cumulative abnormal return (CAR) was computed for each sample firm during the respective event periods as follows:

$$CAR_j = \sum_{t=\tau}^T AR_j \quad (\text{for event period } \tau \text{ to } T \text{ trading days}) \quad (2)$$

⁵ Microfilmed copies of firm annual reports and 10-Ks are available at the Kent State University library. Q-Data Corp. is the firm that filmed these reports. Per discussion with a representative at Q-Data Corp., they filmed any annual report or 10-K that they received. This included annual reports and 10-K's for firms listed on the NYSE, AMEX, and NASDAQ. They did not have any other criteria, such as a firm size threshold, that would appear to create a sample bias for this study.

Several event periods were examined to measure the market's response.⁶ Shorter event periods provide the advantage of capturing fewer confounding events, while longer event windows provide the advantage of allowing for any prior informational leakage as well as providing the market time to assimilate the information contained in the banks' reports. As expected, the mean CAR was found to be significantly different from zero for each of the eight event periods analyzed. This indicates the market responded to the information disclosed in the firms' annual reports/10-Ks. The event period (-10 to +10) was judgmentally selected for use in the remainder of the analysis.

The CAR of each bank was regressed cross-sectionally on various bank characteristics. These characteristics were included in the model as control variables in order to isolate whether the adoption timing had a significant impact on abnormal security returns. The following cross-sectional model was examined:

$$\begin{aligned} \text{CAR}_j = & \alpha + \beta_1 \text{LN}(\text{ASSETS}_j) + \beta_2 \text{BETA}_j + \beta_3 \text{TIER1}_j + \beta_4 \Delta \text{EPS}_j + \\ & \beta_5 \Delta(\text{LOANS}_j / \text{DEPOSITS}_j) + \beta_6 \Delta(\text{LLP}_j / \text{LOANS}_j) + \\ & \beta_7 (\text{INV}_j / \text{ASSETS}_j) + \beta_8 \text{DUMMY}_j + \varepsilon_j \end{aligned} \quad (3)$$

where:

CAR	=	bank <i>j</i> 's cumulative abnormal returns over the event period.
LN(ASSETS)	=	the natural log of bank <i>j</i> 's total assets (reported in millions) at 12/31/93. This variable proxies for bank size.
BETA	=	bank <i>j</i> 's beta from the market model. This variable proxies for bank systematic risk, measured over the last 125 trading days of 1993.
TIER1	=	bank <i>j</i> 's core capital (tier-1) ratio at 12/31/93. This is a common measure of risk-adjusted capital adequacy. Banks have a regulatory minimum of 4%.
ΔEPS	=	the change in bank <i>j</i> 's earnings per share from the period of 12/31/92 to 12/31/93. Although earnings per share is disclosed in the bank's earnings announcement, this variable is included to control for the market's reaction to the <u>composition</u> of bank earnings, which is disclosed more fully in the bank's annual report/10-K.
Δ(LOANS / DEPOSITS)	=	the change in bank <i>j</i> 's ratio of total loans to total deposits from the period of 12/31/92 to 12/31/93. This ratio controls for changes in the primary asset and liability for banks. Also, this ratio serves as a measure of liquidity and credit risk (Mansur et al., 1993).
Δ(LLP / LOANS)	=	the change in bank <i>j</i> 's ratio of loan loss provision to total loans from the period of 12/31/92 to 12/31/93. This ratio serves as a measure of loan quality.
INV / ASSETS	=	the ratio of bank <i>j</i> 's investment securities to total assets at 12/31/93. This ratio measures the significance of a bank's investment securities portfolio relative to total assets.

⁶ Specifically, the following event periods were examined: relatively shorter intervals of (-20 to +20), (-10 to +10), (-5 to +5), (-1 to +1), (-1 to +5), (-1 to +10), and (-1 to +20), and a comparatively longer interval of (-60 to +60).

- DUMMY = a dummy variable that is coded '1' for early adopter banks and '0' for late adopters.
- α, ε = the regression intercept term and disturbance term, respectively.

For the trading volume analysis, daily trading volume for bank j on day t can be measured as follows:

$$\text{Trading Volume}_{jt} = \frac{\text{Number of Shares Traded}_{jt}}{\text{Number of Shares of Stock Outstanding}_{jt}} \quad (4)$$

Consistent with Beaver (1968), the volume measure is standardized by the number of shares of stock outstanding. The reason for this standardization is to control for the size of the firm based on the number of shares of stock that the firm had available to be traded. Bamber and Cheon (1995) used a volume measure that incorporated daily trading volume both prior to the event period and during the event period. Such a measure thus incorporates changes in volume activity.

In a similar manner, changes in volume activity are measured here as follows:

$$\Delta \text{Volume}_j = \text{MTV}_{j\text{EV}} - \text{MTV}_{j\text{EST}} \quad (5)$$

where:

ΔVolume_j = the change in mean trading volume for bank j .

$\text{MTV}_{j\text{EV}}$ = the mean daily trading volume for bank j during the event period (EV).

$\text{MTV}_{j\text{EST}}$ = the mean daily trading volume for bank j during the estimation period (EST). The estimation period consists of the 250 trading days prior to the event period.

Similar to the abnormal returns model, the event period of (-10 to +10) was used for the volume analysis. Also, the following cross-sectional regression was used to test the impact of adoption timing on bank trading volume during the event period:

$$\Delta \text{VOLUME}_j = \alpha + \beta_1 \text{LN}(\text{ASSETS}_j) + \beta_2 \text{TIER1}_j + \beta_3 \Delta \text{EPS}_j + \beta_4 \Delta (\text{LOANS}_j / \text{DEPOSITS}_j) + \beta_5 \Delta (\text{LLP}_j / \text{LOANS}_j) + \beta_6 (\text{INV}_j / \text{ASSETS}_j) + \beta_7 \text{DUMMY}_j + \varepsilon_j \quad (6)$$

where the above variables are as previously defined.

RESULTS

Univariate tests for the regression variables of the sample firms are reported in Table 2 (Appendix). As shown, there are few differences between the early and late adopter firms. The major finding was that early adopter firms had a higher change in earnings per share from the previous year compared to late adopter firms (at the 0.01 and 0.05 statistical level for the t-test and Wilcoxon test, respectively). A possible interpretation of this difference is that early adopter firms, with their relative improved profitability from the prior year, were more willing and financially stable to take the "risks" associated with adopting early. Examples of such risks include the potential exposure to balance sheet volatility and restricted flexibility referred to earlier.

Also, the univariate tests show no statistical differences between the CARs for the early and late adopters. However, as anticipated, both the mean and median of the change in trading volume were somewhat greater for the early adopter firms than the late adopters during the event period. The difference between the two groups approaches statistical significance (at the 0.10 level for the Wilcoxon test). As expected, trading volume increased on average for early adopter firms, evidenced by the positive sign of the mean, while average trading decreased for late adopter firms as indicated by the negative sign. The median for both groups was negative. These results corroborate the hypothesis that early adopters of SFAS No. 115 provided more information to which the market could respond relative to their late adopter counterparts. However, the significance of the change in volume attributable to the adoption timing will be tested by the regression results.

The only other univariate difference between the two groups was the change in the loan loss provision to total loans ratio. However, as reported in Table 2, the difference is only mildly significant for the mean test (0.10) and insignificant for the Wilcoxon test (.8717). Also of note is the concentration of investment securities relative to total assets for the sample firms. Table 2 indicates that the mean and median values of investment security holdings approximate one-fourth of total assets for both early and late adopter firms.

The primary results from this study are derived from the regression models detailed in Tables 3 and 4 (Appendix). Table 3 presents the regression for explaining abnormal firm returns, and the results of three different regressions are reported. The basic model, as detailed above, is model (1) in Table 3. The other two models are variations of model (1), with the primary distinction being the inclusion of an interaction variable between the ratio of investment securities to total assets and the adoption timing dummy variable. This logically follows since the market's reaction to disclosures of this standard would likely depend on the significance of investment security holdings by the banks. As reported in the table, firm size, systematic risk, the change in the loans-to-deposits ratio, and the change of loan loss provision-to-loans ratio were all significant in explaining firm abnormal returns at traditional statistical levels in all three of the models. However, contrary to the hypothesis, adoption timing, as evidenced by the dummy variable and the interaction variable, was not significant in explaining firm abnormal returns.

Table 4 provides the results for the cross-sectional regression for the trading volume analysis. As reported in model (1) of the table, the capital adequacy ratio, the change in earnings per share, and the ratio of investment securities to total assets were significant variables in explaining the changes in the trading volume at the traditional statistical levels. The inclusion of the interaction variable related to adoption timing increases the explanatory power in models (2) and (3) compared to that of the base model. Specifically, model (2) includes all eight of the variables in the regression, and the dummy variable related to adoption timing was the only significant variable (at 0.10). The positive sign of this variable indicates that early adoption of this standard was associated with greater changes in trading volume.

Model (3) includes the interaction variable and the dummy variable, while excluding the investment securities to total assets ratio. The logic for this specification is that the investment securities to total assets ratio would appear to be of primary importance to the market for early adopter firms since the accounting treatment for investment securities did not change for late adopters. The results indicate strong significance of both the interaction variable (at 0.01) and the dummy variable (at 0.01). Again, the positive sign of the dummy variable indicates that early adoption of SFAS No. 115 was associated with a greater change in trading volume during the event period. The negative sign of the interaction variable indicates that the lower the early adopter bank's investment security holdings relative to total assets, the higher the change in trading volume. One interpretation of these results is that the disclosures related to SFAS No. 115 did provide information upon which the market reacted, as evidence by the significance of the dummy variable. However, the greater an early adopter bank's holdings in investment securities, the more uncertainty the market has with respect to the future impact of this standard on the bank. For example, higher investment security holdings potentially subject the bank to increased balance sheet volatility (if the bank has significant holdings in available-for-sale securities) or limited flexibility (if the bank has significant holdings in held-to-maturity securities) in the future.

In analyzing the overall results, adoption timing was found to be significant in the volume analysis but not for the returns analysis. However, as Beaver (1968) notes, price changes reflect the average change in the market's beliefs; whereas, trading volume measures the sum of the market's different reactions. Therefore, it appears that differing price reactions from individual investors may somewhat nullify each other since the overall price reaction represents an average response. This nullification may make measuring the true cause of security return differences more difficult. In contrast, no such nullification exists in a volume reaction, since it represents the sum of the market's reaction. This may help explain why the adoption timing was not significant in the return analysis, while it was significant in the volume analysis. Specifically, since December 31, 1993 represented the potential initial adoption of SFAS No. 115 for calendar year-end firms, the market may not have been efficient in interpreting its disclosures and related impact. Therefore, differences in opinion by individual investors, or a lack of consensus, would result in the price reaction differences or nullification referred to above.

Sensitivity Analysis

Based on the univariate results reported in Table 2, an additional variable of ($\Delta\text{EPS} * \text{Dummy}$) was added to both of the basic regression models. This was done to test the significance of the interaction between changes in earnings per share and adoption timing. This interaction variable was not significant and did not improve the explanatory power of either model, and thus, was not reported in the table.

Several other regressions were run, the results of which were not reported. Most of these regressions included variables which incorporated information specific to the disclosures related to the adoption of SFAS No. 115. Specifically, they included the impact that adopting SFAS No. 115 had on each bank's stockholders' equity in addition to the allocation of securities between the held-to-maturity and available-for-sale classifications. These variables did not improve the explanatory power of the models and were not found significant in explaining either of the dependent variables. This appears somewhat perplexing since one would assume that specific information related to the required disclosures of the standard would provide even more explanatory power to the model. Yet, based on the results reported in Table 4, it appears that adoption timing alone helps explain the differences in trading volume during the event period.

One explanation for this occurrence is that adoption timing provides a signal upon which the market responds. For example, management's decision to early adopt SFAS No. 115 may have signaled management's confidence in the quality of their portfolio and investment policy in response to the potential market fluctuations in capital that SFAS No. 115 could present. Another explanation may be related to the lack of consensus in the market's reaction to the SFAS No. 115 disclosures, as evidenced by the lack of significance in the returns analysis. This may indicate a "learning curve" for the market with respect to interpreting the disclosures of new accounting standards. These are two possible explanations; however, the exact reason for the lack of significance of the standard-specific information may be an issue for future research.

Finally, in order to test whether the regression model of the early adopter firms is a similar fit to that of the late adopters, a Chow F-test was performed for both the abnormal returns model and the trading volume model. The basic regression models, equations (3) and (6), were run for both the early and late adopter firms. The results are reported in Table 5 (Appendix). The reported F-values indicate no differences in the respective regression models for the two groups of firms.

CONCLUSIONS

This paper has examined SFAS No. 115 with respect to the FASB's policy of permitting multi-year adoption for its standards. It was hypothesized that adoption timing differences create information asymmetry across firms and that adoption timing would help explain firm abnormal returns and changes in trading volume during the respective event periods. The banking industry was examined in this study due to the significance of SFAS No. 115 for that industry, and the sample consisted of 118 calendar year-end banks.

The results of this study indicate that adoption timing did not explain firm abnormal returns; however, adoption timing was significant in explaining changes in firm trading volume during the event period. This finding implies that the recognition and disclosure requirements for this standard have information content for financial statement

users. It therefore follows that market liquidity may have been weakened by adoption timing differences across firms, since at the earliest adoption period the market had more information on which to trade for early adopter firms.

The main implication related to these findings pertains to the viability of the FASB's multi-period adoption policy. The FASB's intent related to this policy is to reduce a new standard's implementation costs for financial statement preparers. However, the majority of prior research studies that have examined the adoption timing issue has found that an individual standard's income effect, not implementation costs, was the primary reason driving firms' adoption period choice. Coupling those conclusions with the findings of this study, it appears that the multi-period adoption policy is allowing companies to opportunistically select their initial adoption period. Furthermore, this study shows that these adoption timing differences are to the detriment of market participants due to information asymmetry related to the financial statements and footnotes released by early adopter firms compared to their late adopter firm counterparts. Therefore, it is recommended that the FASB retracts its policy permitting multi-period adoption for the initial application of its standards, and instead requires initial adoption to occur during one period alone.

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TABLE 1**Summary of the sample selection**

Firms listed on the Compustat Bank Tape with the necessary data:	160
Less:	
Firms missing CRSP data:	(6)
Firms whose annual report/10-K was not filmed by Q-Data Corp.:	<u>(36)</u>
Sample Firms	<u>118</u>

TABLE 2

Descriptive statistics and univariate tests for regression variables

VARIABLE	EARLY ADOPTERS n = 61	LATE ADOPTERS n = 57	P-value
	MEAN (MEDIAN) [STD DEV]	MEAN (MEDIAN) [STD DEV]	t-test ^a (Wilcoxon) ^b
CAR	.0572 (.0456) [.0787]	.0564 (.0645) [.0594]	.9547 (.6823)
CH_VOL	.0045 (-0.0118) [1.2301]	-0.2650 (-0.2771) [.9915]	.1945 (.0950) [*]
LN(ASSETS)	9.0596 (8.8802) [1.3735]	8.9655 (8.8983) [1.3681]	.7101 (.9957)
BETA	.7361 (.70) [.6362]	.6845 (.72) [.5028]	.6274 (.4672)
TIER1	10.6459 (10.49) [2.7876]	11.3481 (10.95) [2.8188]	.1765 (.2277)
ΔEPS	.6064 (.30) [1.8621]	-0.1758 (.150) [1.311]	.0092 ^{***} (.0323) ^{**}
Δ(LOANS / DEPOSITS)	.0388 (.0434) [.0880]	.0347 (.0265) [.0465]	.7467 (.1567)
Δ(LLP / LOANS)	-0.0053 (-0.0029) [.0081]	-0.0027 (-0.0029) [.0075]	.0760 [*] (.8717)
INV / ASSETS	.2665 (.2594) [.1247]	.2693 (.2383) [.1126]	.8974 (.7507)

^a P-value reported is the result of a parametric t-test for comparing the means of two samples.

^b P-value reported is the result of a non-parametric Wilcoxon rank-sum test for comparing two samples.

* Significant at 0.10

** Significant at 0.05

*** Significant at 0.01

TABLE 3
Cross-sectional regression results for explaining firm returns

$$CAR_{j[-10,+10]} = \alpha + \beta_1 LN(ASSETS_j) + \beta_2 BETA_j + \beta_3 TIER1_j + \beta_4 \Delta EPS_j + \beta_5 \Delta (LOANS_j / DEPOSITS_j) + \beta_6 \Delta (LLP_j / LOANS_j) + \beta_7 (INV_j / ASSETS_j) + \beta_8 [(INV_j / ASSETS_j) * DUMMY_j] + \beta_9 DUMMY_j + \varepsilon_j$$

Model	α	β_1	β_2	β_3	β_4	β_5	β_6	β_7	β_8	β_9	Adj. R ²	F-Value p-value (model)
(1)	.166 2.44**	-.134** -2.25**	.026 1.99**	-.003 -1.07	-.004 -.96	.204 2.28**	-2.21** -2.22**	.048 .81		-.004 -.33		2.172 .0351
(2)	.168 2.39**	-.013** -2.23**	.025 1.94*	-.003 -1.06	-.004 -.94	.205 2.27**	-2.22** -2.21**	.042 .48	.010 .09	-.007 -.21	.0657	1.914 .0573
(3)	.177 2.65***	-.014** -2.29**	.025 1.90*	-.003 -.97	-.004 -.92	.207 2.30**	-2.25** -2.25**		.048 .66	-.017 -.72	.0723	2.140 .0379

Numbers reported above represent coefficient estimates with related t-values reported beneath.

- * Significant at 0.10
- ** Significant at 0.05
- *** Significant at 0.01

TABLE 4

Cross-sectional regression results for explaining changes in firm trading volume

$$\Delta \text{VOLUME}_{j[-10, +10]} = \alpha + \beta_1 \text{LN}(\text{ASSETS}_j) + \beta_2 \text{TIER}_{1j} + \beta_3 \Delta \text{EPS}_j + \beta_4 \Delta (\text{LOANS}_j / \text{DEPOSITS}_j) + \beta_5 \Delta (\text{LLP}_j / \text{LOANS}_j) + \beta_6 (\text{INV}_j / \text{ASSETS}_j) + \beta_7 [(\text{INV}_j / \text{ASSETS}_j) * \text{DUMMY}_{j}] + \beta_8 \text{DUMMY}_{j} + \varepsilon_j$$

Model	α	β_1	β_2	β_3	β_4	β_5	β_6	β_7	β_8	Adj. R ²	F-Value p-value (model)
(1)	-0.772 -0.74	0.027 .33	0.074 1.72*	0.125 1.66*	1.88 1.30	6.03 .37	-2.25 -2.38**		.231 1.11	.0484	1.865 .0819
(2)	-1.17 -1.10	0.032 .39	0.068 1.59	0.114 1.52	1.77 1.22	7.08 .44	-0.660 -0.47	-2.63 -1.53	.944 1.85*	.0596	1.943 .0605
(3)	-1.34 -1.34	0.039 .48	0.063 1.52	0.112 1.50	1.74 1.21	7.62 .48	-3.23 -2.81***	1.10 2.91***		.0661	2.204 .0391

Numbers reported above represent coefficient estimates with related t-values reported beneath.

* Significant at 0.10

** Significant at 0.05

*** Significant at 0.01

TABLE 5
Chow F-test for explaining differences in regressions between early and late adopter firms

Panel A: Test of abnormal returns model.										
$CAR_{j,t-10,+10} = \alpha + \beta_1 LN(ASSETS_j) + \beta_2 BETA_j + \beta_3 TIER1_j + \beta_4 \Delta EPS_j + \beta_5 \Delta(LOANS_j / DEPOSITS_j) + \beta_6 \Delta(LLP_j / LOANS_j) + \beta_7 (INV_j / ASSETS_j) + \varepsilon_j$										
Group	α	β_1	β_2	β_3	β_4	β_5	β_6	β_7	F-value	R ²
Early (n = 61)	.232 2.31***	-.022 -2.39***	.047 2.54***	-.003 -.67	-.003 -.43	.219 1.98*	-1.21 -.78	.028 .33	2.190 .1219	
Late (n = 57)	.154 1.55	-.008 -.90	-.008 -.38	-.003 -.73	-.00002 -.002	.075 .41	-2.93 -2.02**	-.010 -.12	.864 -.0173	
F-Value: .8425 Prob > F: .5546										
Panel B: Test of trading volume model.										
$\Delta VOLUME_{j,t-10,+10} = \alpha + \beta_1 LN(ASSETS_j) + \beta_2 TIER1_j + \beta_3 \Delta EPS_j + \beta_4 \Delta(LOANS_j / DEPOSITS_j) + \beta_5 \Delta(LLP_j / LOANS_j) + \beta_6 (INV_j / ASSETS_j) + \varepsilon_j$										
Group	α	β_1	β_2	β_3	β_4	β_5	β_6	F-value	R ²	
Early (n = 61)	.322 .21	-.003 -.02	.050 .76	.143 1.32	2.50 1.40	23.54 .94	-3.33 -2.46**	1.688 .0644		
Late (n = 57)	-1.89 -1.17	.075 .57	.124 2.10***	.112 1.01	-2.96 -1.00	-16.87 -.72	-1.41 -.99	1.423 .0434		
F-Value: 1.2470 Prob > F: .2884										
Numbers reported above represent coefficient estimates with related t-values reported beneath.										
* Significant at 0.10										