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## **Accounting Choice and the Fair Value Option**

## Katherine Guthrie, James H. Irving, and Jan Sokolowsky

**SYNOPSIS:** Under the fair value option, SFAS No. 159, firms have full discretion over electing to report specified financial instruments at fair value on a contract-by-contract basis. Building on Henry's (2009) study of early adopting banks, this paper examines to what extent firms' election of instruments benefited their current or future earnings. Our sample comprises the constituents of the S&P 1500 Index for the first quarters of fiscal years 2007 and 2008. Expanding the sample across industries and over time allows us to obtain a more complete picture of the adoption of the fair value option. We identify 72 adopters, two-thirds of which are not commercial banks. We do not find evidence of systematic opportunistic election of the fair value option. In only a handful of cases—concentrated among early adopters with an earnings shortfall—did firms experience a significant improvement in current or future earnings that casts doubt on whether their adoption was keeping with the intent and spirit of the standard.

Keywords: fair value option; fair value; mark-to-market; accounting choice; SFAS 159.

**Data Availability:** The list of adopters used in this paper is available from the authors upon request.

#### INTRODUCTION

he Financial Accounting Standards Board's (FASB) Statement on Financial Accounting Standards No. 159—*The Fair Value Option for Financial Assets and Financial Liabilities* (SFAS 159)—allows firms, and not standard setters, to decide whether to apply fair value measurement to eligible assets and liabilities (AAA 2007). The intent of the fair value option was

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SFAS 159 was issued in February 2007 before the FASB completed the codification of Generally Accepted Accounting Principles (GAAP). On July 1, 2009, SFAS 159 was codified into Accounting Standards Codification Topic 825, Financial Instruments.

two-fold: (1) to improve financial reporting by mitigating earnings volatility created by measuring assets and liabilities differently; and (2) to expand the use of fair value measurement for financial instruments. Yet, SFAS 159 immediately received widespread attention and scrutiny from the media, regulators, and academic researchers. Critics, including two dissenting FASB board members, expressed concerns about SFAS 159, arguing that an instrument-by-instrument option could lead to opportunistic election and weaken cross-sectional comparability. Shortly after the commencement of the early adoption period, the Securities and Exchange Commission (SEC) and the Center for Audit Quality (CAQ) issued guidance explaining that elections lacking economic merit would be inconsistent with the intent and spirit of SFAS 159. Following this guidance, numerous early adopting firms rescinded their original elections.

The purpose of this paper is to evaluate the extent of opportunistic election of the fair value option. Specifically, we ask the question: Did firms manage current earnings and future earnings through the change in fair value during the adoption quarter and the transition adjustment to retained earnings? This is an important research question, because—given the controversy that preceded the SFAS 159 adoption period—a firm's decision to elect financial instruments under the fair value option could be interpreted as a signal of lower earnings quality and questionable management integrity. Our empirical analysis investigates whether there is evidence to support this interpretation.

To this end, we build on the work of Henry (2009) in two ways.<sup>2</sup> First, we expand the sample across industries and over time to include non-banking entities and regular adopters. Because little is known about the incidence of adoption or the profile of firms electing the fair value option, we hand-collect information on the adoption choices for all firms in the S&P 1500 Index.<sup>3</sup> We identify 72 adopters, two-thirds of which are not commercial banks. By broadening the sample, we obtain a more complete picture about the extent of adoption, both in terms of a better representation of the cross-section of adopters as well as total market coverage.

Second, we attempt to calibrate the extent of opportunistic election of the fair value option. Specifically, we design two earnings management tests that incorporate the financial instruments elected for fair value measurement. In our test of *current* earnings management, we examine firms whose earnings meet or beat analysts' consensus earnings forecasts only with the help of unrealized gains from elected financial instruments. In our test of *future* earnings management, we examine firms that accelerate the recognition of losses as transition adjustments to retained earnings on the balance sheet instead of realizing these losses in future income statements.

We do not find evidence of systematic and economically meaningful opportunistic elections for current or future earnings gains in our sample. Only a few sample firms' election choices resemble those of firms previously identified by regulators or the media as opportunistic adopters. We conclude that managing current or future earnings was at most a marginal factor in firms' decisions whether to elect financial instruments under the fair value option. Further, our results and those of Henry (2009) suggest that election choices resulting in current or future earnings increases were most prevalent among early adopters and smaller firms.

While this study is intended to be a comprehensive and detailed examination of opportunistic election choices under the fair value option, the interpretation of our results is subject to two limitations. First, the regulatory intervention following the SFAS 159 early adoption period may

<sup>&</sup>lt;sup>3</sup> Technically, the adoption choice refers to the date the standard becomes effective, and the election choice refers to the election of eligible instruments. Throughout the paper, we use *adopt* as a substitute for *elect*.



<sup>&</sup>lt;sup>2</sup> Henry (2009) closely examines 11 rescinding and 24 non-rescinding commercial banks that elected to measure financial instruments under the fair value option in the early adoption period. She documents pervasive opportunistic election choices in her sample. For example, all 11 rescinders revised their initial earnings announcements downward and 92 percent of non-rescinders shifted unrealized losses from accumulated other comprehensive income to retained earnings.

have effectively halted opportunistic elections by regular adopters. As such, our results cannot be used to predict the extent of opportunistic adoption if all firms had to make the election choice simultaneously. Second, the economic environment in the U.S. began to erode between the election dates of early adopters (the first fiscal quarter of 2007) and regular adopters (the first fiscal quarter of 2008). Although the financial crisis prevents us from generalizing the current earnings management findings to other periods, it strengthens our future earnings management test. That is, the incremental increase in unrealized losses resulting from the financial crisis—and for which SFAS 159 permits recognition in current period retained earnings—made opportunistic election choices to benefit future earnings more attractive.

Our paper complements several contemporaneous studies investigating the fair value option. Chang et al. (2009) examine the relevance of intended benefits for the adoption decisions of banks. They find that hedge accounting ineffectiveness and accounting mismatches—proxies for the intended objectives of SFAS 159—predict the adoption of the fair value option only for regular adopters, but not for early adopters. Fiechter (2011) goes one step further and examines whether the reduction in accounting mismatches translated into lower earnings volatility. In a sample of banks from 42 countries, he finds that adopters of IAS 39 (the international equivalent of SFAS 159) had lower earnings volatility in the cross-section, and that earnings volatility decreased around the election of the fair value option. In contrast, Song (2008) concludes that the banks in his sample were primarily opportunistic adopters of the fair value option. He finds that adopters systematically benefited from earnings management and balance sheet restructuring, but no evidence of a reduction in earnings volatility or a change in hedging activities. The discrepancy between Song (2008) and the other findings may stem from Song not differentiating between early and regular adopters in his sample.

The paper proceeds as follows. The next section describes the institutional background. The third section provides an overview of our sample. The fourth section examines the characteristics of early adopters, regular adopters, and non-adopters. The fifth and sixth sections investigate whether firms electing to measure financial instruments at fair value under SFAS 159 exhibit behavior consistent with current and/or future earnings management. The final section concludes.

#### INSTITUTIONAL BACKGROUND

#### **Evolution of Fair Value Accounting**

In recent years, the FASB and International Accounting Standards Board (IASB) have increasingly focused on incorporating more fair value estimates and disclosures into financial reports. The FASB added a project on financial instruments to its agenda in 1986. During the 1990s, the FASB issued three fair value standards that led to significant changes in financial statement recognition and disclosure: SFAS 107 (1991), SFAS 115 (1993), and SFAS 133 (1998). SFAS 107 expanded the disclosure requirements for financial assets and financial liabilities both recognized and not recognized in the balance sheet. SFAS 115 required firms to record fair value adjustments to debt and equity securities, which was a departure from the previous lower of cost or market valuation premise. Finally, SFAS 133 mandated that all derivative instruments be recorded as assets and liabilities measured at fair value.

A body of accounting research has motivated or been motivated by the fair value policy decisions of the 1990s.<sup>4</sup> For instance, Barth and Landsman (1995) discuss estimation error in the context of valuing financial instruments. Barth et al. (1996) and Nelson (1996) examine SFAS 107

<sup>&</sup>lt;sup>4</sup> Many of these studies focus on financial institutions, and banks in particular. This industry concentration exists because financial firms typically hold the largest proportion of assets and liabilities at fair value on their balance sheets. In addition, in some cases, financial firms are subject to more detailed regulatory reporting requirements than are mandated by the accounting standards.



disclosures for a sample of banks. Graham et al. (2003) investigate the exclusion of the equity method investments from fair value reporting under SFAS 115. Related to SFAS 133, Venkatachalam (1996) studies banks' derivative disclosures in a pre-SFAS 133 setting (under SFAS 119), while Ahmed et al. (2006) study the tension between recognition and disclosure of derivative instruments in a post-SFAS 133 setting.

Just as fair value accounting is not a new concept, it is also not new to controversy. The longstanding debate centers around whether the comparative advantage of the accounting system is to provide *ex post* realizations of past performance or *ex ante* distributions of future value (Ryan 1997). Critics of fair value measurement argue that estimates of current value do not provide consistently reliable information. These estimates, they claim, are unverifiable and are vulnerable to managerial manipulation (e.g., Watts 2003a, 2003b). Further, present-day opponents, especially company executives from the financial industry, maintain that only realized gains and losses should be reflected in firms' financial reports, as unrealized gains and losses do not accurately reflect the true operating performance of the firm. Opponents also point to the illiquid markets during the financial crisis in which fair values were difficult to estimate (Ferguson 2008).

On the other hand, advocates of fair value accounting argue that estimates of current value provide capital market participants with relevant information that is not readily available from other sources. They contend that fair values provide better information for making forward-looking economic decisions (e.g., Barth 2006). Accounting regulators, including the FASB, IASB, and SEC, continued to support a movement toward greater fair value recognition and disclosure throughout the financial crisis (SEC 2008).

#### **FASB Statement 159**

Within a six-month period spanning late 2006 and early 2007, the FASB issued two fair value standards. In September 2006, it issued SFAS 157 (FASB 2006), which creates a framework for recognizing assets and liabilities at fair value and increases the disclosure requirements to support assets and liabilities recognized at fair value.<sup>5</sup> In February 2007, the FASB issued SFAS 159, which expands the scope of fair value measurement to a new set of financial instruments (FASB 2007b). These additional instruments include any recognized financial assets or financial liabilities not specifically excluded by paragraph 8 of the standard. Eligible items include available-for-sale securities, mortgage loans held for sale, and various types of long-term borrowings. Ineligible items include pension and post-retirement liabilities, lease assets and liabilities, and deposit liabilities.

The stated primary objective of SFAS 159 is to help firms mitigate volatility in reported earnings caused by measuring related assets and liabilities differently. For example, firms frequently engage in derivative transactions to reduce their risk exposure. These derivatives are recorded at fair value, while the hedged instruments are typically recorded at historical cost. In the past, firms could offset the change in value of the derivatives with the change in value of the hedged instruments using SFAS 133, but the costs to comply with the required assessment of hedging effectiveness were high. Therefore, applying the fair value option to hedged instruments previously accounted for under SFAS 133 allows firms to benefit from cost savings. To the extent that costly hedge accounting rules prevent firms from recognizing the income effects of the hedged instruments, electing hedged instruments permitted by SFAS 159 enables firms to eliminate unnecessary volatility in their reported earnings.

Most significantly, SFAS 157 requires that firms classify their assets and liabilities carried at fair value into one of three categories, ranging from instruments for which fair value measurement is based on quoted prices in active markets for identical assets or liabilities (Level 1) to instruments for which fair value measurement is based on unobservable inputs (Level 3).



As noted in the introduction, SFAS 159 is also closely related to the amended international standard IAS 39, *Financial Instruments: Recognition and Measurement*, which was issued by the IASB (2005).<sup>6</sup> Like SFAS 159, the fair value option introduced in the amended version of IAS 39 is intended to simplify the accounting for financial instruments, reduce accounting mismatches in scenarios that did not qualify for hedge accounting, and thus reduce earnings volatility. Another similarity between the two standards is the rapidly changing nature of the regulation surrounding them. The IASB is currently working toward a standard that will ultimately replace IAS 39 as a whole. The FASB also originally intended for SFAS 159 to be the first phase in a two-phase process, in which the second phase would mandate adoption and increase the scope of eligible items to include nonfinancial instruments (FASB 2007a). However, as previously discussed, a wave of opposition to fair value accounting led to the removal of phase two from the FASB's agenda, at least for the time being.

SFAS 159 took effect with the first fiscal year beginning after November 15, 2007, although early adoption was permissible. For a calendar-year-end firm, this translates into the first quarter of 2008 (and the first quarter of 2007 for early adopters). Once a financial asset or liability is chosen for fair value measurement, that decision is irrevocable. Moreover, firms electing the fair value option are required to provide a reason for their decision. On the effective date, firms faced the decision whether to apply fair value measurement to existing financial assets and financial liabilities. If existing instruments were elected, the beginning balance of retained earnings on the balance sheet had to be adjusted for the difference between fair value and the current carrying amount of the elected instruments. Subsequent to the effective date, the fair value option only applies to newly acquired instruments or existing instruments that become eligible due to qualifying events (e.g., business combinations or significant modifications to debt contracts). Changes in the fair value of elected instruments in periods following the effective date are recorded as a gain or loss that adjusts net income in the income statement.

#### ADOPTERS IN THE S&P 1500

One objective of this study is to assess the extent of opportunistic adoption of the fair value option. A first step is to evaluate the magnitude of instruments elected by public companies. To this end, we hand-collect information on firms' election decisions for all member firms of the S&P 1500 Index as of December 31, 2006. The S&P 1500 Index reflects the performance of the U.S. equity market, as it is composed of large-cap, mid-cap, and small-cap U.S.-domiciled firms. The combined equity market value of our initial sample captures 90 percent of the market value of all firms in the CRSP universe as of December 2006. Even if non-sample firms are more or less likely to elect instruments opportunistically, their effect on public equity markets is likely to be small.

To identify firms electing the fair value option, we use the SEC EDGAR public company filings website. Since early adoption of SFAS 159 was permitted, we first review each firm's first fiscal 2007 quarterly filing to determine if they were an early adopter. For firms that did not adopt SFAS 159 early, we then review the first fiscal 2008 quarterly filing to determine if they were a regular adopter. Within these quarterly filings, we search for the exact text strings "fair value option" or "159" to locate all references to SFAS 159. A firm's election decision is typically found

<sup>&</sup>lt;sup>6</sup> IAS 39 permits firms to designate, at the time of acquisition or issuance, any financial asset or financial liability to be measured at fair value, with changes in fair value recognized in the income statement. This option is available for financial assets and liabilities for which the fair value can be reliably measured. Interestingly, the IASB considered restricting the fair value option contained in the standard, as regulators were concerned that the fair value option could be used inappropriately, in particular in the case of a firm's own liabilities.



within the "Basis of Presentation" footnote to the financial statements. Actual fair value amounts and additional required disclosures typically appear in a separate fair value footnote.<sup>7,8</sup>

Panel A in Table 1 displays our sample by adoption choice. We begin with the list of S&P 1500 Index constituents as of December 2006. Of the 1,500 sample firms, there are 72 firms that elected instruments under the fair value option, either in the first fiscal quarter of 2007 or 2008. In addition, 1,187 firms did not elect any instruments. We eliminate 76 firms that did not make an election decision because they declared bankruptcy, issued non-timely filings (e.g., NT 10-Qs), or were acquired before the standard's effective date. We also eliminate 165 firms that had not yet made an election decision as of our sample collection cutoff date. These firms had fiscal years ending between July 2008 and October 2008.

Panel B of Table 1 presents the election decision by industry. Adopters represent a quarter of the 64 different industries identified by two-digit SIC codes. The third column (% within industry) provides the percentage of firms in each industry that adopted the fair value option, while the fourth column (% of adopters) provides the percentage of adopters that belong to that industry. Firms electing the fair value option are most heavily concentrated in financials and insurance (73.6 percent of the sample, or 53 of 72 adopters).

Prior research on the fair value option is typically restricted to banks, because it increases homogeneity among sample firms and more detailed data are readily available for banks. However, we find that restricting the research sample to commercial banks (SIC code 6020) covers only about one-third of all adopters in the S&P 1500. Thus, examining the entire S&P 1500 Index enables us to quantify the economy-wide incidence of adoption and magnitude of elected instruments of the fair value, as well as evaluate fair value option election choices at the firm level.

To get a sense for the magnitude of the adoption, we examine the size of prior balances of elected instruments in Panel C. The dollar value of elected liabilities is more than twice as large as the value of elected assets at the mean (\$21.5 billion versus \$9.3 billion). There is a large dispersion of the prior balances as evidenced by the standard deviation. This is not surprising, given the large differences in firms' sizes. In addition, we tabulate prior balances as a fraction of total fair value of assets/liabilities and of total assets/liabilities. There is a stark difference between the value of liabilities elected and the value of assets elected as a fraction of fair-valued instruments. In particular, liabilities elected under SFAS 159 constitute 67.4 percent of fair valued liabilities at the mean, whereas, on average, elected assets are only 29.2 percent of fair valued assets. However, the fractions of total balance sheet assets and liabilities recognized at fair value are more similar, with the SFAS 159 values accounting for 4.4 percent of total assets and 5.0 percent of total liabilities.

Panels D and E display descriptive statistics on the magnitudes of gains/losses and transition adjustments. The impact on first-quarter earnings and retained earnings is widely dispersed. However, the most extreme values occur in firms that claim their elected instruments are economically hedged. We display the descriptive statistics for first-quarter earnings in the row below the total gains and losses as a relative comparison. For many firms, the impact on earnings is quite large. Losses are 42.2 percent and gains are 27.4 percent of first-quarter earnings on average (conditional on positive

 $<sup>^{9}</sup>$  For example, see Song (2008), Chang et al. (2009), Henry (2009), and Fiechter (2011).



<sup>&</sup>lt;sup>7</sup> Interestingly, while Compustat contains data item *acctchgq* to identify accounting changes, we find that it contains systematic errors in its coding of SFAS 159 adopters. Compustat identifies 157 adopters in the S&P 1500 compared to the 72 firms we find by reading firms' 10-Qs. In 101 cases, the firms identified by Compustat as adopters did not elect any instruments. In addition, Compustat fails to identify 16 firms that did adopt (8 early adopters and 8 regular adopters). Therefore, our data collection contributes to a more accurate assessment of the extent of firms' choice to implement fair value measurements.

Appendix A provides an example disclosure for sample firm American International Group. Column 1 provides the prior balances, column 2 provides the transition adjustments, and column 4 provides the first quarter gains and losses.

TABLE 1
Extent of Adoption among S&P 1500 Firms

## Panel A: Number of Firms in Sample

	<u>#</u>	
Adopters	72	4.80
Non-adopters	1187	79.13
Non-filers	76	5.07
Not yet applicable	165	11.00
Total	1500	100.00

## Panel B: Distribution by Industry

SIC	Industry	# of Firms	# of Adopters	% w/in Industry	% of Adopters
13	Oil and Gas	38	1	2.63	1.39
15	<b>Building Construction</b>	10	3	30.00	4.17
27	Printing and Publishing	17	2	11.76	2.78
28	Chemicals	82	1	1.22	1.39
30	Rubber and Plastics	11	1	9.09	1.39
36	Electronic Equipment	86	1	1.16	1.39
37	Transportation Equip.	29	1	3.45	1.39
42	Freight and Warehousing	10	1	10.00	1.39
48	Communications	24	1	4.17	1.39
49	Electric, Gas, Sanitary	77	4	5.19	5.56
60	Banks	82	28	34.15	38.89
61	Non-Depository Lenders	11	7	63.64	9.72
62	Brokers	22	7	31.82	9.72
63	Insurance	62	11	17.74	15.28
73	Business Services	105	1	0.95	1.39
99	Nonclassifiable	3	2	66.67	2.78
	All Other	590	0	0.00	0.00
	Total	1259	72		100.00

## Panel C: Prior Balances of Elected Instruments

	25th Percentile	Median	75th Percentile	Mean	Std. Dev.	n
Elected Assets						
\$ value (in mill.)	84	660	3098	9324	26399	62
% of fair valued assets	2.6	8.9	26.8	29.2	56.3	57
% of total assets	0.5	1.2	4.6	4.4	10.5	61
Elected Liabilities						
\$ value (in mill.)	209	1533	18767	21521	50870	24
% of fair valued liab.	10.2	38.1	93.6	67.4	88.3	21
% of total liabilities	1.2	1.8	5.9	5.0	6.6	23

(continued on next page)



#### TABLE 1 (continued)

Panel D: Effect on Earnings

	25th Percentile	Median	75th Percentile	Mean	Std. Dev.	n
Losses						
Loss (in \$ mill.)	-94	-17	-3	-258	948	35
Earnings (in \$ mill.)	-4	100	698	213	1835	35
Loss/Earnings (in %)	-19.5	-5.2	-1.1	-42.2	118.1	26
Gains						
Gain (in \$ mill.)	1	10	50	63	118	27
Earnings (in \$ mill.)	-151	19	428	515	1490	26
Gain/Earnings (in %)	2.3	9.1	13.4	27.4	64.9	18

Panel E: Effect on Retained Earnings and Stockholders' Equity

	25th Percentile	Median	75th Percentile	Mean	Std. Dev.	n
Negative Transition Adjustr	ment Effects					
$\Delta RE$ (in \$ mill.)	-226	-61	-9	-196	375	20
% of RE	-2.4	-0.8	-0.4	-1.0	6.4	20
$\Delta$ SEQ (in \$ mill.)	-295	-69	-25	-261	451	13
% of SEQ	-1.7	-0.6	-0.2	-0.9	1.0	13
Positive Transition Adjustm	nent Effects					
$\Delta RE$ (in \$ mill.)	10	54	234	193	336	28
% of RE	0.2	0.5	6.9	6.6	13.3	27
$\Delta$ SEQ (in \$ mill.)	20	54	166	215	391	18
% of SEQ	0.2	0.3	2.1	2.9	5.5	17

This table presents summary statistics on the election of SFAS 159 by firms in the S&P 1500 as of December 31, 2006. Panel A shows the number of firms that chose to adopt SFAS 159. *Non-filers* refers to firms that did not issue a first quarter 2007 and/or 2008 Form 10-Q. This category includes firms that have been acquired, entered bankruptcy, or are under regulatory or internal investigation. *Not yet applicable* refers to firms with fiscal years ending between July and October. These firms did not elect the fair value option early and had not filed their Form 10-Qs for the first quarter of 2008 at our sample cutoff date. Panel B presents the adoption decision by industry. We calculate both the fraction of adopters in a given industry, as well as the fraction of adopters that belong to that industry. To illustrate the magnitude of the election of the fair value option, Panels C, D, and E present descriptive statistics for the prior balances of the instruments elected, as well as their gains/losses in the adoption quarter and transition adjustments to retained earnings. Prior balances are not reported by three firms; gains/losses are missing for seven firms. Gains/losses as a fraction of earnings are reported for firms with positive earnings only.

earnings). The transition adjustment relative to retained earnings for negative transition adjustments is 1.0 percent at the mean, whereas for positive adjustments it is 6.6 percent.

To conclude, we find that firms electing the fair value option considerably expand the amount of financial instruments measured at fair value, with a large impact on income and retained earnings for some adopters. In addition, our sample includes regular adopters and adopters that are not banks. Since prior evidence on opportunistic adoption choices is limited to early adopting banks, the remainder of our paper examines in detail the fair value election choices in our expanded sample.

#### CHARACTERISTICS OF ADOPTERS AND NON-ADOPTERS

Our research extends the work of Henry (2009), who studies early adopters of the fair value option that subsequently rescinded their elections due to external pressure (e.g., from the SEC). As such, rescinding firms offer insights into the characteristics of opportunistically elected instruments



against which we can compare the election choices of other SFAS 159 adopters. We begin by examining the characteristics of adopters and non-adopters, and continue with an examination of the characteristics of elected instruments in the next section.

Panel A of Table 2 presents descriptive statistics on the characteristics of early adopters, regular adopters, and non-adopters of SFAS 159. Our selection of variables largely follows Henry (2009), except that we omit the bank-specific measures of investment securities and capital ratio, and add a dummy identifying derivative users. We also construct a proxy for the fraction of total assets and total liabilities that is eligible for fair value measurement (eligible instruments). We expect firms with a greater proportion of eligible instruments to be more likely to adopt the fair value option. Our findings are consistent with those of Henry (2009). We find no significant differences in mean or median firm characteristics between early and regular adopters (with the exception of the mean in total assets and liabilities). Adopters and non-adopters, however, do differ along several dimensions.

We find that adopters are significantly larger than non-adopters, which is consistent with larger firms having greater complexity, need, and skill to engage in hedging activities that trigger many fair value option election decisions. Not surprisingly, adopters have significantly more eligible instruments to mark at fair value than non-adopters, namely 81 percent versus 68 percent at the mean. Likewise, 75 percent of adopters use derivatives prior to the adoption of SFAS 159, while only 50 percent of non-adopters are derivatives users. These relationships are consistent with firms adopting the fair value option as intended. However, we also find that adopters are more likely to have unrealized losses on securities in accumulated other comprehensive income (AOCI), which is consistent with opportunistic implementation of the fair value option. The mean and median profitability, as measured by the return on equity, are not statistically distinguishable between adopters and non-adopters at conventional significance levels.

Complementing the previous descriptive statistics, Panel B of Table 2 displays the propensity of meeting or beating the consensus earnings forecast (MBE) in the first fiscal quarters of 2007 and 2008 for early adopters, regular adopters, and non-adopters. We note two patterns involving MBE propensities. First, while the MBE rate remains stable for non-adopters, this is not the case for adopters. The decrease in the MBE rates for adopters by more than 25 percentage points stems primarily from the economic shock to the financial sector in 2007, as adopters are concentrated in the financial industries (SIC 60–63). Figure 1 summarizes the changing economic environment over years 2006–2008. In August 2007, the TED spread—an indicator of credit risk in the economy—increased sharply. In October 2007, the S&P 1500 Index began a decline that would last for almost a year and a half. In an attempt to stabilize the economy by easing monetary policy, the Federal Reserve's Open Market Committee cut the federal funds target rate from 5.25 percent at the beginning of 2007 down to 2 percent by mid-2008.

Second, because of the comparability issues resulting from the financial crisis, we examine the MBE propensities for financial firms only. Early adopters' and regular adopters' MBE rates display stark differences. Compared to regular adopters, early adopters have a higher MBE rate (75.0 percent versus 48.5 percent) in the first fiscal quarter of 2007, but by 2008, early adopters' MBE rates are as low as those of regular adopters (25.0 percent). In other words, early adopters are relatively more likely to meet or beat their earnings benchmark when the fair value option affords them with election choices. The same is not true for regular adopters, but we cannot predict what their MBE rates would have been in the absence of a financial crisis. Instead, we compare regular

We calculate the TED spread as the difference between annualized rates on three-month Eurodollar deposits (London) and three-month Treasury bills (secondary market). The data are available for download at <a href="http://www.federalreserve.gov/releases/h15/data.htm">http://www.federalreserve.gov/releases/h15/data.htm</a>



<sup>&</sup>lt;sup>10</sup> Similar patterns emerge when we calculate average annual MBE rates for fiscal years 2006–2008.

TABLE 2

Descriptive Statistics on Adopters/Non-Adopters

**Panel A: Firm Characteristics** 

	Min	Median	Max	Mean	Std. Dev.	n
Early Adopters						
Total assets (\$bn)	0.78	36.18	1884.32	423.94	588.61	21
Total liabilities (\$bn)	0.27	22.12	1764.54	394.41	549.75	21
Eligible instruments (%)	23.73	81.01	97.22	73.81	22.68	21
Derivatives user (dummy)				0.67	0.48	21
AOCI (MS) (\$bn)	-2.73	0.00	1.30	0.02	0.73	21
AOCI (MS)/Total assets (%)	-0.47	0.00	1.77	0.12	0.50	21
Return on equity (%)	-153.12	15.62	26.65	7.25	37.08	21
Regular Adopters						
Total assets (\$bn)	3.30	42.86	979.41	151.27*	247.37	51
Total liabilities (\$bn)	1.39	30.74	869.77	136.23*	228.15	51
Eligible instruments (%)	19.50	74.92	96.40	66.99	25.94	51
Derivatives user (dummy)				0.78	0.42	50
AOCI (MS) (\$bn)	-2.75	0.00	10.08	0.27	1.55	49
AOCI (MS)/Total assets (%)	-0.38	0.02	7.08	0.37	1.15	49
Return on equity (%)	-0.23	13.72	364.07	20.36	49.47	51
Non-Adopters						
Total assets (\$bn)	0.05	2.25†	346.29	9.74†	26.26	1187
Total liabilities (\$bn)	0.07	1.18†	316.87	6.58†	20.49	1187
Eligible instruments (%)	4.96	33.95†	98.67	39.12†	20.48	1187
Derivatives user (dummy)				0.50†	0.50	1169
AOCI (MS) (\$bn)	-0.23	0.00	2.79	0.01†	0.12	1135
AOCI (MS)/Total assets (%)	-0.79	0.00	19.30	0.08†	0.69	1135
Return on equity (%)	-329.92	12.94	930.46	15.12	47.96	1187

Panel B: Percentage of Adopters that Meet or Beat the Consensus Earnings Forecast

	All I	Firms	Financial Firms		
	Q1 2007	Q1 2008	Q1 2007	Q1 2008	
Early adopters	80.00	36.84	75.00	25.00	
Regular adopters	54.35	28.57	48.48	25.00	
Non-adopters	67.32	65.73	65.29	45.24	

<sup>\*</sup> Denotes differences in medians and means between early and regular adopters that are significant at the 5 percent level. † Denotes significant differences between adopters and non-adopters.



This table presents descriptive statistics for characteristics of early adopters, regular adopters, and non-adopters. Definition of variables: total assets and liabilities are Compustat items at and lt; eligible instruments are defined as (rect + ivst + ivaeq + ivao + ap + dlc + dltt)/(at + lt); derivatives user is set to 1 if  $cider\ glq \neq 0$  or  $aocider\ glq \neq 0$ ; AOCI (MS) denotes the amount of accumulated other comprehensive income for unrealized gains and losses on marketable securities (acominc - recta - aocipen - aocidergl - aociother); and return on equity is ib/seq. The measures are computed at the end of fiscal year 2006. Panel B contrasts the propensity to meet or beat the consensus earnings forecasts for the two adoption quarters (Q1 2007 and Q1 2008) among early adopters, regular adopters, and non-adopters.

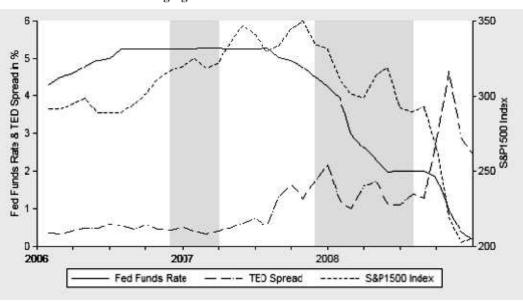


FIGURE 1 Changing Economic Environment 2006–2008

Early and regular adopters of the fair value option faced a very different economic environment at the time of their election choices. We plot three graphs to illustrate these differences: (1) the effective federal funds rate reflecting U.S. monetary policy; (2) the TED spread as an indicator of credit risk in the economy; and (3) the S&P 1500 Index as an indicator of investors' expectations. The grey shaded areas indicate the date ranges for the first quarters of fiscal years 2007 and 2008 of adopters in our sample.

adopters and non-adopters. We find that regular adopters have MBE rates that are about 20 percentage points lower than those of non-adopters, even before the financial crisis. This finding suggests that regular adopters, as a group, place less emphasis on MBE rates.

To summarize, early and regular adopters appear to be systematically different, a pattern that is consistent with the prior empirical evidence on opportunistic early adoption of accounting standards by Ayres (1986) and Amir and Ziv (1997). In the following sections, we compare early and regular adopters' election choices in more detail. In particular, we evaluate how financial instruments elected under the fair value option impact current and future earnings outcomes.

#### **CURRENT EARNINGS MANAGEMENT**

#### Gains and Losses from Elected Instruments

Opportunistic election of instruments for current earnings management purposes—based on fair value gains and losses during the adoption quarter—requires that firms can either predict the performance of these instruments or that the performance is known at the time of the election decision. The rules for early adoption specify that firms could adopt the fair value option up to 120 days into their fiscal year 2007, provided that no financial statements had been filed. Thus, early adopters clearly had the benefit of hindsight at the time of electing instruments under SFAS 159. For regular adopters, the intent of the fair value option is to elect existing instruments at the



beginning of the adoption quarter and newly acquired instruments at the time of acquisition. However, to the best of our knowledge, nothing prevents regular adopters from making the election of instruments contingent on instruments' performance in the adoption quarter, as firms are not committed to any election until their Form 10-Q public filings.

Henry (2009) shows that rescinding and non-rescinding early adopters elect the fair value option in a manner that systematically improves their income statements in the adoption quarter. In her sample, all 11 rescinders revise their initial earnings announcements downward, and 20 out of 24 non-rescinding early adopters elect instruments with current quarter gains. In this section, we assess the prevalence of such current income statement benefits for early and regular adopters among the members of the S&P 1500.

Panel A of Table 3 records the number of firms that recognized either a gain or a loss on financial assets for the first quarter following adoption of SFAS 159. We find that subsequent losses are more prevalent than gains. Firms' elected instruments contribute losses to the current period income statement in 35 out of 65 cases. <sup>12,13</sup> However, most of the recognized losses come from regular adopters. Overall, 56 percent of early adopters and 36 percent of regular adopters recognize an earnings gain from elected instruments in the quarter of adoption, as opposed to 83 percent of non-rescinding early adopters in Henry's (2009) sample.

#### **Earnings Shortfall and Meeting/Beating Earnings Forecasts**

As suggested by studies such as Burgstahler and Dichev (1997) and Degeorge et al. (1999), firms have strong incentives to meet or beat certain earnings benchmarks. More recently, Brown and Caylor (2005) show that the analysts' consensus earnings forecast has been the most important benchmark managers seek to beat since the mid-1990s. In this section, we examine the impact of the fair value option on avoiding negative earnings surprises.<sup>14</sup>

We first investigate if firms electing financial instruments under the fair value option have underlying incentives consistent with earnings management. Consensus earnings forecast data from I/B/E/S are missing for three adopters in our sample. For the remaining 62 firms, we determine whether the hypothetical earnings per share—EPS before the effect of gains or losses from SFAS 159-elected financial instruments—falls below the consensus earnings forecast, which we refer to as an earnings shortfall. Specifically, we expect that firms with an earnings shortfall will be more likely to elect instruments with gains during the quarter of election. Firms without an earnings shortfall, on the other hand, will be less likely to elect instruments with gains.

In Panel B of Table 3, the results uniformly support our expectation for early adopters. All seven early adopters with an earnings shortfall elect instruments with gains in the adoption quarter. Yet of the 10 early adopters without an earnings shortfall, only three elect instruments with gains. That is, when early adopters place less value on a current quarter gain, the elected instruments also

<sup>&</sup>lt;sup>14</sup> Zero-earnings and dividend benchmarks do not yield additional insights beyond the consensus earnings forecast, and we omit them for brevity. Due to the increase in earnings volatility over our sample period stemming from deteriorating economic conditions, we do not compare earnings in the current quarter to earnings of the same fiscal quarter in the previous year. While it would be interesting to consider earnings-per-share-based bonus targets to assess managers' private benefits from opportunistic adoption, a timing mismatch complicates the research design. In particular, our data on the election of the fair value option pertain to the first quarter, whereas the bonus targets are mostly based on EPS targets for the fiscal year.



<sup>&</sup>lt;sup>12</sup> Seven firms (Bear Stearns, CIT Group, Colonial Bancgroup, Ford, General Electric, Lehman Brothers, and MetLife) do not disclose gains and losses stemming from changes in the fair value of elected instruments, which reduces our sample to 65 firms for our descriptive statistics.

Note that in some cases firms elect hedged instruments to eliminate the burden of hedge accounting under SFAS 133. For instruments that are already accounted for under fair value, there is no incremental effect on earnings from electing the fair value option.

TABLE 3
Gains and Losses for the First Quarter after Adoption

Panel A: Frequency of Gains and Losses

	Early Adopters		Regular Adopters		All Adopters	
	#	%	#	%	#	%
Loss	7	38.89	28	59.57	35	53.85
No impact	1	5.56	2	4.26	3	4.62
Gain	10	55.56	17	36.17	27	41.54
Total	18	100.00	47	100.00	65	100.00

**Panel B: Earnings Shortfalls** 

	Early	Early Adopters		Regular Adopters		All Adopters	
	#	%	#	%	#	%	
Adopters with Earn	ings Shortfalls						
No Gain	0	0.00	15	53.57	15	42.86	
Gain	7	100.00	13	46.43	20	57.14	
Total	7	100.00	28	100.00	35	100.00	
Adopters without E	arnings Shortfall	ls					
No Gain	7	70.00	14	82.35	21	77.78	
Gain	3	30.00	3	17.65	6	22.22	
Total	10	100.00	17	100.00	27	100.00	

Panel C: Meeting or Beating the Consensus Earnings Forecast

	Early	Adopters	Regular Adopters		All Adopters	
	#	<b>%</b>	#	%	#	<b>%</b>
Adopters with Earning	s Shortfalls a	nd Gains				
Did Not MBE	3	42.86	11	84.62	14	70.00
MBE	4	57.14	2	15.38	6	30.00
Total	7	100.00	13	100.00	20	100.00
Adopters without Earn	ings Shortfall	ls or Gains				
Did Not MBE	0	0.00	22	68.75	22	52.38
MBE	10	100.00	10	31.25	20	47.62
Total	10	100.00	32	100.00	42	100.00

This table reports our current earnings management results for the full sample of firms electing financial instruments under the fair value option. Panel A presents the impact on the income statement through fair value changes of elected instruments during the quarter of adoption. Seven firms do not disclose gains/losses. Panel B displays the number and percentage of adopters with earnings (net of the FVO earnings impact) falling short of the consensus forecast separated by firms with and without current gains in the adoption quarter (analyst forecasts are missing for three firms). Panel C tabulates the frequency of meeting or beating the consensus earnings forecast (MBE), contrasting adopters with an income-increasing election *and* an earnings shortfall with adopters lacking gains *or* an earnings shortfall.



happen not to benefit current earnings. Regular adopters' gains also occur predominantly when they face an earnings shortfall. As discussed above, declining economic conditions between the first fiscal quarter of 2007 and the first fiscal quarter of 2008 increase the likelihood that regular adopters face an earnings shortfall (62 percent versus 41 percent). Furthermore, the decrease in the value of many eligible instruments leaves firms with fewer opportunities to select instruments with gains. Still, regular adopters with earnings shortfalls are more than twice as likely than regular adopters without earnings shortfalls to report a gain in the quarter of adoption (46 percent versus 18 percent).

Having identified firms with earnings shortfalls in the adoption quarter leads to the primary questions of this section: (1) Do these firms systematically elect financial instruments with gains? and (2) Is the magnitude of these gains sufficient to meet or beat their earnings forecasts? Two observations stand out from the results tabulated in Table 3, Panel C. First, the rate of MBE is substantially higher among early adopters than regular adopters. Four of the seven early adopters with earnings shortfalls and gains manage to meet or beat the consensus forecast because of the fair value gain. However, only two of the 13 regular adopters achieve this benchmark. If instruments were purposefully chosen to help firms meet or beat their earnings benchmark, the MBE rate should have been higher.

The second observation pertains to the frequency of firms missing the consensus forecast due to the election of instruments with a current quarter loss. All ten early adopters without earnings shortfalls or gains from the election of the fair value option meet or beat their earnings forecasts. In other words, there is a high degree of asymmetry in the MBE rate for early adopters, depending on whether a firm is above or below its earnings forecast. For early adopters, the changes in fair value of elected instruments during the adoption quarter only help firms meet or beat their consensus forecasts, but never hurt them. Among regular adopters, on the other hand, the gains from the fair value option election help only two out of 13 firms overcome an earnings shortfall. Moreover, there are 14 regular adopters who would have met or beaten the consensus forecast without electing instruments under SFAS 159, yet half of them miss their benchmark due to losses from elected instruments.<sup>15</sup>

Contrary to the earnings shortfall analysis in Panel B, the MBE analysis in Panel C indicates that regular adopters did not systematically elect instruments with current quarter gains to avoid negative earnings surprises. Interestingly, had the four early adopters that turned earnings shortfalls into MBEs through fair value gains missed their benchmarks, the overall propensity to meet or beat the consensus forecast among early adopters—as displayed in Table 2, Panel B—would have been only 60 percent instead of the observed 80 percent, putting early adopters in line with regular adopters and non-adopters.

One concern about our research design is that gains/losses from elected instruments do not affect the forecast error. I/B/E/S typically adjusts firms' reported earnings to make them comparable to analysts' forecasts. Since our earnings surprise measure is based on the difference between actual and forecasted earnings per share as reported by I/B/E/S, we need to assess whether I/B/E/S removes the impact of the fair value option from actual EPS. To this end, we examine the change in the difference between I/B/E/S' actual earnings per share and those reported by Compustat after excluding the gain/loss per share attributable to the adoption of the fair value option. We find that the correlation between I/B/E/S EPS and Compustat EPS drops from 0.90 to 0.81 after making the SFAS 159 adjustment. Furthermore, we find that for about 60 percent of all adopters, the difference

There are 32 regular adopters without earnings shortfalls or gains from elected instruments, consisting of 15 firms with earnings shortfalls and no gains, 14 firms without earnings shortfalls and no gains, and three firms without earnings shortfalls but with gains. The 15 firms with earnings shortfalls and no gains by definition cannot overcome their earnings shortfalls. Similarly, the three firms without earnings shortfalls and gains must beat their consensus forecasts. Of the 14 firms without earnings shortfalls and no gains, seven firms meet or exceed their earnings forecasts despite electing instruments with losses, and seven firms do not meet their earnings forecasts because of losses from elected instruments.



between I/B/E/S EPS and Compustat EPS increases after the adjustment. We conclude that the reported earnings and analyst estimates by I/B/E/S are not systematically adjusted to remove the effect of the fair value option. This finding provides support for our research design, namely that earnings surprises from I/B/E/S constitute a valid measure to evaluate whether firms elected the fair value option to opportunistically manage earnings.

#### Firm-by-Firm Analysis

Our evidence so far suggests that systematic opportunistic adoption to improve earnings in the election quarter is limited to early adopters. In this section we take a closer look at firms with earnings shortfalls and whose election choices benefit current earnings.

To assess the magnitude of potential earnings management, we relate the adopters' gains/losses resulting from electing the fair value option to their earnings. To circumvent the problem of negative earnings, we extract an estimate of earnings for each firm from its share price. We use adopters' median quarterly earnings-to-price ratio of 0.015, and for each firm multiply it by its stock price at the end of the adoption quarter. This yields a firm-specific estimate of earnings per share underlying the firm's share price (Extracted EPS) as a basis of comparison with the current quarter gain per share (Gain Per Share):

Current EPS Impact = 
$$100 \times \left( \frac{\text{Gain Per Share}}{\text{Extracted EPS}} \right)$$
. (1)

Current EPS Impact is a simple and transparent measure capturing the relative magnitude of the gain per share as a fraction of typical (or expected) earnings per share.

We compute a comparable measure to evaluate the magnitude of the after-tax transition adjustment to retained earnings:

Future EPS Impact = 
$$100 \times \left(\frac{-\text{Transition Adjustment Per Share}}{\text{Extracted EPS}}\right)$$
. (2)

This estimate of Future EPS Impact serves as a validity check for identifying current gains as an adoption incentive for individual firms. That is, current income statement benefits that are accompanied by large future costs would cast doubt on any claim of opportunism.

In Table 4, we list the 20 firms whose election choices benefit current earnings and who face an earnings shortfall. We also tabulate the seven firms with missing disclosures for gains/losses from elected instruments. The first column presents the firms' forecast errors net of the gains from the fair value option. There is a notable difference between the magnitudes of the forecast errors of early and regular adopters. The largest earnings shortfall among early adopters is \$0.13 per share, but 14 out of 17 regular adopters' shortfalls exceed that amount. The second column displays firms' actual forecast errors (that is, after the net effect of instruments elected under the fair value option). Comparing columns 1 and 2 allows us to identify firms whose election of instruments enable them to substantially reduce or even erase their earnings shortfalls.

Our sample contains three known rescinders of the fair value option: CIT, Colonial Bancgroup, and Frontier Financial (in italics). Regulators determined that these firms' elections were inconsistent with the intent of SFAS 159. It is likely that actual earnings per share, as reported by I/B/E/S, reflect the rescission decisions. That is, the gains and transition adjustment effects are probably not reflected in actual earnings, which would explain why two of the three firms fall short of their earnings benchmark by just 1 cent per share.

Five additional firms—Jefferies Group, Lehman Brothers, SunTrust Banks, Trustco Bank, and Wells Fargo (in bold)—display certain similarities that cast doubt on their intent of adoption. These similarities include: (1) eliminating earnings shortfalls due to current quarter gains, which are



TABLE 4
Firms with Current Income Statement Benefits

	Forecast Error (in \$)		EPS Impact (in %)		
	Hypothetical	Actual	Current Qtr.	Future Qtr.	
	(1)	(2)	(3)	(4)	
Early Adopters					
CIT Group		0.03		55.99	
Citigroup	-0.10	-0.08	2.77	2.60	
Colonial Bancgroup		-0.01		47.37	
Frontier Financial	-0.02	-0.01	2.38	13.12	
Jefferies Group	-0.01	0.03	10.01	0.00	
Lehman Brothers		0.02		-3.74	
SunTrust Banks	-0.13	0.01	11.19	87.51	
Trustco Bank	-0.02	0.03	31.59	79.90	
Umpqua Holdings	-0.08	-0.07	1.28	8.98	
Wells Fargo	-0.06	0.01	13.23	0.00	
Regular Adopters					
Ambac Financial	-5.44	-5.44	2.43	-28.30	
BB&T	-0.04	-0.01	5.70	0.00	
Bear Stearns		-0.88		0.00	
Centex	-0.34	-0.33	2.82	0.00	
Freddie Mac	-0.55	0.11	115.66	-419.75	
First Horizon National	-0.21	-0.05	73.94	0.00	
Ford		0.29		-6.24	
General Electric		-0.07		0.00	
Indymac Bancorp	-1.69	-1.34	474.42	-15.30	
MetLife		0.04		-5.77	
National City Corp	-0.52	-0.51	6.34	-8.45	
PMI Group	-2.54	-2.19	404.80	-490.84	
Pulte Homes	-2.06	-2.06	1.60	0.00	
Regions Financial	-0.04	-0.03	4.62	0.00	
Sterling Financial	-0.34	-0.32	9.88	0.00	
Synovus Financial	-0.13	0.02	87.84	-0.18	
Wintrust Financial	-0.18	-0.12	10.52	0.00	

This table reports our current earnings management results for a subset of firms electing financial instruments under the fair value option. In particular, it presents early and regular adopters that reported current quarter gains from their elected instruments under the fair value option *and* had pre-adoption earnings that fell below the consensus analyst forecast (20 firms from Panel B of Table 3), as well as firms that did not disclose gain/loss information (seven firms). Column 1 presents the hypothetical forecast error had the firm not benefited from current quarter gains of elected instruments. Column 2 presents the actual forecast error. Columns 3 and 4 present the impact of the gains (current qtr.) and transition adjustment (future qtr.) on earnings relative to normal quarterly earnings. The three firms in italics are known rescinders of the fair value option. The five firms in bold meet or beat their consensus earnings forecasts due to gains from elected instruments. The five firms in bold italics almost meet or beat their consensus earnings forecasts due to gains from elected instruments.



known at the time of instrument election; and (2) incurring little or no cost in terms of future earnings impact. In fact, SunTrust and Trustco avoid realizing large accumulated losses in future income statements by utilizing the fair value option transition adjustment, as shown in column 4. The magnitude corresponds to 87.5 percent and 79.9 percent of expected quarterly earnings, as defined in Equation (2). Trustco has not previously been identified as an opportunistic adopter, but SunTrust was pressured by the SEC to rescind its adoption.

On the other hand, Jefferies Group and Wells Fargo do not gain from negative transition adjustments (but they do not incur a cost either). What stands out about these two firms is that their elected instruments have the highest adoption-quarter returns among all adopters. For the Jefferies Group, we estimate that the gains between the acquisition of those instruments and quarter end constitute an increase of more than 5.5 percent of the value of elected instruments. For Wells Fargo, we estimate the quarterly gain to be less than 0.9 percent. Unlike the other early adopters, Wells Fargo meets or beats its 2006 quarterly consensus earnings forecasts less often than its industry peers on average. This makes it more doubtful that Wells Fargo elected instruments under the fair value option primarily for opportunistic reasons. Finally, of the early adopters with earnings shortfalls and gains from elected instruments, only Citibank and Umpqua Holdings do not experience substantive current income statement benefits, as the magnitude of their income statement benefits from elected instruments is too small. Their forecast errors are almost unaffected, and future loss avoidance is limited.

Among regular adopters with earnings shortfalls and gains from elected instruments, no firms' current and future earnings benefit simultaneously. Five firms—BB&T, Ford, Freddie Mac, MetLife, and Synovus Financial (in bold italics)—almost meet or beat the consensus earnings forecast due to gains from elected instruments. However, the following discussion expands on why it is unlikely that the majority of these firms electing instruments under the fair value option did so opportunistically.

BB&T still misses its consensus forecast, and the gain relative to the value of elected instruments is modest (similar to Wells Fargo's, just below 0.9 percent). Ford does not disclose the gains/losses of its elected instruments. One reason might be that their contribution to the income statement was immaterial. Ford's large earnings surprise of \$0.29 suggests that beating the benchmark is not attributable to fair value gains from elected instruments (its elected instruments would need to have posted a return in excess of 30 percent over the adoption quarter to increase EPS by \$0.29). While Freddie Mac manages to beat its consensus earnings forecast, it also elects to move unrealized gains five times larger from future income statements into current retained earnings, which suggests that income statement management is not Freddie Mac's primary reason for adopting the fair value option.

The remaining two firms, MetLife and Synovus Financial, display characteristics consistent with opportunistic election of instruments. MetLife's characteristics closely resemble those of Lehman Brothers in the early adopter group: neither discloses the gain/loss from elected instruments, both beat their consensus earnings forecast by a reasonably small margin, both make small sacrifices in terms of future earnings, and both firms meet or beat their forecasts in all four quarters of 2006. The transition adjustments per share—for easier comparability with the forecast errors—are \$0.04 for Lehman Brothers and \$0.05 for MetLife. Gains of these magnitudes are large enough to overcome potential earnings shortfalls. Finally, Synovus Financial incurs only a reasonably small cost in terms of future earnings impact in exchange for increasing current EPS by \$0.15 (corresponding to 88 percent of quarterly earnings), converting a large earnings shortfall into a positive earnings surprise.

Taken together, our findings indicate that opportunistic adoption of the fair value option for current gains is concentrated in early adopters with earnings shortfalls. Given the small number of early adopters relative to all adopters, and the fact that only 5 to 8 of 21 early adopters and 2 of 51



regular adopters appear to have benefited current income in a meaningful way, we do not find evidence of widespread opportunistic adoption for current gains.

#### **FUTURE EARNINGS MANAGEMENT**

## **Negative Transition Adjustments to Retained Earnings**

We now turn to the possibility that firms elect the fair value option to move prior unrecognized losses to retained earnings. Such negative transition adjustments help firms avoid recognizing losses in earnings at the time of sale of the instruments. <sup>16,17</sup> In Panel A of Table 5, we find that 52 percent of early adopters elect instruments with negative transition adjustments. The proportion of potential beneficiaries in our sample is substantially smaller than in Henry (2009). She finds that 94 percent of early adopting banks decrease their retained earnings by means of a negative SFAS 159 transition adjustment. Our analysis of future earnings management is consistent with our earlier findings on current earnings management, namely that publicly traded firms in the S&P 1500 are less likely to adopt the fair value option for opportunistic reasons.

The comparison of transition adjustments between early and regular adopters is particularly well suited to shed light on the extent of systematic opportunistic adoption among regular adopters. Early adopters may have had an advantage in opportunistically electing instruments with current quarter gains (they certainly had the benefit of hindsight), but regular adopters likely had the opportunity to elect instruments with greater accumulated losses to benefit future earnings due to the negative impact of the financial crisis. Yet, as shown in Table 5, Panel A, regular adopters are less likely to elect instruments with negative transition adjustments than early adopters (18 percent versus 41 percent). The magnitude of regular adopters' future EPS impact is not systematically larger than that of early adopters, nor is it larger than their own current EPS impact. These observations contradict the hypothesis that regular adopters elect instruments opportunistically to avoid recognizing losses in future income statements.

Although we find no evidence of widespread future earnings benefits, it is possible to identify instances of opportunistic adoption from an asymmetry in the magnitudes of positive and negative transition adjustments in the tails of the distribution. We would expect opportunistic adopters to have large negative transition adjustments, so as to significantly improve future earnings. Consistent with our findings on the direction of the transition adjustment, we find only one adopter with a negative transition adjustment that exceeds 100 percent of normal quarterly earnings, but seven adopters with positive transition adjustments of comparable magnitude.<sup>18</sup>

While firms could also benefit from positive adjustments to retained earnings by lowering leverage ratios and/or increasing capitalization ratios, we find no such evidence in our data. These positive transition adjustments have a negligible impact on leverage and capitalization ratios. The greatest impact on leverage occurs in firms with the lowest leverage ratios, and banks with even the lowest capitalization ratios are well capitalized. Furthermore, our inability to identify firms with an incentive to increase their retained earnings might be attributable to the fact that transition adjustments from remeasuring liabilities at fair value are excluded from the calculation of Tier 1 capital and that typical explicit loan contracts have clauses that shield accounting numbers from any GAAP changes.



Without disclosure on the sale or settlement of elected instruments, we cannot determine the timing of the realization of the benefits from negative transition adjustments. We assume that firms do not sell the elected instruments in the adoption quarter. In other words, firms benefit current quarter earnings only through fair value gains. Our assumption seems reasonable in light of Henry's (2009) evidence that (1) only a minority of adopters acknowledge selling or settling their elected instruments in the adoption quarter; (2) most of those adopters rescinded their adoption; and (3) only five out of 18 early adopters and one out of 47 regular adopters in our sample elect instruments with current quarter gains and a negative transition adjustment simultaneously.

<sup>&</sup>lt;sup>17</sup> In a few cases, firms' future earnings benefit from the election of the fair value option even without a negative transition adjustment. Exelon, for example, was previously required to record unrealized losses in income. The fair value option eliminated the asymmetry in the recognition of gains and losses.

TABLE 5
Transition Adjustments to Retained Earnings

Panel A: Direction of Transition Adjustments

	Early Adopters		Regular Adopters		All Adopters	
	#	<b>%</b>	#		#	%
Positive	7	33.33	21	41.18	28	38.89
No change	3	14.29	21	41.18	24	33.33
Negative	11	52.38	9	17.65	20	27.78
Total	21	100.00	51	100.00	72	100.00

Panel B: Firms with Future Income Statement Benefits

	Forecast Error (in \$)		EPS Impact (in %)	
	Hypothetical (1)	Actual (2)	Current Qtr. (3)	Future Qtr. (4)
Early Adopters				
Abbott Laboratories	0.12	0.02	-11.56	14.66
Bank of America	0.00	0.00	-0.47	6.53
CIT Group		0.03		55.99
Citigroup	-0.10	-0.08	2.77	2.60
Colonial Bancgroup		-0.01		47.37
Frontier Financial	-0.02	-0.01	2.38	13.12
Goldman Sachs	4.72	1.90	-93.19	3.62
Merrill Lynch	0.49	0.37	-9.62	17.28
SunTrust Banks	-0.13	0.01	11.19	87.51
Trustco Bank	-0.02	0.03	31.59	79.90
Umpqua Holdings	-0.08	-0.07	1.28	8.98
Regular Adopters				
AIG	-0.96	-1.32	-55.21	68.68
Bank of Hawaii	0.26	0.26	0.28	7.57
Bank of New York Mellon	0.03	0.00	-5.50	5.03
E Trade Financial	-0.06	-0.12	-98.09	320.47
First Financial Bancorp	0.00	0.00	0.00	10.58
Independent Bank	-0.07	-0.15	-50.23	41.86
United Parcel Service	-0.06	-0.06	-0.09	1.42
Wachovia	-0.68	-0.69	-2.51	4.77
Zions Bancorp	-0.08	-0.09	-0.82	15.71

This table reports the results from our future earnings management analyses. Panel A presents the impact on retained earnings from financial instruments elected under the fair value option, grouped by the direction of the transition adjustment. Panel B lists the subset of firms that report negative transition adjustments to retained earnings from the adoption of the fair value option. Column 1 presents the hypothetical forecast error had the firm not benefited from current quarter gains of elected instruments. Column 2 presents the actual forecast error. Columns 3 and 4 present the impact of the gains (current qtr.) and transition adjustment (future qtr.) on earnings relative to normal quarterly earnings. The three firms in italics are known rescinders of the fair value option. We also call attention to four firms that disclose reasons for adoption that are seemingly inconsistent with the spirit of the fair value option. The three firms in bold are early adopters and the firm in bold italics is a regular adopter.



#### Firm-by-Firm Analysis

In Panel B of Table 5, we list all firms with negative transition adjustments. There are no instances in which firms with negative transition adjustments go from meeting or beating the consensus earnings forecast to missing it. Since we are unable to link negative transition adjustments to a particular quarter in the future, it is tempting to label all adopters with a large future gain as opportunistic adopters. After all, losses shifted into current period retained earnings upon election of the fair value option bypass future income statements.

However, relative to current gains, it is more difficult to substantiate opportunistic adoption for future gains. Even the adopters themselves may not know in which future quarter the accumulated losses will be realized (and cannot predict future changes in the value of these instruments). A large positive impact on future earnings is not sufficient to identify a firm as an opportunistic adopter—the probability of committing a type I error would be unacceptably high. A negative earnings surprise in the adoption quarter also does not help rule out the possibility of opportunistic adoption. Firms with an earnings surplus or a deficit might sacrifice some of their current earnings for a gain in the future (reining in earnings and taking big baths). <sup>19</sup> Therefore, we are limited to examining the disclosures of firms with negative transition adjustments.

Not surprisingly, the most common reasons cited for electing the fair value option are reducing volatility in reporting earnings and decreasing the accounting costs associated with SFAS 133 (although it is often difficult to differentiate between these two). Six regular adopters do not provide any reasons for adoption, which constitutes a violation of the standard's disclosure requirements. However, aside from the three rescinders, we identify an additional three early adopters (Trustco, SunTrust, and Abbott Laboratories) and one regular adopter (Bank of Hawaii) who disclose reasons that are seemingly inconsistent with the spirit of the fair value option.

Trustco cites an earnings management motivation in its Form 10-Q for the first quarter of 2007: "Recording the unrealized losses on these securities directly to undivided profits as part of the transition adjustment will benefit net income because the loss will not be realized in the income statement when the security is sold." Despite this disclosure, as well as being flagged as beating its current earnings forecast with the aid of gains from elected instruments and recording a sizeable negative transition adjustment, Trustco Bank faced no regulatory pressure to rescind its fair value option election. Similarly, Bank of Hawaii discloses it elects the fair value option "to achieve balance sheet management flexibility," and SunTrust refers to "accelerating the deployment of the various asset/liability strategies."

In its Form 10-Q for the first fiscal quarter of 2007, Abbott Laboratories discloses the following information: "Abbott is required to dispose of the [Boston Scientific] stock no later than October 2008. Abbott remains subject to a limitation on the amount of shares it may sell in any one month through October 2007 and Abbott will not reacquire the Boston Scientific shares it sells." Abbott's investment in Boston Scientific reduces its first quarter 2007 earnings by \$149 million. Despite this loss from electing the fair value option, Abbott still beats its consensus earnings forecast in the adoption quarter. Furthermore, the fair value option enables Abbott to record a \$297 million unrealized loss on the Boston Scientific stock in retained earnings, thereby bypassing future income statement recognition.<sup>20</sup>

Anecdotal evidence supports our conjecture on Abbott's adoption of SFAS 159 for earnings management reasons. Matthew Dodds, analyst at Citigroup, stated in 2009 that he was concerned about the earnings quality at Abbott over the previous four years (Cendrowski 2009).



Abbott, Merrill Lynch, and Bank of New York Mellon fit the story of reining in earnings; AIG, E Trade, and Independent Bank fit the story of taking a big bath.

Not all firms' disclosures are as straightforward as those previously discussed. CIT Group (a rescinder) discloses in its April 2007 Form 8-K: "We applied the standard, which provides for elective fair value accounting on selected financial instruments, to fixed high-coupon debt securities, which were hedged in accordance with SFAS 133, resulting in an \$85.3 million direct after tax reduction of retained earnings. In response to our tender offer, a portion of these securities were refinanced near the end of the quarter with lower cost floating rate debt." CIT's adoption reason at first appears to be in the spirit of the fair value option, namely to reduce the cost of hedge accounting. However, CIT uses hedging under SFAS 133 more as a description of which instruments it elects rather than as an adoption reason. CIT's refinancing of elected instruments invalidates the cost-saving argument of replacing hedge accounting under SFAS 133.

As is evident from these cases, disclosure of the holding period for elected instruments can convey valuable information about firms' true underlying adoption reasons. However, many of those honest disclosers were forced to rescind their elections, which raises the question whether those adopters were relying on inattention on the part of financial statement users or truly did not understand the intent of the fair value option. More sophisticated opportunistic adopters may better conceal their true intentions by managing their disclosures (e.g., by not disclosing the immediate sale of elected instruments, strategically electing multiple instruments, not disclosing gain or loss information, or using boilerplate language in the discussion supporting why they elect the fair value option).

#### **CONCLUSION**

SFAS 159 granted firms the option to elect individual financial assets and liabilities for fair value measurement. Its issuance drew widespread concern about opportunistic adoption choices. As documented by Henry (2009), evidence from a sample of early adopting banks suggests that those concerns were indeed justified.

We expand the analysis of fair value option elections on two dimensions. First, we study the incidence of opportunistic adoption in large, publicly traded firms across all industries. Second, we extend the sample to include the adoption choices by regular adopters. To this end, we hand-collect information on the adoption choices for all member firms of the S&P 1500 Index. We identify 21 early adopters and 51 regular adopters, the majority of which are not commercial banks. Expanding the sample allows us to obtain a more complete picture about the aggregate impact of opportunistic adoption of the fair value option.

Our evidence suggests that earnings management is a plausible explanation for only a small number of individual firms electing the fair value option. Contrary to the public perception of and concern over systematic opportunistic adoption, as shaped by media coverage and academic research, we conclude that current and future earnings management from opportunistic adoption of the fair value option is negligible. The differences between our findings and those of Henry (2009) are fully attributable to our sample differences. As such, our findings are consistent with prior evidence in Ayres (1986) that income-increasing choices are concentrated among early adopters.

There are two alternative interpretations of the limited number of opportunistic elections among regular adopters. First, early action by regulators and the media may have effectively curtailed widespread opportunistic election decisions by regular adopters. However, in light of the numerous non-rescinding early adopters in Henry's (2009) sample whose election choices closely resemble those of the rescinders, SunTrust's refusal to rescind its adoption despite pressure from the SEC, and the open acknowledgement of opportunistic election by Abbott, Bank of Hawaii, and Trustco Bank without consequences, this alternative interpretation does not appear to be comprehensive.



Second, the economic environment deteriorated between the SFAS 159 effective dates for early adoption and regular adoption. For our current earnings management test, the financial crisis may have rendered the fair value option ineffective for regular adopters, because of the absence of unrealized gains and/or the magnitude of earnings shortfalls. At the same time, the onset of the financial crisis strengthens our future earnings management test, as it provided firms with greater opportunities to move significant accumulated unrealized losses on SFAS 159-eligible instruments from future income statements into current period retained earnings.

One avenue for future research is to further investigate the election of financial instruments from a valuation perspective. Prior studies show that there is considerable discretion in recognition, disclosure, and presentation of fair value estimates (e.g., Beatty and Weber 2006; Hilton and O'Brien 2009). Many of the assets and liabilities eligible under the fair value option do not have observable inputs and are traded in illiquid or inactive markets. As the majority of SFAS 159-eligible instruments fall within the Level 2 and Level 3 categories of the fair value hierarchy, their fair value estimates rely to a greater extent on subjective and manipulable inputs. In other words, election of the fair value option may afford firms greater income statement and balance sheet flexibility in the future without raising red flags through gains or transition adjustments in the quarter of adoption.

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#### APPENDIX A

# American International Group, Inc. Excerpt from Footnote 3 of the Form 10-Q filed May 8, 2008

The following table presents the gains or losses recorded during the three-month period ended March 31, 2008, related to the eligible instruments for which AIG elected the fair value option and the related transition adjustment recorded as a decrease to opening shareholders' equity at January 1, 2008:

(in millions)	January 1, 2008, Prior to Adoption	Transition Adjustment upon Adoption	January 1, 2008, after Adoption	Gain (Loss) Three Months Ended March 31, 2008
Mortgage and other loans receivable	1,109		1,109	68
Financial Services assets: Trading securities (formerly	39,278	5	39,283	(433)
available for sale) Securities purchased under agreements to resell	20,950	1	20,951	268
Other invested assets	321	(1)	320	10
Short-term investments	6,969	(1)	6,969	24
Deferred policy acquisition costs	1,147	(1,147)	2,5 25	
Other assets	435	(435)		
Future policy benefits for life, accident, and health insurance contracts	299	299		
Policyholders' contract deposits	3,739	360	3,379	115
Financial Services liabilities:	,		ŕ	
Securities sold under agreements to repurchase	6,750	(10)	6,760	(296)
Securities and spot commodities sold but not yet purchased	3,797	(10)	3,807	21
Trust deposits and deposits due to banks and other depositors	216	(25)	241	(15)
Long-term borrowings	57,968	(675)	58,643	(973)
Other liabilities	1,792		1,792	(33)
Total gain or loss for the three- month period ended March 31, 2008				(1,244)
Pre-tax cumulative effect of adopting the fair value option		(1,638)		
Decrease in deferred tax liabilities		526		
Cumulative effect of adopting the fair value option		(1,112)		



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