

# **Historical-cost or Fair-value Accounting: Analysis of the Reclassification of Unrealized Holding Gains and Losses for Marketable Securities**

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### **ABSTRACT**

This paper studies the reclassification of unrealized holding gains and losses (UHGL) for available-for-sale securities and cash-flow-hedge. These gains and losses, which have previously been recognized on a firm's balance sheets, become part of the reported net income at the time of reclassification. We find that UHGL, when recognized by firms as an addition to retained earnings, are priced by investors similar to other comprehensive income items which bypass the income statement. However, we also document a significant positive correlation between the amount of reclassification and firms' stock prices. When a firm reclassifies UHGL into earnings, the reclassified amount on average receives a 3-times price-multiple. This is intriguing given that such gains and losses have been recognized in banks' previous financial statements. Further analysis of reclassification also reveals that firms reclassify substantially more gains than losses into the income statement for available-for-sale securities, after controlling for the previous balance of UHGL. In contrast, the reclassified amounts of gains and losses are roughly even for cash-flow hedge. Analysis of future stock return indicates that investors may be misled by the inflated amount of reclassified net gains for available-for-sale securities.

**Key words:** Available-for-sale; Cash-flow Hedge; Reclassification; Earnings Management; Stock Returns

## 1. INTRODUCTION

Since 1994 U.S. firms have been required to use the fair value accounting method to measure their holdings of marketable securities. In 1998 the Financial Accounting Standards Board (FASB) further required firms to disclose a considerable amount of market-related information in the footnotes of their financial reports. Such an accounting method was extended in 2001 to cover the measurement of hedging activities. In this study we compile a dataset of the disclosed details regarding the Unrealized Holding Gain and Losses (UHGL) account of the top U.S. banks. We examine the market valuation and firms' activities associated with the reclassification of unrealized gains and losses from available-for-sale securities as well as cash-flow-hedge.

The question of how to account for marketable securities and hedging activities arises from one of the core issues in financial accounting. Our current accounting system was primarily built on the principle of historical-cost, reflecting the accounting profession's emphasis on reliability as a primary property of accounting information. On the other hand, accountants have also been constantly searching for an alternative measure that might provide more relevant, albeit less reliable, information. Market value has become the most promising candidate for such an alternative measure.

Proponents of the fair value accounting method argue that market price provides the most relevant, comprehensive, and timely measure of their intrinsic value. Former Securities and Exchange Commission (SEC) Chairman Breeden advocated a move to fair value accounting for financial institutions as well as all publicly-held companies, and stated his belief that market-based information is the most relevant financial data attribute (testimony before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, September 10, 1990). Opponents of the

fair value accounting method, however, are concerned about the usefulness and the lack of reliability of such measures (e.g., Wallison 2008, Forbes 2008).

After a long and heated debate, the Financial Accounting Standards Board (FASB) adopted the fair value accounting method by issuing the Statement of Financial Accounting Standards 115. However, the new set of rules is mixed. For securities classified as “held-to-maturity,” historical cost accounting still applies. Mark-to-market accounting, on the other hand, applies to all “trading” securities. For securities which are neither “held-to-maturity” nor “trading,” which often represent the major portion of a firm’s security holdings, a mixed method of mark-to-market and historical cost accounting is used. For this class of securities, classified as “available-for-sale,” market value is used as the measurement base on the firm’s balance sheet. However, unrealized holding gains and losses of available-for-sale securities bypass the income statement and directly debit/credit the equity section of the balance sheet. In addition, to preserve the integrity of the income measure based on historical cost accounting, firms are required to “reclassify” into the income statement the gains and losses previously recognized in the equity section when the securities are finally sold. In 2001 a similar accounting method was also applied to hedging activities with the issuance of SFAS 133, “Accounting for Derivative Instruments and Hedging Activities.”

The above method of accounting for marketable securities represents a major departure from the traditional historical-cost based accounting system. The fact that the applicable accounting method changes with the “intention” of the holder of the securities reflects the idea that different aspects of a security (e.g., current market price versus future cash flows) have different relevance or usefulness in different situations. However, such an idea is often met with a high degree of skepticism (or criticism) as it is often believed that, at least for assets such as

marketable securities which have readily available markets, price incorporates all relevant information for equity investors. Many consider the convoluted accounting method for available-for-sale securities to be the result of a political compromise, rather than rigorous economic reasoning. As a result, the above set of accounting rules has been widely criticized as “psychiatric accounting.”<sup>1</sup>

A crucial feature of accounting for available-for-sale securities and cash-flow hedge is the reconciliation of measuring earnings based on historical cost with measuring book value based on fair value via the “reclassification” of previously recognized unrealized gains and losses into current earnings. This provides an interesting setting with both the mark-to-market balance sheet information as well as historical cost income information for the same set of financial instruments. Such a setting enables us to examine how various aspects of the same security holdings, such as current market price and historical net income, might be used by investors in making equity investment decisions. It also allows us to examine how firms react and readjust their selling and hedging activities in this situation.

We study the reclassification activities of top U.S. banks whose unrealized holding gains and losses often represent a significant portion of their operations. A couple of interesting findings emerge. First, the market price exhibits a positive correlation with the amount of unrealized holding gains and losses from marketable securities similar to other components of comprehensive income items. In other words, when unrealized holding gains/losses are recognized as part of the retained earnings, even though such recognition bypasses the income statement, investors react to such information and treat such UHGL similar to other comprehensive income items such as gains and losses from foreign currency translation adjustments. However, we also find a significant positive correlation between stock price and

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<sup>1</sup> See, for example, “BankAmerica Disaster Arose from a Lack of Standards,” *Wall Street Journal*, October 27, 1998.

the reclassified amount of UHGL. On average, when UHGL is reclassified into earnings, such reclassified amount receives a price-multiple around 3. The correlation between the reclassified amount and stock price is stronger for high-growth firms.

The fact that reclassification correlates positively with stock price, together with the observation that stock price and earnings are often used in compensation contracts, suggests that firms may have incentive to manipulate reclassification opportunistically. Any evidence on such manipulation, in turn, will further support the conjecture that reclassification gains and losses, which are calculated based on historical cost, matter for valuation and/or performance evaluation. We document that firms reclassified significantly more holding gains than losses for available-for-sale securities. The amount of reclassified net gains is disproportional to the amount of unrealized holding gains and losses available at the beginning of the fiscal year. In contrast, the reclassified amount from cash-flow-hedge is more proportional to the UHGL balance. After controlling for the amount of UHGL, the residual amount of reclassification for cash-flow-hedge is insignificantly different from zero. This difference between available-for-sale securities and cash-flow-hedge is consistent with the significantly greater cost associated with managing the timing of UHGL reclassification for cash-flow-hedge. Our analysis further reveals that firms tend to reclassify more gains into earnings when not doing so would result in an earnings decrease from the previous year. Such reclassification does not appear to be driven by tax, capital maintenance or cash shortage considerations.

The documented 3-times price-multiple for the reclassified amount of gains and losses seems rather intriguing, given that such gains and losses have been recognized in firms' prior statements. Granted that a positive reclassified amount might provide a favorable signal regarding the value of securities above and beyond what is reflected by their fair value on the

balance sheet, or even regarding the profitability of the firm as a whole, a 3-times multiple seems high. This is particularly so considering the fact that the accounting treats such reclassification as a zero-sum transfer among different components of the retained earnings. That is, for an accounting's perspective, reclassification does not affect shareholders' equity.

Investor mispricing might be a contributing factor to the high price-multiple, considering the fact that there is very limited disclosure regarding what income statement accounts these gains and losses are reclassified into. Since UHGL that is reclassified into interest income are more likely to receive a high multiple compared to those that are reclassified into more transitory items such as realized gains and losses (we will discuss this in more details later), it is conceivable that investors are not be able to properly adjust their valuation for such reclassification and hence attach an incorrect valuation multiple to the reclassified amount.

Analysis of future stock returns further uncovers evidence suggesting that investors may be misled by the amount of reclassified gains from available-for-sale securities in net income. Each year we sort firms into three groups based on the amount of reclassified gains and losses from available-for-sale securities relative to the amount of net income. During our sample period firms with more reclassified gains and losses tend to underperform firms with relatively low amounts of reclassified gains and losses by roughly 3.05% in the subsequent year. For the subset of firms with relatively high-growth, this return difference equals 4.45%.

Overall, our paper provides evidence on reclassification of unrealized gains and losses as well as the association between such reclassified UHGL and the stock price. The paper makes several contributions to the literature. To our best knowledge, this paper is the first attempt to document evidence concerning the reclassification of UGHL for available-for-sale securities and cash-flow-hedge. Prior studies on fair value accounting focus primarily on the issue of reliability

(e.g., Barth 1994, Ahmed and Takeda 1995, Barth, Beaver and Landsman 1996, O’Hanlon and Pope 1999, Hirst, Hopkins and Wahlen 2004, Biddle and Choi 2006, Hodder, Hopkins and Wahlen 2006, Chambers, Linsmeier, Shakespeare, and Sougiannis 2006, Penman 2007) Our analysis, on the other hand, focuses on the rationale for allowing the mandated accounting methods to vary with firm intention. Since all three categories (trading, available-for-sale, and held-to-maturity) cover the same type of asset (i.e., marketable securities), difference in reliability is not a primary cause of the difference in accounting treatment. Instead, the issue of difference in relevance is our primary focus. The relevance issue becomes the center of a heated debate regarding the role of fair value accounting in the current financial crisis (Turner 2008, Veron 2008, Laux and Leuz 2009).<sup>2</sup>

Our findings suggest that investors react to both unrealized holding gains and losses information (even though such information bypasses the income statement), *and* to the subsequent reclassification of such UHGL into earnings. This evidence, together with the documented excessive amount of reclassified gains, supports the hypothesis that, beside fair value information, gains and losses calculated based on historical cost provides useful information for valuation and/or performance evaluation. However, the subsequent decline in stock price for firms with large amount reclassified gains also suggests that investors may be misled and attach unduly high multiple to the reclassification portion of net income. Such a finding calls into question the appropriateness of keeping the income statement on a historical-cost basis while presenting fair-value information on the balance sheet. More disclosure regarding the exact amounts of UHGL that are reclassified into different income line-items,

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<sup>2</sup> Even though SEC does not share such a view, the Financial Accounting Standards Board (FASB) did subsequently address this concern by relaxing the mark-to-market accounting rule. For details, see *CNNMoney.com*, December 30, 2008, “SEC: Bank Failures not due to Fair-value Rule” and *Reuters*, April 2, 2009, “Mark-to-market Rule Set to Lose a Few Teeth.”

especially those with different level of persistence, seems to be needed in order for investors to make proper valuation adjustments for reclassification.

## **2. Related Research**

Accounting professionals have long been studying the properties of alternative measurements, such as fair value, as potential addition or replacement for the historical-cost numbers. In 1979 FASB issued SFAS 33 requiring firms to disclose current cost estimates for a restricted set of assets, principally inventory and property, plant and equipment. Academic studies examining such current cost estimates provide weak results regarding their ability to explain share prices (Beaver and Landsman 1983, Beaver and Ryan 1985, Bublitz et al. 1985, Lobo and Song 1989, Hopwood and Schaefer 1989, among others). Several studies conclude that errors in estimating the SFAS 33 amounts account for the generally insignificant findings regarding their incremental explanatory power. Consistent with the concerns raised by this research, FASB eliminated the disclosure requirement.

In 1991 FASB issued SFAS 107 requiring disclosure of fair value estimates for financial instruments. It is generally believed that fair value estimates of financial instruments are likely to be more reliable than those based on historical cost because many instruments are traded in active markets. Consistent with this belief, studies on such fair value disclosures generally conclude that the fair value estimates provide significant incremental explanatory power for stock prices. For instance, Barth (1994) studied the fair value estimates of banks' investment securities and concluded that such estimates provide significant explanatory power beyond that provided by historical cost. Barth, Beaver, and Landsman (1996), Nelson (1996), Eccher, Ramesh, and Thiagarajan (1996), and Venkatachalam (1996), among others, studied other fair

value estimates reported under SFAS 107, such as loan value and derivative, and generally found significant results.

Supported by the above documented correlation between fair value estimates and stock price, FASB issued SFAS 115 and 130 requiring firms to fully recognize fair value estimates in their financial statements. Studies on the value relevance of the comprehensive income items provide mixed results. Dhaliwal, Subramanyam, and Trezevant find that, pre SFSA 130, comprehensive income does not have a stronger association with stock returns than net income. Using a sample of U.K. firms, O'Hanlon and Pope (1999) find that other comprehensive income is not priced prior to the required reporting of comprehensive income. On the other hand, Biddle and Choi (2006) find that comprehensive income dominates other measures of income in explaining equity pricing. Chambers, Linsmeier, Shakespeare, and Sougiannis (2006) show that other comprehensive incomes, as reported by firms after SFAS 130, are priced dollar-for-dollar by investors. Consistent with the findings of Chambers, Linsmeier, Shakespeare, and Sougiannis (2006), we also find that UHGL are priced by investors as transitory income (Ohlson 1999).<sup>3</sup> However, unlike other transitory income items, these unrealized gains and losses receive a significant positive price-multiple when they are reclassified into reported earnings. Although this finding provides certain support for the differential accounting treatment for seemingly similar financial instruments, it also highlights the distinctive possibility of investor mispricing due to the reclassification of UHGL into income accounts with high perceived persistency.

Our study also relates to the literature on the earnings management activities of banks. Prior studies have documented evidence suggesting that banks manage their earnings for the

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<sup>3</sup> Barth (1994) also calculates the fair value gains and losses based on banks' fair value disclosures prior to 1990. However, since the amount of the "reclassified" portion of realized earnings was not available, her measure of fair value gains and losses based on changes in unrealized gains and losses is noisy. Another key difference between this study and Barth (1994) is that her study examines held-to-maturity securities.

purpose of tax planning, regulatory capital planning, and financial reporting planning (e.g., Moyer 1990, Scholes, Wilson, and Wolfson 1990, Clinch and Magliolo 1993, Wahlen 1994, Beatty, Chamberlain and Magliolo 1995, and Collins, Shackelford, and Wahlen 1995). Our study provides evidence regarding the “cherry picking” behavior associated with the reclassification of marketable securities. Since the amount of unrealized holding gains and losses have already been recognized in prior financial reports, it is surprising to observe such strong earnings management behavior with respect to this data item. We find that such manipulation does not appear to be motivated by capital-ratio, tax, or cash shortage considerations. Instead, the need to manage the amount of reported earnings appears to be the main cause. This finding suggests that even though unrealized holding gains and losses are disclosed in the shareholders’ equity section, the reported net income numbers continue to be used in contracts which govern employee compensation and other activities of the firm (such as external financing).

### **3. HYPOTHESIS DEVELOPMENT AND RESEARCH DESIGN**

Reclassification (RECL) occurs when certain amount of the unrealized holding gains and losses which have been previously recognized on a firm’s balance sheet are “reclassified” and recognized in the income statement. For example, when a firm sells some of its available-for-sale securities, unrealized gains and losses associated with these securities will be reclassified as realized gains and losses on the income statement. Similarly, for cash-flow hedge, recognition of reclassified gains and losses mostly occurred when the corresponding cash-flow hedge was utilized, restructured, or expired.

It is important to recognize that, from an accounting perspective, reclassification does not affect the total amount of shareholders’ equity. It is simply a “re-recognition” of what has been

recognized in the shareholder equity section into the income statement. To see this more clearly, consider the benchmark case where no reclassification takes place during year  $t$ . Let  $RE_t$ ,  $NI_t$ , and  $OCI_t$  denote the retained earnings, reported net income, and other comprehensive income respectively. Assume that

$$RE_t = RE_{t-1} + NI_t + OCI_t$$

Now, suppose certain amount of unrealized holding gains and losses (UHGL) are reclassified into earnings as a result of the sales of available-for-sale securities. Let  $RECL_t$  denote the amount of reclassification. Such reclassification would decrease the other comprehensive income adjustment section of retained earnings dollar-for-dollar. At the same time,  $RECL_t$  will increase the amount of reported net income. Therefore, the total amount of comprehensive income (CI) equals

$$CI'_t = NI'_t + OCI'_t = (NI_t + RECL_t) + (OCI_t - RECL_t) = CI_t$$

where  $CI'_t$ ,  $NI'_t$ ,  $OCI'_t$  denote the amounts of comprehensive income, net income, and other comprehensive income *after* reclassification. That is, reclassification merely shifts certain amount from the other comprehensive income to reported income, the total amount of comprehensive income stays unchanged.

### **3.1. Hypothesis Development**

Once we understand how reclassification shifts income among various sections of comprehensive income, it is easier to differentiate the various views regarding the valuation implication of RECL.

### 3.1.1. Valuation hypotheses

As we mentioned earlier, many believe that the convoluted accounting method for available-for-sale securities is merely the outcome of a political compromise. Even though the fair value information captures as much value relevant information for available-for-sale securities as for trading securities, the changes in fair value are allowed to bypass the income statement in order to reduce the volatility of the reported earnings. If that is the case, then reclassification will not provide any additional information for valuation above and beyond what their fair values. That is,

*H1: If fair value captures all relevant information, then the book value of securities will be highly correlated with stock price. In contrast, reclassification will not affect stock price.*

The above view, at least in theory, is not shared by FASB. As can be seen from the accounting rule for held-to-maturity securities, FASB seems to believe that, for securities held for purposes other than trading, historical cost and the income measure calculated based on historical cost provides more relevant information than market price. This reflects the opinion of many accounting professionals who believe that for assets engaged in long term operation, short term price fluctuation ceases to be relevant. However, it is not clear how this argument can be applied to a liquid asset such as marketable security. Note that under SFAS 115 marketable securities are valued at fair value on the balance sheet. Although such fair value estimates can be noisy and inaccurate, it is not clear how earnings calculated based on old historical cost number can provide a systematic indication of how fair value estimates deviate from “true”, or “fundamental” values. Nonetheless, it remains an empirical question of the extent to which reclassification can add positively to firm value above and beyond the fair value information of marketable securities.

*H2: Reclassified provide useful information to investors above and beyond the fair value information on the balance sheet.*

### **3.1.2. Mispricing hypothesis**

Another possible cause for reclassification to be positive correlated with stock price has to do with the way UHGL are reclassified. As discussed in Ryan (2007), reclassification of UHGL can occur in three ways other than through the sale of securities. They are:

- a. By transferring available-for-sale securities to trading;
- b. By recording other-than-temporary impairment write-downs;
- c. Through the passage of time, due to the required use of amortized cost interest that is different from fair value interest under SFAS 115. For example, if an unrealized gain occurs on an available-for-sale security, then, -- even in the absence of sale, impairment, or transferring to trading -- the gain is “realized” over the life of the debt security through amortized cost interest that exceeds fair value interest.

Compared to (a) and (b), (c) is more pervasive. This complication regarding the exact channel through which UHLG are reclassified into earnings significantly increase the possibility of mispricing. As we know, investors generally attach a larger multiple to line items such as interest income compared to line items such as realized gains and losses. Under SFAS 115, firms are not required to break down the total amount of reclassification by income statement line items. Investors are thus left in the dark as to how much earnings in each income categories come from reclassification. Therefore, unless UHGL are all reclassified into separate line-items such as impairment write down or realized gains and losses which are clearly transitory, it is

conceivable that investors do not adjust for the reclassified gains and losses properly, and apply unduly high multiple to RECL.

*H3: Any association between RECL and stock price may be partially due to investor mispricing.*

### **3.1.3. Reclassification management hypothesis**

Besides valuation, information based on historical cost such as reclassification may be useful for other purpose, such as performance evaluation. Given that reported earnings, not comprehensive incomes, are often used in performance measures, managers may have incentive to behave opportunistically with the reclassification of UHGL. That is,

*H4: Managers may manipulate RECL to increase reported earnings and/or meet earning targets.*

Any evidence on such manipulation, in turn, will further support the conjecture that reclassification gains and losses, which are calculated based on historical cost, matter for valuation and/or performance evaluation. We perform the following tests the above conjectures regarding pricing of RECL and firms' practice associated with reclassification.

## **3.2. Research Design and Tests**

### **3.2.1. Price Association Test**

To examine how investors react to the information regarding unrealized holding gains and losses, we perform several tests. In the first set of tests we associate UHGL and RECL with the market price of stocks. Specifically, we estimate several variations of the following regression model derived in Ohlson (1995):

$$P_t = \alpha + \beta_1 BV_t + \beta_2 CI_t$$

where  $BV_t$  and  $CI_t$  represent the book value and comprehensive income of the firm.  $P_t$  is the market price of the stock. To examine whether unrealized holding gains and losses are associated with stock price, we decompose book value into three parts: the amount of unrealized holding gains and losses (UHGL), the book value of the associated securities ( $BV^{afs}_t$ ), and the remaining book value for other net assets ( $BV^{other}_t$ ). Similarly, we also decompose comprehensive income into three parts: earnings excluding the reclassification amount ( $E^{other}_t$ ), the amount of new unrealized holding gains and losses arise during the current year ( $CUGL_t$ ), and other comprehensive income items ( $OCI_t$ ). RECL is also included in the following regression:

$$P_t = \alpha + \beta_1 BV^{other}_t + \beta_2 BV^{afs}_t + \beta_3 UHGL_t + \beta_4 E^{other}_t + \beta_5 CUGL_t + \beta_6 OCI_t + \beta_7 RECL_t \quad (1)$$

A finding of  $\beta_3 > 0$  and  $\beta_7 = 0$  would be consistent with the prediction of Hypothesis 1. In contrast, if  $\beta_3 > 0$  and  $\beta_7 > 0$  would provide support for Hypothesis 2.

### 3.2.2. Reclassification test

As discussed in Ryan (2007), firms often manage their earnings through reclassification via realizing gains and losses out of proportion with the level of unrealized gains and losses. Accordingly, we test the existence of earnings reclassification by comparing RECL with the beginning balance of unrealized holding gains and losses.

In addition, we also compare the distribution of RECL for available-for-sale securities and cash-flow-hedge. Although different in nature, both available-for-sale and cash-flow-hedge are securities with rather liquid markets. Both securities are subjects to similar market shocks

which affects their unexpected returns. However, there are two important differences between the two. (1) Unlike available-for-sale securities, cash-flow-hedge usually involves relatively less upfront investment. This, together with the possibility of having a shorter duration, implies that UHGL from cash-flow-hedge are more likely to exhibit symmetric split between gains and losses compared to UHGL of available-for-sale securities. Thus, in comparing the two, we need to carefully control the balance of UHGL. (2) There is significant difference in the costs associated with manipulating the time of reclassification. For available-for-sale securities, reclassification can be triggered by simply selling the right securities. However, reclassification of UHGL for cash-flow-hedge usually occurs when hedges are terminated, possibly through disposal or non-occurrence of the hedged item. This means that changing the timing of the cash-flow-hedge reclassification involves considerably higher operational cost, compared with the reclassification of available-for-sale securities. Such as difference suggests that, *ceteris paribus*, we would expect more earnings management behavior associated with the reclassification of available-for-sale securities compared with cash-flow-hedge.

### **3.2.3. Stock return test**

To test possible investor mispricing, we group firms based on the amount of reclassified gains and losses relative to the total amount of reported earnings. We then track and compare the subsequent stock returns for the different groups of firms.

## **4. SAMPEL AND DATA**

Our analysis focuses on top U.S. commercial banks whose unrealized security holding gains and losses are usually significant. We obtain basic accounting and market valuation

information regarding our sample firms from the Compustat and CRSP datasets. Information regarding the amount of, as well as changes in, the unrealized holding gains and losses is hand-collected from footnote disclosures of banks' annual reports. In the Appendix we provide some disclosure samples regarding the other comprehensive income components of available-for-sale securities and cash-flow hedge. Because of the considerable cost involved in the data collection process, we restrict our final sample to the top U.S. commercial banks traded on NYSE, AMEX and NASDAQ.

Firms are required by SFAS No. 130 to report other comprehensive income items after December 15, 1997. Our sample period covers the nine fiscal years from 1998 to 2006.<sup>4</sup> We sort all U.S. commercial banks (covered by the Compustat and CRSP datasets) based on the amount of total assets in 1998, and collect the holding gains and losses data for the top 200.<sup>5</sup> The market capitalization of the 200 banks ranges from \$50 million to \$230 billion. This gives us a good coverage of large and small banks without over-exposure to Nano-cap stocks. As a sensitivity check we repeat our tests with the top 100 banks. All of our results hold.

SFAS 138, "Accounting for Certain Derivative Instruments and Certain Hedging Activities," became effective for fiscal years beginning after June 15, 2000. Therefore our data on unrealized gains or losses associated with cash-flow-hedge is only available for fiscal years 2001 to 2006. Of the initial 200 sample firms, 13 banks (with approximately 5.5% of total firm-year observations) did not provide any information regarding the reclassification of unrealized gains or losses. Our final sample contains 1,297 firm-year observations with non-missing unrealized holding gains and losses data.

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<sup>4</sup> Coverage of the current Compustat dataset ends at fiscal year 2006.

<sup>5</sup> We do not update our sample each year as the list of top 200 changes. Therefore we avoid possible hindsight bias in analyzing the changes in unrealized holding gains and losses.

Some basic statistics about our sample firms are presented in Table 1. SIZE is the logarithm of the market capitalization at the end of the fourth month after the fiscal year ends. The median sample size equals approximately \$700 million. The average amount of unrealized holding gains and losses (UHGL) equals about 8 cents per share, with significant cross-section variation (standard deviation 0.69). One possible economic reason for the finding of a positive average UHGL is that the interest rate decreased steadily during our sample period. Prior to 2001, UHGL represents the total amount of unrealized holding gains and losses from available-for-sale securities. Starting in 2001, UHGL also includes the amount of unrealized gains and losses from cash-flow hedge.

Recall that reclassification (RECL) occurs for four different reason: security sales, transferring between categories, impairment, and through the interest recognition based on historical cost. In our sample only 11 out of the total 1,179 available-for-sale reclassifications were due to securities being reclassified among categories or impairment. The majority of the reclassifications were triggered by the sales of securities and interest recognition. For cash-flow hedge, recognition of reclassified gains and losses mostly occurred when the corresponding cash-flow hedge was utilized, restructured, or expired.

During our sample period, the average amount of reclassification equals approximately 3 cents per share. The distribution of the amount of unrealized gains and losses arising during the current year (CUGL) is also presented in Table 1. The average amount of CUGL equals 1 cent (loss), with a standard deviation of 0.62. Even though the average amount RECL and CUGL are less than 5 cents per share, their importance should not be underestimated. In absolute value terms, RECL represents about 8% of the firm's reported net income. The average amount of CUGL represents amounts as high as 28% of the net income.

The amount of unrealized gains and losses (UHGL) and its changes (RECL and UN) reconciles through the following equation:

$$\text{UHGL}_{t+1} = \text{UHGL}_t - \text{RECL}_{t+1} + \text{CUGL}_{t+1} \quad (2)$$

That is, the amount of unrealized holding gains and losses increases with the amount of new gains and losses (CUGL), and decreases with the amount that is reclassified into net income (RECL). Panel B of Table 1 reconciles the average amount of UHGL, RECL, and CUGL for firm-year observations with non-missing UHGL (beginning as well as ending balances), RECL and CUGL. On average the balance of UHGL has been decreasing by about 5 cents per year. New increases in unrealized holding losses equal 3 cents per share. Firms on average reclassify roughly 2 cents per share of unrealized holding gains into the income statement. Note that the averages of RECL and CUGL differ slightly from the numbers shown in Panel A, for two reasons. The observations used in panel B include only those with non-missing data for all the four data items of (2). In addition, to preserve the reconciliation, the beginning balance of UHGL, RECL and CUGL are all deflated by the ending number of shares outstanding. In panel A, on the other hand, RECL and CUGL are deflated by the average number of shares outstanding.

## **5. RECLASSIFICATION OF UGHL: PRICE ASSOCIATION TEST**

### **5.1. Price Association Tests**

To examine how investors react to the information regarding unrealized holding gains and losses, we associate UHGL and RECL with the market price of stocks. The regression results are presented in Table 2. To avoid the potential heteroscedasticity problem, we deflate all variables by the number of shares outstanding. Since no single deflator is known to best control for the heteroscedasticity problem *ex ante*, we also use total assets as the deflator. Our results

are robust to this deflator choice. All test statistics are based on the White standard errors adjusted for cross-sectional clustering within each sample year (Petersen 2009).

As a benchmark for our tests, we first regress stock price on book value and earnings (Ohlson 1995). The result is presented in the first columns of Panel A, Table 2. Consistent the prior findings, both the book value and the comprehensive income exhibit significant positive correlation with stock price.

In the second column we break down book value into three components: contributed capital, retain earnings<sup>other</sup>, and UHGL. The estimated coefficient on UHGL equals 1.49, which is highly significant. Note also that the coefficient on UHGL (1.49) is insignificantly different from the estimated coefficient on other retained earnings (1.30), suggesting that investor value UHGL from price change of securities similar to other comprehensive income items, such as foreign currency translation adjustments. This provides support for hypothesis 1 which conjectures that investors use fair value information to value available-for-sale securities and cash-flow-hedge.

Note also that if investors find the fair value estimates for available-for-sale securities to be less relevant because such securities are not held for trading purposes, we would expect the correlation between UHGL and price to be less than one. If investors treat such fair value estimates as completely irrelevant, the estimated coefficient on UHGL should be zero. The result of Table 2 clearly shows that this is not the case.

We also decompose earnings into other income (i.e., income excluding reclassified gains and losses), CUGL, and other comprehensive income items (OCI, which exclude RECL as well). Even though RECL does not affect the total amount of comprehensive income, we also include RECL in the regression analysis. The result is presented in the last column of Table 2, Panel A.

Consistent with the findings of Chambers, Linsmeier, Shakespeare, and Sougiannis (2006), both the estimated coefficients on CUGL and OCI are insignificant, suggesting that investors view gains and losses from securities price changes as transitory. This finding provides further support for hypothesis 1, i.e., investors value UHGL similarly to other gains and losses contained in the other comprehensive income section of retained earnings.

However, the estimated coefficient on RECL is positive and highly significant (2.75), suggesting that investors react positively to any reclassified net gains even though such gains were recognized in prior shareholders' equity statements. This finding contradicts hypothesis 1, but is consistent with the prediction of hypotheses 2 and 3.

In Panel B, we repeat the above analysis with book value decomposed into the book value of other net assets, the book value of available-for-sale securities, and UHGL. The idea is to separate out the balance sheet and income statement information associated with UHGL. Note that cash-flow-hedges often involve negligible amount of initial cost, hence the book value of those transactions are close to zero. The regression results are fairly consistent with what we observe in Panel A. One interesting result to note is that the estimated coefficient on UHGL is highly significant at 1.33. This suggests that investors value UHGL, almost dollar-for-dollar, as predicted by theory on the valuation of transitory earnings (Ohlson 1999). Again, the coefficient on reclassification is highly significant, at 3.54.

## **5.2. Reclassification and Growth**

In Table 3 we present some test results concerning the possible cause of the observed association between reclassification and stock price. Reclassification occurs when firms sell available-for-sale securities. Such selling may indicate that the firm is in need of cash, causing

the stock price to move. Of course, the fact that a company needs cash can be either good or bad. It could indicate that the firm is close to bankruptcy, or that it has come across valuable growth opportunities.

To test the cash-shortage hypothesis, we add the change in the firm's total security investment to regression (1). If a firm needs to raise cash by selling securities, we would expect it to decrease rather than increase its net holding of total securities. Therefore, the cash-shortage hypothesis predicts that the change in total investment be negatively correlated with RECL. The test result is presented in Panel A of Table 3. Contrary to this prediction, change in investment shows a significant and positive correlation with RECL.

The positive price association of RECL with stock price could also indicate that measurement of earnings based on historical cost provides investors with useful information about a firm's profitability and growth. To test this conjecture, we include a measure of growth (i.e., growth in revenue) in regression (1). The result is shown in the second column of Panel A. The growth measure (GREV) shows a significant positive correlation with price. More importantly, the inclusion of GREV in the regression takes away some of the explanatory power of RECL.

We further divide our sample into two subsamples based on GREV, the growth rate of total revenue. Regression (1) was conducted for each subsample and the results are presented in Panel B of Table 3. For the low growth firm, RECL still shows a significant positive correlation with price, but the magnitude of the estimated coefficient is less, at 1.87. In contrast, the estimated coefficient on RECL is highly significant at 5.89 for high growth firms. This finding suggests that RECL is most relevant as an income measure when a firm experiences high growth.

## **6. RECLASSIFICATION FOR AVAILABLE-FOR-SALE AND CASH-FLOW-HEDGE**

To further examine the reclassification issue, we perform detailed analysis of the amount of reclassified unrealized holding gains and losses. The fact that employee compensation is often linked to reported earnings, together with the positive association between price and the reclassified holding gains and losses, suggests that firms may have incentives to manipulate the reclassified gains and losses. Such tests would generate evidence regarding the use of the historical-cost based measures in tasks besides valuation, such as performance evaluation. Any evidence on potential management of the reclassification activity by the firms will also provide more direct evidence, compared to the price association tests, regarding the real economic impact of such an accounting method.

### **6.1. Reclassification of UHGL for Available-for-sale and Cash-flow-hedge**

To detect possible manipulation of the amount of RECL, we separate the amount of RECL from available-for-sale securities and the gains or losses for cash-flow-hedge. Reclassification of gains and losses from available-for-sale securities can be easily triggered by the selling of the related securities. In contrast, reclassification of gains and losses from cash-flow-hedge usually occurs when such a hedge expires or is used. Thus, if firms engage in the manipulation of such reclassification amounts, it is considerably easier to do so via the selected selling of available-for-sale securities than to change the pattern of the underlying hedged transactions.

We compare the amount of RECL from available-for-sale and cash-flow-hedge and report the results in Table 4. Panel A shows that reclassification differs significantly across

available-for-sale securities and cash-flow-hedge. The average amount of reclassification is positive and highly significant for available-for-sale securities. In contrast, the average amount of reclassification for cash-flow-hedge is a loss, and is insignificantly different from zero.

Panel C further presents statistics regarding the sign of the reclassified amount associated with available-for-sale and cash-flow-hedge. In 70% of the cases, firms include net reclassification gains in their earnings for available-for-sale. In 24.8% of the cases, firms reported net reclassification losses. In contrast, firms only reclassified net gains in 18.1% of the cases for cash-flow-hedge. In 22.6% of the cases reclassification for cash-flow hedge represents a net loss. In most cases (59.3%) no gain or loss is reclassified in the income statement.

A more striking finding emerges when we compare the percentage of gains and losses for each sample year. As depicted in Figure 1, in all of the nine sample years firms reclassified more gains than losses for available-for-sale securities. In most years the number of firms that reclassified net gains is almost twice as many as the number of firms that reclassified net losses. In contrast, the reclassified amounts are almost evenly split between gains and losses for cash-flow-hedge.

However, even though both available-for-sale and cash-flow-hedge can be viewed as part of a firm's holding of financial instruments, the difference in the nature of these instruments causes available-for-sale securities to be more likely to have cumulative gains than losses. Therefore, in order to carry out a more meaningful comparison between the two, we need to control for the difference in the amount of UHGL for available-for-sale and cash-flow-hedge. We regress the amount of reclassified gains and losses on the beginning amount of UHGL, and report the result in Table 5. Panel A shows that RECL does have a significant positive correlation with the beginning balance of UHGL. After controlling for this factor, the

reclassified amount for available-for-sale securities still shows a significant positive residual amount. In contrast, the residual amount for cash-flow-hedge is insignificant.

In Panel B we present a 3x3 table showing the distribution of positive, zero, and negative reclassification conditional on the sign of the beginning balance of unrealized holding gains and losses. For firms with positive UHGL for cash-flow-hedge, they are two times more firms reclassifying gains than those reclassifying losses. Similarly, for firms with negative UHGL for cash-flow-hedge, the number of firms reclassifying losses is roughly three times the number of firms reclassifying gains.

However, we observe a quite different pattern for the reclassification of available-for-sale securities. For firms with positive UHGL for available-for-sale securities, the number of firms reclassifying net gains is more than 3 times the number of firms reclassifying losses. In contrast, even for firms have *negative* UHLG, there are still more firms reclassifying gains than losses. This indicates that, consistent with the prediction of hypothesis 4, firms disproportionately classifying more gains than losses for available-for-sale securities.

We also partition our sample into two subsamples, those with a positive beginning balance of UHGL and those with a negative beginning balance of UHGL. As panel C of Table 5 shows, firms with negative UHGL show a smaller mean amount of reclassification net gains. However, even for this group of firms, the average amount of net gains is significantly positive at 1 cent per share.

We further decompose the beginning balance of unrealized holding gains and losses into the separate amounts that occurred during the prior three years. The regression results are shown in Panel D. For available-for-sale securities, the result shows that for every dollar of UHGL, about 9 cents are subsequently reclassified into the income statement in the subsequent year.

Another 5 cents are classified in the following year. CUGL in the year  $t-3$  does not show a significant correlation with the amount of reclassification reported in the current year. After controlling for CUGL, there is still a significant positive residual amount of reported reclassified gains and losses for available-for-sale securities. For cash-flow-hedge, however, only CUGL in year  $t-1$  shows a positive and significant correlation with the reclassification reported in year  $t$ . In addition, there is not a significant residual amount in the reclassification after controlling for CUGL.

Note that regressions in Table 5 include lagged independent variables. To control for possible correlation among observations from the same firm, we repeat the regressions using (1) within-firm clustering adjustments, and (2) a by-year regression method. Our results are robust to such changes in the regression method.

## **6.2. Reclassification and Earnings**

In Table 6 we report the results from conditional analysis of the reclassification amount. If firms do manipulate their reported income via the reclassification of gains and losses, we would expect such manipulation to be more likely when a firm's earnings are short of its target level. We split our sample into two sub-samples. The first sub-sample contains the cases where a firm's earnings (excluding reclassification) are less than the prior year's earnings. For these firms, reported earnings would show a decrease from last year's level if the firm keep the amount of reclassification at the same (or less) level compared to the previous year. The second sub-sample contains the years when firm earnings (excluding reclassification) exceed the previous year's level. If firms use reclassification of available-for-sale to boost their reported earnings, we would expect the amount of reclassified gains and losses to be larger for the first sub-sample.

Panel A of Table 6 shows that where earnings are lower than the previous year's level, firms in the sub-sample on average reclassify 6.7 cents to their reported earnings. In contrast, when earnings exceed the previous year's level, firms only reclassify 1.9 cents per share of net gains. The difference between the two cases is highly significant. In contrast, firms reclassify roughly 3 cents of losses for cash-flow-hedge in both cases.

In Panel B we perform a cross-sectional regression test. The result confirms that the amount of reclassified gains and losses for available-for-sale securities is highly correlated with whether the firm's pre-reclassified earnings are higher or lower than the previous year's level after controlling for the beginning balance of unrealized holding gains and losses. This result further supports our conjecture that investors seem to react positively to reclassified gains, and that firms tend to reclassify more gain from available-for-sale securities.

Prior studies have documented more general financial reporting management activities by banks (e.g., Scholes, Wilson, and Wolfson 1990, Wahlen 1994, Beatty, Chamberlin, and Magliolo 1995, Collins, Shakelford, and Wahlen 1995). The manipulation documented in this paper has the unique feature that the gains and losses have already been recognized on the balance sheets in prior periods. This rules out several possible motivations discussed in the prior studies (e.g., to meet regulatory capital requirement). In addition, prior studies of earnings manipulation use a cross-sectional return test which is more vulnerable to potential omitted variable problems. In this paper we document differences between the amounts of reclassified gains and losses for available-for-sale and for cash-flow-hedge. This test essentially uses each firm as its own control.

### **6.3. Regulatory Capital, Cash, Tax, and Reclassification**

Scholes, Wilson, and Wolfson (1990) report that regulatory capital, taxes, and earnings all influence the realization of the investment security gains. Moyer (1990) reports that regulatory capital affects the realization of the investment security gains and loan loss provisions. Moyer (1990) does not document a consistent relation between taxes and realized security gains, and observes a relation between regulatory capital and loan charge-offs opposite to that expected. Collins, Shackelford, and Wahlen (1995) study bank-specific regulatory capital-raising decisions. Beatty, Chamberlain, and Magliolo (1995) study banks' joint decisions with respect to loan charge-offs, loan loss provisions, issuance of securities, pension settlement gains, and miscellaneous gains and losses.

We test these possible motivations for the manipulation of the amount of reclassified gains and losses, but do not consider the reclassification jointly with other decisions such as loan-loss provisions. Beatty, Chamberlain and Magliolo (1995) studied these issues jointly and found that the choice of security gains and losses appears to be determined independent of the other choices. As we discussed earlier, one possible cause of the reclassification is that banks simply sell securities to meet the cash need for operations. We split our sample based on the amount of previous year's cash (scaled by total assets), and compare the amount of reclassified gains and losses. As Panel A of Table 7 shows that firms with less cash indeed generate less gains. However, the difference between the two groups is insignificant. We also partition our sample based on the change in total investments in securities. However, as Panel A shows, firms with more reclassified gains actually increase their security investment more significantly. This indicates that cash shortage cannot explain the pattern we observe regarding reclassified gains and losses.

Next we consider the possibility that firms may manipulate reclassified gains and losses to meet the regulatory capital requirement. Note that even though unrealized gains and losses have already been recognized in shareholders' equity, bank regulator excludes UHGL from the calculation of Tier 1 capital. During our sample period, most banks' capital ratios far exceed the limit set by bank regulators, making it unlikely for firms to manage RECL for capital maintenance reason. Our test results confirm this conjecture. In our first test, we split our sample based on the Tier 1 risk adjusted capital ratio (RACR), and report the result in Panel A of Table 7. The difference between the amounts of reclassified net gains is insignificant between firms with high RACR and low RACR. In the second test, we take into consideration that a firm's incentive to meet the regulatory capital requirement is stronger when its RACR is close to the regulatory minimum level (which is 4 for Tier 1 capital requirement). We separate out the bottom 10% of observations with previous year's RACR closest to the regulatory minimum, and compare its level of RECL with that of the rest of the firms. The result is also shown in Panel A. For this group of firm-year observations, the average RECL equals 0.022, which is *less* than the average of other firms (0.031). This does not support the hypothesis that regulatory capital requirement consideration prompted the documented earnings management.

We also explore the possible tax motive of manipulating the reclassification amounts. Following Collins, Shackelford and Wahlen (1995), we use the amount of bank's tax-exempt interest income as a percentage of total interest income to proxy for marginal tax rate. The rationale is that firms facing higher marginal tax rates will invest more in tax-exempt bonds. The result is also presented in Panel A of Table 7. Contrary to the tax hypothesis, firms with higher tax rates reclassified significantly more net gains.

In Panel B we regress the amount of reclassified gains and losses on the beginning amount of UHGL, a dummy variable indicating whether earnings (excluding reclassification) is less than or exceeds previous year's earnings, and other variables represent tax, capital ratio, and the amount of security investments. The result confirms that considerations such as tax and regulatory capital ratio do not seem to be the main driver behind the decision regarding UHGL reclassification. Instead, managing the amount of reporting earnings to exceed a certain target level seems to be a major cause.

## **7. TEST OF SUBSEQUENT STOCK RETURNS**

Note that when unrealized gains and losses are first recognition as part of the retained earnings, those UHGL are valued more or less as transitory income. However, when the same gains and losses are reclassified into earnings, a 3-time price multiple is applied. Granted that realizing gains and losses can be a favorable signal regarding the true value of security holding beyond their fair value, but a change in price-multiple from 1 to 4 seems high. Of course, positive price change for available-for-sale securities could also provide a favorable signal regarding the value of a firm's other assets, such as know-how, brand name, or other intangibles. But, unless the fair value measures of unrealized gains and losses are very noisy, such consideration should also be reflected in the pricing of unrealized gains and losses (UHGL). The results of Table 2 show that, for any increase in unrealized holding gains and losses, the pricing multiple roughly equal to one. Thus the pricing implication between realized and unrealized gains and losses, for available-for-sale securities, needs to be quite significant to justify such a dramatic change in the pricing multiples.

As we discussed in Section 3, there is also the possibility of mispricing. If investors are somehow fixated on the earnings number, then mandating the inclusion of reclassified gains and losses in earning items with high multiples, such as interest income, would cause the stock price to correlate with RECL. Prior research has provided abundant evidence consistent with the existence of such functional fixation (see, for example, Lakonishok, Shlefer, and Vishney 1992, Sloan 1996, Teoh, Welch and Wong 1998, Penman and Zhang 2002). The possibility that such investor functional fixation occurs, together with the manipulation of RECL by firms as documented in Section 5, suggests that subsequent stock returns may be significantly correlated with RECL. In this section we further explore this possibility.

Table 8 contains the results from a cross-section regression of firms' one-year ahead stock returns. Independent variables include the stock beta, the book-to-market ratio, size, and the stock return momentum, which have been shown to affect the cross-sectional expected stock return (Fama and French 1992, 1993, Jegadeesh and Titman 1993). One-year stock returns are calculated starting from the fifth month after fiscal year end in order to ensure that the accounting data in the annual reports are available to investors. At the same time, we also want to make sure that the date of the announcement for the first quarter result is included in the return calculation window. We calculate SIZE as the logarithm of the market value of equity at the end of the fourth month after fiscal year end. Book-to-market is the amount of book value, measured at the end of the fiscal year, divided by the amount of market capitalization measured at the end of the fourth month after fiscal year end. MOM is the momentum of stock return, calculated as the cumulative stock return during the past 12 months up to the fourth month after fiscal year ends. To minimize the impact of extreme observations, we use the deciles-ranking of independent variables in all regressions.

Consistent with the findings of prior studies, the book-to-market shows a significant positive correlation with future stock returns. Size and momentum, on the other hand, do not show significant correlation with future stock return. The amount of reclassified gains from available-for-sale securities demonstrates a significant negative correlation with subsequent stock return. This indicates that the stocks of firms that boost their income by reclassifying large amounts of net gains from available-for-sale securities tend to underperform in the subsequent year.

To better gauge the magnitude of this return pattern, we perform a portfolio return analysis. Each year we divide our sample firms into three equal-sized portfolios based on the amount of reclassification relative to the amount of reported earnings, and track the subsequent average portfolio stock returns. To avoid potential hindsight bias when firms have a different fiscal-year-end, we eliminate 11 (out of 1,337) observations where firms do not have a December fiscal-year-end. The result is shown in Table 9.

As Panel A shows, for the groups with large amounts of reclassified gains and losses in their reported earnings, the subsequent average stock return equals 11.09%. In contrast, the average return for the group of firms with low reclassified net gains equals 14.22%. The difference, 3.13%, is highly significant. In Panel B we also report the size-adjusted return, the difference, again, is highly significant.

Earlier test results reported in Table 3 show that the correlation between RECL and Stock price is more significant for high-growth firms. Accordingly we expect the return difference between high- and low-RECL firms to be more significant for high-growth firms. To test this conjecture we divide our sample into two equal-sized groups based on revenue growth. Then we repeat our tests separately for the high-growth and the low-growth subsamples. The results are

presented in Panel A of Table 10. Consistent with our conjecture, the return difference is more significant for high growth firms, at 4.26%.

Fama (1998) shows that most documented abnormal returns tend to focus on small firms. That, however, is not the case for the return difference documented in this paper. Repeating the analysis using a value-weighted return shows that the return difference for high-growth firms *increases* from 4.26% to 5.54%. We also repeat our tests for a subset of large firms (defined as those firm-year observations with market capitalizations above the median of the sample year). For these large firms with high growth, the return difference further increases to 7.23%.

Mitchell and Stafford (2000) argues that long-window portfolio return tests may compound and exaggerate the level of abnormal returns. Since we do not know *ex ante* the months in which subsequent return reversals might occur, the return test we used with a one-year window seems appropriate. Nonetheless, following Mitchell and Stafford (2000), we conduct additional tests based on calendar-time portfolio analysis. Specifically, during each calendar month from May 1999 to May 2008, we calculate the mean portfolio return for the high-, medium-, and the low-RECL groups as well as for the hedge portfolio. We then regress the monthly portfolio returns on the monthly factor returns for size, book-to-market, and momentum. The residuals are reported in Panel B of Table 10. The hedge portfolio yields a positive and significant return residual, consistent with the findings in Table 9.

## **8. CONCLUSION**

In this paper we study the reclassification of unrealized holding gains and losses which were previously recognized on balance sheets. We document a significant positive correlation between stock price and the amount of reclassified earnings. In addition, firms reclassify substantially more gains than losses into the income statement from available-for-sale securities.

Analysis of subsequent stock returns further uncovers evidence indicating that investors may be misled by the inflated amount of reclassified net gains from available-for-sale securities.

The documented positive correlations between the stock price, together with the reclassified amount of gains and losses, supports the hypothesis that even for assets such as marketable securities, which have constant active markets, market price does not seem to incorporate all relevant information for investors. An income measure based on historical cost, when available, seems to provide important useful information to investors. This highlights the complexity of information demand by investors and the importance of preserving the traditional flow measures based on historical-cost accounting.

However, the documented negative correlation between the amount of reclassification and the subsequent stock return also suggests that at least part of the stock price movement that correlates with reclassification seems excessive. As we discussed in Section 3, investors are often left in the dark regarding how much holding gains and losses are reclassified into interest income as opposed to realized gains and losses. This, together with managers' intentional inflation of the amount of reclassified net gains, might cause investors to apply unduly high multiple to reclassified gains and losses. Future enhancement in the disclosure requirement might be needed to protect investors' interest.

## APPENDIX

U.S. companies are required by SFAS 130 disclose information regarding the components of other comprehensive income, together with the information on reclassification, in their financial reporting. There are a variety of formats and methods that are used by the companies to fulfill this disclosure requirement.

### 1: Disclosure of other comprehensive income components

In our study, we find two approaches that have been mostly widely used by U.S. commercial banks to report the other comprehensive income. The first is to integrate the components of other comprehensive income with the equity statement. The second is to report specifically the components of other comprehensive income in a separate table.

#### *Example I: Integrated reporting*

AMCORE FINANCIAL, INC. AND SUBSIDIARIES							
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY							
	Common Stock	Treasury Stock	Additional Paid-in Capital	Retained Earnings	Deferred Compensation	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity
	(in thousands, except share data)						
Balance at December 31, 2004 .....	\$6,643	\$(102,832)	\$74,102	\$407,045	\$(273)	\$ 1,893	\$386,578
Comprehensive Income (Loss):							
Net Income .....	—	—	—	44,941	—	—	44,941
Net unrealized holding losses on securities available for sale arising during the period .....	—	—	—	—	—	(22,771)	(22,771)
Less reclassification adjustment for net security gains included in net income .....	—	—	—	—	—	(995)	(995)
Income tax effect related to items of other comprehensive Income .....	—	—	—	—	—	9,049	9,049
Comprehensive Income .....	—	—	—	44,941	—	(14,717)	30,224
Cash dividends on common stock-\$0.68 per share .....	—	—	—	(16,873)	—	—	(16,873)
Purchase of 256,196 shares for the treasury .....	—	(7,702)	—	—	—	—	(7,702)
Deferred Compensation and Other .....	1	—	703	—	199	—	903
Reissuance of 211,280 treasury shares for incentive plans .....	—	6,294	(1,525)	—	(220)	—	4,549
Issuance of 34,874 common shares for Employee Stock Plan .....	8	—	830	—	—	—	838
Balance at December 31, 2005 .....	\$6,652	\$(104,240)	\$74,110	\$435,113	\$(294)	\$(12,824)	\$398,517

*(Source: Amcore Financial Inc., annual report 2005)*

*Example II: Independent reporting:*

Other Comprehensive Income: A summary of activity in accumulated other comprehensive income follows:

(In Thousands)	For the Calendar Year		
	2007	2006	2005
Accumulated unrealized gains (losses) on securities available for sale at January 1, net of tax	\$ 3,938	\$ (4,018)	\$ 107,193
Net unrealized gains (losses) for the period, net of tax expense (benefit) of \$13,341 in 2007, \$4,115 in 2006, and \$(49,316) in 2005	24,776	7,642	(91,586)
Reclassification adjustment for (gains) losses included in net income net of tax expense (benefit) of \$7,636 in 2007, \$(169) in 2006, and \$7,463 in 2005	(14,180)	314	(19,625)
Effect on other comprehensive income for the period	10,596	7,956	(111,211)
Accumulated unrealized gains (losses) on securities available for sale at December 31, net of tax	\$ 14,534	\$ 3,938	\$ (4,018)
Accumulated unrealized (losses) gains on derivatives used in cash flow hedging relationships at January 1, net of tax	\$ (3,505)	\$ 15,883	\$ (6,605)
Net unrealized gains for the period, net of tax expense of \$39,452 in 2007, \$4,227 in 2006, and \$16,849 in 2005	73,268	7,850	31,291
Reclassification adjustment for losses (gains) included in net income, net of tax (benefit) expense of \$(69) in 2007, \$14,666 in 2006, and \$4,740 in 2005	128	(27,238)	(8,803)
Effect on other comprehensive income for the period	73,396	(19,388)	22,488
Accumulated unrealized gains (losses) on derivatives used in cash flow hedging relationships at December 31, net of tax	\$ 69,891	\$ (3,505)	\$ 15,883
Accumulated unrealized losses for pension and other postretirement obligations at January 1, net of tax	\$ (71,347)	\$ —	\$ —
Net unrealized losses of prior service costs for the period, net of tax benefit of \$2,854	(4,859)	—	—
Net unrealized gains for the period, net of tax expense of \$48,710	82,938	—	—
Amortization of prior service costs included in net periodic benefit, net of tax benefit of \$1,319 in 2007	(2,300)	—	—
Amortization of transition obligation included in net periodic benefit, net of tax expense of \$295 in 2007	514	—	—
Amortization of net loss included in net periodic benefit, net of tax expense of \$1,257 in 2007	2,193	—	—
Effect on other comprehensive income for the period	78,486	—	—

(Source: National City Corp. annual report 2007, p. 107)

**2: The reclassification disclosure:**

The information on reclassification is mostly presented in a separate table format as shown in the following example. Most banks clearly indicate the tax effects related to the reclassification adjustment. For those without tax information, we use the standard federal tax rate of 35% to calculate the after-tax effect.

The following table presents the after-tax changes in net unrealized holdings gains (losses), reclassification adjustments for realized gains and losses on AFS securities and cash flow hedges, changes resulting from foreign currency translation adjustments (including the impact of related derivatives), net gains and losses and prior service costs from pension and OPEB plans, and amortization of pension and OPEB amounts into Net income. The table also reflects the adjustment to Accumulated other comprehensive income (loss) resulting from the initial application of SFAS 158 to the Firm's defined benefit pension and OPEB plans. Reclassification adjustments include amounts recognized in Net income that had been recorded previously in Other comprehensive income (loss).

Year ended December 31, (in millions)	2007			2006			2005		
	Before tax	Tax effect	After tax	Before tax	Tax effect	After tax	Before tax	Tax effect	After tax
<b>Unrealized gains (losses) on AFS securities:</b>									
Net unrealized holdings gains (losses) arising during the period	\$ 431	\$ (176)	\$ 255	\$ (403)	\$ 144	\$ (259)	\$(1,706)	\$ 648	\$(1,058)
Reclassification adjustment for realized (gains) losses included in Net income	164	(67)	97	797	(285)	512	1,443	(548)	895
<b>Net change</b>	<b>595</b>	<b>(243)</b>	<b>352</b>	<b>394</b>	<b>(141)</b>	<b>253</b>	<b>(263)</b>	<b>100</b>	<b>(163)</b>

(Source: JP Morgan Chase & Co., annual report 2007, p.163)

The following example shows that banks may also provide the reclassification as well as the accumulated balance amount for each year in one table.

#### 17. ACCUMULATED OTHER COMPREHENSIVE INCOME

The Bancorp has elected to present the disclosures required by SFAS No. 130, "Reporting of Comprehensive Income," in the Consolidated Statements of Changes in Shareholders' Equity and in the following table. Disclosure of the reclassification

adjustments, related tax effects allocated to other comprehensive income and accumulated other comprehensive income as of and for the years ended December 31 were as follows:

(\$ in millions)	Total Other Comprehensive Income			Total Accumulated Other Comprehensive Income		
	Pretax Activity	Tax Effect	Net Activity	Beginning Balance	Net Activity	Ending Balance
2007						
Gains on available-for-sale securities	\$60	(23)	37			
Reclassification adjustment for net gains recognized in net income	(21)	9	(12)			
Unrecognized gains (losses) on available-for-sale securities	39	(14)	25	(119)	25	(94)
Gains on cash flow hedge derivatives	42	(15)	27			
Reclassification adjustment for net gains on cash flow hedge derivatives recognized in net income	(1)	-	(1)			
Unrecognized gains (losses) on cash flow hedge derivatives	41	(15)	26	(1)	26	25
Defined benefit plans:						
Net prior service cost	-	-	-			
Net actuarial loss	3	(1)	2			
<b>Total pension and other postretirement obligations</b>	<b>3</b>	<b>(1)</b>	<b>2</b>	<b>(59)</b>	<b>2</b>	<b>(57)</b>
<b>Total</b>	<b>\$83</b>	<b>(30)</b>	<b>53</b>	<b>(179)</b>	<b>53</b>	<b>(126)</b>

(Source: Fifth third Bancorp, annual report 2007, p. 75)

### 3. Components of other comprehensive income from available-for-sale and cash-flow-hedge:

According to SFAS 130 and SFAS133, banks account for the unrealized gains and losses on available-for-sales, and the effective portion of cash flow hedges, as components of other comprehensive income. In the paragraphs below we provide examples of both practices.

**Available-for-sale securities:** Securities available for sale are carried at fair value with unrealized gains and unrealized losses not deemed other-than-temporary reported in accumulated other comprehensive income, net of tax. Realized gains and losses on the sale of, and other-than-

temporary impairment charges on available-for-sale securities are recorded in securities gains or losses in the statement of income.

*(Source: National City Corp., annual report 2007, p. 68)*

**Cash Flow Hedging:** We hedged our exposure to the variability of future cash flows for all forecasted transactions for a maximum of 10 years for hedges converting floating-rate commercial loans to fixed. The fair value of these derivatives is reported in other assets or other liabilities and offset in accumulated other comprehensive income (loss) for the effective portion of the derivatives. We subsequently reclassify any unrealized gains or losses related to these swap contracts from accumulated other comprehensive income (loss) into interest income in the same period or periods during which the hedged forecasted transaction affects earnings. Ineffectiveness of the strategies, if any, is recognized immediately in earnings *(Source: The PNC Financial Services Group, p.94)*

**Table 1: Descriptive statistics**

Our sample is constructed based on the top 200 U.S. commercial banks traded on NYSE, AMEX and NASDAQ in 1998. We restrict the sample to firms with return and financial data from the merged CRSP/COMPSTAT dataset. SIZE is the logarithm of the market value of equity on the last trading date in the fourth month after fiscal year end. UGHL is the total amount of unrealized gain/loss. Prior to fiscal year 2001, UHGL represents the amount of unrealized holding gains and losses associated with available-for-sale securities at the end of fiscal year. From 2001 to 2006, UGHL represents the total amount of unrealized holding gains and losses for available-for-sale securities as well as cash flow hedge. RECL is the amount of UGHL reclassified during the fiscal year. CUGL represents the amount of UHGL arising during the current year. Similar to UHGL, both RECL and CUGL capture the total amount from available-for-sale securities as well as cash-flow-hedge after 2001.

**Panel A: sample statics**

<i>Variable</i>	<i>N</i>	<i>Mean</i>	<i>STDEV</i>	<i>Q1</i>	<i>Median</i>	<i>Q3</i>
SIZE	1,337	6.84	1.49	5.75	6.55	7.60
Unrealized holding gains and losses (UHGL) per share	1,297	0.08	0.69	-0.17	0.04	0.29
Reclassified unrealized holding gains and losses (RECL) per share	1,179	0.03	0.19	-0.00	0.01	0.05
Addition to UHGL, i.e., holding gains and losses arising during current year (CUGL), per share	1,203	-0.01	0.62	-0.26	0.01	0.24
Absolute value of reclassification (RECL) relative to absolute value of net income	1,179	0.08	0.31	0.01	0.05	0.06
Absolute value of CUGL relative to absolute value of net income	1,203	0.28	0.91	0.05	0.14	0.28

**Panel B: Reconciliation of UHGL, RECL, and CUGL (all deflated by number of shares)**

Beginning UHGL	Add: CUGL	Subtract: RECL	Ending UHGL
0.12	-0.03	0.02	0.07

**Table 2: Association with Stock Price**

This table reports the cross-sectional regression results of stock prices on various accounting data, include book value, earnings, unrealized holding gains and losses (UHGL), and reclassification of unrealized holding gains and losses (RECL). We exclude the amount of unrealized holding gains and losses (after tax) and the book value of available-for-sale securities in calculating the other components of book value ( $BV^{other}$ ). Similarly, UHGL is excluded from the calculation of other retained earnings ( $RE^{other}$ ). After tax amount of RECL is also excluded from the calculation of other earnings ( $Income^{other}$ ). Comprehensive income is calculated based on change in retained earnings, adjusted for dividends. OCI is the amount of other comprehensive income items besides CUGL. Stock variables (e.g., book value, UHGL) are deflated by the number of shares outstanding at fiscal year end. Flow variables (e.g., earnings, RECL) are deflated by the number of shares used in calculating earnings per share. T-statistics adjusted for clustering among observations within the same sample year (Petersen 2009) \*, \*\*, and \*\*\* indicate two-tailed statistical significance at 10, 5, and 1 percent levels.

**Panel A: Price association tests**

	<i>Dependent variable: price</i>		
Intercept	5.01***	10.35***	6.42***
Book Value:	1.41***		
Contributed Capital		0.89***	0.53***
Retained Earnings <sup>other</sup>		1.30***	0.75***
UHGL		1.49**	1.45**
Comprehensive Income:	2.94***	1.85***	
Income <sup>other</sup>			7.34***
CUGL			0.01
OCI			0.67
RECL			2.75**
N	1,449	1,291	1,156
R-square	0.75	0.65	0.76

**Panel B: Price association tests with the balance sheet information regarding available-for-sale securities separated from others**

	<i>Dependent variable: price</i>		
Intercept	2.68 <sup>***</sup>	9.04 <sup>***</sup>	5.56 <sup>***</sup>
Book Value:	1.39 <sup>***</sup>		
BV <sup>other</sup>		1.07 <sup>***</sup>	0.58 <sup>***</sup>
BV <sup>afs</sup>		1.11 <sup>***</sup>	0.61 <sup>***</sup>
UHGL		1.51 <sup>**</sup>	1.33 <sup>**</sup>
Comprehensive Income:	3.05 <sup>***</sup>	2.23 <sup>***</sup>	
Income <sup>other</sup>			7.89 <sup>***</sup>
CUGL			-0.24
OCI			0.77
RECL			3.54 <sup>**</sup>
N	1,449	1,168	1,037
R-square	0.76	0.64	0.75

**Table 3: Reclassification and Growth**

Stock prices are regressed on various accounting data, include book value, earnings, unrealized holding gains and losses (UHGL), reclassification of unrealized holding gains and losses (RECL), as well as growth in revenue (GREV). CINV equals to the change in the amount of both short-term and long-term investments. We exclude the amount of unrealized holding gains and losses (after tax) and the book value of available-for-sale securities in calculating the other components of book value ( $BV^{other}$ ). Similarly, the after tax amount of RECL is also excluded from the calculation of other income ( $Income^{other}$ ). Comprehensive income is calculated based on change in retained earnings, adjusted for dividends. OCI is the amount of other comprehensive income items besides the change in UHGL (i.e., CUGL). All stock variables are deflated by the number of shares outstanding at fiscal year end. All flow variables are deflated by the number of shares used in calculating earnings per share. T-statistics are adjusted for the effect of clustering among observations from the same sample year (Petersen 2009) \*, \*\*, and \*\*\* indicate two-tailed statistical significance at 10, 5, and 1 percent levels.

**Panel A: Regression of stock price on earnings, CUGL, RECL, and growth**

	<i>Dependent variable: price</i>		
Intercept	5.56***	5.54***	4.65***
$BV^{other}$	0.58***	0.58***	0.57***
$BV^{afs}$	0.61***	0.60***	0.60***
UHGL.	1.33**	1.82**	2.24**
$Income^{other}$	7.89***	7.76***	7.90***
CUGL	-0.24	-0.48	-0.38
OCI	0.77	0.64	0.48
RECL	3.54**	2.55**	3.42*
CINV		0.11**	
GREV			7.17***
N	1,037	1,037	1,037
R-square	0.75	0.76	0.77

**Panel B: Regression results for firms with different growth**

	<i>Low growth firms</i>	<i>High growth firms</i>
INTERCEPT	5.73 <sup>***</sup>	5.36 <sup>***</sup>
BV <sup>other</sup>	0.45 <sup>***</sup>	0.74 <sup>***</sup>
BV <sup>afs</sup>	0.49 <sup>***</sup>	0.75 <sup>***</sup>
UHGL.	2.16 <sup>**</sup>	1.49
Earnings <sup>other</sup>	7.93 <sup>***</sup>	7.52 <sup>***</sup>
CUGL	0.07	-1.64
OCI	-0.22	1.85 <sup>**</sup>
RECL	1.87	5.89 <sup>***</sup>
N	515	522
R-square	0.77	0.76

**Table 4: Reclassification for Available-For-Sale and Cash-Flow-Hedge**

This table compares the amount of reclassification from available-for-sale securities and cash-flow-hedge. UHGL stands for the amount of unrealized holding gains and losses recognized on the balance sheets. Reclassification of unrealized holding gains and losses is denoted as RECL. CUGL stands for the amount of unrealized holding gains and losses arose during the current fiscal year. UHGL is deflated by the ending number of shares outstanding. RECL and CUGL are deflated by the number of shares used in calculating earnings per share. Panels A and C contain results based on the full sample. Panel B presents results for firms with no missing data for both available-for-sale and cash-flow-hedge. \*, \*\*, and \*\*\* indicate two-tailed statistical significance at 10, 5, and 1 percent levels.

**Panel A: Mean, full sample comparison**

	<i>Available-for-sale</i>	<i>Cash-flow-hedge</i>
UHGL	0.09 <sup>***</sup>	-0.02 <sup>*</sup>
Reclassification of UHGL (RECL)	0.03 <sup>***</sup>	-0.00
Addition to UHGL (CUGL)	-0.01	-0.01

**Panel B: Mean, same sample comparison**

	<i>Available-for-sale</i>	<i>Cash-flow-hedge</i>
UHGL	0.12 <sup>***</sup>	-0.04
Reclassification of UHGL (RECL)	0.03 <sup>***</sup>	-0.00
Addition to UHGL	-0.05 <sup>**</sup>	-0.01

**Panel C: Sign of Reclassification (RECL)**

	<i>Available-for-sale</i>	<i>Cash-flow-hedge</i>
Negative	24.8%	22.6%
Zero	5.2%	59.3%
Positive	70.0%	18.1%

**Table 5: Determinants of Reclassification**

UHGL denotes the amount of unrealized holding gains and losses recognized on the balance sheets. Reclassification of unrealized holding gains and losses is denoted as RECL. CUGL represents the amount of unrealized holding gains and losses arising during the current fiscal year. UHGL is deflated by the ending number of shares outstanding. RECL and CUGL are deflated by the number of shares used in calculating earnings-per-share. This table compares the residual amount of RECL, for available-for-sale and cash-flow-hedge, after controlling for the amount of beginning balance of UHGL and the increases in UHGL during the prior three years. In all regressions we adjust for the effect of clustering among observations within each sample year (Petersen 2009) \*, \*\*, and \*\*\* indicate two-tailed statistical significance at 10, 5, and 1 percent levels.

**Panel A: Controlling for beginning balance of UHGL**

	<i>Dependent Variable: Reclassification (RECL per share)</i>	
	<i>Available-For-Sale</i>	<i>Cash-Flow-Hedge</i>
Intercept (%)	0.02 <sup>***</sup>	0.00
UHGL, year-1	0.07 <sup>***</sup>	0.30 <sup>***</sup>
N	1,003	277
R-square	0.10	0.27

**Panel B: Distribution of reclassification**

	<i>Sign of Reclassification</i>					
	<i>Available-For-Sale</i>			<i>Cash-Flow-Hedge</i>		
	<i>+</i>	<i>0</i>	<i>-</i>	<i>+</i>	<i>0</i>	<i>-</i>
positive beginning balance	47%	3%	13%	12%	3%	4%
zero beginning balance	0%	0%	0%	1%	42%	1%
negative beginning balance	21%	3%	13%	6%	13%	17%

**Panel C: Mean reclassification amount**

	<i>Average amount of reclassification</i>	
	<i>Available-for-sale</i>	<i>Cash-flow-hedge</i>
positive beginning balance	0.05 <sup>***</sup>	0.06 <sup>***</sup>
zero beginning balance	0.03	-0.00
negative beginning balance	0.01 <sup>**</sup>	-0.04 <sup>***</sup>

**Panel D: Changes in UHGL (CUGL) during prior 3 years**

	<i>Dependent Variable: Reclassification (RECL per share)</i>	
	<i>Available-For-Sale</i>	<i>Cash-Flow-Hedge</i>
Intercept (%)	0.01 <sup>***</sup>	0.00
Change in UHGL, year-1	0.09 <sup>***</sup>	0.10 <sup>*</sup>
Change in UHGL, year-2	0.05 <sup>***</sup>	0.09
Change in UHGL, year-3	0.02	0.00
N	679	189
R-square	0.10	0.19

**Table 6: Conditional Distribution of Reclassification**

This table compares the average amount of the reclassification of unrealized holding gains between firms whose earnings (excluding reclassification) exceed the prior year's amount, and firms whose earnings (excluding reclassification) are less than the prior year's amount. UHGL stands for the amount of unrealized holding gains and losses recognized on the balance sheet. Reclassification of unrealized holding gains and losses, denoted as RECL.  $E_t$  is calculated as reported earnings (before extraordinary items) minus the amount of reclassified gains and losses from available-for-sale securities and cash-flow-hedge.

**Panel A: Comparison of the average amount of reclassification (RECL), for available-for-sale and cash-flow-hedge, conditional on the amount of current year's earnings (excluding reclassification) relative to prior year's earnings.**

	<i>Available-For-Sale</i>	<i>Cash-Flow-Hedge</i>
$E_t \geq E_{t-1}$	0.019***	-0.003
$E_t < E_{t-1}$	0.067***	-0.003
Difference	0.048***	0.00

**Panel B: Regression analysis**

	<i>Dependent Variable: Reclassification (RECL) per share</i>	
	<i>Available-For-Sale</i>	<i>Cash-Flow-Hedge</i>
Intercept (%)	0.031***	0.00
UHGL <sub>t-1</sub>	0.073***	0.300**
Sign ( $E_t - E_{t-1}$ )	-0.024**	0.006
N	1,002	277
R-square	0.082	0.274

**Table 7: Other Factors: Cash Need, Risk Adjusted Capital Ratio, and Tax**

This table compares the amount of reclassification of unrealized holding gains and losses for available-for-sale securities, for firms with an increase or decrease in the Tier 1 risk adjusted capital ratio (RACR) in the preceding year, and for firms with different amount of changes in total security investments. “RACR<sub>t-1</sub>-Regulatory Min” denotes the difference between the firm’s RACR level at the end of last fiscal year and the regulatory minimum level. The Low group includes firms with RACR less than or equal to 8. With regulatory minimum at 4, this group contains about 10% of all firm-year observations. Following Collins, Shackelford, and Wahlen (1995), we use the amount of total tax-exempted net interest income scaled by the total net interest income to proxy for firms’ marginal tax rate (TAX). INV is the change in the total amount of investment in securities.

**Panel A: Comparison of mean Reclassification (RECL)**

	<i>High</i>	<i>Low</i>	<i>Difference</i>
Last year’s Cash/Assets	0.026 <sup>***</sup>	0.028 <sup>***</sup>	-0.002
Change in INV	0.035 <sup>***</sup>	0.019 <sup>***</sup>	0.014 <sup>***</sup>
Sign of Change in INV	0.042 <sup>***</sup>	0.016 <sup>***</sup>	0.027 <sup>***</sup>
Change in RACR	0.029 <sup>***</sup>	0.031 <sup>***</sup>	0.002
RACR <sub>t-1</sub> -Regulatory Min	0.031 <sup>***</sup>	0.022 <sup>*</sup>	0.009
TAX	0.038 <sup>***</sup>	0.028 <sup>***</sup>	0.010 <sup>**</sup>

**Panel B: Regression analysis**

	<i>Dependent variable: RECL per share</i>
INTERCEPT	0.012 <sup>*</sup>
UHGL, year-1	0.073 <sup>***</sup>
Sign of change in earnings (excl.RECL)	-0.021 <sup>***</sup>
Sign of change in INV	0.020 <sup>**</sup>
Sign of change in RACR	-0.002
Marginal tax rate	0.319 <sup>**</sup>
N	779
R-square	0.15

**Table 8: Cross-Section Regression of Future Stock Return**

This table documents the correlation between the amount of reclassification (deflated by the absolute value of net income) and following year's stock returns. Beta is the stock market beta estimated over the past 60 months using the CAPM model. SIZE is the logarithm of the market value of equity at the end of the fourth month after fiscal year end. Book-to-market is the amount of book value, measured at the end of the fiscal year, divided by the amount of market capitalization measured at the end of the fourth month after fiscal year end. MOM is the momentum of stock return, calculated as the cumulative stock return during the past 12 months up to the fourth month after fiscal year end (Jegadeish and Titman 1993). The t-statistics are based on the White standard errors clustered by year. \*, \*\*, and \*\*\* indicate two-tailed statistical significance at 10, 5, and 1 percent levels.

	<i>Dependent Variable: RET<sub>t+1</sub></i>	
	<i>Available-For-Sale</i>	<i>Cash-Flow-Hedge</i>
Intercept	0.144*	0.072
Beta	-0.068	-0.060
Book-to-market	0.007*	0.002
SIZE	-0.006	0.001
MOM	-0.006	-0.002
RECL(available-for-sale)	-0.003**	
RECL (cash-flow hedge)		-0.001
N	1,169	403
R-square	0.028	0.011

**Table 9: Portfolio Return Analysis**

This table reports the average portfolio returns for firms sorted based on the amount of reclassified gains and losses relative to the absolute value of the reported net income. Each year firms are divided into three equal-sized groups based on the amount of reclassified gains and losses (RECL) relative to the amount of net income. Firms with small, medium, and large amount of RECL are denoted as the Low, Medium, and High group. The mean portfolio returns are then calculated for each sample year. The following tables report the average of the mean portfolio returns over all sample years. Panel A shows the raw returns while Panel B reports the size-adjusted returns.

**Panel A: Stocks sort based on RECL, relative to net income**

	<i>Available-For-Sale</i>	<i>Cash-Flow-Hedge</i>
Low	14.22% <sup>**</sup>	10.95% <sup>*</sup>
Medium	12.67% <sup>*</sup>	8.35% <sup>*</sup>
High	11.09% <sup>*</sup>	9.86% <sup>*</sup>
High-Low	-3.13% <sup>**</sup>	-1.10%

**Panel B: Size-adjusted return**

	<i>Available-For-Sale</i>	<i>Cash-Flow-Hedge</i>
Low	2.07%	-1.83%
Medium	1.55%	-3.67% <sup>*</sup>
High	-0.81%	-2.67%
High-Low	-2.88% <sup>**</sup>	-0.84%

**Table 10: Growth and Calendar-time Portfolio Return Analysis**

Panel A reports the average portfolio returns for firms with large, medium, and small amount of reclassified gains and losses. Each year firms are first divided into two equal-sized groups based on revenue growth. Then, within each growth group, firms are further divided into three groups based on the amount of reclassification (RECL) relative to the absolute value of the reported net income. The average portfolio returns are then calculated for each portfolio in each sample year. The average of mean portfolio returns over all sample years is then reported in Panel A. Panel B shows the residuals from monthly portfolio return regressions controlling for size, book-to-market, and momentum factor returns. Monthly factor returns are obtained from [http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data\\_library.html](http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html).

**Panel A: Stocks sort based on RECL for available-for-sale securities, relative to net income**

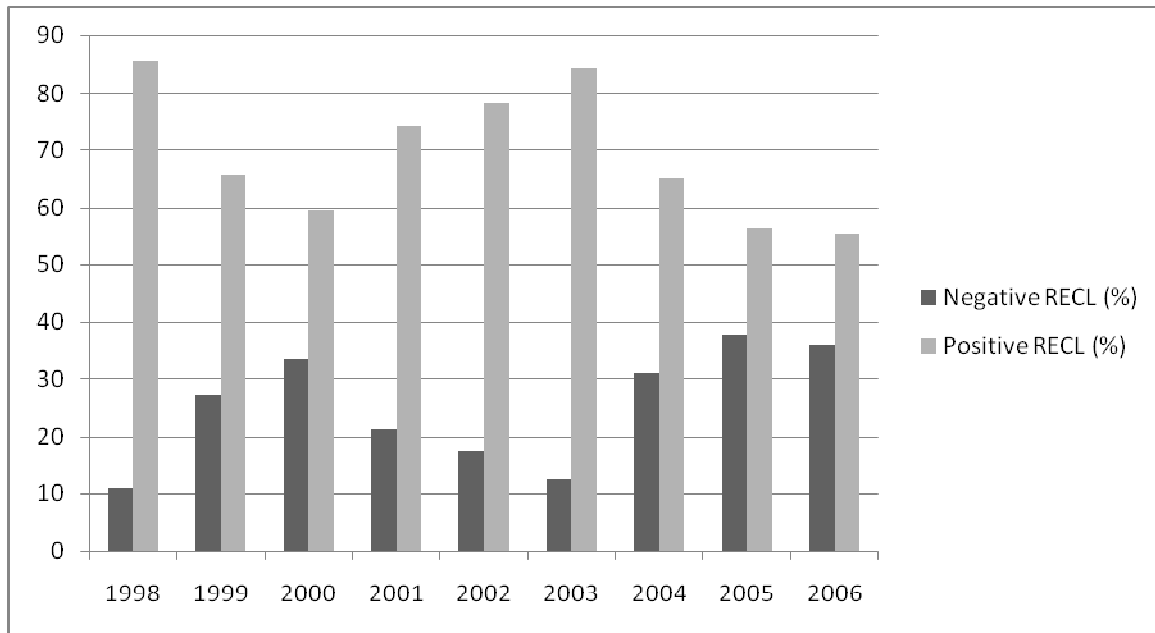
	<i>High Growth</i>	<i>Low Growth</i>
Low	18.56% <sup>***</sup>	16.54% <sup>***</sup>
Medium	19.85% <sup>***</sup>	15.52% <sup>***</sup>
High	14.30% <sup>***</sup>	14.02% <sup>***</sup>
High-Low	-4.26% <sup>***</sup>	-2.51%

**Panel B: Monthly calendar-time portfolio return residuals after controlling for size, book-to-market, and momentum factor returns**

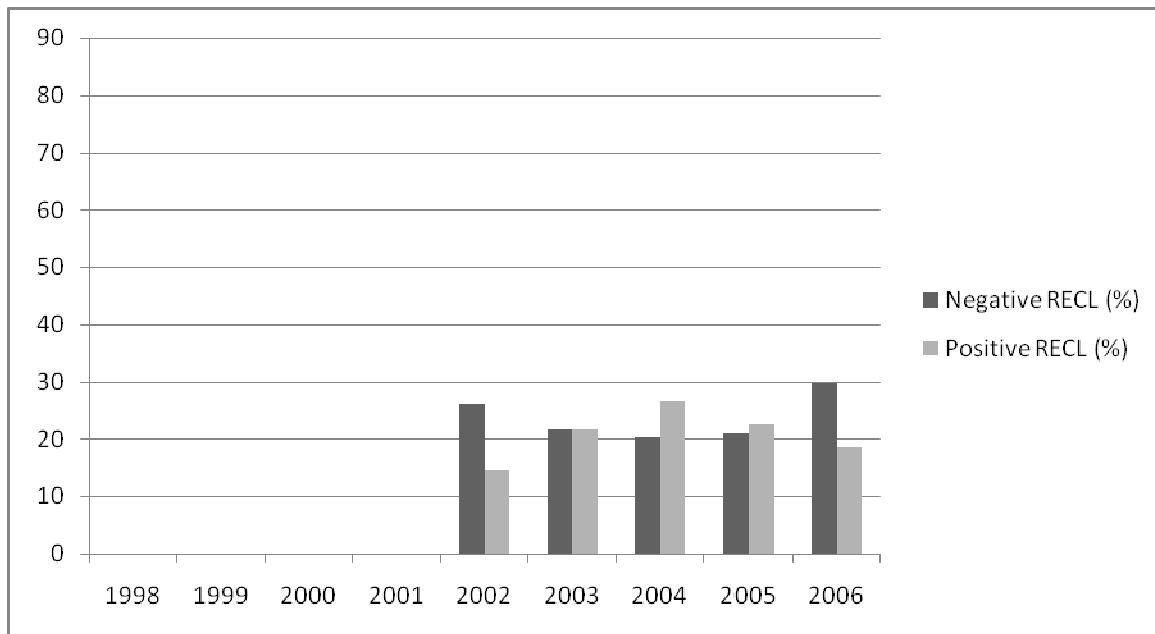
	<i>High Growth</i>	<i>Low Growth</i>
Low	0.64% <sup>**</sup>	0.24%
Medium	0.27%	0.48%
High	0.22%	0.34%
Hedge	0.42% <sup>**</sup>	-0.09%

**Figure 1**

**Figure 1a: Percentage of positive and negative reclassification for available-for-sale securities**



**Figure 1b: Percentage of positive and negative reclassification for cash-flow-hedge**





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