Are Auditors Skeptical of Management’s
Level 2 versus Level 3 Fair Value Classification Judgments?

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We conduct an experiment to examine whether auditors with fair value task expertise respond skeptically to management's Level 2 versus Level 3 fair value classification judgments under SFAS 157 or whether they are subconsciously swayed towards management's classification as has been found in several other audit judgment settings. Because management determines these classifications before the audit takes place and can be opportunistic in their classification choices, it is important to understand how management's preferred classification influences auditors' fair value classification judgments of whether a security is classified as a Level 2 versus Level 3 security. We find that auditors are more skeptical of management's preferred classification treatment, especially when management prefers the less conservative fair value reporting choice. Our findings are contrary to prior research that found that management's classification swayed auditors' judgments in the SOX Section 404 context, and are consistent with concerns voiced by various management organizations that complain that auditors are overly skeptical and conservative of whatever fair value treatment management believes is appropriate. The PCAOB should find it reassuring that auditors' classification judgments appear to be responding to the PCAOB's appeal for auditors to increase their scrutiny of management's fair value judgments.
I. **INTRODUCTION**

Regulators and financial statement preparers have differing views regarding auditors’ evaluation of their clients’ fair value accounting. On the one hand, the PCAOB has expressed concern that auditors are not sufficiently skeptical of management’s fair value judgments (e.g., Hanson 2012; PCAOB 2009). Indeed, Griffith et al. (2012) document that fair value measurement is the accounting issue that is most often identified as a deficiency by the PCAOB. In contrast, corporate managers contend that litigation-shy and regulation-averse auditors are overly conservative and skeptical of management’s fair value judgments (e.g., CEB 2009; Corgentum Consulting 2011). Therefore, we conduct an experiment to examine whether auditors with fair value task expertise respond skeptically to management’s fair value classification judgments or whether they are subconsciously swayed towards management’s classification as has been found in several other audit judgment settings (e.g., McDaniel and Kinney 1995; Earley et al. 2008).

The fair value judgments we examine are auditors’ evaluations of whether a client should classify a security as a Level 2 versus Level 3 asset in accordance with SFAS 157 (ASC 820), *Fair Value Measurements* (FASB 2006). SFAS 157 defines fair value as “the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.”1 There are various approaches to arriving at fair value

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1 The standard requires companies to classify how they report the fair value of their securities based on the liquidity of the inputs used to determine the security’s value (Level 1, Level 2 or Level 3, ranked from most to least liquid). Level 1 inputs (quoted prices in active markets) do not require judgment and are not controversial. Level 2 inputs require judgment and depend on the presence of observable data, whether from a market or other independent source, and would include quoted prices for a similar asset or liability. For Level 2 assets, the judgment call is determining the appropriate security to use as an analogous one. Level 3 inputs are considered “unobservable,” and are based on models or assumptions of management and/or valuation specialists. These inputs are quite subjective and difficult to verify, and require more financial statement disclosures.
estimates (e.g., income-based approaches such as discounted cash flow analysis and other present value techniques) which require management to exercise significant judgment. In particular, a great deal of judgment is required for Level 2 and Level 3 securities, and there is often no “correct” answer as to whether a Level 2 or Level 3 fair value classification would be more appropriate, which results in the classification judgment being highly subjective. ² Because management determines these classifications before the audit takes place and can be opportunistic in their classification choices, it is important to understand how management’s preferred classification influences auditors’ fair value classification judgments of whether a security is classified as a Level 2 versus Level 3 security.

Before examining the influence of management’s preferred classifications, we first conducted a preliminary study where we obtained experienced auditors’ quality ratings of Level 2 versus Level 3 classification judgments for the two types of securities that are examined in this paper (i.e., a Mortgage Backed Security [MBS] and an Auction Rate Security [ARS] in a setting that did not include contextual factors such as management’s preferred classification. In the current study, we conduct an experiment that follows Laux and Leuz’s (2009) advice to examine how such important contextual factors in the auditor’s institutional environment impact auditors’ judgments. Our results indicate that when auditors are aware of management’s preferred classifications, their judgments regarding the quality of management’s preferred classification exhibit both skepticism and conservatism. This result differs from those in other audit settings, such as Sarbanes-Oxley Section 404 judgments (e.g., Earley et al. 2008), where auditors were influenced towards management’s preferred classification. However, these findings are consistent with concerns voiced by various management organizations (e.g., the Corporate

² See guidance provided in PCAOB Practice Alerts #2 in December 2007, #3 in December 2008a, and #4 in April 2009.
that complain that auditors are overly skeptical and conservative of whatever fair value treatment management believes is appropriate. The PCAOB should find it reassuring that auditors’ classification judgments appear to be responding to the PCAOB’s appeal for auditors to increase their scrutiny of management’s fair value judgments.

The remainder of this paper is organized as follows: in the next section we provide a discussion of the related literature and present our theory and hypotheses tested. The third section outlines the experimental method and the fourth section presents our experimental results. Discussion and conclusions are provided in the final section.

II. BACKGROUND AND DEVELOPMENT OF COMPETING HYPOTHESES

Background on the Fair Value Classification Task

Fair value accounting has been very controversial. The intent of standard setters was to improve the usefulness of accounting information for financial statement users. Initially, at a time when it would have resulted in their companies appearing financially stronger, many companies embraced and even lobbied for the provisions of the standard (e.g., Investment Company Institute comments on FASB proposal, 2004). However, the unanticipated financial crisis and the ensuing inactivity in the financial markets led to a complete reversal of views and during the economic meltdown many began to blame SFAS 157 (commonly referred to as “mark-to-market”) for exacerbating the economic slowdown by “freezing” or eliminating the market for financial assets (Ryan 2008; Kruetzer 2009). Indeed, former Speaker of the U.S. House of Representatives Newt Gingrich argued that regulators “can fix 70% of the financial crisis by changing the mark-to-market accounting rule (Gingrich 2008),” and Steve Forbes charged that mark-to-market accounting was “an economic version of the bubonic plague” and
that “this rule was the principal reason that the financial disaster…threatened to destroy our financial system (Forbes 2010).”

Not only did critics blame the accounting rules for the country’s economic problems, but companies and appraisers also blamed auditors for scrutinizing their clients’ fair value accounting too much and for being overly conservative in the way they applied the fair value standards (CEB 2009; King 2008). Interestingly, at the same time, the PCAOB criticized auditors for not being sufficiently professionally skeptical. Numerous PCAOB inspection and 4010 reports (e.g. PCAOB 2008b) and concept releases (e.g., PCAOB 2011) indicate that lack of skepticism by auditors has led to audit deficiencies and has negatively impacted audit quality. Because management has discretion (and the potential to be opportunistic) in the classification level selected for fair value securities, we examine whether management’s classification preference influences auditors’ fair value judgments.

*Auditors’ Conservatism in the Fair Value Setting*

In a high-risk setting like the fair value judgment task, many empirical archival and experimental auditing studies have shown that auditors have a preference for conservative accounting treatments (e.g., Myers et al. 2010, Feldmann and Read 2010; Brown and Johnstone 2009; Rama and Read 2006; Geiger et al. 2005; Shelton 1999; Hoffman and Patton 1997; Hackenbrack and Nelson 1996). In addition, research suggests that auditors have an aversion to ambiguity and respond to uncertainty in valuation settings by becoming more conservative (e.g., Zimbelman and Waller 1999). Thus, it is likely that auditors will be cautious and conservative when making fair-value classification judgments.

Note that the term “conservative” is often used to indicate a measure that reduces net income or assets or increases liabilities. A conservative auditor deters client management from
presenting their company’s financial position in too positive a light, and prefers accounting
treatments that seem easier to defend or justify. Conservatism is not generally viewed as a
relevant concept in fair value accounting per se, because the focus is on reaching the appropriate
market value, not the income/asset reducing book value of an asset. However, conservative
auditors in the fair value setting still seek to deter client management from presenting their
financial position too positively (i.e., in a manner that is likely to result in the market overvaluing
the security), and conservative auditors prefer accounting treatments that are easier to defend.

Given the interpretation of the term conservative as described above, there is academic
and professional (non-academic) literature that indicates that auditors consider the Level 3 fair
value classification to be more conservative and, therefore more preferred for two main reasons:
1) the market discounts Level 3 securities to a greater extent than Level 2 securities, and 2) Level
3 securities require more disclosures, making them easier to defend, thereby reducing litigation
risk. First, archival studies find that Level 3 securities are valued lowest in the marketplace
because they are discounted significantly more than Level 2 securities (Song et al. 2010; Kolev
2009; Cullinan and Zhang 2012). The discount observed in these studies for Level 3 securities
ranges from 20% to 30% on $1 of reported assets (Laux and Leuz 2010). Thus, ceteris paribus,
auditors consider the Level 3 classification to be most conservative because, holding the reported
book value of an asset constant, Level 3 classifications result in the lowest market valuation.

Second, auditors view Level 3 securities as more conservative because they require
greater disclosures than Level 2 securities, and would therefore be more defensible. Specifically,
Goh et al. (2011) discuss that the reason that Level 3 securities require more disclosures than
Level 2 securities is because they require more management discretion. Therefore, extra
disclosures inform investors about how management used their discretion in arriving at the Level
3 classification. Goh et al. (2011) also indicate that auditors from large CPA firms prefer situations in which managers provide more fair value disclosures. They note that auditors pressure management to provide more disclosures, presumably to increase auditors’ ability to defend the treatment. In addition, other research (e.g., Ryan 2008; Laux and Leuz 2009) suggests that auditors might also view the additional financial statement disclosure requirements associated with Level 3 classifications as providing increased transparency and comparability, which also makes them more defensible, thereby reducing auditors’ litigation risk.

There is evidence that auditors push companies into using the more conservative Level 3 classifications. Specifically, Corgentum Consulting claims that, “when faced with questionable inputs or uncertain levels of liquidity….many auditors took a conservative hard-line approach and classified these questionable assets and liabilities as being in Level 3” (Corgentum Consulting, Feb. 13, 2011, p. 1). A PricewaterhouseCoopers white paper on fair value (PwC 2008) is also consistent with auditors pushing management to use Level 3 classifications more often. It mentions that the additional disclosures (such as those associated with Level 3 securities) will be more defensible and reduce litigation risk. PwC takes the position that investors value ease of comparability, and that as uncertainty and litigation risk increases, management can take the conservative approach by increasing the explanations and assumptions of their models.

Initially, archival accounting researchers (e.g., Chen et al. 2010; Botosan et al. 2011) did not treat Level 3 securities as the conservative choice, believing that the increased information asymmetry and discretion inherent in Level 3 valuations made Level 2 securities appear more conservative. Interestingly, these studies did not find evidence consistent with Level 2 securities
being more conservative, and in some cases the researchers found the opposite to be true. Their assumption about Level 3 securities could have partially been in reaction to the PCAOB’s warnings to auditors following the passage of SFAS 157. Specifically, the PCAOB cautioned auditors (e.g., PCAOB Staff Audit Practice Alert No. 2, 2007, p. 6) to “be alert for circumstances in which the company may have an incentive to inappropriately classify fair value measurements within the hierarchy” and notes that “more discretion or judgment on the part of management” is required as one moves up the hierarchy. The PCAOB’s warning does not seem to have taken into account that investors are also aware of the discretion and illiquidity in Level 3 securities and tend to “punish” their use by discounting them heavily, making Level 3 securities less desirable to management, not more desirable.

Other research has confirmed that managers have a strong tendency to use Level 2 classifications and prefer to avoid Level 3 classifications because of the perceived stigma against Level 3 securities (e.g., Johnson 2009). Riedl and Serafeim (2011) find that Level 3 assets have higher systematic risk and greater information asymmetry when compared to Level 2 assets, and, as discussed earlier, Level 3 securities are valued less by investors (Song et al. 2010; Kolev 2009; Cullinan and Zhang 2012). This would explain why the vast majority of fair value assets are valued as Level 2 securities, whereas only a small minority of fair value securities has been

Botosan et al. (2011) predicted that auditors and clients who faced greater litigation exposure would be less likely to use Level 3 inputs, which suggests that they view Level 3 classifications as the less conservative classification. However, they do not find consistent empirical support for this view, and in some cases found the opposite result, that auditors facing greater litigation risk were more likely to use Level 3 classifications. Chen et al. (2010) do not examine the Level 2 versus Level 3 classification per se, but in their empirical tests, they operationalize “companies with less conservative classifications” as Level 3 classifications, and ultimately do not find support for their hypothesis related to this operationalization.

Framing this in terms of strategic reasoning (e.g., Wilks and Zimbelman 2004), the PCAOB’s warning assumes that management would use zero-order strategic reasoning and behave opportunistically when given the discretion to do so. However, management actually appears to use higher-order strategic reasoning by considering how investors would perceive any opportunistic behavior on their part; management appears to anticipate the market’s negative reaction to the extra discretion inherent in Level 3 securities, and choose to avoid using them.
classified as Level 3 (e.g., Grant Thornton 2010; Corporate Executive Board -- Controller’s Leadership Roundtable on Accounting Hot Topics 2011).

Based on the preceding discussion we expect that, in the high-risk fair value environment, when faced with a client’s preferred classification, ceteris paribus, auditors will have a tendency to be more conservative and rate Level 3 classifications as higher quality than Level 2 classifications. We predict that this general tendency towards conservatism will be combined with one of two alternative hypotheses (i.e., second-mover effect in which auditors are swayed towards management’s classification or skepticism effect in which auditors’ judgments move away from management’s classification). That is, auditors could tend to rate management’s preferred classification as higher quality, but temper this by preferring it more if management chose the more conservative Level 3 classification. Alternatively, auditors could be skeptical of management’s preferred classification, tending to rate it as lower quality, and be more skeptical of management’s less conservative Level 2 classifications. We develop these alternative hypotheses below.

**Development of H1a: Auditor Swayed Toward Management’s Preferred Classification**

In the fair value setting, management has to make its fair value judgments prior to the auditor’s. The auditor then has to evaluate the reasonableness of management’s judgment, using management’s judgment as an input in the auditor’s decision process. When performing this task, it is difficult, if not impossible, for the auditor to reach an independent judgment that is not influenced by management’s. Earley et al. (2008) discussed the challenge for auditors of being the “second mover,” making their judgments after being exposed to their client management’s judgment. They examined auditors’ classifications of internal control deficiencies in accordance
with Section 404 of the Sarbanes-Oxley (SOX) Act of 2002, and found that auditors’ classification judgments were biased towards management’s initial classification. The authors attributed this bias to the curse of knowledge (e.g., Fischhoff 1977), where individuals are unable to ignore previously processed information. 5 Earley et al. (2008, p. 1480) note that fair value judgments are another important area where management’s valuation judgment precedes the auditors’ judgment and that the fair value task is even more uncertain and ill-structured than the task of evaluating internal controls. They therefore caution that fair value judgments could be another setting in which auditors’ judgments could be swayed towards management’s preferred treatment.

The literature on motivated reasoning also suggests that auditors’ fair value judgments can be influenced by management's reporting preferences (e.g., Kunda 1990; Hackenbrack and Nelson 1996; Salterio and Koonce 1997; Jenkins and Haynes 2003; Kadous et al. 2003; Blay 2005). Those studies examine auditors’ negotiation over accounting treatments with their clients and find that auditors’ judgments are influenced in the direction of management’s preferred treatment due to their desire to please and retain their audit clients. Both second-mover effects and motivated reasoning would predict that auditors’ judgments would be influenced towards the fair value classification that the client’s management prefers, and that auditors would rate management’s preferred treatment as being of higher quality. Table 1, Panel A illustrates the prediction of combining this tendency towards rating management’s preferred treatment as the

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5 While previous accounting studies (Kennedy 1995; McDaniel and Kinney 1995) also showed that auditors’ judgments were swayed toward management’s, Earley et al. (2008) note that it might be even harder to ignore management’s estimate for tasks such as SOX Section 404 internal control judgments and fair value judgments, which are less-structured tasks where the true state or outcome would not be available to the auditor at the time of the auditors’ report.
higher quality treatment with auditors’ general tendency towards rating the more conservative (i.e., Level 3) classification as the higher quality treatment,⁶ which is hypothesized as follows:

\[ \text{H1a: Auditors will be influenced toward management’s preferred classification (i.e., subject to the second-mover effect) in that their quality ratings of the classification that management prefers will be higher than their quality ratings for the alternative classification. Furthermore, this influence will be stronger when management prefers the more conservative Level 3 classification than when management prefers the less conservative Level 2 classification.} \]

[Insert Table 1 Here]

\textit{Development of H1b: Auditor Skeptical of Management’s Preferred Classification}

As mentioned earlier, the fair value judgment setting is considered to be a very high-risk setting (e.g., Young 2008). Prior studies (e.g., Blay 2005; Hackenbrack and Nelson 1996) have shown that in such high-risk settings, the effects of motivated reasoning were either diminished or eliminated. In addition, recent studies (e.g., Nelson 2009; Brown-Liburd, Cohen and Trompeter 2011; Harding and Trotman 2011; Quadackers, Groot and Wright 2011) report evidence that client preferences can actually have an effect that is in the opposite direction of the second-mover effect that was found in Earley et al. (2008). Specifically, those studies found that when faced with high-risk judgment tasks, auditors can display strong professional skepticism, and can be wary of any accounting treatment that is preferred by management.

Consistent with Shaub and Lawrence’s (1996) view of skepticism, Nelson (2009) views skepticism as “presumptive doubt,” where “auditors who exhibit high professional skepticism…need relatively more persuasive evidence (in terms of quality and/or quantity) to be convinced that an assertion is correct.” Whereas some previous research (e.g., Hurtt 2010) has

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⁶ Note that prior research suggests that subconscious cognitive biases like the second-mover effect and effects of economic incentives, such as conservatism, can occur simultaneously (See Hobson and Kachelmeier 2005 for a detailed explanation).
examined professional skepticism in terms of an auditor’s individual traits or characteristics that they would bring to any task, Nelson (2009) argues that there are incentives in the auditors’ environment (such as increased regulatory scrutiny, litigation risk, and reputation risk) that cause them to become more professionally skeptical. Consistent with Nelson (2009), Young (2008) notes that the fair-value audit setting is a particularly high-risk one in which auditors face both high litigation risk and reputation risk, and Quadackers et al. (2011) find that auditors’ skepticism is more pronounced in high-risk settings.

We mentioned earlier that reaching conservative, defensible judgments is one way for auditors to reduce their litigation risk. Another way for auditors to reduce their litigation risk is to be professionally skeptical of whatever accounting treatment management prefers to use. We present professional skepticism and conservatism as two distinct phenomena (which they can be), but these tendencies often go hand in hand. Indeed, Brown-Liburd et al. (2011, p. 10) argues that, “prior research suggests that, when faced with heightened risk—that causes heightened professional skepticism, auditors may adopt a conservatism heuristic”.7

Many critics complain that auditors have responded to the PCAOB’s criticism that auditors were not sufficiently skeptical in the fair value setting (PCAOB 2008b)8 by becoming unduly skeptical of the client’s preferred treatment and scrutinizing management’s choices simply because management prefers them (e.g., King 2008; Duff and Phelps 2010). If auditors do respond to the PCAOB’s inspection reports by increasing their professional skepticism, it is likely that they will scrutinize management’s less conservative (i.e., Level 2) fair value

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7 They cite Carpenter et al., 2003; McMillan and White, 1993, and Smith and Kida, 1991 as evidence.
8 Specifically, in its inspections of audits by registered audit firms from 2004-2007, the PCAOB found that auditors have not been demonstrating an appropriate level of professional skepticism regarding fair market value judgments and often do not adequately test management's assumptions underlying these judgments.
classifications more than their more conservative (i.e., Level 3) fair value classifications. Further, because management strongly prefers securities with a Level 2 classification (see Corgentum Consulting 2011; CEB 2009), auditors could perceive that insisting on a Level 3 classification is a way for them to demonstrate that they are taking a tough stance against aggressive reporting.

Table 1, Panel B illustrates the prediction of combining the general tendency towards rating the more conservative (i.e., Level 3) classification as the higher quality treatment with the tendency to be skeptical of whichever treatment management prefers (and, therefore, rating that as the lower quality treatment), which is hypothesized as follows:

**H1b:** Auditors will be skeptical of management’s preferred classification in that their quality ratings for management’s preferred classification will be lower than their quality ratings for the alternative classification. Furthermore, when management prefers the less conservative Level 2 classification, auditors will be more skeptical than when management prefers the more conservative Level 3 classification.

Figure 1 illustrates graphically the two different interactions predicted for these alternative hypotheses.

[Insert Figure 1 Here]

### III. METHOD

**Participants**

Before conducting the experiment reported here, we conducted a preliminary study to better understand how auditors would rate the quality of the fair value classifications for different types of securities in the absence of contextual factors such as knowing management’s preferred classification. In the preliminary study, we presented 83 auditors (with the same level of experience as those used in the current experiment) with four cases, each of which described a
different security type, and asked them to judge the quality of the Level 2 versus Level 3 classification for each of the four securities. In the preliminary study, we tested whether auditors’ quality ratings were influenced by (1) providing the “label” of a security as a Level 2 versus Level 3, as opposed to just describing the classification treatment without mentioning whether it was a Level 2 or Level 3 treatment, and (2) including a dollar amount, versus not including a dollar amount, of the fair value treatment. In addition, in cases for which a dollar amount was provided for the Level 2 versus Level 3 treatment, we tested whether a 2% difference in net income between the Level 2 versus Level 3 classifications influenced auditors’ quality ratings. The results of the preliminary study indicated that neither providing the label nor the dollar amount influenced auditors’ quality ratings; nor did varying the dollar amount by 2% of net income. We also used the results of the preliminary study to select two security types (MBS and ARS) to use in the current study. We selected these two security types because they were considered at-margin cases for which, in the absence of information about management’s preferred treatment, auditors’ Level 2 and Level 3 classifications did not differ. In the current experiment, Participants were 114 general auditors identified by their firms as having expertise at performing fair value audit tasks on their audit clients. The participants were recruited from four of the five largest international public accounting firms. They had a mean of 7.55 years of experience and had been working for their current employer for a mean of 6.6 years. Their experience ranged from 2 to 25 years and the median was 7 years. The auditors had significant experience related to fair value measurements, and had made at least one fair value judgment on a mean of 6.86 engagements. Because Griffith et al. (2012) report that auditors at the manager and senior levels typically perform the auditing of management’s estimates such as fair value
measurements, our participants’ level of experience matches that needed to perform the experimental task. Table 2 presents descriptive statistics related to the participants’ experience.

[Insert Table 2 Here]

**Design**

We employ a 2 x 2 x 2 mixed design. The two between-participants independent variables are *Security Type* and *Management’s Preference*. The two security types were a mortgage backed security (MBS) and an auction rate security (ARS). As mentioned above, we selected the MBS and ARS securities because our preliminary study indicated that, in a setting which did not include management’s preferred classification, these were the two securities that were considered by auditors to be “at-margin” cases where there was no statistical difference between auditors’ quality ratings for the Level 2 and Level 3 classifications. Using two securities for which auditors do not have strong opinions *ex ante* about which classification is more appropriate as it allows us to focus on the effect of the auditor knowing management’s preferred treatment. The MBS was an AA rated B tranche of a privately issued pass-through non-agency backed security. The ARS’s underlying assets were non-guaranteed student loans with 20-year terms and interest rates determined by periodic “Dutch” auctions, usually occurring every 28 days. In the most recent quarter these auctions had failed and the market outlook suggested that failed auctions would be likely in the future. The detailed cases used for each security type are included in the Appendix. Note that we pilot tested the securities used in this experiment with national level fair value experts at several large international audit firms to confirm that they were realistic and that the Level 2 and Level 3 option descriptions were plausible for each
security. In addition, in the current study we held facts constant. Specifically, we always (1) provided the label that the classification was Level 2 versus Level 3, (2) provided a dollar amount of the fair value of the security, and (3) varied the dollar amount of the valuation by 1% of net income, based on the findings of the preliminary study that these design choices do not influence auditors’ quality ratings.

The Management’s Preference variable was manipulated between participants such that half of the participants were told that management preferred to classify the investment security using a Level 2 approach and the other half were told that management preferred to use a Level 3 approach to classifying the securities, where the Level 2 preference was a market valuation approach based on observable transactions for similar securities and the Level 3 preference was a theoretical pricing model (an income approach).

The within-participants variable (Valuation Level) measured the participants’ ratings of the reporting quality of the Level 3 versus the Level 2 security. Participants were initially told that management had obtained two outside experts’ estimates of the classification and appropriate valuation of the security, and that management had selected the valuation option they preferred. They were asked to assess the quality of the preferred option (either the Level 2 or Level 3, depending on which Management Preference condition they were in). Participants were then presented with the second option (i.e., whichever option management had not preferred initially), and were asked how they would rate this option. Thus, participants either rated Level 2 and then Level 3 or they rated Level 3 and then Level 2, depending on the Management Preference condition to which they were assigned.

9 The descriptions of the securities were developed based on training materials from a Big 4 CPA firm. We also had the national fair value experts at each of the participating firms review our securities and we made adjustments to each security and classification level description based on the experts’ recommendations.
Procedures

Participants were recruited through a contact at each of the four participating firms. The firm representatives provided the researchers with the email addresses of the pre-qualified potential participants. The firm representatives sent an e-mail to each potential participant alerting the individual to expect to be contacted by the researchers and strongly encouraging their participation. One of the researchers contacted each potential participant via email asking them to participate in the study and provided a link and access code to the study.

The experiment was conducted online and had three parts: (1) review of general instructions and distribution of a unique code, (2) review of the description of the particular security and management’s preferred fair value treatment, (3) review of the alternative fair value treatment, and (4) completion of the post-experimental questionnaire and rating of the attributes of fair value measurement. The participants were randomly assigned to the four treatment conditions. Each participant was given a unique code so that they could resume the study if they were inadvertently disconnected.

As noted above, participants were told that the client’s management had obtained a valuation from two independent experts to help them determine the appropriate fair value measurement. Half of the participants were told that management decided to report the fair value of the investment using the Level 2 valuation approach, whereas the other half of the participants were told that management decided to report the fair value of the investment using the Level 3 valuation approach, and the approach was described to them. The participants then rated the quality of management’s classification of the security on a 7-point scale (where 1 = lowest, 4 = moderate and 7 = highest quality). After making that judgment, participants were told that the

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10 We omitted a fifth firm from the study because the firm instructed their participants to refrain from completing the post-experimental questionnaire.
partner wanted them to review the alternative fair value reporting option that the other independent expert had supplied to management. Participants were provided with the alternative valuation approach they had not received for Judgment 1 (either Level 3 or Level 2) and ranked the quality of the second fair value classification on the 7-point scale (where 1 = lowest, 4 = moderate and 7 = highest quality). Thus, each participant rated the fair value classification quality of both the Level 2 and the Level 3 fair value reporting options. The experiment concluded with the completion of the manipulation check and demographic questions.

**IV. RESULTS**

As noted above, Table 2 presents the descriptive statistics for the participants, which indicate that all participants have extensive experience making fair value judgments. Because we manipulated management’s classification preference, we asked manipulation check questions designed to ascertain whether participants were aware of management’s preference. Eighty-five percent of the participants passed the manipulation check and there was no difference in the participants’ pass rate across treatment conditions ($F = 1.90; p = .134$).\(^{11}\) Participants also rated the realism of our experimental instrument where 1 indicated not at all realistic and 9 indicated very realistic. The mean realism score was 6.26 and did not differ across treatment conditions ($p = .99$).

Panel A of Table 3 presents participants’ mean quality ratings of the Level 2 and Level 3 classification for each Management Preference condition (Management Prefers Level 2 vs. Management Prefers Level 3). Recall that participants first rated the quality of management’s preferred classification option and then rated the alternative option. Therefore, the evaluation of

\(^{11}\) The directional results and inferences from the tests of our hypotheses remain the same when we exclude those participants who failed the manipulation check.
Level 2 and Level 3 is a within-participants variable (*Valuation Level*). Also, recall that we used the two securities for which our preliminary study indicated that there were no significant differences between participants’ quality ratings for Level 2 versus Level 3 (i.e., the two “at margin” cases) in a context that had not included management’s preferred treatment. In the current study, we manipulated Security Type between participants to ensure that there was no idiosyncratic effect attributable to a particular security type. As expected, in the current study there was no difference in participants’ judgments of the MBS and ARS security types, so we collapse the results across the two security types, and do not include Security Type as a variable in the presentation of our results.

[Insert Table 3 Here]

Recall that both Figure 1 and Table 1 depict H1a as a joint effect of conservatism and the second-mover effect, whereby auditors are swayed toward the client’s preference. In addition, Figure 1 and Table 1 depict H1b as a joint effect of conservatism and auditor skepticism. Specifically, H1a predicted that auditors’ judgment of the quality of the Level 2 and Level 3 classifications would be influenced toward management’s preferred treatment and that this influence would be stronger when management prefers the more conservative Level 3 classification than when management prefers the less conservative Level 2 classification. H1b predicted the alternative, that management’s preference would increase auditors’ skepticism particularly when management prefers the less conservative Level 2 classification. Panel A of Table 3 presents the mean quality ratings for the two treatment variables: Valuation Level (Classification level being evaluated – either Level 2 or Level 3) and Management Preference (Management Prefers Level 2 or Management Prefers Level 3 Classification).
Panel B of Table 3 presents the results of the repeated-measures ANOVA conducted to test the hypotheses. The Management Preference X Valuation Level interaction is statistically significant ($F = 4.375; p = .039$). As depicted in Figure 2, the pattern of the interaction is consistent with H1b, because the difference between participants’ fair value rating of the Level 2 vs. Level 3 classification reporting options is smaller when management prefers the more conservative Level 3 option (difference = -.02) than when management prefers the less conservative Level 2 option (difference = -.77). Thus, auditors are skeptical of management’s preferred classification, and particularly so when management’s reporting choice is less conservative.

[Insert Figure 2 Here]

V. CONCLUSION

This research was designed to examine auditors’ Level 2 and Level 3 fair value classification judgments. We investigate auditors’ classification judgments because it is considered a “central issue in …the fair value accounting debate” (Fahnestock and Bostwick 2011), but there are no academic studies to date that have examined how auditors’ fair value classification judgments are made. We examine how contextual factors and institutional factors of the audit setting influence auditors’ fair value classification judgments, and test competing hypotheses suggested by prior literature. Specifically, we test whether auditors are subject to the second-mover effect and are swayed towards management’s preferred classification or whether the high-risk nature of the fair value setting causes auditors to be skeptical of management and reject the classification that management prefers. We also expected auditors’ general tendency to prefer more conservative classifications to interact with either of these competing alternatives. The results were consistent with the skepticism hypothesis. Specifically, we found that in the fair
value classification context, auditors are more skeptical of management’s preference when management prefers the less conservative reporting choice. These results suggest that in the high-risk fair value setting, auditor skepticism and conservatism work together to temper the second-mover effect of management’s preference on auditor judgments that was found in lower risk settings.

An experiment is an ideal way to test whether auditors are biased towards accommodating management’s fair value preferences or whether they scrutinize management’s preferred classification. There is a great deal of speculation and conjecture about such tendencies in the natural environment, but many complex factors are confounded in the natural environment, constraining our ability to isolate the influence of management’s preference. The fact that we were able to use two securities for which previous research determined that auditors’ quality ratings of the Level 2 versus Level 3 classification did not differ (i.e., at margin cases) enabled us to clearly demonstrate the effect on auditors’ judgments of knowing management’s preferred classification.

This research is subject to limitations. First, although we pretested the securities used in the experiment for realism and to ensure that there was enough information to make a preliminary classification judgment, participants were not provided with the level of detail about each security and the resources that they would normally have access to in practice (i.e., they could not consult with outside experts, pricing services, etc.). Second, this research focused on the first step of auditors’ judgment process in which they arrive at an initial judgment regarding a fair value security’s classification. If auditors are skeptical of client management’s choice of a Level 2 security, it is likely that they will require more evidence before allowing management to use this approach. Future research could investigate how much extra evidence, and what kind of
evidence, auditors would need in order to be persuaded that management’s position that the
securities are Level 2 is appropriate.

Notwithstanding these limitations, our research provides insight into how auditors make
fair value classification judgments. In our experiment, management classifies the fair value
security before the auditor does, as is the case in the natural environment. In this environment,
management could exploit the discretion available in fair value classification to make
opportunistic classification choices. We find that auditors respond to these classifications with
professional skepticism, reducing their quality ratings for management’s preferred treatment.
Future research could examine whether auditors also have this level of skepticism for other
aspects of fair value reporting. In particular, the PCAOB has expressed concerns about auditors’
judgments when testing their client’s internal controls over financial reporting of fair value
securities (PCAOB 2010).

Also, PCAOB inspection reports have noted that when auditors are provided with several
fair values obtained from external pricing services, auditors tend to select the value that is closest
to that preferred by management without evaluating the significance of differences between the
other prices obtained and management’s preferred value (see for example, PCAOB Release No.
104-2011-288, 2011). While it is possible that despite auditors’ initial skepticism of
management’s preferred Level 2 classification in the current study, that they could gather
additional evidence in support of management’s preferred classification and ultimately allow
management to use their preferred valuation on the financial statements. It is also possible that
there are other aspects of the fair value task, aside from choosing the appropriate classification
level, for which auditors could exhibit different levels of skepticism. For example, auditors
might be less skeptical and more swayed by management’s preferred fair valuation within a fair
value classification (e.g., when deciding between two different Level 3 valuations) than they were in our study of *between* level judgments (i.e., Level 2 versus Level 3 classification). While our results are consistent with the PCAOB’s criticisms increasing auditors’ skepticism, future research could examine how far-reaching these results might be with regard to these other aspects of the valuation task.
References


Corporate Executive Board (CEB) Fair Value: Sustainably Managing New Auditor Demands (on-line August 2009 copyright).


Hanson, Jay. 2012. PCAOB board member Jay Hanson’s plenary speech at AAA Auditing Midyear meeting in Savannah, GA, January 2012.


Song, C. J., W. B. Thomas, and H. Yi. 2010. Value Relevance of FAS No. 157 Fair Value


Figure 1 – Predicted Patterns of Auditors’ Judgments of the Client’s FV Classification Under Each Hypothesis

H1A - Second Mover Effect: Auditor Influenced Toward Management Preference

Quality Rating

Mgt Prefers Lvl 2 Valuation  Mgt Prefers Lvl 3 Valuation

H1B - Auditor Skepticism

Quality Rating

Mgt Prefers Lvl 2 Valuation  Mgt Prefers Lvl 3 Valuation
Figure 1 (continued)

KEY:

Lvl 2 = Level 2 classification

Lvl 3 = Level 3 classification

Quality Rating = Participants’ rating of the quality of the client’s financial disclosure treatment (i.e., Level 2 or Level 3) of the fair value security measured on a 7-point scale where 1=Lowest Quality, 4=Moderate Quality and 7=Highest Quality.
Figure 2 – Experimental Results of Auditors’ Judgment of the Client’s FV Classification

Results Consistent with H1B

KEY:
Lvl 2 = Level 2 classification
Lvl 3 = Level 3 classification

Quality Rating = Participants’ rating of the quality of the client’s financial disclosure treatment (i.e., Level 2 or Level 3) of the fair value security measured on a 7-point scale where 1=Lowest Quality, 4=Moderate Quality and 7=Highest Quality.
Table 1: Development of Hypotheses

Dependent variable is the rating of quality of the fair value classification

Panel A: Combination of Conservatism and Auditor Influenced Toward Client Preference

General tendency towards conservatism (Level 3 is more conservative):

<table>
<thead>
<tr>
<th></th>
<th>Management prefers Level 2</th>
<th>Management prefers Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Auditor Rating of</strong></td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td><strong>Level 2 Valuation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Auditor Rating of</strong></td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td><strong>Level 3 Valuation</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Auditor is Influenced Toward Client Preference:

<table>
<thead>
<tr>
<th></th>
<th>Management prefers Level 2</th>
<th>Management prefers Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Auditor Rating of</strong></td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td><strong>Level 2 Valuation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Auditor Rating of</strong></td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td><strong>Level 3 Valuation</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Combined Prediction of Conservatism and Influence Toward Client Preference (H1a):

<table>
<thead>
<tr>
<th></th>
<th>Management prefers Level 2</th>
<th>Management prefers Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Auditor Rating of</strong></td>
<td>Medium</td>
<td>Lowest</td>
</tr>
<tr>
<td><strong>Level 2 Valuation</strong></td>
<td>(two forces offset)</td>
<td>(two forces in same direction)</td>
</tr>
<tr>
<td><strong>Auditor Rating of</strong></td>
<td>Medium</td>
<td>Highest</td>
</tr>
<tr>
<td><strong>Level 3 Valuation</strong></td>
<td>(two forces offset)</td>
<td>(two forces in same direction)</td>
</tr>
<tr>
<td><strong>Prediction</strong></td>
<td>Smaller difference</td>
<td>Larger difference</td>
</tr>
<tr>
<td></td>
<td>between Level 2 and Level 2</td>
<td>between Level 2 and Level 3</td>
</tr>
<tr>
<td></td>
<td>Quality ratings</td>
<td>Quality ratings</td>
</tr>
</tbody>
</table>

**H1a:** Auditors will be influenced toward management’s preferred classification (i.e., subject to the second-mover effect) in that their quality ratings of the classification that management prefers will be higher than for the alternative classification. Furthermore, this influence will be stronger when management prefers the more conservative Level 3 classification than when management prefers the less conservative Level 2 classification.
Panel B: Combination of Conservatism and Auditor Skeptical of Client Preference

**General tendency towards conservatism (Level 3 is more conservative):**

<table>
<thead>
<tr>
<th>Auditor Rating of Level 2 Valuation</th>
<th>Management prefers Level 2</th>
<th>Management prefers Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Auditor Rating of Level 3 Valuation</th>
<th>Management prefers Level 2</th>
<th>Management prefers Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
</tbody>
</table>

**Auditor is Skeptical of Client’s Preference:**

<table>
<thead>
<tr>
<th>Auditor Rating of Level 2 Valuation</th>
<th>Management prefers Level 2</th>
<th>Management prefers Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>High</td>
<td>Low</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Auditor Rating of Level 3 Valuation</th>
<th>Management prefers Level 2</th>
<th>Management prefers Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Low</td>
<td>Low</td>
</tr>
</tbody>
</table>

**Combined Prediction of Conservatism and Skepticism (H1b):**

<table>
<thead>
<tr>
<th>Auditor Rating of Level 2 Valuation</th>
<th>Management prefers Level 2</th>
<th>Management prefers Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest (two forces in same direction)</td>
<td>Medium (two forces offset)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Auditor Rating of Level 3 Valuation</th>
<th>Management prefers Level 2</th>
<th>Management prefers Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest (two forces in same direction)</td>
<td>Medium (two forces offset)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prediction</th>
<th>Management prefers Level 2</th>
<th>Management prefers Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Larger difference between Level 2 and Level 3 Quality ratings</td>
<td>Smaller difference between Level 2 and Level 3 Quality ratings</td>
<td></td>
</tr>
</tbody>
</table>

**H1b:** Auditors will be skeptical of management’s preferred classification in that their quality ratings for management’s preferred classification will be lower than for the alternative classification. Furthermore, when management prefers the less conservative Level 2 classification, auditors will be more skeptical than when management prefers the more conservative Level 3 classification.
Table 2: Participant Descriptive Statistics

<table>
<thead>
<tr>
<th>Demographic Factor</th>
<th>All Participants (n = 114)</th>
<th>Mgmt. Prefers Level 2 (I) Treatment Condition (n=56)</th>
<th>Mgmt. Prefers Level 3 (II) Treatment Condition (n=58)</th>
<th>Results of Statistical Tests of I vs. II p-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Median</td>
<td>Range</td>
<td>Mean</td>
</tr>
<tr>
<td>Years of audit experience</td>
<td>7.60</td>
<td>7.0</td>
<td>2 - 25</td>
<td>7.79</td>
</tr>
<tr>
<td>First or second industry of specialization requiring substantial FV auditing (^a)</td>
<td>73.7%</td>
<td>n/a</td>
<td>n/a</td>
<td>71.4%</td>
</tr>
<tr>
<td>First industry of specialization requiring substantial FV auditing (^b)</td>
<td>64.0%</td>
<td>n/a</td>
<td>n/a</td>
<td>66.1%</td>
</tr>
<tr>
<td>Hours spent on FV tasks in past year</td>
<td>205.79</td>
<td>100.0</td>
<td>0 - 1000</td>
<td>191.52</td>
</tr>
<tr>
<td>Number of audits requiring FV judgment (^c)</td>
<td>6.91</td>
<td>4.0</td>
<td>0 - 100</td>
<td>5.63</td>
</tr>
<tr>
<td>Years with current employer</td>
<td>6.64</td>
<td>6.0</td>
<td>1 - 25</td>
<td>6.96</td>
</tr>
</tbody>
</table>

\(^a\) This variable is the proportion of participants who indicated that either their 1\(^{st}\) or their 2\(^{nd}\) industry of specialty included financial services, real estate, oil, gas & utilities, or insurance & employee benefits. Industries that were considered non-FV specialty includes: non-profits, technology, consumer goods, etc.

\(^b\) This variable is the proportion of participants who indicated that their top industry of specialty included financial services, real estate, oil, gas & utilities, or and insurance & employee benefits. Industries that are considered non-FV specialty includes: non-profits, technology, consumer goods, etc.

\(^c\) Participants were asked the number of engagements on which they made at least one fair value judgment,
Table 3: The Influence of Management’s Preference on Auditors’ Classifications Judgments

Panel A: Auditors’ mean fair value classification quality ratings

<table>
<thead>
<tr>
<th>VALUATION LEVEL ASSESSED b</th>
<th>MANAGEMENT PREFERENCE a</th>
<th>Marginal Mean (Difference in means)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Management Prefers Level 2 (sd) n= 56</td>
<td>Management Prefers Level 3 (sd) n= 58</td>
</tr>
<tr>
<td>Level 2</td>
<td>3.91 (1.269)</td>
<td>4.41 (1.200)</td>
</tr>
<tr>
<td>Level 3</td>
<td>4.68 (1.252)</td>
<td>4.43 (1.365)</td>
</tr>
<tr>
<td>Marginal Mean (Difference in Means)</td>
<td>4.30 (-.77)</td>
<td>4.42 (-.02)</td>
</tr>
</tbody>
</table>

Panel B: Repeated measures ANOVA of quality ratings on the between subjects factor, management preference, and the within subjects factor, valuation level

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F-Value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Participants:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management Preference a</td>
<td>1</td>
<td>.930</td>
<td>.930</td>
<td>.661</td>
<td>.418</td>
</tr>
<tr>
<td>Error</td>
<td>112</td>
<td>157.579</td>
<td>1.407</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Participants:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valuation Level b</td>
<td>1</td>
<td>8.781</td>
<td>8.781</td>
<td>4.786</td>
<td>.031</td>
</tr>
<tr>
<td>Management Preference X Valuation</td>
<td>1</td>
<td>8.026</td>
<td>8.026</td>
<td>4.375</td>
<td>.039</td>
</tr>
<tr>
<td>Error</td>
<td>112</td>
<td>205.482</td>
<td>1.835</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Management preference was manipulated between subjects on two levels. Half of the participants were told that management preferred to classify the investment security using a Level 2 approach and the other half were told that management preferred to use a Level 3 approach, where the Level 2 preference was a market valuation approach based on observable transactions for similar securities and the Level 3 preference was a theoretical pricing model (an income approach).

b Valuation level was a within subjects variable of the participants’ quality rating of the Level 2 and Level 3 financial reporting options. Participants rated the quality of the client’s financial disclosure treatment (i.e., Level 2 or Level 3) of the fair value security measured on a 7-point scale where 1=Lowest Quality, 4=Moderate Quality and 7=Highest Quality. Specifically, first, participants provided a quality rating of management’s preferred fair value classification level (either Level 2 or Level 3 depending on Management Preference treatment condition). Next, participants provided a quality rating of the alternative fair value classification level (Level 3 or Level 2). Thus, each participant rated the fair value classification quality of both the Level 2 and the Level 3 fair value reporting options.
## Summary of Fair Value Security Information Provided to Participants

<table>
<thead>
<tr>
<th>Security</th>
<th>Summary</th>
<th>FVM Reporting Options</th>
</tr>
</thead>
</table>
| **Case 1 - Mortgage-Backed Security** | CVJ is a community bank. One of its holdings is an S&P AA-rated B-level tranche of a privately issued pass-through non-agency Mortgage-Backed Security (MBS), which had a stated maturity of 30 years. The underlying collateral for the MBS security is subprime residential mortgages. Previously, CVJ used a FV market valuation approach that included quoted prices in active markets for similar MBS with insignificant adjustments for differences between the MBS held by CVJ and similar securities. As of the end of the current fiscal year, the MBS market activity declined and became increasingly volatile evidenced through fluctuating bid-ask spreads. | **Level 3**<br>This is a theoretical pricing model (i.e., an income approach), which takes into account the relationship between interest rates and loan prepayment speeds.  
• CVJ bases its assumptions about prepayment speeds on its own historical data regarding prepayments. | **Level 2**<br>This approach values the MBS using similar observed transactions.  
• CVJ determined that the adjustments to the observed transactions required to determine its MBS’ FV are insignificant at year end. |
| **Case 2 - Auction Rate Securities** | DCK is a regional bank. Included in its portfolio are Auction Rate Securities (ARS). The underlying assets for the ARS are non-guaranteed (non-FFELP) 20 year student loans, with the interest rate reset based on “Dutch” auctions that generally occur every 28 days. Originally the ARS were seen as cash equivalents. However, when demand for the ARSs decrease, a failed auction occurs, so that investors cannot liquidate their positions through the auction process. | **Level 3**<br>This is a discounted cash flow model (i.e., an income approach), to value the ARS.  
Inputs to the model based on previous experience with student loan-related investments. | **Level 2**<br>This approach is a market approach based on the limited observable market auctions for similar investments and/or prices quoted in the limited secondary market to determine the |
In the last quarter of the current year, there were auction failures and a limited secondary market for these ARS held by DCK. The market outlook for these ARS is that continued failed auctions are likely to occur, however, the auctions continue to be conducted as scheduled, and are eventually expected to clear, because recent legislation should provide primary and secondary market liquidity in student loans.

- Inputs to cash flow model that are significant to the overall valuation are not market based.
- FV of the ARS.
- Management obtains market information and then makes adjustments based on differences between its ARS other investments.
- DCK would use prices quoted in the limited secondary market for ARS with similar characteristics to value its ARS.