

MEMORANDUM

TO: IASB Members, IASB Staff and the Program Advisory Committee for
IAAER-KPMG Research Opportunities: Informing the IASB Standard Setting Process

FROM: Roshan Sinha and Donald Young

DATE: November 2020

RE: Progress to Date and Preliminary Design

The purpose of this memo is to report our progress on the research proposal funded through the *IAAER-KPMG Research Opportunities Program: Informing the IASB Standard Setting Process* titled “The Impact of Hedging and Hedge Reporting on Managers’ and Investors’ Decisions.”

This memo is not a duplicate of our initial proposal; however, we repeat discussion relevant to our research question. First, we discuss the aspects of the Dynamic Risk Management (DRM) project we plan to examine. Second, we describe preliminary designs for our proposed experiment to answer our research questions. Our objective is to examine research questions and design appropriate tests to address issues of the highest importance to the IASB. We appreciate all comments and suggestions regarding our areas of focus and our experiments.

Examining Transparency and Performance Measurement

The goal of developing a new macro-hedging model is to allow firms to convey information about the complex risk strategies that do not qualify for instrument-specific approach required in IFRS 9 (IASB 2014; IASB 2019). More specifically, the existing hedge accounting requirements do not apply to dynamically managed portfolios with continuous or frequent changes in the risk positions being hedged. Thus, the main issue relates to concerns information about DRM is not properly conveyed to investors via amounts recognized in the primary financial statements. In its April 2019 Staff Paper summarizing the discussions up that date, the IASB indicates it wishes to address the following four challenges in the new DRM model: transparency, eligible items, dynamic nature and performance measurement (IASB 2019). Transparency refers to quantitative disclosures on the face of the financials, and qualitative disclosures in the notes regarding the firm’s DRM strategy. Eligible items refers to properly reflecting risk management strategies in

the financial statements not captured by IFRS 9. Dynamic nature refers to conveying information about the frequent changes in the underlying assets and the related DRM actions. Performance measurement refers to providing reliable metrics and information to allow stakeholders to evaluate whether management was successful in achieving the risk management strategy. Of these four, we preliminarily conclude that controlled experiments are best suited to provide standard-setting-relevant information on the potential effects on managers' and investors' decisions of transparency and performance measurement. By randomly assigning participants to alternative risk-management scenarios, we can examine the causal effects of alternative features of transparency and performance measurement on investor behavior. We discuss transparency and performance measurement in further detail.

With regard to transparency, we identified multiple ways to present DRM related activities in the statement of financial position and the statement of profit or loss. Specifically, results from DRM activities can be presented as a separate line item or as an aggregated presentation in relation to the item being hedged. It is unclear how the presentation of DRM activities will affect investors' understanding and evaluation of a firm's DRM activities. Prior research on presentation effects of hedging has focused mostly on investor perceptions (e.g., Koonce, Lipe and McAnally 2005, 2008; Koonce Miller and Winchel 2015). Chen, Tan and Wang (2013) is the only study examining the effect of hedging presentation on the managers' decisions to engage in hedging activities. These studies find investors prefer hedged presentations, and that managers are more likely to hedge when the presentation results in reduced profit or loss volatility. Our study is distinct from these prior studies as under the presentation styles examined in these studies, reported net income varies based on disclosure regime. Consistent with the alternatives considered by the Board, our study seeks to examine alternative presentation techniques when total profit or loss remains constant. We propose to design an experiment that varies the presentation of profit and loss items components with a focus on aggregated versus disaggregated reporting of DRM outcomes.

Related to performance measurement, an objective described in the April 2019 IASB Staff Paper is to have firms provide a metric stakeholders can use to assess the effectiveness of the firm's risk management strategy. This is important as firms are unlikely to always achieve perfect

alignment with their stated DRM strategies. While the Board has considered ways to address the issue of performance measurement *ex-post*, we propose examining whether *ex-ante* management perceptions regarding the controllability of risk, and required disclosure regarding these perceptions, affects investor judgments and decisions. Management is already required to disclose both idiosyncratic and systematic risks in financial statement disclosures. If management was required to disclose the same with regard to their DRM activities and discuss alignment separated out by controllable and uncontrollable factors, stakeholders should be better able to judge management's performance. Additionally, forcing firms to consider the controllability of these risks would better serve as a commitment mechanism from the manager's perspective. This may help ensure managers are more deliberate with their use of derivatives and may help curb concerns about earnings management by opportunistically including or excluding items from a portfolio. Such a disclosure would also more closely tie the new standard with the existing IFRS 9 standards by highlighting the role of management intent (Leisenring, Linsmeier, Schipper and Trott 2012). We seek to examine investor reactions to qualitative disclosures highlighting controllability. In an ideal scenario, investors should only judge management's performance based on how their attempts to deal with more controllable risks. Providing the detailed difference between how investors react to alignment, or a lack therefore, between more controllable and less uncontrollable risks will be helpful, especially as the Board does not wish to include bright-line thresholds within the DRM model.

Preliminary Research Design and Proposed Procedures

Our preliminary experimental design addresses the following research questions:¹

RQ for transparency: How do components of the DRM disclosure impact risk assessments and investment decisions?

¹ Our original, accepted proposal included a research question related to how existing hedges would interact with disclosure regimes to affect managers general operational (i.e., non-hedge-related) decisions. We choose to delete that particular research question because, based on our interpretation of the Board's deliberations, the question did not appear to be of great concern. However, we are willing to include that question, and sincerely appreciate any comments or suggestions regarding our decision to remove it.

RQ for performance measurement: How does recognition of DRM misalignment on the statement of profit and loss impact risk assessments and investment decisions?

We plan to address our research questions by designing and executing an experiment in which participants will assume the role of investors who must use accounting information to buy and sell securities in a controlled laboratory setting. Because we are attempting to differentiate how investors will respond to DRM disclosure and reporting, we propose a pre-assessment, intervention, and post-assessment laboratory design setting has the best chance of assuring participants attend to the DRM manipulations and measuring the effect of these manipulations.² We will pilot study with master of business administration (MBA) students as participants and plan to include more sophisticated participants with experience in the banking industry in our final experiments.

Our primary focus in conducting the experiment is the use of different DRM disclosures and reporting alternatives to assess the impact of these alternatives on investors' judgments and decisions. Here are some possible areas for manipulation:

DRM disclosure

Possible avenues for manipulation are (1) disclosure or no disclosure of cash flow and re-pricing risk (2) management's strategy to address these risk (3) Qualitative and forward-looking nature of the disclosure (4) the volatile or uncontrollable nature of these risks (e.g., repricing from prepayment)

Impact of DRM on the Income statement

Possible avenues for manipulation are (1) vary how misalignment is reported on the income statement (e.g., under net interest income (NII), onetime gain or loss, separate line) (2) vary whether misalignment affects key metrics like NII (i.e., does the misalignment flow throw NII).

We plan to conduct a computer-based experiment in which investors will make decisions over several different periods. On a "between-subjects" basis across participants, we will vary the disclosure (transparency) and reporting (performance measurement) of DRM activities.³ In all

² This is in different than traditional "one-shot" experiments in which information is presented to participants and their resulting judgments are analyzed without providing the opportunity for feedback or learning.

³ In a "between-subjects" manipulation, subjects are exposed to only one of the between-subjects versions of the experiment. Participants in one condition are not aware of the manipulations participants view in the other conditions.

conditions, investors will be presented with financial statements, assess risk, and estimate the price of the security. In summary, the experiment will vary across subjects (i.e., between subjects) at least two sets of financial reporting and financial disclosure regime.

Investors' compensation will be based on a fixed wage for participation plus compensation for the decisions they make during the experiment. Both sources of compensation will be paid to participants in a lump sum at the conclusion of the experiment.

Figure 1 illustrates the sequence of events in every period across all between-subjects conditions.

In step 1, each investor receives an endowment of funds they will use to purchase securities of the firms. In step 2, investors receive the firm's most recent financial statements and earnings forecasts.

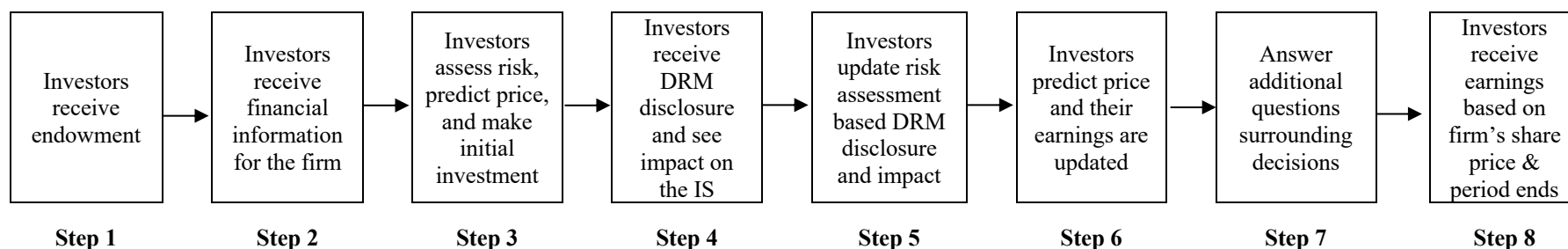
In step 3 investors assess the risk associated with interest rates and re-pricing and predict the current price of the security. If the investor's estimate of the price of the security is greater (less) than the security's baseline price, then the investor buys (sells) one share of the security at every discrete price from the expected value to their estimated value. Investors are informed of the actual stock price and their earnings from the valuation of the firm are calculated.

In step 4, investors will receive additional information about a new DRM disclosure and how these activities impact the income statement. All economic events are held constant but the nature of the DRM disclosure and how it is reported on the income statement will vary depending on the condition.

In step 5, based on the DRM disclosure and reporting, investors will reassess the risk associated with interest rates and re-pricing. In step 6, investors predict the current price of the security. If the investor's estimate of the price of the security is greater (less) than the security's baseline price, then the investor buys (sells) one share of the security at every discrete price from the expected value to their estimated value. Investors are informed of the actual stock price and their earnings from the valuation of the firm are calculated.

In step 7 investors answer additional question about their risk assessment and investment decisions. In step 8, investors earnings are updated and investors receive their total earnings for the period and the next period begins. Investors will repeat this over several periods. At the conclusion of study, investors will be paid their cumulative earnings and participation fee and will be asked to complete a short questionnaire.

Figure 1 - Flowchart of Experiment



Step 1: Investors receive an endowment of funds that they will use to purchase securities of the firm.

Step 2: Investors receive the firm's most recent financial statements and earnings forecasts.

Step 3: Investors assess the risk associated with interest rates and re-pricing and predict the current price of the security. If the investor's estimate of the price of the security is greater (less) than the security's baseline price, then the investor buys (sells) one share of the security at every discrete price from the expected value to their estimated value. Investors are informed of the actual stock price and their earnings from the valuation of the firm are calculated.

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Step 5: Based on the DRM disclosure and reporting, investors will reassess the risk associated with interest rates and re-pricing.

Step 6: Investors predict the current price of the security. If the investor's estimate of the price of the security is greater (less) than the security's baseline price, then the investor buys (sells) one share of the security at every discrete price from the expected value to their estimated value. Investors are informed of the actual stock price and their earnings from the valuation of the firm are calculated.

Step 7: Investors answer additional question about their risk assessment and investment decisions.

Step 8: Investors earnings are updated and investors receive their total earnings for the period and the next period begins.

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