# **Accepted Manuscript**

The role of accounting in Behavioral Finance

Andreas Hellmann

PII: S2214-6350(16)00007-1

DOI: http://dx.doi.org/10.1016/j.jbef.2015.11.004

Reference: JBEF 60

To appear in: Journal of Behavioral and Experimental Finance

Received date: 13 August 2015 Revised date: 11 November 2015 Accepted date: 21 November 2015



Please cite this article as: Hellmann, A., The role of accounting in Behavioral Finance. *Journal of Behavioral and Experimental Finance* (2016), http://dx.doi.org/10.1016/j.jbef.2015.11.004

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

# The Role of Accounting in Behavioral Finance

Andreas Hellmann

Department of Accounting and Corporate Governance

Faculty of Business and Economics

Macquarie University

NSW 2109, Australia

Tel: +61 2 9850 4055

Email: andreas.hellmann@mq.edu.au

### **Abstract:**

This short letter argues that insights from behavioral accounting are highly relevant for studies examining human aspects in finance. This is important because research focusing on the users of financial information and their characteristics often assumes that financial information in itself is neutral, unbiased and value-free. However, the information used by investors and capital markets participants for making economic decisions is prepared by accountants, who use their professional judgments by interpreting and applying accounting standards.

### Key words:

Behavioral Finance, Behavioral Accounting, Behavioral Economics, Homo Economicus, International Financial Reporting Standards

# The Role of Accounting in Behavioral Finance

Accounting plays an important role in capital markets because the financial statements of an organization summarize the economic consequences of its business activities and are the most widely available source of information. The accounting system of an organization provides the mechanism to identify and measure these business activities, aggregate them into financial statements, and communicate them to shareholders and other users of economic information.

With the aim of reducing international differences in accounting standards, the IASB has been largely responsible for developing a set of financial reporting standards that can be used internationally. Indeed, the IASB is highly successful in establishing International Financial Reporting Standards (IFRS¹) as globally accepted accounting standards with over 115 countries permitting or requiring them to be used for financial reporting purpose. An implicit assumption of the IASB seems to be that IFRS are objective, neutral and value-free, because it assumes that financial statements are comparable across countries if accountants all over the world would apply IFRS. However, the accounting literature provides clear evidence that this is not always the case (e.g. Doupnik and Richter 2003, 2004; Doupnik and Tsakumis 2004; Hellmann et al. 2010).

One concern that arises from this is that stakeholders may be misled into believing that there is more uniformity and objectivity in practice than actually is the case. This short letter draws attention to the importance of the need to give adequate consideration to the behavioral aspects of accounting from the development process through to the application of the information. This is important because behavioral research concerning investment decisions is often solely focusing on the human aspects of investors and related stakeholders. However, the information used by investors and capital markets participants for making economic decisions is prepared by accountants, who use their professional judgments by interpreting and applying accounting standards.

Importantly, the preparation and disclosure of accounting information is mainly determined by accounting standards such as IFRS. These standards are developed by a standard setter in

<sup>-</sup>

<sup>&</sup>lt;sup>1</sup> IFRS issued until 2001 are called International Accounting Standards (IAS). The term IFRS refers to both the International Financial Reporting Standards issued by the IASB and the IAS issued by the IASB's predecessor International Accounting Standards Committee.

a political process and interpreted and applied by accountants. Finally, financial statements have to be interpreted by auditors and monitored by enforcement bodies. As such, behavioral issues can arise in the following three dimensions: (1) Standard setting, (2) Preparation of financial statements, and (3) Auditing and enforcement. The remainder of this short letter provides some important examples showing that accounting information is inherently behavioral from the development process through to the application of the information.

### The role of standard setters

The impact of accounting standards on financial statements becomes clear when considering the variation in corporate results as a consequence of applying previously coexisting accounting standards. A good example is the 1993 financial statement of Daimler-Benz, which was one of the first Germany companies to list on the New York Stock Exchange. For this purpose, Daimler-Benz had to disclose financial information according to US-GAAP and showed a loss of German Deutsche Mark (DM) 1.8 billion. For the same year, the company showed a profit of DM 615 million in line with the German Commercial Code (Doupnik and Perera 2015, p. 56). This discrepancy arguably caused uncertainty among investors and other stakeholders, and may have contributed to pressures from multinational companies, stock exchanges and securities regulators to reduce the diversity of accounting practices globally.

The IASB plays a key role in this process and strives to replace national accounting standards with IFRS which are developed through an international consultation process involving interested stakeholders from around the world (IFRS Foundation 2013). This due process is also intended to eliminate arbitrariness of the decisions made by the IASB (Erb and Pelger 2015). However, accounting standard setting is a political process and the members of the IASB may be biased in regard to their opinion about specific accounting principles and appropriate accounting standards.

Indeed, the literature provides clear evidence that stakeholders' participation in the due process is driven by the economic consequences of accounting standards and that professional bodies, companies, governments and other stakeholders attempt to influence the direction and content of accounting standards by writing comment letters and heavily lobbying on the IASB (e.g. Kwok and Sharp 2005; Larson 2007; Cortese and Irvine 2010; Hansen 2011; Giner and Arce 2012; Kosi and Reither 2014). In other words, those who are

affected by a proposed new standard or proposed change of existing regulation are likely to place pressure on the IASB not to approve a proposal containing an objectionable feature. This may make it sometimes difficult for the standard setter to remain neutral and maintain its independence from the influence of powerful lobby groups as evidenced by, for example, the IASB's amendment to IAS39 (Financial Instruments: Recognition and Measurement) after the EU put pressure on the IASB to eliminate some controversial sections. As a result, accounting standards may leave considerable room for managers to influence financial statement data in the form of a broad set of implicit and explicit options from which managers can choose.

Finally, the complex issue of translating IFRS should be considered. Although promulgated in English, IFRS are often expressed in the local language of a country, which may be a language other than English. The endorsement process in the EU, for example, requires the translation of IFRS from English into all other 22 official languages, which have the same legal standing. Niehus (2005), Hellmann et al. (2010) and Dahlgren and Nilsson (2012) provide several examples of translations errors which may cause problems concerning the consistent application of IFRS leading to different accounting practices across countries.

# The role of financial statement preparers

IFRS are principle-based and require the extensive application of professional judgments. Indeed, the IASB refers to the term 'substance over form' to highlight the importance of professional judgments for the interpretation and application of IFRS. This concept requires accountants to focus more on the economic substance of a business transaction than on its legal form. For example, professional judgments are required if probability expressions have to be interpreted, materiality thresholds have to be assessed, and specific accounting policy options have to be selected. Probability expressions are an important feature of principle-based standards such as IFRS and are extensively used for the recognition, measurement and disclosure of items. For example, IAS18 (Revenue) requires revenue to be recognized "when it is *probable* that the economic benefits associated with the transaction will flow to the entity." (Paragraph 18, emphasis added).

Importantly, there is clear evidence that probability expressions are interpreted differently by accountants across countries. For example, Doupnik and Richter (2004) examined whether a

common terminology may be interpreted differently across countries and found that German accountants interpret probability expressions more conservatively than their counterparts in the United States. Hellmann et al. (2010) argue that the German tendency to avoid risks may be a reason for this because it may result in professional judgments being applied more conservatively in Germany. Additionally, they found that German accountants who grew up with the German Commercial Code and its underlying features such as creditor protection are likely to interpret the principle-based IFRS using subliminal German accounting principles. This suggests that the cultural background of accountants influences the interpretation of probability expressions which may cause issues of consistency in the interpretation and application of IFRS across countries. Indeed, culture has been considered by the literature as a factor that affects judgment and decision making of professional accountants and the accounting environment of a country for more than 30 years (Gray 1988; Perera 1989; Gernon and Wallace 1995). Additional to culture, other important personal characteristics that may affect the quality of professional judgments include abilities, motivation, confidence, cognitive style, and gender (see Bonner 2008, for a discussion of these dimensions).

The changing form of annual reports have been apparent by the voluminous increase in annual report sizes, reflecting the increasing importance of narrative information. Additionally, financial information is increasingly presented in form of pictures and graphs, and annual reports feature design elements such as headlines (Beattie and Jones 2008) which may influence the formation of judgments because visual salience of graphical formats is able to draw attention and redirect the way information is acquired (Bruce and Tsotsos 2009). With regulatory efforts being largely related to quantitative information, a lesser regulatory emphasis has been placed on the accompanying narrative information. Indeed, the content and form of the accounting narratives accompanying the financial statements is recognized to lie within managerial discretion (IASB 2010). The lack of regulation regarding narrative financial information and design elements may enable management to opportunistically engage in impression management through strategic disclosure and presentation.

As a result, management may be able to over-emphasize favorable performances and conceal unfavorable performances depicted in the highly regulated financial statements section. For example, the over-emphasis of positive outcomes is an impression management strategy that prominently recognizes corporate achievements so that management is presented in the best possible light or in accordance to a norm or expectation (Merkl-Davis and Brennan 2011).

Clatworthy and Jones (2003) provide evidence for this practice by demonstrating that a significant portion of the chairman's statement of U.K. listed companies is dedicated to communicating positive news.

This is becoming increasingly important with online financial reporting on corporate web sites. By using the emotive power of elements such as design, color and music in the context of the multi-dimensional possibilities of the internet, companies may have exponentially greater power to influence decision makers than in the two-dimensional format of the traditional annual report.

#### The role of auditors and enforcement bodies

Auditing is inherently a judgment process as auditors are applying their professional judgments in order to form an overall assurance regarding the financial statements of a company. As such, the quality of the auditor's judgments may be affected by personal characteristics. Indeed, Gul et al. (2013) provide evidence that audit quality varies across individual auditors. Factors influencing judgments and decisions in auditing include culture, auditor knowledge and expertise, organizational and professional commitment, and cognitive limitations (see Nelson and Tan 2005 for a review). As auditors work under significant time pressures particularly during the year-end audit, heuristics and biases may influence the judgments of auditors. Additionally, the interaction between auditor and other stakeholders such as clients and peers in task performance may influence the audit opinion pertaining to the financial statements (Nelson and Tan 2005).

Finally, non-compliance and different practices are likely to occur if auditors and companies are weakly monitored or the regulatory environment in a particular country is relatively weak (Nobes 2013). For example, Poudel et al. (2014) highlight that the relatively weak regulatory body in Nepal is one factor causing an inconsistent application of IFRS within that country.

### References

Beattie, V. and Jones, M.J. (2008) Corporate reporting using graphs: A review and synthesis, Journal of Accounting Literature, 27(1), 71-110.

Bonner, S. E. (2008) Judgment and decision making in accounting, Pearson Prentice Hall: New Jersey.

Bruce, N.D.B. and Tsotsos, J.K. (2009) Saliency, attention, and visual search: An information theoretic approach, Journal of Vision, 9(3), 1-24.

Clatworthy, M. and Jones, M.J. (2003) Financial reporting of good news and bad news: Evidence from accounting narratives, Accounting and Business Research, 33(3), 177-185.

Cortese, C. and Irvine, H. (2010) Investigating international accounting standard setting: The black box of IFRS 6, Research in Accounting Regulation, 22(1), 87-95.

Dahlgren, J. and Nilsson, S.A. (2012) Can translations achieve comparability? The case of translating IFRSs into Swedish, Accounting in Europe, 9(1), 39-59.

De Bond, W. (2005) The psychology of world equity markets, Edward Elgar: Cheltenham

Doupnik, T.S. and Perera, H. (2015) International Accounting, 4<sup>th</sup> edition, McGraw-Hill: New York.

Doupnik, T. S. and Richter, M. (2003) Interpretation of uncertainty expressions: a cross-national study, Accounting, Organizations and Society, 28(1), 15-35.

Doupnik, T. S. and Richter, M. (2004) The impact of culture on the interpretation of "in text" verbal probability expressions, Journal of International Accounting Research, 3(1), 1-20.

Doupnik, T. S. and Tsakumis, G.T. (2004) A critical review of tests of Gray's theory of cultural relevance and suggestions for future research, Journal of Accounting Literature, 23, 1-48.

Erb, C. and Pelger, C. (2015) "Twisting words"? A study of the construction and reconstruction of reliability in financial reporting standard-setting, Accounting, Organizations and Society, 40 (1), 13-40.

Gernon, H. and Wallace, R.S.C. (1995) International Accounting Research: A review of its ecology, contending theories and methodologies, Journal of Accounting Literature, 14(1), 54-106.

Gilovich, T., Griffin, D. and Kahneman, D. (2002) Heuristics and biases: The psychology of intuitive judgement, Cambridge University Press: Cambridge.

Giner, B. and Arce, M. (2012) Lobbying on accounting standards: Evidence from IFRS 2 on share-based payments, European Accounting Review, 21(4), 655-691.

Gray, S.J. (1988) Towards a theory of cultural influence on the development of accounting systems internationally, Abacus, 24(1), 1-15.

Gul, F.A., Wu, D. and Yang, Z. (2013) Do individual auditors affect audit quality? Evidence from archival data, Accounting Review, 88(6), 1993-2023.

Hansen, T.B. (2011) Lobbying of the IASB: An empirical investigation, Journal of International Accounting Research, 10(2), 57-75.

Hellmann, A., Perera, H. and Patel, C. (2010) Contextual issues of the convergence of International Financial Reporting Standards: The case of Germany, Advances in Accounting, incorporating Advances in International Accounting, 26(1), 108-116.

IASB (2010) IFRS Practice Statement Management Commentary, International Accounting Standards Board: London.

IFRS Foundation (2013) Due Process Handbook, http://www.ifrs.org/DPOC/Documents/2013/Due\_Process\_Handbook\_Resupply\_28\_Feb\_2013\_WEBSITE.pdf

Kahneman, D. and Tversky, A. (2000) Choices, values and frames, Cambridge University Press: Cambridge.

Kosi, U. and Reither, A. (2014) Determinants of corporate participation in the IFRS 4 (Insurance Contracts) replacement process, Accounting in Europe, 11(1), 89-112.

Kwok, W.C.C. and Sharp, D. (2005) Power and international accounting standard setting: Evidence from segment reporting and intangible assets projects, Accounting, Auditing and Accountability Journal, 18(1), 74-99.

Larson, R. K. (2007) Constituent Participation and the IASB's International Financial Reporting Interpretations Committee, Accounting in Europe, 4(2), 207-254.

Merkl-Davis, D.M. and Brennan, N.M. (2011) A conceptual framework of impression management: New insights from psychology, sociology and critical perspectives, Accounting and Business Research, 41(5), 415-437.

Nelson, M. And Tan, H.-T. (2005) Judgment and decision making research in auditing: A task, person, and interpersonal interaction perspective, Auditing: A Journal of Practice & Theory, 24 (supplement), 41-71.

Niehus, R. J. (2005) Die IFRS auf Deutsch, Fehler und Unzulänglichkeiten der Übersetzung, Der Betrieb, 58(46), 2477-2483.

Nobes, C. (2013) The continued survival of international differences under IFRS, Accounting and Business Research, 43(2), 83-111.

Perera, H. (1989) Towards a framework to analyze the impact of culture on accounting, International Journal of Accounting, 24(1), 42-56.

Poudel, G., Hellmann, A. and Perera, H. (2014) The adoption of International Financial Reporting Standards in a non-colonized developing country: The case of Nepal, 30(1), 209-216.

Shafir, E. (2004) Preference, belief and similarity, MIT Press: Cambridge.