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The Improbability of Fraud in Accounting for Derivatives: A Case Study on the Boundaries of Financial Reporting Compliance

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ABSTRACT This study responds to recent calls in the literature to examine fraud using detailed case studies, extending knowledge beyond individual incentives and capital market reactions towards a more contextualized understanding of the concept. We use an institutional logics perspective to challenge existing assumptions about a universally valid meaning of compliance, fraud, and faithful representation. Presenting the case of the Swedish bank HQ, we show how the interpretation of the accounting standard for option measurement varies across different enforcement bodies because the meaning of compliance is socially negotiated across the institutional logics of markets, financial regulation, and law. The independent decision-making of the different enforcement bodies leads to a systematic variation in the interpretation of principles-based accounting standards without ultimate coordination. To define consistent boundaries of compliance across institutional logics, and thus, to distinguish between fraud and allowable managerial discretion becomes problematic. Faithful representation, in turn, cannot be understood as financial statements reflecting a correct value or as financial statements being prepared in accordance with acceptable practice, as suggested in the earlier literature. Instead, faithful representation itself becomes a contextually bound concept, which can only be defined within an institutional logic.

Keywords: Fraud; Fair value; Banking industry; Institutional logic; Financial instruments

Subject classification codes: M41; G21

Introduction

The bank has not applied IAS 39 correctly. (...) In summary, the Swedish financial supervisory authority finds that the bank has broken several regulations on how to measure its trading portfolio and to report effects on earnings.

The Swedish financial supervisory authority. (FI, 2010, p. 10)

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IAS 39, particularly AG82 (f), must be interpreted as to allow historical volatility in the underlying asset to be considered observable market data in the measurement. (...) Consequently, reported earnings are measured in accordance with IAS 39.

Stockholm District Court (2016, pp. 134 and 147)

This study falls under the umbrella of social construction studies (Young, 2006) and presents the case of the Swedish bank HQ AB ('HQ'). In 2010, the Swedish financial supervisory authority (Finansinspektionen, 'FI') revoked the bank's charter, accusing the bank of having serious deficiencies in its trading operations and taking irresponsible risks. While one of the bank's founders (and chairman of the board), Mats Qviberg, reflected on the bank's high losses in the years 2008–2010 claiming that 'it is not illegal to do bad business' (Jakobsson, 2012), FI considered the bank's measurement practices to be non-compliant with IAS 39 *Financial Instruments: Recognition and Measurement*.¹ FI argued that the bank had significantly overvalued its trading portfolio (mainly index options) and, thus had been reporting an erroneous financial position (FI, 2010, p. 11). The case is of particular interest because six years later, in 2016, the bank's board members, the CEO, and the bank's auditor were all found not guilty of swindling in a criminal trial in Stockholm's district court (Stockholm District Court, 2016). Two central Swedish institutions, one financial supervisory authority and one court of law, evaluated the bank's practices of option measurement in the financial statements and reached entirely different interpretations of acceptable or erroneous practice according to IAS 39.²

This case offers an opportunity to respond to recent calls in the literature to rethink and contextualize our understanding of fraud³. Fraud has been investigated from many different perspectives in different scholarly disciplines. Cooper, Dacin, and Palmer (2013) provide an

¹The relevant accounting standard in relation to the measurement of the trading portfolio was the version of IAS 39 in place in 2009, as endorsed by the EU. This version differed from the IASB version of IAS 39 in one paragraph, related to hedge accounting, which has no bearing on this case. IFRS 13 *Fair Value Measurement* had not been issued at the time FI revoked the charter and was therefore not applicable. In addition to IAS 39, the bank's compliance with IFRS 7 *Financial Instruments: Disclosures* was assessed by FI and the court. The court concluded that there were minor deviations from the disclosure requirements, which were not found misleading in a way that could lead to sentencing for swindling (Stockholm District Court, 2016). This aspect of the trial, however, is of less relevance for our discussion of the case and we therefore focus our attention on the interpretation of IAS 39.

²The case of the failed Swedish bank is the first example of a sufficiently severe breach (or non-breach) of the EU IAS/IFRS Regulation (EC/1606/2002) to be brought to a criminal trial in Sweden. To clarify the legal context, we want to highlight that a decision from FI is only normative for the party or parties addressed by the decision; it cannot be used to draw any general conclusions on the interpretation or application of the law. A judgment from a court of law has a higher legal value compared to a decision from an authority. However, as the judgment in the criminal trial of the HQ case has not been tried in a court of appeal, and a judgment from a district court has a very restricted legal value in Sweden, it is difficult to use the judgment as a precedent for how the law should be applied in future cases. The reasoning in the judgment, as well as in the decision by FI, is nonetheless interesting to analyze and compare, to discuss how accounting standards and other regulations are apprehended, construed, and applied by different actors and enforcers. This study therefore discusses the grounds for the judgments of the different parties and not the actual ruling or final decision.

³In this study, we refer to the concept of fraud as used in an accounting context; that is, we do not restrict the use of the term fraud to the legal definition found in, for example, Swedish criminal law. *Brottsbalken* (the Swedish Penal Code) defines fraud as:

If a person by deception induces someone to commit or omit to commit some act which involves gain for the accused and loss for the deceived or someone represented by the latter, imprisonment for at most two years shall be imposed for *fraud*. (the Penal Code, Chapter 9, Section 1, emphasis added)

Another type of fraud is *swindling*, which was tried in the HQ criminal case, and is defined as: 'A person who publishes or otherwise disseminates misleading information among the public in order to influence the price of an article, a security or other property, shall be sentenced for *swindling*' (the Penal Code, Chapter 9, Section 9, emphasis added). Our use of the term fraud includes swindling and managerial discretion outside the boundaries of what is deemed in compliance with the relevant standard. In the legal context, these are separate offences tried in the court of law.

extensive overview of current areas of fraud research, highlighting the importance of interdisciplinary research on the meaning of fraud, its role, and its effect in organizations and society. While a substantial literature points to the contextual embeddedness of financial reporting in general (Ball, 2016; Ball, Kothari, & Robin, 2000; Brown, 2011), Cooper et al. (2013) argue specifically that fraud needs contextualization, and call for further research on its social construction, temporality, and cultural embeddedness.

In this study, we focus our attention on a central aspect of fraud, namely compliance with relevant accounting standards. Following a general definition in accounting literature, fraud can be defined as ‘[t]he use of fictitious accounting transactions or those prohibited by generally accepted accounting principles (. . .) which becomes proved after an administrative or court proceeding’ (Jones, 2011, p. 7). In its general understanding, accounting fraud therefore is defined in two steps. First, accounting fraud requires non-compliance with existing accounting standards – either through fictitious transactions⁴ or through measurement and/or disclosures that are not permitted. Second, according to the general understanding, such wrongdoing is only demarcated as fraud through an administrative or court proceeding. This latter requirement builds a strong bond between the financial accounting and legal realms for establishing fraud.⁵ Since contracts that relate to financial statement information cannot be written to capture all future possibilities, accounting standards are, to some extent, open-ended or principles-based (Fields, Lys, & Vincent, 2001). Resolving the remaining ambiguity through a court or similar mechanism can be an efficient solution (Ball, 2001).

As the analysis of the case reveals, such a general definition of fraud is problematic because the interpretation of standards, and thus the understanding of compliance, is contextually bound in the different realms of markets, regulatory oversight, and law. As the initial quotations exemplify, principles-based standards like those regulating financial instruments accounting require a significant amount of judgment about methods and inputs used in the measurement. It is likely that the judgment is bound to the context where the interpretation of standards takes place and therefore it is interesting to investigate how a *correct* or reasonable (in other words, compliant) application of the relevant standards is defined across different contexts.

The purpose of this study therefore is twofold. First, it highlights the problems that can arise in establishing whether an accounting measurement is compliant with a standard. More precisely, the study sheds light on how the boundaries of compliant fair value measurement practices – specifically for stock market index options – are socially negotiated in diverse institutional logics. Second, based on the analysis of this social negotiation, we discuss how a disagreement on the boundaries of compliance influences the perceived meaning of fraud, faithful representation, and the role of financial reporting in society.

Set in the banking industry, the HQ case offers the opportunity to observe three distinctly different institutional logics⁶ involved in the social negotiation. Unlike other listed companies, listed banks are subject to dual enforcement mechanisms.⁷ As for all listed firms, financial

⁴Examples of fictitious accounting transactions include recognition of fictitious sales, inflation of inventory quantities, or fraudulent disbursements.

⁵A more specific definition of fraud in the accounting context is presented by Riahi-Belkhoui and Picur (2000). They define fraud as corporate fraud, white collar crimes, and audit failures. In total, the authors present 14 types of corporate fraud. In this study, however, we limit our focus to fraud connected with financial statements.

⁶A subsequent civil court trial was concluded in December 2017. Thus, the HQ case gives the opportunity to investigate four types of logic, because criminal law and civil law logic are distinctly different. However, a detailed analysis of the civil court trial lies outside the scope of this study (see Section ‘Epilogue’ for a short introduction to the judgment of the civil trial).

⁷The twofold enforcement system for the banking industry is not specific to Sweden but is found in most advanced economies in the world.

statements of banks are subject to enforcement focused on protecting investors who trade on the stock exchange. The underlying market logic of such enforcement is the idea of decision usefulness for investors. In addition, banks are subject to banking supervision, with an underlying regulatory logic focused on the protection of banking customers and the financial stability of society.⁸ The HQ case therefore provides an opportunity to investigate a situation where these two fundamentally different logics confront each other (both drawing on different types of economic reasoning). In the HQ case, these two logics are confronted with a third institutional logic, legal logic or more precisely criminal law logic, based on human rights and the rule of law, as the bank's management, board members, and the auditor were tried for charges of swindling in a Swedish court of law. Moreover, the HQ case provides an opportunity to gain detailed insight into the complexity of fair value measurement of a trading portfolio that contains index options. The insight is made possible by the extensive resources invested in the case by both the prosecution and the defense in the court trial. Consequently, all relevant aspects of the case were covered and documented in detail as the two sides argued their positions.⁹ The trial provides in-depth documentation and analysis of organizational conduct, offering a unique insight into the different measurements of financial assets and liabilities. These insights allow for a detailed analysis of how different institutional logics influence the interpretation of accounting standards and show that variation in the interpretation is not only an issue across nations but also within one national context.

In this study, we use the HQ case to theorize the contradicting understandings of appropriate measurement practices to generate insights for scholars, standard setters, and the accounting profession. We conclude that, in the context of principles-based standards that require substantial judgment, differences in the interpretation of the correct application of these standards arise across institutional logics and this variation can create problems for organizations and society. Variation in the interpretation of standards is not always problematic; on the contrary, principles-based standards invite different opinions and allow flexibility for adapting to specific situations. However, the idea of principles is that the variation in interpretation is within a boundary that fulfills the overarching objective of the standard.

The analysis of the HQ case shows that the boundary of the standard as determined in multiple administrative and court procedures becomes too loose to ensure the overarching objective of the standard when moving across institutional logics. When the interpretation of standards across different logics leads to different judgments regarding compliance or non-compliance with the requirements of the standard, a universal understanding of accounting fraud becomes problematic. It may not seem surprising that a financial supervisor and a court of law come to different conclusions about compliance, considering that one is concerned with the financial stability of the state and the other with the judgment of individual criminal behavior. However, in both instances, the assessment of the situation was based on an interpretation of the same standard, IAS 39 *Financial Instruments: Recognition and Measurement*.¹⁰ Banks must relate to the different logics of markets, supervision, and law when deciding on their business models, measurement practices, and accounting disclosures. Both the survival of the bank and risks of the personal criminal indictment must be considered in making accounting choices. There is a

⁸We acknowledge that a distinction must be made between the consolidated financial statements issued by the parent company with relevance for the stock exchange and the corresponding enforcement, and the separate financial statements relevant for banking supervision. However, in this case, the two levels of financial statements relate to the same accounting standards, and the basis for interpretation of the standards is therefore the same.

⁹To give an indication of the resources spent in the case: the defense attorneys alone were granted 37 million SEK (about 4 million EUR) by the district court for expenses related to the case.

¹⁰The focus of investigation therefore lies in the interpretations of the standard by the different actors (i.e. compliance), not in the analysis of the actual decision by FI or the judgment by the court.

dilemma for managers and auditors if such choices are judged differently by different enforcers. In the banking industry, this dilemma is also relevant on a macro level because problems in banks might jeopardize the financial stability of the state. Concepts like compliance and faithful representation are bound to the different judgments and therefore are not universally stable but have to be interpreted within logics.

Our study contributes to a contextualization of the meaning of fraud by presenting and utilizing a framework of institutional logics that helps illustrate how different institutional logics lead to different conclusions about what is permitted and what is prohibited accounting practice. This contextual variation in the tension between economic and legal logics (cf. Braithwaite, 2013; Stryker, 1994, 2000) shows the difficulty of a universally shared concept of fraud. FI and the Stockholm district court assessed the situation from distinctly different rationales, responding to different questions. In the context of prudential supervision, FI determined the practice by HQ to be non-compliant with standards, answering the question of whether the bank acted in a way that jeopardized financial stability (an economic logic). The criminal court judgment, meanwhile, should be understood in the context of criminal charges, assessing whether personal responsibility can be established for fraud or other criminal offences for the individuals in charge of the bank (criminal law logic). Neither of these judgments included the idea of investor decision usefulness, for which the standards themselves were developed (another economic logic).

The extensive documentation provided though the court trial gives an opportunity to exemplify the complexity of fair value accounting for index options in a very specific way and to show how different interpretations are possible across institutional logics. The meaning of fraud and compliance anchor in the different logics. Through the detailed documentation of measurement practices and key assumptions, the case exemplifies how our understanding of the role of financial accounting benefits from recognizing the tensions arising across the institutional logics of markets, financial regulation, and law.

On a more general level, this study contributes to the ongoing discussion of the role of financial reporting in society. We identify three approaches to understanding the usefulness of financial information. The literature based on economic theory tends to accept (theoretically) correct measures, where earnings management represents biased deviations from such measures (a similar view is exhibited by the use of the term ‘faithful representation’ by the IASB). Meanwhile, the critical literature claims that financial statements cannot be a reflection of true or correct values (Bayou, Reinstein, & Williams, 2011), but instead help to construct financial markets (MacKenzie & Millo, 2003). A third approach to this discussion finds some middle ground by explaining how market actors agree on impersonal calculation procedures that create a notion of ‘relative reliability’ (Huikku, Mouritsen, & Silvola, 2017), making financial information useful despite its social construction. All three lines of research are centered in market logic or discuss the relation between market and regulatory logic. The legal realm is secondary, although several studies hint at the importance of a functioning legal system for enforcement (Ball, 2001; Ball et al., 2000; Watts, 2006). Our study contributes by showing how the boundaries of compliance, which are seen as definable in the economic literature, are gradually dissolved when accounting standards are interpreted in criminal proceedings. While confirming that actors can agree on the boundaries of compliance within one logic, the case contributes by exemplifying how this agreement is not possible across institutional logics, because actors can no longer agree on the boundaries of interpretation of standards. This difficulty to define a universal understanding of compliance also reflects on concepts like faithful representation and accounting quality, because these concepts build on the assumption of general agreement of compliance. Part of the dilemma caused by loose boundaries might be solved with more transparency and education to create a better understanding of the nature and role of financial accounts. Still, potentially contradicting logics are a problem for managers and auditors, due to uncertainty about enforcement consequences.

The case study design is primarily based on publicly available documents, which enables transparency and open discussion about the sensitive issue of financial instrument measurement but naturally also involves limits. The case presents detailed insights into the negotiations around the criminal court trial. However, we do not have equally detailed access to material on the internal discussions that took place within, for example, FI, the audit firm, or HQ. Such internal discussions could provide insight into the variety of rationales within the organizations and could therefore lead to a more refined understanding of how the dominant institutional logics play out at the organizational level. We also acknowledge the normative traits inherent in using an institutional logics perspective. Although perhaps unfashionable in accounting research (Cooper et al., 2013), normative reasoning is more common in legal and management studies. Using ideal types of logics enables us to focus the analysis on the essential aspects of the phenomenon to generate a rich and generalizable understanding of the varied and complex negotiations and processes around derivative measurement and standard interpretation (Thornton, Ocasio, & Lounsbury, 2012, p. 52).

The remainder of the text is structured as follows. In the next section, we present the theoretical framework of the study, defining the central concepts and elaborating on the institutional logics perspective used to structure and analyze our data. We then describe the data collection and analysis process before presenting the empirical setting and the HQ case in detail. The analysis and discussion section draws a picture of the different arguments and logics that negotiate compliance and fraud, which builds the basis for our reflections on a possible shared understanding of compliance, fraud, and faithful representation. The study concludes with a reflection on the possible role of financial reporting in society and implications for further research.

Theoretical Context

Creative Accounting, Fraud, and the Boundaries of Standard Compliance

The manipulation of financial information to improve reported performance is a common practice (Griffiths, 1986) that has been investigated from many angles and has been referred to as creative accounting, earnings management, income smoothing, and aggressive accounting.¹¹ For the purpose of our investigation, the central concern is the question of when manipulation turns from a legitimate or compliant creative accounting practice into a non-compliant practice, a central element of accounting fraud. Jones (2011, p. 6) defines creative accounting as ‘[u]sing the flexibility in accounting *within the regulatory framework* to manage the measurement and presentation of the accounts so that they give primacy to the interests of the preparers not the users’ [emphasis added]. From a financial accounting perspective, creative accounting therefore remains within the boundaries of compliant measurement and presentation. Fraudulent practice, on the other hand, lies outside the boundaries of the regulatory framework. However, the general definition of fraud referred to in the introduction carries an additional element. Only a conviction of individuals (or firms) as breaking a law and/or violating the regulatory framework constitutes fraud. While non-compliance therefore forms the basis for fraudulent behavior, only an administrative or court proceeding can establish fraud by attaching personal or organizational responsibility through the conviction of individuals and/or firms. Differing interpretations of compliance with standards across institutional orders, however, challenge such universal understanding of fraud, because one authority might identify a particular accounting practice as a fraud while another authority might see it as acceptable, as in the HQ case.

¹¹See Jones (2011) for an expanded overview of the different definitions.

Although both accounting and legal scholars are concerned with the concept of fraud, little attention has been paid to the interrelationship between the economic and legal realms, which exhibit distinctly different traditions, practices, and modes of interpreting the world (Stryker, 1994, 2000). Accounting research based on economic theory suggests the importance of the institutional context, including the legal context, relative to accounting quality (Ball, 2001; Ball et al., 2000; Watts, 2006), where rigorous enforcement of standards is particularly important in relation to principles-based standards (Barth & Israeli, 2013; Marton & Runesson, 2017). These studies point to the necessity of research on the relationship between the economic and legal aspects of fraud and the need for a redefined understanding of the construction of fraud in society. However, research on the consequences of a misalignment, that is, differing interpretations and understandings, between the institutional settings is underdeveloped. Not all aspects of fraud lead to variation in interpretation and therefore the relationship between the economic and legal realms will not always be problematic. However, when regulation is understood and interpreted differently in separate institutional contexts – as in the case of HQ – the resulting confusion and uncertainty might have severe consequences for the different parties involved. Variation in judgment might also have wider societal consequences in the form of reputational damage for the ruling authorities or financial instability.

Further contextualization of the concept of fraud is therefore necessary and researchers have started critically investigating the relationship between terms such as fraud, wrongdoing, or illegal activity, and the multiple levels of analysis in which fraud takes place.¹² However, the nature of the relationship between accounting practice and its institutional context, especially the consequences of contradicting judgments about compliant accounting practices in the economic and legal contexts, are still unclear. In the banking industry, these relationships are even more complex, because the economic context is split into market expectations and the expectations of regulators (see next section). The possible tensions that arise from such interrelationships are most obvious in cases where it becomes difficult to draw the boundaries of compliance with standards. The potential for tensions increases as the room for interpretation and level of preparer judgment afforded in accounting standards is greater, because actors have to draw on the institutional logics that underlie their sense-making in order to interpret high judgment standards, which is more likely to lead to a variation in judgment.

The interrelationship between the different institutional realms where fraud is negotiated presents an interesting area for investigating and contextualizing fraud, because the IASB's definition of accounting quality – more specifically faithful representation – relates to an understanding of fraud. Fraud constitutes a problem for faithful representation, defined as information that is complete, neutral, and free from error (IASB, 2018). Any misstatement or omission will jeopardize the attainment of faithful representation, and therefore the decision usefulness of the presented material could be in question. A possible definition of faithful representation is how well financial statements reflect underlying economic variables. This seems to be the view taken in the earnings management literature (for an overview, see Dechow, Ge, & Schrand, 2010). However, within these seemingly concise concepts lies tension. In this view, the definitions of fraud and creative accounting imply a form of neutral accounting, a 'correct' way of presenting financial statements, which can be used to verify the reliability of the reported information. This notion of truth and objectivity that is attached to accounting information is problematic and widely challenged in the more critical literature (Bayou et al., 2011; Hines, 1991; Macintosh, 2009; Tinker, 1991) but still seems to be common in both research and societal understanding of financial reporting. An alternative understanding of faithful representation is that financial

¹²See Cooper et al. (2013) for a detailed overview of existing themes in the current fraud literature.

statements are prepared in accordance with an accepted, impersonal procedure that grants ‘relative reliability’ (Huikku et al., 2017) where compliance with the standard is the central reference element in relation to such acceptance. In our reflections on the HQ case, we extend this discussion by showing how an agreement on the boundaries of compliance may be possible within one logic, confirming Huikku et al.’s (2017) ideas of a notion of objectivity and relative reliability that is constructed in a network of market actors, but may be problematic across institutional logics because of the high reliance on preparer judgment. The next section presents literature on the institutional setting in which this discussion is embedded.

Institutional Logics, Diverse Rationales, and Actors’ Choices for Sense-making

The role and agency of institutions¹³ in society is well established in the literature (DiMaggio & Powell, 1983, 1991). Researchers in the field of organizational studies have been especially active in showing how institutions shape and are shaped by the practices and sense-making of the actors involved (Thornton et al., 2012). Accounting plays a central role in this ordering of the world because it carries, mediates, and confirms institutional structures in society (Meyer & Rowan, 1977). Accounting has influence because it is commonly considered to provide rational conceptualizations of the world (Mouritsen, 1994; Porter, 1995) that are mobile, immutable, and combinable (Robson, 1992). Accounting intervenes in (Robson & Young, 2009) and governs human behavior (Miller & O’Leary, 1987; Miller & Rose, 1990; Robson, 1994), thereby shaping and confirming the orders of the world that are taken for granted (Miller, 1994). Our study extends existing knowledge by focusing on how institutions, in turn, affect the interpretation of financial reporting standards, and how competing institutional logics create variations among interpretations.

Lounsbury (2008) introduces the institutional logics perspective to accounting scholars as a fruitful way to extend existing knowledge on accounting in its organizational and societal context. He points out that accounting scholars limit their explanatory potential when predominantly focusing on micro-processes of the performativity of accounting practice, forgoing investigations of wider institutional dynamics. The institutional logics perspective opens new ways of investigation (Lounsbury, 2008, p. 354), ‘focusing on how fields are comprised of multiple logics, and thus, multiple forms of institutionally-based rationality, institutional analysts can provide new insight into practice variation and the dynamics of practice.’ The perspective is not new to accounting scholars. Puxty, Willmott, Cooper, and Lowe (1987), for example, mobilize an institutional logics perspective by focusing on the three institutional orders of market, state, and community and their respective institutional logics to contrast regulatory systems in advanced capitalist societies. The authors show how contradictions between and within the three logics create dynamics that influence the salience of one logic over another in accounting regulation, which in turn helps explain similarities and differences in accounting regulation systems. The consequences for and transformation of accounting and finance firms when competing institutional logics are at play have been another theme of interest (Greenwood, Suddaby, & Hinings, 2002; Lounsbury, 2002, 2007; Suddaby & Greenwood, 2005; Thornton, Jones, & Kury, 2005; Townley, Cooper, & Oakes, 2003).

¹³There is no generally agreed upon definition of an institution. For this study, we use the general definition provided in old institutional economics because it includes both ordering of thought and activity: ‘a way of thought or action of some prevalence and permanence, which is embedded in the habits of a group or the customs of a people’ (Hamilton, 1932, p. 84; cited in Scapens, 1994, p. 306). Friedland and Alford (1991, p. 243) provide a similar definition of the institution, adding that institutions are also symbolic systems through which actors order reality and render time and space meaningful.

The institutional logics perspective, rooted in and yet distinct from institutional theory, enables a specific focus on competing institutional logics. Under this perspective, society is structured by potentially contradictory subsystems of institutions called *institutional orders*, where each order consists of material elements of structures and practices as well as symbolic elements of shared meaning and understanding (Thornton et al., 2012, p. 10). Each order carries a distinct institutional logic that governs the practices in a certain situation and the symbols, beliefs, and shared understandings that define the ways people can make sense of the world, rationalize their situation, and legitimize their action. *Institutional logics* are defined as a ‘socially constructed, historical pattern of material practices, assumptions, values, beliefs, and rules by which individuals produce and reproduce their material subsistence, organize time and space, and provide meaning to their social reality’ (Thornton, 2004, p. 69).

Competing logics play a key role in understanding how individuals and organizations comprehend and work with accounting information. Arguably, the strongest form through which an institutional order can influence behavior is organizational embodiments, particularly if the institution is embodied by only one organization (Haveman & Rao, 1997). In the case analysis, for example, behavior can be influenced through the IASB, the FI, and the Stockholm district court. Research on the role of these regulatory agencies is scarce and agencies are not distinguished from each other in investigations (Greenwood et al., 2002). This is problematic, because the role of financial supervisory bodies and standard setters such as the IASB is vital to the theorization of sense-making and interpretations of financial accounting standards as these agencies carry and reinforce shared understandings and meanings through their dominant logic.

Thornton et al. (2012) identify seven ideal types of institutional orders in Western society: family, community, religion, state, market, profession, and corporation (see Thornton et al., 2012, p. 73, for an extensive topography of the seven ideal types). In the context of this study, the institutional orders of market and state are of particular interest.

The institutional *order of the market* as an ideal type refers to the financialized order that is strong in Western society. The market logic that underpins this order is defined through the pricing of human activity in financial markets. Rationality in this logic links to the aims of earnings maximization, shareholder value, and the assumption of economic individuals. From a financial accounting perspective, this logic is deeply embedded in the conceptual framework and accounting standards issued by the IASB (Müller, 2014). The institutional *order of the state*, on the other hand, links to a system of domination and structure bound in an administrative, hierarchical form that defines rules, procedures, protocols, and functions. In a Weberian understanding, the bureaucratic logic underpinning this order is strongly connected to a legal rationale where authority is assured by official functions embedded in a legal system (Townley et al., 2003). In organization studies, this understanding of a bureaucratic rationale is connected to both states and individual organizations. It becomes synonymous with organizing, which renders the particularities insignificant in relation to the greater administrative structures (Townley et al., 2003, p. 43).

In relation to accounting and finance, however, this broad understanding of bureaucratic logic is not sufficient for understanding the contradictions that arise when the need to ensure financial stability and the need to ensure justice are only loosely coupled responsibilities of the government. While bureaucracy defines the structure of states and organizations, the underpinning rationales must become more refined to enable analysis of the consequences of conflicting institutional logics (Fligstein, 1998; Townley et al., 2003). Stryker (1994, 2000) comes to a similar conclusion when elaborating on the conflicts arising from new expertise moving into the legal system. In the analysis of the HQ case, we therefore categorize the bureaucratic logic underpinning the order of the state into regulatory logic and criminal law logic, bound together in the bureaucratic order but with distinctly different defining elements and core assumptions. Although

there is ample discussion on the usefulness of financial statements in different economic settings that establishes a distinction between market logic and other logics (Ball et al., 2000; Christensen & Demski, 2003; Dechow et al., 2010; Gjesdal, 1981), the distinction between regulatory logic and legal logic (criminal and civil law) is less discussed.¹⁴

Regulatory logic is defined within the administrative, hierarchical system of banking oversight, building on elements like the defined function of FI as an integrated supervisor of all financial firms in Sweden, including stock exchanges, banks, investment firms, and insurance companies, as well as rules, procedures, and protocols followed by FI in its judgment and enforcement activities. The reasoning in this logic aims to ensure financial stability and consumer protection. *Criminal law logic* is defined within the administrative, hierarchical system of legal oversight, building on a system of distinct levels, such as district courts, administrative courts, courts of appeal, and a supreme court. Fixed rules, procedures, and protocols in these institutions secure overall aims related to the rule of law¹⁵ that builds on fairness, legal security, foreseeability, and review. Criminal law covers offences that a person may be charged with through prosecution, such as theft, murder, and swindling. Actions are criminalized because of public concerns and are dealt with according to strict principles; for example, it is a point of departure for moral culpability where one is conscious of wrongdoing. Prosecution therefore requires a strict reading of legal text and proof of intention or gross negligence by the defendant. Individuals and firms have the right to a fair trial, which is stipulated by the European Convention on Human Rights (ECHR) as well as on a national level. In criminal matters, individuals also have a right of appeal (see Protocol 7, Article 2, ECHR). Such requirements are in accordance with the rule of law and of fundamental importance to a democratic society. If wrongful decisions or judgments are made, there must be remedies in place to correct them and, if possible, compensate for what went wrong. This is also connected to the principle of legality, which ensures restrictions on the room for interpretation of criminal law.

Table 1 summarizes the institutional orders and logics that are salient in the HQ case. The analysis focuses on the negotiations around HQ's measurement practice within market logic, regulatory logic (both stemming from an overall economic logic), and criminal law logic.

Originally developed to investigate processes of institutional change (Friedland & Alford, 1991), the institutional logics perspective provides useful concepts that help investigate processes of sense-making and legitimizing actions. Paying attention to different rationales enables an analysis of the HQ case with a focus on contradictory arguments around fraudulent and compliant measurement practices. Bringing the conflicting logics to the foreground can therefore provide insights into the legitimization of activities and into the variation of institutionalized practices (Thornton et al., 2005).

The conflicting logics of equity investors and regulators¹⁶, each serving a different role related to financial reporting, are well established in the prior accounting literature. Equity investors need accounting information to evaluate and forecast financial performance for investment decisions (valuation function of accounting), whereas other stakeholders, including regulators, need accounting information to evaluate management performance (stewardship function of accounting). In both cases, accounting information provides a means of reducing information asymmetry; however, the relevance and quality of the information provided depend on the

¹⁴The analysis in this case study is based on the criminal trial and therefore focuses on the relationship between economic, regulatory, and criminal law logic. Civil law logic is briefly discussed in the epilogue to this study.

¹⁵*The Rule of Law* refers to a set of principles considered fundamental for any democratic society, foremost that all citizens, including those persons that create and enforce the law, are equally subject to publicly disclosed legal codes and processes, and that the law has a constraining authority upon the behavior of the government.

¹⁶We use the word 'regulator' to refer to FI in its role as banking supervisory authority. Other regulators, such as securities market regulators, may have a logic that is aligned with that of equity investors.

Table 1. Institutional orders and institutional logics in the banking industry.

Order	Logic	Defining elements	Specification	Aims of activity/ underlying assumptions
Market	Market logic	Commodification and pricing of human activity	Economic logic 1	Earnings maximization, shareholder value, and the economic individual
State	Bureaucratic logic	Authority through official functions embedded in a legal, administrative system	Regulatory logic (Economic logic 2)	Financial stability and consumer protection
			Criminal law logic	Rule of law and European Convention; rules-based, intention or gross negligence by defendant required for conviction

intended use and cannot be universally defined (Christensen & Demski, 2003; Dechow et al., 2010; Gjesdal, 1981).

Creditors and regulators prefer accounting measures that are verifiable, even at the expense of less relevance, because a verifiable measure enables a decision on whether an accounting measure is correct or erroneous in relation to a benchmark. Further, they have higher requirements of verifiability for gains than for losses, leading to more conservatism (Watts, 2003a), which places emphasis on ensuring financial stability rather than on neutral presentation of financial performance as preferred by equity investors. This difference in underlying logics is particularly important in the banking industry where equity investors and states have very different economic exposure.¹⁷

Watts (2003a) states that for financial statements to be useful for debt contracting, corporate governance, taxation, and shareholder litigation, higher levels of conservatism (i.e. higher verifiability requirements for gains than for losses) are required. Such asymmetry is not supported by the IASB Conceptual Framework. ‘Prudence’ as a concept was removed from the 2010 Conceptual Framework. Even though prudence was reintroduced in the 2018 Conceptual Framework, the IASB points out that prudence should be interpreted as a caution rather than asymmetry in measurement or verifiability (IASB, 2018, BC2.42). In addition, while the IASB Conceptual Framework refers to verifiability as an element of accounting quality, verifiability is not prominently applied (see Ball, 2016). IASB (2018, BC2.62) points out that a strict interpretation of verifiability could hinder forward-looking estimates in financial statements, which would make the financial statements less useful.

It is asymmetry in measurement that makes accounting useful based on regulatory logic, while neutrality is central in market logic. Nikolaev (2010) shows that asymmetric recognition of gains and losses is important for restraining management action when firms are close to a covenant breach, in support of the argument that conservative accounting is useful for financial statement users like creditors and regulators (Aier, Chen, & Pevzner, 2014; Fonseca & González, 2008; Wall & Koch, 2000). Taken together, this literature suggests that, although neutrality (as required by the IASB) and measures with high relevance but limited verifiability may be useful for equity

¹⁷States have limited positive exposure but potentially negative exposure without a clear limit (Bushman & Williams, 2012). Creditors and states exhibit a similarity in economic exposure and arguments on financial statement usefulness are therefore similar in the two cases.

investors (cf. Huikku et al., 2017), such financial reporting is not useful for banking supervision. Watts (2003b) adds to this argument that verifiability is a necessary condition for enforceability of accounting quality, because without verifiability, fraud cannot be established, an aspect that becomes very clear in the HQ case.

To assess accounting quality, and fraud, financial reporting therefore must be understood in its economic, political, legal, and institutional context (Ball, 2001; Ball et al., 2000). Ball (2001, p. 128) further elaborates that an economically efficient financial reporting system must be aligned with an ‘independent legal system for detecting and penalizing fraud’. Watts (2006) supports this, again highlighting the importance of verifiability. For example, he states that the litigious US environment creates incentives for firms and auditors to be conservative (as verifiability requirements are higher). These studies acknowledge the importance of context; however, they are silent on the problems that arise when translating the economic reasoning of accounting standards into an independent legal system. Ball (2001) suggests that the legal system should be independent of the parties involved in any legal dispute because the open-ended nature of accounting regulation requires an ultimate institution that defines the responsibilities of the parties. The study of the HQ case, however, suggests that an ultimate decision about compliant or non-compliant measurement practice can become problematic because the independently acting regulatory and legal bodies systematically reflect different institutional logics without ultimate coordination.

Few studies have explicitly investigated the relationship between economic and legal reasoning. Braithwaite (2013) writes about the regulatory capitalism of today’s economies. Investigating tax avoidance and tax enforcement regulation, the author provides insight into a loosening of boundaries between the state and the market. The role of the state is to govern, but the role of private sector bodies (such as the IASB, stock exchanges, and accounting firms) increases as they assume increasing roles in market regulation and enforcement. This new division of labor gives way to conflicting logics in legal enforcement, a point that is also made by Stryker (1994, 2000) in relation to conflicts of interest arising in law enforcement when technocratic reasoning enters formal legal logic.

As the HQ case shows, assessment and enforcement of accounting standards are split between different institutions, relying on different logics. The claim that rigorous enforcement improves accounting quality therefore needs to become more refined in situations where there is a disagreement about the boundaries of principles-based standards.¹⁸ The analysis of the HQ case enables us to show these complexities, as variation in judgment becomes evident in relation to complex derivative instruments and the problematic verifiability of mark-to-model valuations.

Data Collection and Analysis

This study is a qualitative case study that aims to investigate financial reporting in its organizational and societal context, as suggested by Hopwood (1983). As such, analysis of the material builds on the sense-making activities of the individuals involved (Lincoln & Guba, 1985). We acknowledge and discuss economic literature in our analysis and aim to enrich this knowledge with new insights gathered from a special case (cf. Chua, 1986) that extends existing

¹⁸Interestingly, the Swedish government came to a similar conclusion in relation to accounting for taxation purposes. In the Swedish government bill to implement the IAS/IFRS Regulation in Sweden (Proposition 2004/05:24), the issue of mandating or allowing IFRS in single company financial statements was discussed. As Sweden maintains a link between financial reporting in single company accounts and taxation (Marton, 2017), the bill concludes that IFRS cannot be allowed for single company financial statements because IFRS is focused on international equity investors and do not consider local legal and tax issues. Despite this statement, FI required IFRS with only minor exceptions in the individual financial statements of Swedish banks from 2005.

knowledge with a refined understanding of the detailed tensions that arise in the interpretation and application of financial standards. We mainly focus our case description and analysis on the study of documents. Because of the importance of the case to Swedish financial regulation and the substantial resources allocated to the case in the court trial, the documents investigated are highly detailed. For example, the documents contain detailed arguments from both the prosecution and the defendants. The rich material offers insight into the variation in rationales and sense-making involved in the processes of standard interpretation and assessment of measurement. The analyzed documents are largely statements issued by various agencies related to the acceptability of HQ's 2009 financial statements. The primary documents are the judgment from the Stockholm district court (Stockholm District Court, 2016), the report from the FI motivating the decision to withdraw HQ's bank charter (FI, 2010), and HQ's 2009 annual report. Additional documents include a decision from the Stockholm Stock Exchange (SSE) on disciplinary action against HQ (SSE, 2011) and a review of the audit by the Supervisory Board of Public Accountants (RN, 2011). All these documents are publicly available. Overall, the data used in the study include documentation, observations in the criminal trial, the audit profession's elaborations, and personal observations in the Stockholm district court and seminars held by legal scholars.

To enable a multifaceted analysis of the case, the author team consists of two accounting scholars, one of whom was part of the criminal trial as an expert witness with access to the discussions in court, and one legal scholar with expert knowledge of the HQ case. This differentiated insight into the case constitutes a central part of the case analysis, particularly in relation to the different rationales and basic assumptions of the various actors. Additional observations and discussions, as participants in the trial and in different discussions about the trial with legal scholars, enabled a deeper understanding of the differing institutional logics over and above the written text. The analysis was developed through systematic triangulation to achieve a theorization of the role of diverging institutional logics in the interpretation of the standard and social construction of the concepts of compliance and fraud. We used no formal coding software. Instead, the theorization took place through repeated reading, discussing, and drawing comparisons among the different instances of interpretation of the standard and assessments of option valuation practice. The analysis was guided by the theoretical framework outlined in the previous section, which focused our view on the different logics and processes of sense-making involved in the interpretation of the boundaries of the standard, providing insights on the contextualized meanings of compliance and fraud. We used the three logics (market, regulation, and criminal law) as a starting point to focus our attention on the essential ideas, assumptions, and conflicts present in the different actors' negotiations regarding acceptable and non-compliant measurement practice in the HQ case. These idealized types of logic were therefore a means of creating a more generalized understanding of the specific negotiations and processes.

In the following, we present the case of HQ and the different instances in which IAS 39 was interpreted, to assess the acceptability of the bank's trading portfolio measurement practices and resulting financial statements.

The Case Study

Background to the HQ Case

In 1990, Hagströmer and Qviberg founded a stock brokerage firm that expanded its services to fund management and trading in the following years.¹⁹ Trading started as a vehicle for facilitating

¹⁹This section is based on data obtained from Neurath (2011), Stockholm District Court (2016), FI (2010), and HQ's 2009 financial statements which were the last annual statements issued before the closure of the bank.

the firm's function as a market maker but trading on its own account increased significantly over time. The firm was listed on the SSE in 1999. In 2006, HQ Bank was created and chartered by FI, allowing the bank to accept deposits from the general public. When it became chartered, the bank also became subject to stronger supervision from FI. In 2010, following several months of dialogue between FI and HQ, FI decided on 28 August 2010 to close the bank. FI effectively withdrew the bank charter, as well as HQ's license to engage in brokerage and trading of financial instruments (FI, 2010).²⁰ FI further requested a disciplinary investigation of HQ's auditor by the supervisory board of public accountants (RevisorsNämnden, 'RN'). After a thorough investigation of the case, RN concluded on 18 October 2011 that the bank's audit was correctly performed in accordance with the effective auditing standards, and the issuance of a clean audit opinion for the 2009 HQ annual financial statements was therefore not criticized by the authority (RN, 2011).²¹

The HQ group was structured into a parent company, HQ AB ('HQ'), with almost no operating activity, and several subsidiaries. The most important subsidiary was HQ Bank AB, with most of the operating activity of the group.²² Five people involved with the bank were prosecuted in 2016: Mats Qviberg, one of the founders²³, the largest owner, and the chairman of the board of HQ AB; Mikael König, CEO of HQ AB and of HQ Bank AB; Stefan Dahlbo, board member of HQ AB, and chairman of HQ Bank AB's board; Curt Lönnström, head of HQ AB's audit committee; and Johan Dyrefors, KPMG, auditor of the individual financial statements of HQ AB and HQ Bank AB as well as the consolidated financial statements of HQ group. The Swedish Economic Crime Authority (EkoBrottsMyndigheten, 'EBM') decided to prosecute the five individuals on the charge of swindling. The trial was carried out in the Stockholm district court in the spring of 2016, and the judgment was pronounced on 21 June 2016. All five defendants were acquitted of any wrongdoing (Stockholm District Court, 2016).

The Measurement Issue

HQ was involved in several business segments, including deposits and lending, private banking, asset management, and investment banking. The study focuses on trading on the company's own account. By 31 December 2009, this trading portfolio included 4.4 billion SEK in assets, and 4.0 billion SEK in liabilities, so net assets were 400 million SEK (in comparison, consolidated equity was 1.2 billion SEK). At the time, HQ had about 1000 different instruments in the portfolio. Within the trading portfolio, the case is specifically about the measurement of DAX and OMX30 index options.²⁴ HQ was both holder and writer of index options, and therefore the options

²⁰In Sweden, the enforcement of the IAS/IFRS Regulation has been delegated by FI to the stock exchanges. In accordance with the FI decision, the Stockholm Stock Exchange (SSE) concluded on 19 May 2011 that HQ did not apply IAS 39 correctly, and a fine was issued (SSE, 2011).

²¹In detail, RN concluded that the auditor correctly ascertained that HQ had a reasonable method of determining whether markets were active or not and that the interpretation of observable market data in the measurement was within the boundaries of IAS 39. RN elaborated that there were minor, not material, deviations from IFRS and that not all specific disclosure requirements in IFRS 7 were followed, but that the notes in the annual report were transparent on an aggregate level. RN therefore gave the auditor only a minor reprimand for weaknesses in the documentation of the audit.

²²The listed parent company HQ AB applied IFRS in the preparation of consolidated financial statements in accordance with the IAS/IFRS Regulation. All trading activity took place in the consolidated subsidiary HQ Bank AB. The individual financial statements of HQ Bank AB were also prepared in accordance with IFRS (endorsed by the EU), based on Swedish FI Regulations. The district court judgment referred to the consolidated financial statements, while the FI decision on the bank charter referred to the individual financial statements. However, both decisions refer to the same accounting standards and the same transactions.

²³Sven Hagströmer, the other founder, was no longer involved in the bank, and therefore not part of the trial.

²⁴The DAX index reflects the 30 largest equities on the Frankfurt stock exchange and the OMX30 includes the 30 largest equities on the Stockholm stock exchange.

represented both assets and liabilities on the balance sheet. At 31 December 2009, index options represented assets of 2.3 billion SEK and liabilities of 3.3 billion SEK. Most of those assets had a maturity of less than 3 months (1.9 billion SEK) and only 25 million SEK had a maturity of more than one year. Many of the liabilities had a maturity between 3 and 12 months (1.8 billion SEK). For some of the instruments held, HQ's holdings were large in the sense that HQ's own trading could affect market prices. The measurement of assets and liabilities besides index options in the trading portfolio was uncontroversial and is not further discussed here.

The index options in HQ's trading portfolio met the definition of derivatives in accordance with IAS 39 par. 9 and were therefore measured at fair value through profit and loss. IAS 39 48A states that 'the best evidence of fair value is quoted prices in an active market'. If the market is not active, a valuation technique should be used. The technique should maximize the use of market input and minimize the use of entity-specific input. Further, the technique should mirror how market participants would price the instrument. The valuation technique should also be calibrated through periodic comparison with prices from observable market transactions. Additional guidance is provided in Appendix A to IAS 39, Application Guidance ('AG'). IAS 39 AG74 exemplifies option pricing models as possible valuation techniques. IAS 39 AG76 states that the best evidence of fair value at initial recognition is the transaction price, but it also states that the fair value of a financial instrument based on a valuation technique can differ from the transaction price if the valuation technique is based on only observable market data. IAS 39 AG82 provides examples of observable market data, and AG82(f) states that the volatility expected by the market can be estimated by observing historic volatility, or through implied volatility in current prices of similar instruments.²⁵

The interpretation of the standard therefore requires a significant amount of judgment. The preparer of the financial statements needs to determine whether there is an active market for the options or not. If there is no active market, a valuation technique similar to techniques used by market participants is chosen. The preparer can only recognize gains and losses at initial recognition from a difference in fair value and transaction price if the technique uses exclusively observable market data. Consequently, the preparer must determine whether the input in the valuation technique is observable or not. Specifically, in the measurement of options, where expected volatility is an important parameter in valuation techniques, the preparer must also determine how to estimate the volatility expected by the market.

Assessment of Fair Value Measurement Across Institutional Logics

This section describes and analyses the social negotiation of acceptable measurement practice (and fraud) in relation to the index options in HQ's trading portfolio at three instances. At the first instance, the initial measurement, HQ argued for its measurement practice in negotiation with the auditor. This negotiation was settled exclusively in the order of the market and did not show conflicting logics. However, the initial measurement set the stage for the negotiations and tensions in the following instances of negotiation and established the economic market logic in relation to the interpretation of IAS 39. The second instance is represented by FI's investigation of the measurement practice, resulting in the strongest supervisory action available to FI: withdrawing a bank's charter, which means that the bank must cease operations. In its decision, the

²⁵The Black-Scholes valuation model is an algorithm that produces an option value based on certain inputs. If the value and all but one input variable are known, the remaining input variable can be calculated. For options traded on active markets – where a value is readily available – this method can be used to calculate the market's expected volatility, called 'implied volatility'. Historic volatility is calculated by simply looking at the actual volatility of the index for a specific historic period preceding the measurement date.

regulatory body drew on the regulatory logic that aimed to ensure financial stability. The interpretation of the standard was central in FI's argument, although the final decision was based on several factors. The third instance of negotiation arose in the legal realm where the measurement issue moved into the criminal law context and onto an individual level, acquitting all individuals of criminal action in the court of law. All three institutional logics came into play during the negotiations in the court case, as prosecution and defense drew on conflicting rationales, building convincing stories to argue their cases.

The market realm: initial measurement of the derivatives

The measurement model for index options applied by HQ differed based on market activity for the instruments. For operational purposes, HQ interpreted the principles-based definition of active market contained in the standard (quoted prices that represent actual market transactions are readily available) into a simplified rule. HQ considered the market for an instrument to be active if the daily market activity was at least 50% of HQ's holdings of that instrument, if there were at least three such days in a week, and if there were at least three such weeks in the preceding three months. In the 2009 annual report (p. 47), the bank argued for this rule stating that this level of activity would correspond to a representative pricing picture and would avoid erroneous effects from transactions at unusual market prices.

For all index options, HQ used the Black-Scholes valuation model, which requires five input variables: the exercise price (index), the life of the option, the current index level, the risk-free interest rate, and the expected volatility of the index during the life of the option. Except for the expected volatility of the underlying index, which needs to be estimated, all inputs were directly observable in option contracts or in markets. The estimation of expected volatility at HQ was based on a combination of implied and historic volatility. Implied volatility was used in cases where (in HQ's judgment) active markets for similar options with the same maturity existed, as readily available quoted prices for these similar options allowed for calculation of implied volatility. Historic volatility was used when (in HQ's judgment) there were no active markets for similar options with the same maturity. When the fair values estimated using the valuation technique differed from the transaction price at acquisition, HQ recognized immediate gains and losses in profit and loss. The risk department of HQ performed a weekly review of the consistency and a monthly review of the reasonableness of the volatilities used for measurement, which included a comparison with recent market observations. The reviews were reported monthly to the CEO and quarterly to the board of directors of HQ Bank AB.

HQ assumed straight volatility in the application of Black-Scholes, although the vega of index options (the option's price sensitivity to volatility) normally varies with exercise price. Such variation is not modeled in Black-Scholes and different expected volatilities for different exercise prices must therefore be used to reflect the variation. There were, however, two main arguments for use of straight volatility. First, HQ did not have sufficient data on how much the option vega varied with the exercise price to reflect the variation in expected volatilities. Inclusion would therefore have added too much noise to the measurement. Second, the estimated effect of the assumption of straight volatility was immaterial in accordance with the sensitivity analysis performed by HQ.

HQ consistently applied volatilities to index options that were both assets and liabilities. According to HQ's rules for determining market activity, active markets existed primarily for options with a short remaining life, while markets for options with longer life were generally defined as illiquid. In effect, the use of historic volatility (which was lower than implied volatility would have been) lowered the reported value of options with a longer life, as there is a positive correlation between volatility and value in Black-Scholes. The maturity structure differed

between assets and liabilities and therefore the effect of using historic volatility was greater for liabilities (more long-term) than for assets (more short-term). The total effect therefore was a reduced recognized value of net liabilities that resulted in net gains being included in profit and loss, which increased equity on the balance sheet.

The judgments made by HQ when interpreting IAS 39 on an operational level reflect the market logic in which they are embedded. This logic is characterized by a focus on decision usefulness for equity investors, as defined by the IASB. The preparer's judgment of a situation conveys private information to investors, which is one of the central benefits of fair value accounting (Bhimani, 2008; Laux & Leuz, 2009) and makes the information more relevant even if it reduces the focus on conservatism and verifiability.

HQ's decision to use a valuation technique instead of broker quotes entails more judgment and less verifiability. HQ's own decision rule for making a distinction between active and non-active markets (which forms the basis for the use of a valuation technique) was itself based on HQ's own position in the index option market. The decision rule defined markets as illiquid for a substantial amount of the firm's holdings, a fact that was a matter of dispute in the decisions of both FI and the court of law. The rule was related to the market rationale that consideration must be made of the ability to dispose of financial instruments, which can be problematic when a firm has large holdings that cannot be disposed of without affecting the price (Ball, 2006). Investors were provided with private information about (1) HQ's management making the judgment that a quick disposal would affect prices; and (2) HQ's judgment regarding mispricing in the market, which was reflected in the recognition of immediate gains and losses. In general, the view of HQ's management suggested a perception of inefficiency in the market for index options, which complicates the use of fair value measurement (Milburn, 2008), especially in mark-to-model fair value measurement (Hitz, 2007; Song, Thomas, & Yi, 2010).

HQ's measurement was arguably aligned with the bank's business model and therefore involved providing private information to investors. In addition, given that the outcome of the adopted approach was a relatively favorable presentation of financial position, the approach was probably not contrary to any incentive HQ management may have had with respect to accounting policy choice.

The incentives of auditors differ from those of management, as auditors have little upside potential but large risks in an audit. Nevertheless, auditors share the market logic as they aim to implement standards in accordance with IASB objectives. However, the use of preparer judgment creates difficulties for auditors, because of information asymmetry between the auditor and the firm's management (Martin, Rich, & Wilks, 2006). Research suggests that a Big Four audit ensures high quality of financial statements (Dechow et al., 2010), which is an indicator that managerial judgment leads to a faithful representation. Although our data provide limited insight into the negotiations between the auditor and HQ as well as within the accounting firm²⁶, we can conclude that by providing a clean audit opinion, the lead auditor agreed with HQ's judgments and implementation of IAS 39. The auditor's judgment was also not criticized by RN, which indicates that HQ's interpretation of IAS 39 was within the boundaries of the standard as understood in market logic. This does not imply that it was the 'best' or only possible measurement technique, but it indicates that the objectives of communication to investors in accordance with IFRS were achieved.²⁷

²⁶The documentation of the court trial exposes substantial discussion inside the accounting firm showing no general agreement with HQ's valuation technique. This could be interpreted as an indication that the technique was controversial. However, it could also be interpreted as a natural part of applying principles-based standards in an area characterized by a high level of judgment.

²⁷The indication of reliability through a clean audit opinion is limited because of the difficulty of auditing fair value measurements (Power, 2010). Nevertheless, a Big Four audit still sends a clear sign of assurance to the financial markets.

The regulatory realm: negotiating fraud on an organizational level

In its decision to withdraw the bank charter and other licenses, FI (2010) stated several reasons related to financial reporting and others. Related to financial reporting, the authority claimed that HQ's trading portfolio was overvalued, and that – based on a correct value of the portfolio – the bank did not meet its capital requirements from December 2008 to March 2010 (the last available financial statements). FI claimed that, in December 2009, the total error was 632 million SEK. This amount was highly material, as the total capital of the bank in accordance with banking regulations was 525 million SEK. The minimum capital required was 281 million SEK; therefore, a reduction of 632 million SEK would have resulted in a capital shortage of 388 million SEK. FI quantified the error in HQ's balance sheet through the assumption that markets for the options in question were active in the meaning of IAS 39 and in accordance with the guidance in the IASB Expert Advisory Panel (IASB, 2008). Therefore, FI argued that observable broker quotes should have been used in the measurement. The total error figure was calculated by comparing reported fair values with the respective market quotes for the options. FI was partly able to do this because HQ itself kept records of this difference, called the 'edge'. As their position was that broker quotes should have been used, there was no need for FI to discuss how to apply Black-Scholes or how to estimate expected volatility.

In addition to financial reporting issues, FI further concluded that the bank had jeopardized its survival by excessive risk-taking and that it lacked adequate risk control.

The FI decision was preceded by substantial discussion, both between FI and HQ, and within HQ. For example, in response to FI's claim that the measurement should have been based on broker quotes, HQ responded (FI, 2010, p. 9):

The bank did not consider a valuation at market value necessary because the bank did not intend to close down the positions. The assumption was instead that, when the positions would be closed, this would happen at volatility in accordance with the historical average. The bank calls this a 'going-concern' principle.

In the discussion between FI and HQ, there was some confusion of terminology. In internal documentation used to calculate the edge, HQ used the term 'market value' for broker quotes, and 'theoretical value' for the Black-Scholes valuation technique. The 'theoretical values' were the ones reported in the balance sheet as fair values. Those terms were confusing, as 'theoretical values' were considered fair values in accordance with IAS 39 both by HQ and the auditor. Meanwhile, 'market value' was not considered fair value, as suggested by the above quote.

The discussion between FI and HQ shows very different interpretations of the definition of an active market. FI defined an active market as one where broker quotes were available, even if there were only a limited number of actual transactions. FI certainly did not assign any relevance to the size of HQ's holdings and the possible effect of a disposal on the pricing of the options. In support of its decision, FI also referred to internal discussions at HQ that took place within the board of HQ AB, the parent company. This is conveyed in the following quote (FI, 2010, pp. 18–19):

With respect to the large differences between the bank's own valuation and the market quotes, which increased over time, the bank should have realized that the measurement technique was faulty and therefore the risk taken by the bank was too high. In addition, a new board member of the parent company, instructed to review issues with the trading portfolio, alerted the bank to review its valuation principles. Moreover, at the bank's board meeting on May 17, 2010, this person registered a dissenting opinion on the bank's decision not to review the valuation principles. (...) Based on this, it is remarkable that the bank did not inform FI on May 18, 2010 that there are at least uncertainties in relation to the valuation of the trading portfolio.

To FI, the dissenting opinion by the board member was a clear indication of an error in the measurement. An alternative view is that the disagreement within the bank indicates the complexity

of financial instruments accounting and banking oversight, as the establishment of an error (and fraud) requires knowledge of both financial instruments and accounting regulations.²⁸

FI's interpretation of IAS 39 was based on the regulatory logic that involved a focus on verifiability and conservatism, that is, asymmetric recognition of unexpected losses before unexpected gains (cf. Watts, 2006). FI argued that observable broker quotes should have been used instead of less verifiable valuation techniques. FI largely did not discuss the judgment involved in the determination of whether a market is active or not but saw this matter as rather unproblematic. Through a focus on observable inputs that did not require much judgment, FI was able to determine that fraud had occurred and to establish the exact amount of the error.

Verifiability of data therefore was central in the regulatory logic applied by FI. The application of conservatism was less obvious in this case. There was nothing inherently conservative in FI's proposed measurement because it involved symmetric accounting treatment of unrealized gains and losses. However, FI's method was conservative in relation to HQ's method, leading to lower asset values and higher liability values, as well as later recognition of gains and earlier recognition of losses. As a banking supervisor, FI promotes prudence²⁹ in banking. A more conservative measure of regulatory capital is one way to be prudent (Fonseca & González, 2008).

In this study, we do not analyze the broader issue of whether HQ took excessive risks. Arguably, FI can be seen as having had market, ethical, and societal arguments for withdrawing the bank's charter, apart from the problematic measurement issue. However, FI apparently wanted to base its decision on a financial reporting argument. The establishment of non-compliance in financial reporting was an important basis for communicating FI's decision to withdraw the bank's charter. Pointing to an overvalued trading portfolio, FI argued that the bank had jeopardized its solvency. According to FI, allowing such a practice would send signals to other banks that the practice was acceptable, which would endanger the financial system and the financial stability of the state. Although the bank did not have systemic importance per se, which means that the closure did not have negative secondary effects on the stability of the financial system (Söderström, 2017), its practices still had a signaling effect in the market, especially if an official investigation had accepted the conduct. Through its interpretation of IAS 39, FI was very specific and definitive in its declaration of the bank's non-compliant measurement, which had an important role in how the withdrawal of the bank's charter was perceived in public. For example, the media coverage of the decision almost exclusively focused on the financial reporting wrongdoings of the bank. However, the judgment in the later court trial shows a critique of the financial reporting argument brought forward by FI. The district court stated in its judgment that FI's 'extensive efforts at obtaining disciplinary action against [...] the auditor]' had to be interpreted as an attempt to retrospectively legitimize its controversial decision to withdraw the bank's charter (Stockholm District Court, 2016, p. 76).

The legal realm: negotiating fraud on an individual level

In the criminal trial in the Stockholm district court, there were three main actors: the prosecution, the defense, and the court (judge and jury). Both market and criminal law logic frequently came into play in the discussion. In addition, the material shows some arguments from the prosecution

²⁸The establishment of an error is linked to the boundaries of the accounting standard – a procedural assessment – and not to the resulting total amounts of the measurement, a view indirectly expressed by the judge in the criminal court case. The dissenting board member was called as a witness. Because she stated that she had deep knowledge of option valuation, but no knowledge of accounting or of IAS 39, her testimony was not effective in convincing the court that a measurement error had occurred.

²⁹Prudence is used here in a broad sense, meaning lower risk taking and having adequate reserves. It is not meant to equal accounting conservatism, in terms of an asymmetric valuation of assets and liabilities, and gains and losses, respectively.

that resembles regulatory logic. The partial autonomy of the actors within the institutional orders (Thornton et al., 2005) enables them to draw on different logics to argue their case. We focus our analysis mostly on the prosecution and the court. The prosecution had the burden of proof in the criminal trial and had to establish that fraud had occurred. The defense reacted to the respective arguments, focusing on the standard's text and its boundaries of interpretation, drawing on the market logic in which the standard is embedded. The court, meanwhile, represented a pure criminal law logic, mostly following the defense's arguments in relation to the boundaries of compliance.

The prosecution pleaded that three crimes were committed.³⁰ First, the prosecution pleaded for faulty bookkeeping, claiming that HQ used inadequate source documents as a basis for the reporting of index options in the financial statements. Second, the prosecution pleaded for swindling, claiming that the 2009 annual financial statements were not prepared in accordance with IFRS.³¹ Third, the prosecution pleaded that swindling was committed based on the recognition of immediate gains and losses in the Q1 report of 2010. The second and third pleas are of central importance for this study and are discussed together, as the recognition of gains and losses is a result of the measurement applied.

The prosecution focused on the immediate recognition of gains and losses, claiming that unobservable data were incorrectly used in the measurement technique. The basis for this claim was HQ's use of historic volatility, the assumption of straight volatility, and a lack of calibration with market data. As such, the prosecution, unlike FI, argued in terms of market logic, accepting that judgment was necessary in the preparation of the financial statements. The prosecution's claim was that the judgments made by HQ were not in accordance with IAS 39. In the criminal case, the prosecution was forced to specify the amount of the error in net income in 2009 and stated it to be in the range 145–615 MSEK. The purported reason for the broad range was the lack of verification documents. Again, unlike FI, who came up with a very precise error (632 MSEK), the prosecution appeared to accept the principles-based nature of IAS 39. The response of the defense was simply that only observable data were used in the valuation technique as historic volatility was observable. The defense also claimed that calibration with market data did occur frequently within HQ.

On the measurement issue, the court concluded that the prosecution failed to show that a breach of IAS 39 had occurred. Therefore, most claims of incorrect disclosure by HQ were not supported. The court's judgment on measurement started with the finding that the application of IAS 39 necessarily required judgment, which could result in two identical firms reporting different income without differing from IFRS. The court then went into detail about the measurement technique, including the use of historic and straight volatility, as the following quote shows (Stockholm District Court, 2016, p. 134):

According to the court, it is hardly possible to interpret IAS 39, especially paragraph AG82(f), as not allowing historic volatility as observable market data in the valuation technique. [...] There is no pronouncement that historic volatility in an underlying index does not qualify as observable market data; neither in IAS 39 nor in its basis for conclusion. [...] As the volatility in the underlying index is considered observable market data in accordance with

³⁰All these crimes – with the possible exception of faulty bookkeeping – would fit the definition of fraud used in this study and in the accounting literature. In accordance with Swedish law, none of them were actually defined as fraud. The court's response was an acquittal of the defendants in all cases. The first plea, for faulty bookkeeping, was rejected on a technicality because the Swedish law referred to does not apply to accruals but only to transactions with outside parties.

³¹There were four parts to this plea: 1. incorrect profit and loss accounting, as immediate gains and losses were recognized even though the measurement technique partly relied on unobservable inputs; 2. HQ's own rule to determine whether markets were active or not was not consistently applied; 3. regarding recognition of immediate gains and losses, HQ refrained from disclosing in the financial statements a reason for this deviation from IFRS; and 4. HQ did not follow the disclosure requirements in IFRS 7 or provide an explanation for the deviation.

IAS 39, it is reasonable, in the case of index options, to allow straight volatility. The underlying index has only one historic volatility, regardless of the exercise price of the options.

Regarding the purported error caused by the assumption of straight volatility, the court further concluded that the prosecution failed to show that an error had occurred. The court pointed out that the prosecution prepared a vega calculation based on broker quotes, but that there were no or very few market transactions at the time. Due to the inactivity of the market, the broker quotes were not considered evidence of an error.

Reflecting on the court's judgment, the court clearly exhibits criminal law logic with a strong burden of proof required to sentence an individual in a criminal trial. The court required the prosecution to prove that a specific regulation was not followed and to specify the error. Principles-based accounting standards that afford substantial judgment to preparers do not provide the basis for such proof because they do not enable the definition a correct benchmark against which the measures could be verified. A strict reading of the text as required in the criminal law context is therefore not possible.³² Consequently, it was difficult to establish wrongdoing in a case such as HQ, as predicted by Laux and Leuz (2009) and Watts (2003b, 2006). Sanctioning or regulating risky financial measurements based on non-compliance becomes difficult or even improbable.

The problem of interpreting principles-based standards in a criminal law context becomes even more relevant in a setting where the standard includes complex measurement requirements. The HQ case is an example of what Stryker (1994, 2000) defines as technocratization of the legal realm. Technocratization means that social and natural science logic (new expert knowledge) enter and transform formal legal logic and structure by providing an alternative rationale. In relation to financial crimes, both prosecution and defendants are dependent on expert witnesses from the accounting profession because the financial models and financial accounting standards require expert knowledge. Very few people have expertise in both financial accounting standards and financial modeling. In relation to a compliance debate, this may become problematic because to form a successful argument, the expert witness' claims must be translated into the legal context with specific legal structure and language. Legally binding decisions build on weak, contradictory, or confusing evidence in such cases (Stryker, 1994, pp. 861–862). The ability to translate technical expert knowledge into legal arguments is therefore a challenge faced by lawyers.

In summary, the case points to two difficulties in establishing fraud based on IFRS. First, there is tension between the market logic of IFRS and the criminal law logic of the court system. Second, both market logic and the complexity of IFRS make it difficult to use the standards as a basis for a rigorous argument by legal experts, such as prosecutors.

Reflections on the Concept of Faithful Representation and the Role of Financial Reporting in Society

What does this case tell us about the role of financial reporting in society? Financial accounting is used in several different contexts. A reasonable expectation by FI, HQ, and the auditor is that it is possible to distinguish between measurement that is compliant with IAS 39 versus non-compliant measurement. However, in a legal context, this may be too much to expect from a

³²The interpretation and application of principles-based regulation are more flexible than rules-based regulation. A strict reading of principles-based accounting standards is not possible in the same way as for other legal requirements of the Swedish Penal Code in the criminal law context, which is more rules-based. In other legal contexts, such as civil law, principles-based regulation allows substantial room for different opinions. In the case of HQ, the court in the civil case found the measurement practice non-compliant with the standard (see epilogue).

principles-based financial reporting standard, and it becomes difficult to define the boundary of the standard in a particular case.

The closing of HQ bank affected many investors and the subsequent court trials were very expensive. The largest financial losses came about after the closing of the bank when the bank's equity investors lost their investment, which became virtually worthless. While FI had several reasons to withdraw the bank's charter, the most important being inadequate risk management and control, the decision was legitimized in public by referring to the erroneous accounting measurements. Presenting a specific amount of measurement error created a public reaction and media coverage because accounting numbers are associated with objectivity and a truth dimension, although accounting researchers for some time now have highlighted that accounting does not reflect but creates reality and can therefore not be neutral, objective, or correct in the sense of 'true' (Bayou et al., 2011; Hines, 1988; Macintosh, 2009; Tinker, 1991). Financial reports acquire a notion of objectivity because they are created in networks where no single entity is responsible for their entirety, a notion that Huikku et al. (2017) termed relative reliability. Numbers are very persuading (Robson, 1992) and the financial economics in which they are embedded creates trust in their correctness (Porter, 1995).

The reliance on trust is one reason why fraud is an important issue. Fraud reduces trust and has therefore always been an object of inquiry in relation to corporate scandals. Establishing fraud in relation to financial instrument measurement, however, is complex because the difference between a fraudulent measurement of a trading portfolio and a valid opinion about mark-to-model measurement is hard to identify. While fraud literature provides insights into the incentives for fraud (Johnson, Ryan, & Tian, 2009; Jones, 2011), detection of fraud (Brazel, Jones, & Zimbelman, 2009; Johnson, Grazioli, & Jamal, 1993), and market reaction to fraud (Dechow, Sloan, & Sweeney, 1996; Feroz, Park, & Pastena, 1991), our case contributes by showing how the establishment of non-compliance with a standard as the basis of fraud is bound to the dominant institutional logic in the respective assessment context. In other words, when the interpretations of the standard differ across institutional contexts, individuals and firms face varying consequences and must relate to these consequences in their actions. Accounting quality and faithful representation become problematic concepts in such situations because actors must make decisions in favor of a certain institutional logic; in other words, in favor of market logic or regulatory logic, leaning more towards risk or more towards verifiability, while at the same time facing legal consequences resulting from other institutional logics. Only within a specific logic can a sense of right or wrong, or of compliance or error, be established, because principles-based standards explicitly require judgment, and the assessment of judgment is bound to a specific logic.

Within market logic, Huikku et al. (2017) show that markets still find a way to establish the usefulness of a value through relative reliability despite a lack of direct verification. Within regulatory logic, we know that conservatism is favored (Ball, 2016; Wall & Koch, 2000; Watts, 2003b, 2006) because it ensures solvency and thus has a positive relationship with market stability. While Sweden chose to link banking oversight and stock market regulation, making IFRS the regulation in both realms, other countries, like the UK and the US, have chosen to have separate systems, requiring different sets of financial statements. The problematic position of FI (and the prosecution) gives an indication that separation might be a better solution, because it also enables the separation of the institutional logics involved. However, for a separation to function, banks would be required to prepare separate financial reports for different authorities, which significantly increase preparers' reporting costs. From criminal law logic, the concern is with the individuals involved. Establishing fraud in the setting given was improbable, if not impossible, because the principles-based standard required significant amounts of judgment and presented no appropriate basis for the establishment of misconduct. HQ's assessment of market inactivity and

choice of historic volatility were not directly verifiable, but, given the openness of the standard for such judgment, the prosecution could not prove the judgment wrong.

We conclude from the case that accounting standards that require complex measurements and at the same time heavily build on the preparer's judgment, like IAS 39³³, are not useful for banking oversight and are difficult to use in a legal context. While both FI and the press interpreted the large difference between quoted market prices and reported values as greed and gambling, which are traditional motives for fraud (Jones, 2011, p. 31), an alternative explanation based on market logic defines the difference as the result of the bank's business model. FI and the press connected an ethical dimension to the financial reports; there must be something wrong if quoted prices and reported values show such divergence, making the trading portfolio seem overvalued. However, financial reporting is not really about what is right or wrong in an ethical sense, which is seen as critical by some (Bayou et al., 2011). In respect to ethical claims in financial accounting, we agree with McKernan and Kosmala (2007), who suggest that responsibility for ethical conduct must lie with each individual. Financial accounting standards need room for diverging opinions because they need to be adaptable to many different situations, not all of which can be foreseen. Ultimately, one cannot assess in an absolute sense whether a standard is applied correctly or not; this depends on the institutional order in which the assessment is made, and only within a specific institutional order can an assessment of (in)correct application be translated in terms of ethical behavior. Within market logic, the aim of the standards is not to induce ethical behavior and financial stability but the usefulness of information and faithful representation.

Interestingly, while accepting that fair value comes at the expense of verifiability, standard setters still aim for a faithful representation that has a direct link to compliance with the standard. Faithful representation is closely linked to market logic with an affinity for fair value measurement and investor focus (Erb & Pelger, 2015; Power, 2010).³⁴ Fraud therefore no longer links only to a clear referent but also to a decision of whether there was a procedural error in the measurement. The procedure of how a value becomes defined, the valuation model, the inputs, and the execution of the valuation, become the center of attention. An error is then defined as misconduct in the procedure. When taking the future into account in fair value measurement, this focus on measurement procedures challenges a universalistic understanding of error (and compliance) because the error, defined as procedural misconduct, becomes a matter of judgment, which is ultimately bound to the logic in which it is embedded. For example, neither the difference between quoted market prices and reported values nor the lack of prudence was a matter of concern in the court of law. The focus was instead on proof of wrongdoing in the sense of non-compliance. Since principles-based accounting standards include managerial judgment, non-compliance (and fraud) can only be established in a procedural manner, that is, by assessing whether the measurement technique and inputs used are in accordance with the standard. However, to assess whether the measurement technique and inputs are in accordance with the standard is not as straight-forward as is often assumed. Whether markets are active or whether historic volatility is appropriate to use are managerial judgments that cannot be directly verified.

Overall, accounting is about judgment and therefore it is necessary and efficient to have some degree of open-endedness in accounting standards (Fields et al., 2001). Since all future

³³Although there are aspects of IAS 39 that arguably are rules-based (e.g. effectiveness of hedge accounting), the standard is principles-based in relation to the fair value measurement of index options. As we have shown in this study, substantial judgment is required to determine whether markets are active or not, and to estimate the volatility expected by the market.

³⁴The standard setter argued for faithful representation because verifiability requires an agreed upon referent in the form of readily available market data (a transaction or quoted market price), but even if a value is not readily verifiable, it might still be relevant for market participants (IASB Conceptual Framework, BC2.62).

contingencies cannot be foreseen, formal contracts that include accounting numbers are narrow in scope and rely on enforcement (Armstrong, Guay, & Weber, 2010). Any attempt to relate an accounting standard to the circumstances of a specific situation requires a judgment that can be challenged, which is why it is necessary to fall back on courts or enforcers at some point. Since an independent legal system follows an institutional order that differs from that of the parties involved, however, it is difficult to establish fraud across these different institutional logics creating uncertainty for the parties.

Concluding Remarks

We conclude from the HQ case that principles-based standards, with high reliance on preparer judgment, challenge a universal understanding of compliance, and thus, of fraud and faithful representation. The case shows how variation in interpretation of IAS 39 across institutional logics makes it difficult to define a consistent boundary for measurement practices that fulfills the overarching objective of the standard. The meaning of compliance and fraud therefore are anchored in the different logics and a shared understanding about these concepts is bound to a specific institutional context.

The analytical framework presented contributes to existing literature by enabling a focus on the different institutional logics that are relevant in a financial accounting context. The case shows that even the most basic aspect of accounting quality, compliance with an accounting standard, becomes problematic when viewed from the different logics of market and enforcement. The difficulty of assessing compliance across institutional logics constitutes a problem for managers and auditors, because they have to relate to different expectations and requirements in their business practice. The difficulty also presents a problem for standard setters and the enforcement system, because accounting quality lacks a clear referent. A solution is an increased focus on verifiability of financial statement information, which is likely to be beneficial for creditors and for corporate governance. Less focus on verifiability, however, is also an expression of the benefits of principles-based accounting, because it enables managers to provide private information, potentially benefitting equity investors.

There are voices that suggest stepping away from fair value measurement, because it is difficult to audit and enforce (Ball, 2006; Martin et al., 2006). In addition, concerns have been voiced in relation to a loss of an ethical or 'truth' dimension of accounting if a lack of verifiability restricts the role of auditors towards a confirmation of compliant measurement processes rather than correct valuation (Bayou et al., 2011). However, the questions discussed here are not so much about ethics, and without managerial judgment, financial reporting would be restricted to the past rather than incorporating the future (McKernan & Kosmala, 2007). Without relevant alternatives (Laux & Leuz, 2009), financial reporting without fair value would certainly risk becoming much less useful for investors (Bhimani, 2008). Some researchers argue for stronger enforcement systems with greater consequences of litigation for managerial misconduct (Brown, 2011), but it is questionable whether stronger enforcement solves the tension because the implied dominance of legal logic (both criminal and civil) would be of much less value for investor decision-making. Laux and Leuz (2009), for example, suggest that the high risk of litigation in the US hinders managers from optimally using fair value measurements. Managers tend to not diverge from quoted market prices and effectively undervalue their portfolios. While this form of conservatism and focus on verifiability might be pleasing based on legal logic, it hinders market efficiency from an investor's standpoint and is not compliant with the IASB's requirement of faithful representation. From market logic, it is therefore valuable to have principles-based financial reporting that builds on decision usefulness.

We show how agreement about compliance is possible within one logic but difficult across logics. Compliance and fraud can therefore be defined within logics. Within market logic, for example, the reliability of information, which builds on compliance with the standard, is created through standardized and impersonal processes of preparation and auditing of the financial information (Huikku et al., 2017). HQ, the auditor, and the supervisory board of public accountants – all within market logic – agreed that the measurement practice was in compliance with the standard. However, problems arise when trying to stretch this understanding to other institutional logics.³⁵

On a more general level, the analysis implies that we need to raise awareness about the different roles of financial statements, accepting that we cannot assume a shared understanding of faithful representation across logics. The lack of shared understanding is especially visible in the banking industry with its clear example of a prominent ‘other’ institutional order in which financial statements play a role. The analysis also implies that managers and auditors are faced with a dilemma, because in the context of standards with high uncertainty or managerial judgment, these actors have to navigate through the different institutional logics when making accounting choices and designing their business models.

The dilemma is not a matter of only transparency or education, because the variety in the interpretation of a standard is bound to different institutional logics. Neither is the dilemma a matter of additional or more detailed regulation. Courts will always have a role in resolving ambiguity in open-ended standards, and an independent legal system can be expected to follow an institutional order that differs from that of preparers and users.³⁶ Even if the introduction of IFRS 13 would likely have solved the particular issue of measuring index options discussed here, new situations will arise where standards are applied without clear boundaries of compliance, making it difficult to separate creative accounting or earnings management from fraud. The uncertainty for managers and auditors arising from a variation in the interpretation of standards across enforcement bodies is also of consequence for standard setters because the variation implies that comparability and harmonization of financial accounting information are not just an issue across nations. With accounting standards that focus on relevance at the expense of verifiability, it also becomes difficult to ensure comparability and a shared understanding of faithful representation within countries.

Financial accounting research therefore benefits from further investigating how financial numbers travel through and link different institutional logics to help shape ways in which we can handle complex standards within and across institutional logics. Such understanding also builds the basis for a more refined understanding of accounting quality which enables preparers and users to navigate through different expectations and requirements.

Epilogue

On 14 December 2017, Stockholm district court made their judgment in a civil trial relating to the HQ case (Stockholm District Court, 2017). Plaintiffs were representatives of HQ, and defendants were former board members, management, and auditors of HQ. In many respects, this was a very large trial in a Swedish setting. The plaintiffs wanted compensation of approximately 5

³⁵An interesting side effect of this tension is that the role of auditors becomes more complex as well, because auditors form part of the enforcement system while at the same time relying on market logic.

³⁶As discussed in the epilogue, this issue becomes even more prominent when taking into account that the legal context contains more than one institutional logic, because criminal law logic and civil law logic are distinctly different in their underlying assumptions and requirements.

billion SEK (including interest) for coverage of losses. The total cost of the trial exceeded 450 million SEK.

The court concluded that HQ's valuation of its trading portfolio was non-compliant with IAS 39 in the 2009 financial statements and that the error was 492 million SEK. The value was calculated based on the court's own interpretation of IAS 39 to measure the value of some of the more material index options. In the judgment, the court applied the different steps of IAS 39 to come up with its own measurement, which is neither in agreement with the plaintiffs' nor the defendants' estimates of the measurement error.³⁷

The presentation of a fixed error amount is surprising, considering the wide range that was presented by the prosecution in the criminal trial. To understand this difference, one must consider the logic that underlies a civil trial.

Civil law logic relates to the same legal system with the same defining elements as criminal law logic. However, the aims and underlying assumptions within this logic are distinctly different, allowing a wider and more principles-based application of rules and regulations compared to criminal law logic. Civil law deals with conflicts between individuals and/or firms, such as injuries, contract breaches, or property damage. While the rule of law and European Convention also apply for civil procedures, the interpretation and application of the principle-based regulation in civil trials are more flexible compared to criminal trials and usually require additional content in the form of explaining rules, policies, or market practice. Civil law logic leaves substantial room for different options within the same standard to maintain flexibility for the standards to be used in various situations, and still by its application fulfill the overarching objectives of the regulation. In contrast, the rules-based regulation in criminal law cannot allow for this type of flexibility due to the requirement for foreseeability and legal certainty in the application of such regulation.

When taken literally, the standard text of IAS 39 did not provide the basis for the prosecution in the criminal trial to specify an error number. The wide error range reflects the burden of proof put on the prosecutor in the criminal context. To convict an individual, it is not sufficient to argue for the best estimate of expectations about the future. Within the context of civil law logic, however, there is more room for judgment from the court. The court calculated the error as an overvaluation of 492 million SEK, arguing that for six material index options, HQ used historic volatilities when implied volatilities should have been used. The court based its argument on an analysis of market activity, claiming that the market for the six options was active, while HQ argued it was inactive.

The diverging interpretations of IAS 39 – including the court's judgment in the civil trial – confirm our conclusion that organizations, managers, and auditors face struggles when searching for the boundaries of acceptable business models and valuation practices. These actors must comply with the standards but understanding what that means becomes difficult.

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³⁷The actual outcome of the trial was that the plaintiffs lost the case regardless of HQ's non-compliance with IAS 39. The judgment by the court was based on the reasoning that the measurement error was not the proximate cause of the plaintiffs' losses.

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References

- Aier, J., Chen, L., & Pevzner, M. (2014). Debtholders' demand for conservatism: Evidence from changes in directors' fiduciary duties. *Journal of Accounting Research*, 52, 993–1027.
- Armstrong, C., Guay, W., & Weber, J. (2010). The role of information and financial reporting in corporate governance and debt contracting. *Journal of Accounting and Economics*, 50, 179–234.
- Ball, R. (2001). Infrastructure requirements for an economically efficient system of public financial reporting and disclosure. *Brookings-Wharton Papers on Financial Services*, 2001, 127–169.
- Ball, R. (2006). International Financial Reporting Standards (IFRS): Pros and cons for investors. *Accounting and Business Research*, 36, 5–27.
- Ball, R. (2016). IFRS – 10 years later. *Accounting and Business Research*, 46, 545–571.
- Ball, R., Kothari, S. P., & Robin, A. (2000). The effect of international institutional factors on properties of accounting earnings. *Journal of Accounting and Economics*, 29, 1–51.
- Barth, M., & Israeli, D. (2013). Disentangling mandatory IFRS reporting and changes in enforcement. *Journal of Accounting and Economics*, 56, 178–188.
- Bayou, M., Reinstein, A., & Williams, P. (2011). To tell the truth: A discussion of issues concerning truth and ethics in accounting. *Accounting, Organizations and Society*, 36, 109–124.
- Bhimani, A. (2008). The role of a crisis in reshaping the role of accounting. *Journal of Accounting and Public Policy*, 27, 444–454.
- Braithwaite, J. (2013). Flipping markets to virtue with qui tam and restorative justice. *Accounting, Organizations and Society*, 38, 458–468.
- Brazel, J., Jones, K., & Zimbelman, M. (2009). Using nonfinancial measures to assess fraud risk. *Journal of Accounting Research*, 47, 1135–1166.
- Brown, P. (2011). International financial reporting standards: What are the benefits? *Accounting and Business Research*, 41, 269–285.
- Bushman, R., & Williams, C. (2012). Accounting discretion, loan loss provisioning, and discipline of banks' risk-taking. *Journal of Accounting and Economics*, 54, 1–18.
- Christensen, J., & Demski, J. (2003). *Accounting theory: An information content perspective*. New York, NY: McGraw-Hill/Irwin.
- Chua, W. (1986). Radical developments in accounting thought. *The Accounting Review*, 61, 601–632.
- Cooper, D., Dacin, T., & Palmer, D. (2013). Fraud in accounting, organizations and society: Extending the boundaries of research. *Accounting, Organizations and Society*, 38, 440–457.
- Dechow, P., Ge, W., & Schrand, C. (2010). Understanding earnings quality: A review of the proxies, their determinants and their consequences. *Journal of Accounting and Economics*, 50, 344–401.
- Dechow, P., Sloan, R., & Sweeney, A. (1996). Causes and consequences of earnings manipulation: An analysis of firms subject to enforcement actions by the SEC. *Contemporary Accounting Research*, 13, 1–36.
- DiMaggio, P., & Powell, W. (1983). The iron cage revisited: Collective rationality and institutional isomorphism in organizational fields. *American Sociological Review*, 48, 147–160.
- DiMaggio, P., & Powell, W. (1991). *The new institutionalism in organizational analysis (Vol. 17)*. Chicago, IL: University of Chicago Press.
- Erb, C., & Pelger, C. (2015). "Twisting words"? A study of the construction and reconstruction of reliability in financial reporting standard-setting. *Accounting, Organizations and Society*, 40, 13–40.
- Feroz, E., Park, K., & Pastena, V. (1991). The financial and market effects of the SEC's accounting and auditing enforcement releases. *Journal of Accounting Research*, 29, 107–142.
- FI. (2010). *Beslut om återkallelse av tillstånd* [Decision to recall bank charter]. Finansinspektionen, FI Dnr 10-7854. Issued August 28. Retrieved from http://www.fi.se/contentassets/a0e7584191924e9b91b4c0b5bbd230fa/beslut_hq_10-7854ny.pdf
- Fields, T., Lys, T., & Vincent, L. (2001). Empirical research on accounting choice. *Journal of Accounting and Economics*, 31, 255–307.
- Fligstein, N. (1998). The politics of quantification. *Accounting, Organizations and Society*, 23, 325–331.
- Fonseca, A., & González, F. (2008). Cross-country determinants of bank income smoothing by managing loan-loss provisions. *Journal of Banking and Finance*, 32, 217–228.
- Friedland, R., & Alford, R. (1991). Bringing society back in: Symbols, practices and institutional contradictions. In W. Powell & P. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (pp. 232–263). Chicago, IL: University of Chicago Press.

- Gjesdal, F. (1981). Accounting for stewardship. *Journal of Accounting Research*, 19, 208–231.
- Greenwood, R., Suddaby, R., & Hinings, C. (2002). Theorizing change: The role of professional associations in the transformation of institutionalized fields. *Academy of Management Journal*, 45, 58–80.
- Griffiths, I. (1986). *Creative accounting: How to make your profits what you want them to be*. London: Sidgwick and Jackson.
- Hamilton, W. (1932). Institution. In E. Seligman & A. Johnson (Eds.), *Encyclopaedia of the social science* (Vol. 8, pp. 74–89). London: Macmillan.
- Haveman, H., & Rao, H. (1997). Structuring a theory of moral sentiments: Institutional and organizational coevolution in the early thrift industry. *American Journal of Sociology*, 102, 1606–1651.
- Hines, R. (1988). Financial accounting: In communicating reality, we construct reality. *Accounting, Organizations and Society*, 13, 251–261.
- Hines, R. (1991). The FASB's conceptual framework, financial accounting and the maintenance of the social world. *Accounting, Organizations and Society*, 16, 313–331.
- Hitz, J. (2007). The decision usefulness of fair value accounting – a theoretical perspective. *European Accounting Review*, 16, 323–362.
- Hopwood, A. (1983). On trying to study accounting in the contexts in which it operates. *Accounting, Organizations and Society*, 8, 287–305.
- Huikka, J., Mouritsen, J., & Silvola, H. (2017). Relative reliability and the recognizable firm: Calculating goodwill impairment value. *Accounting, Organizations and Society*, 56, 68–83.
- IASB. (2008). *Measuring and disclosing the fair value of financial instruments in markets that are no longer active*. IASB Expert Advisory Panel. London: IFRS Foundation.
- IASB. (2018). *Conceptual framework for financial reporting*. London: IFRS Foundation.
- Jakobsson, J. (2012, August 29). Qviberg: Inte olagligt att göra dåliga affärer [Qviberg: Not illegal to do poor business]. *Svenska Dagbladet*. Retrieved from <http://www.svd.se/qviberg-inte-olagligt-att-gora-daliga-affarer/om/hq-harvan>
- Johnson, P., Grazioli, S., & Jamal, K. (1993). Fraud detection: Intentionality and deception in cognition. *Accounting, Organizations and Society*, 18, 467–488.
- Johnson, S., Ryan, H., & Tian, Y. (2009). Managerial incentives and corporate fraud: The sources of incentives matter. *Review of Finance*, 13, 115–145.
- Jones, M. (Ed.). (2011). *Creative accounting, fraud and international accounting scandals*. Chichester: John Wiley & Sons Ltd.
- Laux, C., & Leuz, C. (2009). The crisis of fair-value accounting: Making sense of the recent debate. *Accounting, Organizations and Society*, 34, 826–834.
- Lincoln, Y., & Guba, E. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage.
- Lounsbury, M. (2002). Institutional transformation and status mobility: The professionalization of the field of finance. *Academy of Management Journal*, 45, 255–266.
- Lounsbury, M. (2007). A tale of two cities: Competing logics and practice variation in the professionalizing of mutual funds. *Academy of Management Journal*, 50, 289–307.
- Lounsbury, M. (2008). Institutional rationality and practice variation: New directions in the institutional analysis of practice. *Accounting, Organizations and Society*, 33, 349–361.
- Macintosh, N. (2009). Accounting and the truth of earnings reports: Philosophical considerations. *European Accounting Review*, 18, 141–175.
- MacKenzie, D., & Millo, Y. (2003). Constructing a market, performing theory: The historical sociology of a financial derivatives exchange. *American Journal of Sociology*, 109(1), 107–145.
- Martin, R., Rich, J., & Wilks, J. (2006). Auditing fair value measurements: A synthesis of relevant research. *Accounting Horizons*, 20, 287–303.
- Marton, J. (2017). The role and current status of IFRS in the completion of national accounting rules – evidence from Sweden. *Accounting in Europe*, 14, 207–216.
- Marton, J., & Ruesson, E. (2017). The predictive ability of loan loss provisions in banks – effects of accounting standards, enforcement and incentives. *The British Accounting Review*, 49, 162–180.
- McKernan, J., & Kosmala, K. (2007). Doing the truth: Religion – deconstruction – justice, and accounting. *Accounting, Auditing and Accountability Journal*, 20, 729–764.
- Meyer, J., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83, 340–363.
- Milburn, J. (2008). The relationship between fair value, market value, and efficient markets. *Accounting Perspectives*, 7, 293–316.
- Miller, P. (1994). Accounting as social and institutional practice: An introduction. In A. Hopwood & P. Miller (Eds.), *Accounting as social and institutional practice* (pp. 1–39). Cambridge: Cambridge University Press.

- Miller, P., & O’Leary, T. (1987). Accounting and the construction of the governable person. *Accounting, Organizations and Society*, 12, 235–265.
- Miller, P., & Rose, N. (1990). Governing economic life. *Economy and Society*, 19, 1–31.
- Mouritsen, J. (1994). Rationality, institutions and decision making: Reflections on March and Olsen’s rediscovering institutions. *Accounting, Organizations and Society*, 19, 193–211.
- Müller, J. (2014). An accounting revolution? The financialisation of standard setting. *Critical Perspectives on Accounting*, 25, 539–557.
- Neurath, C. (2011). *Den stora bankhärvan* [The large bank scandal]. Stockholm: Norstedts.
- Nikolaev, V. (2010). Debt covenants and accounting conservatism. *Journal of Accounting Research*, 48, 51–89.
- Porter, T. (1995). *Trust in numbers: The pursuit of objectivity in science and public life*. Princeton, NJ: Princeton University Press.
- Power, M. (2010). Fair value accounting, financial economics and the transformation of reliability. *Accounting and Business Research*, 40, 197–210.
- Puxty, A., Willmott, H., Cooper, D., & Lowe, T. (1987). Modes of regulation in advanced capitalism: Locating accountancy in four countries. *Accounting, Organizations and Society*, 12, 273–291.
- Riahi-Belkhoui, A., & Picur, R. (2000). Understanding fraud in the accounting environment. *Managerial Finance*, 26, 33–41.
- RN. (2011). Beslut. Disciplinärende – Auktoriserade revisorn Johan Dyrefors [Decision. Disciplinary Matter – Certified Public Accountant Johan Dyrefors]. Revisorsnämnden Dnr 2010-1391. Issued on October 18, 2011.
- Robson, K. (1992). Accounting numbers as “inscription”: Action at a distance and the development of accounting. *Accounting, Organizations and Society*, 17, 685–708.
- Robson, K. (1994). Inflation accounting and action at a distance: The Sandilands episode. *Accounting, Organizations and Society*, 19, 45–82.
- Robson, K., & Young, J. (2009). Socio-political studies of financial reporting and standard-setting. In C. Chapman, D. Cooper, & P. Miller (Eds.), *Accounting, organizations, & institutions: Essays in honour of Anthony Hopwood* (pp. 341–366). Oxford: Oxford University Press.
- Scapens, R. (1994). Never mind the gap: Towards an institutional perspective on management accounting practice. *Management Accounting Research*, 5, 301–321.
- Song, C., Thomas, W., & Yi, H. (2010). Value relevance of FAS No. 157 fair value hierarchy information and the impact of corporate governance mechanisms. *The Accounting Review*, 85, 1375–1410.
- Söderström, R. (2017). *Sound banking* (Doctoral dissertation). Uppsala University, Uppsala.
- SSE. (2011). Beslut 2011:1 [Decision 2011:1]. Nasdaq OMX Stockholm Disciplinary Committee. Issued May 5, 2011.
- Stockholm District Court. (2016). Dom. Mål nr: B 15982-11 [Judgment. Case no.: B 159821-11]. Pronounced June 21, 2016.
- Stockholm District Court. (2017). Dom. Mål nr: T 9311-11, T 9306-11, T 17512-11 och T 17809-11 [Judgment. Case no.: T 9311-11, T 9306-11, T 17512-11 and T 17809-11]. Pronounced December 14, 2017.
- Stryker, R. (1994). Rules, resources, and legitimacy processes: Some implications for social conflict, order, and change. *American Journal of Sociology*, 99, 847–910.
- Stryker, R. (2000). Legitimacy processes as institutional politics: Implications for theory and research in the sociology of organizations. *Research in the Sociology of Organizations*, 17, 179–223.
- Suddaby, R., & Greenwood, R. (2005). Rhetorical strategies of legitimacy. *Administrative Science Quarterly*, 50, 35–67.
- Thornton, P. (2004). *Markets from culture: Institutional logics and organizational decisions in higher education publishing*. Stanford, CA: Stanford University Press.
- Thornton, P., Jones, C., & Kury, K. (2005). Institutional logics and institutional change in organizations: Transformation in accounting, architecture, and publishing. *Transformation in Cultural Industries*, 23, 125–170.
- Thornton, P., Ocasio, W., & Lounsbury, M. (2012). *The institutional logics perspective: A new approach to culture, structure, and process*. Oxford: Oxford University Press.
- Tinker, T. (1991). The accountant as partisan. *Accounting, Organizations and Society*, 16, 297–310.
- Townley, B., Cooper, D., & Oakes, L. (2003). Performance measures and the rationalization of organizations. *Organization Studies*, 24, 1045–1071.
- Wall, L., & Koch, T. (2000). *Bank loan loss accounting: A review of theoretical and empirical evidence*. Federal Reserve Bank of Atlanta Economic Review, Second Quarter.
- Watts, R. (2003a). Conservatism in accounting part I: Explanations and implications. *Accounting Horizons*, 17, 207–221.
- Watts, R. (2003b). Conservatism in accounting part II: Evidence and research opportunities. *Accounting Horizons*, 17, 287–301.
- Watts, R. (2006). What has the invisible hand achieved? *Accounting and Business Research*, 36, 51–61.
- Young, J. (2006). Making up users. *Accounting, Organizations and Society*, 31, 579–600.