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Influence of the Expansion of Fair Valuation on the Contracting Role of Accounting: A Normative Study

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Abstract

This paper examines the ways of providing information that will enhance the valuation role of accounting while not creating significant problems for its contracting role. Until the global financial crisis beginning in 2008, the accounting standards setters have gradually expanded the scope of fair value accounting. We examine the impact of the expansion of fair valuation on the use of accounting in contracts (private contracts and public regulations) and derive some hypothetical conclusions. First, there will be no significant problems in the contracting role of accounting, if information in the body of financial statements used directly in contracts is able to be revised and adjusted in a way that eliminates unrealized profit and valuation profit or loss with room for management estimation and discretion. Second, if one uses the standard of differences in business models to distinguish, from the perspective of the valuation role, between assets and liabilities subject to fair value measurement and assets and liabilities subject to cost-based measurement, there is considerable overlap between information that plays the valuation role and information that plays the contracting role. Finally, it is also found desirable that risk information, corporate governance information, and other similar information that is useful in contracts but has low verifiability be provided in the form of footnote information, etc. that supplements and complements information in the body of financial statements.

Keywords: fair value; valuation role; contracting role; executive compensation; financial covenants; dividend restrictions; financial regulation and supervision

JEL classification: M41

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1. Introduction

The purpose of this paper is to examine, within the context of the expanding scope and concept of fair value measurement mainly until the financial crisis of 2008 (in this paper, this phenomenon is referred to in general as the "expansion of fair valuation"), the ways to provide information that fulfills the valuation role of accounting while also not creating significant problems for its contracting role.

In recent years, the International Accounting Standards Board (IASB) and the Financial Accounting Standards Board (FASB) of the United States have adopted the position that fair value information is useful in investor decision-making and gradually expanded the scope of fair value measurement of assets and liabilities[1] (for details, see Section 2). This growing emphasis on fair value has already begun to impact accounting standards and accounting systems in Japan through the mechanism of convergence with International Financial Reporting Standards (IFRS).

Behind this expansion of fair valuation is an attitude of emphasizing the "valuation role" of accounting. The valuation role consists of the provision of accounting information that is useful in investor decision-making and therefore encourages efficient trading on securities markets.[2] However, accounting information is also used in areas other than investor decision-making, for example, in different types of contracts as described in Section 3, and indeed, accounting information plays the role of providing information that is both necessary and useful for contracts. This is referred to as the "contracting role" of accounting, and it is explained as, for example, encouraging the monitoring and performance of contracts, reducing conflicts of interest among the contracting parties, and therefore reducing agency costs.[3] The IASB/FASB conceptual framework (IASB [2010], FASB [2010])[4] defines the objective of financial reporting as the valuation role,[5] and does not position users of accounting information other than investors, lenders, and creditors as primary users of financial reporting.[6] The reason for this is that the valuation role of financial reporting is deemed to satisfy the needs of users of accounting information other than investors.[7]

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1 However, after the financial crisis beginning in 2008, there was a slowdown and in some cases a reversal of the expansion of fair valuation, and after the change in the IASB executive in 2011, there has been a tendency to review fair value measurement with greater weight on practical issues and auditability (see Section 2).

2 See Hail [2013].

3 See Shivakumar [2013].

4 IASB and FASB are pursuing a joint project for the creation of an integrated conceptual framework that defines the concepts and ways of thinking at the foundation of accounting standards. As the first phase in that, they completed the purposes and qualitative characteristics of financial reporting in September 2010.

5 IASB [2010], OB2.

6 IASB [2010], OB10.

7 IASB [2010], BC1.6. In the actual process for establishing accounting standards, there appears to be an attempt to take account of the opinions of other interested parties in addition to investors. For example, in the IASB Agenda Consultation (IASB [2011b]), it was noted "Our focus on setting the

Theoretical and empirical research is going forward on the impact of the expansion of fair valuation on the valuation role of accounting and the question of whether the valuation role of accounting is increased as intended by IASB and FASB. However, there has not necessarily been sufficient research done on the impact on the contracting role of accounting, which is the question of whether the expansion of fair valuation truly satisfies the needs of users of accounting information other than investors. This paper focuses on the latter question.[8]

The remainder of the paper is organized as follows. Section 2 contains an explanation of the concept of fair value used in this paper and an overview of the historical development of fair valuation at IFRS. Section 3 examines typical contracts in which accounting information is used and confirms the impact of the expansion of fair valuation on the use of accounting information in these contracts. Having done that, Section 4 observes whether significant problems have arisen in the contracting role as a result of the expansion of fair valuation and investigates methods of providing information able to fulfill the valuation role of accounting while not creating significant problems for the contracting role. Section 5 provides conclusions and identifies issues for further research.[9]

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agenda is on the investors, lenders and other creditors who use IFRS financial statements, but we also consider the differing interests of other users of IFRSs: preparers of financial statements, auditors, securities regulators, prudential regulators, national standard-setters and others involved in incorporating IFRSs into laws and regulations. We will listen to the needs and priorities of our various stakeholders when considering projects to include on our agenda." Likewise, the prospectus on IFRS (IASB [2002]) calls for international due process with the involvement of accountants, financial analysts, and other users of financial statements, the business community, stock exchanges, regulatory and legal authorities, academics and other interested individuals and organizations from around the world. "Conceptual Framework for Financial Accounting," a discussion paper published by the Accounting Standards Board of Japan (ASBJ) (ASBJ [2006]) also views the purpose of financial reporting as the valuation role and does not see regulatory authorities as primary users of financial report. However, it was explicitly noted that the effects of developing or updating accounting standards on regulations and contract must be considered, when regulations or contracts affect most constituencies.

[8] The goal hypothesis in preparing this paper is that the expansion of fair valuation has contributed to the valuation role of accounting as intended by IASB and FASB, and has never created significant problems for the contracting role. Verification of this hypothesis requires the observation of fact on two points: 1) whether the expansion of fair valuation has contributed to the valuation role, and 2) whether it has raised significant problems for the contracting role. For 1), a significant amount of theoretical and empirical verification has already been performed, and this paper merely presents its observations based on that research (see Section 4.2). For 2), there has not necessarily been sufficient research performed, so this paper focuses on 2) to observe the impact of the expansion of fair valuation on the use of accounting information in contracts.

[9] This paper is based on discussions in an accounting research group on "Changes in the Role of Accounting Resulting from Emphasis on Fair Value" sponsored by the Institute for Monetary and Economic Studies (IMES), Bank of Japan to address these concerns (author Tokuga chaired, and Ota participated as secretariat). An outline of the discussions in this group can be found in the executive summary (IMES [2012]) and the published reports of the participants (Japanese language only).

2. Background

2.1 Clarification of the fair value concepts

This paper begins by clarifying the concept of fair value. There are three concepts involved: 1) fair market value, 2) arm's-length price, and 3) value in use. What they have in common is the fact that they are all embodiments of the present value of future cash flow (discounted cash flow/DCF), and from a theoretical perspective, it is possible to refer to them generically as "fair value." Likewise, 1), 2), and 3) are expected values determined by the participants in pricing decisions, and will differ according to the actors formulating expectations. Fair market value reflects the weighted average of the expectations of market participants; arm's-length price reflects the expectations of the parties to the transaction, and value in use reflects the expectations of users (ordinarily, managers). They are all derived from estimates of DCF. Even if it is possible to imagine that three different circumstances would occur simultaneously for the same goods (a market that is highly liquid and in which arbitrage functions; an arm's length situation; and no other method of estimation except user expectations), the actors formulating expectations differ, as do the methods used in their formulation, so the values of 1), 2), and 3) will ordinarily be different.

4) Prices determined in a market in which liquidity is low and arbitrage does not function are still market values, but for our purposes are not fair market values (DCF), and therefore from a theoretical perspective should be considered outside the scope of fair value. Conversely, in circumstances in which there is no market, 5) price calculated with an option pricing model (Mark-to-Model) is theoretically calculated on the basis of the fiction of a highly liquidity market in which arbitrage functions, and from a theoretical perspective can therefore be included in the scope of fair value. It should be noted that both 1) and 4) are market prices (Mark-to-Market).

However, the institutional and practical definitions do not need to be the same as our interpretation, which focuses on the commonality of DCF estimation. If the definition is formulated by placing the weight on the market either for regulatory purposes or for practical convenience, 3) can be positioned as a separate concept from fair value, 4) can be included in the concept of fair value, and 5) can be eliminated from fair value. Also, if regulatory actors emphasize the verifiability of estimates, it will be difficult to consider anything but 1), 2), and 4) to be fair value.

Thus, while there is room to debate the concept of fair value, the US Statement of Financial Accounting Standards (SFAS) 157 (FASB [2006]) categorizes fair value as Level 1 (1] above), Level 2 and Level 3 (5] above), indicating that it is possible to call the entire range from 1) to 5) "fair value" (possible to use "value in use" in accounting standards). At the same time, this was probably also intended to trigger a debate on how far institutionally to recognize fair value. In light of this, this paper considers everything from 1) to 5) to be included in the concept of fair value.

2.2 Historical development of fair valuation

IASB and its predecessor, the International Accounting Standards Committee (IASC), adopted a stance of emphasizing fair value in the formulation of accounting standards beginning in the 1980s. The scope of application for fair value measurement was expanded from a handful of financial instruments to all financial instruments, and then to non-financial instrument areas. At the same time, the concept of fair value was expanded to include not only fair market value but also price rationally derived using valuation models (Mark-to-Model), and then to value in use. Likewise, the point of application was expanded from retrospective measurement to initial measurement. The method of application has also shifted from voluntary adoption to mandatory adoption. In the discussion below, we examine these developments in terms of financial instruments and non-financial instrument areas.

For financial instruments, IASC proposed partial, elective fair value measurement in exposure draft E40 "Financial Instruments" (IASC [1991]) and exposure draft E48 "Financial Instruments" (IASC [1994]). In short, it allowed the elective adoption of either the approach in which financial assets and financial liabilities held long-term or to maturity are valued at acquisition cost and all other financial assets and financial liabilities except those subject to hedge accounting are valued using fair value measurement, or the approach in which fair value measurement is used for all financial assets and financial liabilities. Later, the discussion paper "Accounting for Financial Assets and Financial Liabilities" published in the 1997 (IASC and CICA [1997]) and the draft standard of the Joint Working Group (JWG) published in 2000 (JWG [2000]) proposed full fair value accounting (measurement of fair value for all financial assets and liabilities and posting of changes in fair value to net income). Behind this was the idea that full fair value accounting would make it difficult for managers to manipulate earnings or better forecasts of future cash flows. However, a large number of negative comments were received from around the world concerning the introduction of full fair value accounting, and neither IASC and CICA [1997] nor JWG [2000] were ever adopted as formal standards. Instead, International Accounting Standard (IAS) 39 "Financial instruments: Recognition and Measurement" (IASC [1998 d]), which is based on the mixed attribute approach, was introduced. However, this was always positioned as a provisional standard, and IASC did not back down from its stance of expanding fair value measurement. This stance can be observed, for instance, in the introduction of fair value options in the revisions to IAS 39 in 2003.[10] In addition, the memorandum of understanding on convergence of accounting standards executed by IASB and FASB in 2006 (MoU) (IASB and FASB [2006]) articulated the stance of both bodies towards the promotion of fair value accounting. Under this agreement, IASB published the discussion paper "Reducing Complexity in Reporting Financial Instruments" in 2008 (IASB [2008]). This paper proposed an intermediate approach under which financial instruments would in principle be subject to fair value measurement and only those meeting exception criteria would be eligible for cost-based measurement. Examples of financial instruments meeting exceptional criteria include

[10] Perry and Nöelke [2005] argues that one of the reasons for the IASB's emphasis on fair value is organizational because the members involved in the process of establishing IASB standards are primarily specialists from financial institutions.

instruments with fixed or slightly variable cash flows, like bonds and loans assumed to be held to maturity rather than sold and those with low credit risk.

Turning to non-financial instrument areas, in the first half of the 1980s a standard was formulated requiring the use of fair value measurement at initial recognition under certain specific circumstances (IAS 16 <IASC [1982]>, which covers the acquisition of tangible fixed assets in exchange for non-monetary assets). In the latter half of the 1980s, fair value measurement was also allowed for subsequent measurement of assets (the old IAS 25, which covers subsequent measurement of investment property <IASC [1986]>). The scope of fair value measurement in subsequent measurement began to expand in the 1990s and it became possible to electively employ fair value in the revaluation of tangible fixed assets and intangible assets (IAS 16 <IASC [1998 a]>, IAS 38 <IASC [1998 c]>). IAS 41, which requires fair value measurement of the biological assets related to agricultural activities (IASC [2001]) was also adopted, expanding the scope of mandatory adoption. Fair value was likewise employed in standards for the recognition of impairment and measurement of impairment loss (IAS 36 <IASC [1998 b]>, IFRS 5 <IASB [2004 b]>) and the calculation basis for goodwill acquired as a result of business combination (IFRS 3 <IASB [2004 a]>).

With the outbreak of global financial crisis triggered by the "Lehman Shock" of September 2008, problems were identified in fair value accounting that led to a rethink of the approach to financial instruments found in IASB [2008]. This review consisted of short-term "Band-Aid" measures and a longer-term review that aimed to revise accounting standards. In the short-term review, IASB allowed changes in valuation standards according to changes in the classifications of financial instruments. This is based on the opinion that fair value measurement was inappropriate under stress conditions, which led to IASB allowing changes in the classifications of financial assets, something that to that point had been prohibited. As a result, it became possible to temporarily switch from fair value measurement to cost-based measurement. For securitized transactions in particular, where markets are not active, IASB expanded its guidance on the measurement of financial instruments and called for stronger disclosure provisions. The longer-term review formulated IFRS 9 (IASB [2009]) to replace IAS 39 and maintained the approach of using both fair value measurement and cost-based measurement rather than the approach found in IASB [2008] of in principle requiring fair value measurement. It should be noted, however, that at the current point in time there is insufficient information to determine whether this marks a return of IASB to the mixed attribute approach, or whether it at heart maintains its intent of seeking full fair value measurement, but has adopted a wait-and-see stance in light of public opinion.[11]

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[11] Behind these developments, Suzuki [2012] points to the withdrawal of the "Fair Value Corner" group, a hard-line fair value accounting faction, from among the IASB board members around mid-2011 when former IASB chairman Tweedie resigned. The primary factor for that withdrawal was the continued resistance from practitioners to fair value accounting based on deductive concepts. Street [2011] says that the change in IASB members from hard-line to moderate on fair value was influenced by the reform of IASB governance that began in 2008 and changed the standard for participation in the organization from "technical expertise" to "geographic representation."

It was within this context that IFRS 13 "Fair Value Measurement" (IASB [2011a]) was published as a crosscutting accounting standard on fair value measurement in May 2011. The standard defines fair value as the "price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date", articulating the basic thinking of IFRS concerning fair value measurement.[12] In conjunction with the publication of IFRS 13, FASB published Accounting Standard Update (ASU) No. 2011-04 "Fair Value Measurement (Topic 820)" (FASB [2011]) containing the same definition of fair value as found in IFRS 13. However, these standards do not indicate to what specifically fair value measurement is to be applied in which situations or what the relationship is between fair value measurement and income measurement.

3. Impact of the Expansion of Fair Valuation on the Use of Accounting Information in Contracts

This section examines a number of typical contracts that make use of accounting information and observes the impact of the expansion of fair valuation on the use of accounting information in contracts. The contracts are not necessarily conceptually the same. In civil law, contracts are interpreted to be changes in real rights and the emergence, change and elimination, etc. of credit-debt relationships as legal actions intending to result in certain legal effects, and more broadly, as promises for which the fulfillment is protected by law. There are also those who argue that the government's right to levy taxes against companies and its duty to provide public goods and services constitute a contractual relationship between a government and companies.[13]

This paper adopts a broad concept of a legally-compelling promise in which a company is a party. Because of this, contracts include both private contracts and public regulations. Private contracts are executed under the principle of private autonomy, while public regulations that impact corporate activities constitute a kind of promise between the regulatory actor and the company, and therefore can be seen as falling within the scope of contract. This section specifically examines four of these broadly-defined contracts: executive compensation, financial covenants in debt contracts, dividend restrictions, and financial regulation and supervision ("Basel requirements").[14] We look at how accounting information is used in each of these contracts and what the impact has been of the expansion of fair valuation.

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[12] IFRS 13 categorizes the input information used in fair value measurement into three levels (Level 1: quoted prices [unadjusted] in active markets for identical assets and liabilities that the entity access at the measurement date; Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly; and Level 3: unobservable inputs, including the entity's own data, which are adjusted if necessary to reflect market participants' assumption).

[13] See Sunder [1997].

[14] With respect to public regulations, this paper focuses on those for the purpose of broadly-defined adjustment of interests between companies and creditors (creditor protection), and specifically the dividend restrictions and financial regulation and supervision for which accounting information is considered to play an important role. Another example of public regulations in which accounting

3.1 Impact on executive compensation

3.1.1 Use of accounting information in executive compensation

Performance-based executive compensation is a contract that pays (or grants[15]) compensation to managers linked to share price and/or accounting profit. Its purpose in an incorporated entity in which ownership and management are separate is to encourage managers to act in ways that will increase the wealth of shareholders. In most cases, the company's share price and accounting profit are used as performance measurements to determine managers' compensation. The use of both the share price and accounting profit as performance measurements is because of the differences in their natures as measurements. The combination of the two is thought to enable more accurate performance evaluation.[16] In other words, if the share price is the management's performance measurement, the management will have a common interest with shareholders. But while the share price has the benefit of being more difficult for managers to manipulate than accounting profit, it also has the drawback of being subject to changes in the market environment, industrial structure, or other aspects of the economic environment that are unrelated to the management's efforts.[17] On the other side, the use of accounting profit (or ROE, etc.) provides the performance measurement that is less vulnerable to changes in the economic environment, but has the drawback of being more easily manipulated by managers. It should be noted, however, that it is possible (over the short term) to manipulate the share price by manipulating accounting profit, so it is not accurate to state that managers are entirely unable to manipulate share prices.

3.1.2 Impact of the expansion of fair valuation

The expansion of fair valuation has, through the process of fair value measurement, increased room for management estimation and discretion in accounting profit as a performance measurement. For example, when fair value measurement is performed using a valuation model (especially for Level 3 fair value information[18]), room for management estimation and discretion is included in the process. Additionally, when value in use is used in fair value information, it is measured in terms of assets and liabilities and also the synergy with management's unique expertise and other business resources (intangible assets, human resources, etc.), which gives relatively large room for management estimation and discretion in the fair value measurement process. This is thought to amplify the drawback of accounting profit that it is more easily manipulated by managers than share prices. Accounting profit also includes a large

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information plays an important role is taxation, but this has not been considered in this paper because of the need for a broader investigation that examines issues of fairness and efficiency.

15 For example, the granting of stock options.

16 Comprehensive observations will be found in Bushman and Smith [2001].

17 See Sloan [1993].

18 See Note 12.

number of figures that are calculated on the basis of estimates of future cash flow, which eliminates the benefit of accounting profit of being less vulnerable to changes in the economic environment, and makes the roles of accounting profit and share price more ambiguous. As a result, the usefulness of accounting profit as a performance measurement may be diminished.[19]

There are attempts to respond to this impact by revising and adjusting published accounting profit to ensure the usefulness of accounting profit as a performance measurement. Examples include the exclusion of profit/loss on fair value measurement of trading financial instruments from accounting profit to eliminate transient valuation profit or loss.[20]

In the United States, many companies have rules that allow them to seek the return of compensation to managers when overpayment is the result of erroneous accounting information (called the "clawback").[21] The introduction of such rules is thought to restrain managers' incentive to overstate income so as to increase their own compensation.[22]

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19 In its examination of the impact of the expansion of fair valuation on accounting profit as a performance measurement, Kusano [2013] refers to Scott [2012] and finds a positive impact in terms of the reflection of a broader range of the results of management efforts ("sensitivity"), and a negative impact in terms of reducing "precision" (the lack of noise from movements of the market as a whole). It concludes that the usefulness as a performance measurement will decline if the negative impact is greater than the positive.

20 See Livne, Markarian, and Milne [2011].

21 The Dodd-Frank Wall Street Reform and Consumer Protection Act that entered into effect in the United States in 2010 includes a "clawback" rule for the refunding of overpaid compensation within rules requiring improved disclosure of management (executive) compensation at publicly-traded companies. The rule states that publicly-traded companies have an obligation to seek the refund from executives and former executives of overpaid performance-based compensation calculated from erroneous accounting information for a period of three years prior to the event of an accounting restatement. Section 954 of the Act requires the US Securities and Exchange Commission (SEC) to formulate this rule. The Sarbanes-Oxley Act of 2002 also contained provisions about this rule (Section 304), but named the SEC as the actor in seeking refunds, which was not necessarily effective. Dodd-Frank contains broader provisions: 1) obligation to refund compensation regardless of whether it is malfeasance; 2) extension of the refund period from one year to three years; 3) expansion to former executives; and 4) change of the actor from the SEC to the company itself. The SEC has yet to formulate the regulations required under Dodd-Frank, but many companies have already voluntarily introduced rules on the refunding of overpaid compensation (according to Chan et al. [2012], approximately 39% the companies included in the S&P500 index [194 companies] had introduced rules as of 2010. According to Dehaan, Hodge and Shevlin [2013], only 3% of the Fortune 100 companies had rules in place in 2005, while 82% did in 2010).

22 In point of fact, some research finds trends that suggest the quality of financial reporting improved after companies voluntarily introduced clawback rules (decline in earnings manipulation by managers [manipulations to bring results closer to analyst forecasts and other benchmarks], improvement in auditing findings [fewer issues raised with the weakness of internal control], and shortening of the period required to produce audit reports). See Chan et al. [2012], Dehaan, Hodge and Shevlin [2013].

It is also considered possible to control management estimation and discretion with stronger corporate governance.[23] In addition to strengthening governance, disclosure of governance-related information (for example, the guidelines used by the compensation committee in its decision-making) may also be useful in ensuring the transparency and suitability of compensation-decision processes. The United States and other countries have regulations to strengthen governance and governance information disclosure regarding decisions on management compensation,[24] and an increasing number of companies are establishing compensation committees.[25] These developments can be seen as an expression of the concepts outlined above.

3.2 Impact on financial covenants in debt contracts

3.2.1 Use of accounting information in financial covenants

Financial covenants stipulate that the debtor will be subject to the disadvantage of acceleration of repayment, etc. if certain conditions[26] regarding its financial status are not satisfied. Within this context, accounting information is used to ascertain financial status.[27]

3.2.2 Impact of the expansion of fair valuation

The expansion of fair valuation has increased room for management estimation and discretion included in accounting information, and may therefore make it more difficult

[23] Chen and Tang [2009] finds that after introducing IFRS, Hong Kong investment property companies tended to include only appraisal profit on investment property, but not appraisal loss, in accounting profit as a performance measurement, and this tendency is stronger at companies that lack effective governance. This indicates that level of corporate governance impacts room for management estimation and discretion in accounting profit. However, some research also finds cases in which full control is not exerted even after strengthening governance (Dechow, Myers, and Shakespeare [2010]).

[24] For example, in the United States, the Dodd-Frank Act and the SEC regulations based on the Act require independent compensation committees, disclosure of the relationships between executive compensation and financial performance, and disclosure of the policies by which compensation is determined at listed companies. Japan likewise requires companies with committees to disclose their guidelines and the methods by which guidelines are determined when they formulate compensation guidelines (Ordinance for Enforcement of the Companies Act, Article 121:5).

[25] According to Pinto and Branson [2004], most publicly-traded companies in the United States establish compensation committees. Likewise in Japan, according to Kanda [2013], there were roughly 60 companies with committees in July 2003, but approximately 90 in September 2012.

[26] Maintaining the value of net assets at a certain level, not posting a net loss, etc.

[27] Additionally, in debt contracts there may be restrictions that do not make use of accounting information, for example, on provisions of collateral by the debtor.

to use as a part of the contract giving compulsory force to financial covenants.[28] Fair value measurement also increases the volatility of accounting information, which increases the potential to violate financial covenants, and therefore also makes it more difficult to use financial covenants. It is possible to argue that this increases the agency costs in debt contracts,[29] and some attempts can be seen to address this influence in debt contracts by using financial covenants that revise and adjust accounting information. One example is the deduction of an amount equivalent to goodwill from value of net assets on the balance sheet (B/S).[30] These are attempts to exclude room for management estimation and discretion[31] in the process of fair value measurement of goodwill (and related impairment treatment).

Other attempts try to change the nature of financial covenants by changing accounting information that they use. One example is the use of information from the profit and loss statement (P/L) rather than information from the B/S in financial covenants.[32] One factor in this is the ability to use profit/loss classifications in P/L information to distinguish between valuation profit or loss with room for management estimation and discretion and other profit/loss.[33] More financial covenants are also taking the approach of not using information on accounting profit or net assets at all, or using it in conjunction with cash flow information. The adoption of "frozen GAAP" in which changes in accounting standards are not applied to accounting information used

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28 In actual practice, there may be cases in which there is an acceleration event under the financial covenants, but rather than requiring immediate repayment of the entire amount of principal and interest as called for in the covenants, repayment is temporarily waived (Okato [2008 a, b]). Behind this is presumably the idea that there is little probability of actually receiving repayment in full of principal and interest even if it is sought, and the potential to send the debtor company into bankruptcy by doing so. This would cause the creditor (primarily a financial institution) to lose its customer. Faced with this, the decision is made to give a grace period.

29 Kusano [2013] says that, all else being equal, when it becomes more difficult to use financial covenants, it may not be possible to adequately reduce agency costs, so the expansion of fair valuation may reduce the usefulness of accounting information in contracts.

30 See Frankel, Seethamraju, and Zach [2008].

31 IFRS3 (Business Combinations) expands the scope of fair value measurement for goodwill acquired in business combinations (IASB [2004a]).

32 Demerjian [2011] surveys 8,527 debt contracts executed during the 1996–2007 period. It finds that in 1996, more than 80% of debt contracts used capital-based financial covenants (financial covenants using B/S information), but that number had declined to 32% in 2007. Conversely, performance-based financial covenants (financial covenants using P/L information) were used in 74–82% of debt contracts. However, there is also research (Christensen and Nikolaev [2012]) that finds an increase in capital-based financial covenants, primarily leverage covenants, since the financial crisis of 2008. In Japan, the most common practice is to use both net income covenants and net assets covenants in financial covenants (Okato [2008 a, b]).

33 There is the possibility of revising and adjusting B/S information for use, but there is a greater need to refer to past B/S information when making these revisions and adjustments than there is with P/L information, which raises practical difficulties.

for financial covenants is another attempt to avoid increases in room for management estimation and discretion resulting from changes in accounting standards.[34]

All of these responses represent attempts to restrain increases in agency costs with some sort of innovation in financial covenants. It should be remembered, however, that these responses also have costs, and there may therefore be a stronger tendency to select contractual formats that have low agency costs from the beginning.[35] Companies have three choices for sources of financing: 1) contracts executed privately between companies and creditors like bank borrowings (private debt contracts); 2) contracts with a large and indeterminate number of creditors executed by the company on the open market (market debt contract); and 3) contracts executed with the same content between the company and multiple creditors like syndicated loans (hybrids between 1) and 2)). Generally, 1) is considered to have low agency costs because the creditor can obtain information directly from the company. 2), by contrast, is considered to have high agency costs because creditors can only obtain corporate information from public sources. If the expansion of fair valuation makes it more difficult to use financial covenants as a means of reducing agency costs, companies may conceivably shift from market debt contracts with high agency costs (issue of bonds) to private debt contracts with low agency costs (borrowings or hybrid syndicated loans).[36] There is research that

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[34] If accounting standards are changed and contracts are not (when figures calculated under the new accounting standards are referred to under the old contract; called "rolling GAAP"), there is the potential for violation of contracts even though nothing in the actual situation of the reporting company has changed. "Frozen GAAP" is the practice of determining whether contracts have been violated by using figures calculated under previous accounting standards after accounting standards change. The use of frozen GAAP removes the impact from changes in accounting standards, but generates the cost involved in continuing to prepare accounting reports under the old accounting standards. For details, see Christensen and Nikolaev [2012].

[35] Bharath, Sunder, and Sunder [2008] verifies the impact on debt contracting of the borrower accounting quality.

[36] The causes are not identified, but in Japan, recent years have not seen much of an increase in bond issuing (balance at the end of 2004: approx. 52 trillion yen → end of 2012: approx. 60 trillion yen [preliminary]; issuing in 2004: approx. 5.7 trillion yen → 2012: approx. 8.2 trillion yen [from data in Japan Securities Dealers Association, "Issuing, Redemption and Outstanding Amount of Bonds"]), while there has been a clear rising trend for syndicated loans (balance at the end of 2004: approx. 25 trillion yen → end of 2012: approx. 60 trillion yen; origination in 2004: approx. 19 trillion yen → 2012: approx. 29 trillion yen [from data in Japanese Bankers Association, "Loans Syndicated and Loans Transferred"]). One reason may be that syndicated loans have a limited number of creditors and their content, including financial covenants, is generally not published, so that events that violate financial covenant and result in the acceleration can be dealt with more flexibility in negotiations among the parties to grant temporary grace periods (see Note 28). By contrast, most bonds have a large and indeterminate number of creditors and their contracts are public, which makes it more difficult to be flexible and therefore creates a preference for syndicated loans over bonds. However, the situation is the opposite in the United States. Most negotiations are not for the maintenance of the loan with a temporary grace period, but for its refinancing (see the Mizutomi comments in IMES [2013]), so it must be noted that syndicated loans may not necessarily be preferred for the same reasons. One can also point to inequities in the treatment of bonds and loans in Japan as a reason for the increase in loans. For example, the collateral substitution provisions in the financial covenants of bonds are usually limited to pari passu, while in loans usually cover the entire liability. Therefore, when collateral is provided for a bond, similar

finds that in the United States changes in contractual format will, in some cases, result in demands for changes in lending terms (higher interest rates or shorter loan periods).[37]

3.3 Impact on dividend restrictions

3.3.1 Use of accounting information in dividend restrictions

Dividend restrictions are a form of creditor protection that place limits on the dividends paid to shareholders by companies in which shareholders only have limited liability, and indeed form the core creditor protection regulation in both commercial and corporate laws.

Different countries have different forms of dividend restrictions, but the common, basic framework is only to allow dividends within a certain ceiling amount ("distributable amount" below), and accounting information is used to calculate this distributable amount. In Japan, for example, the base figure is the surplus remaining when the amount of capital and statutory reserves, etc. are deducted from value of net assets, which is then adjusted to reflect increases and decreases in current profit/loss, etc. and arrive at a distributable amount.[38] EU member countries incorporate the dividend restrictions found in the EC Second Company Law Directive[39] in their national commercial and corporate laws.[40] Under these provisions, except for the cases of reductions of subscribed capital, no distribution to shareholders may be made when on the closing date of the last financial year the net assets as set out in the company's annual accounts are, or following such a distribution would become, lower than the amount of the subscribed capital plus those reserves which may not be distributed under the law or the statutes (Article 15:1:a). The amount of a distribution to shareholders may not exceed the profits at the end of the last financial year plus any profits brought forward and sums drawn from reserves available for this purpose, less any losses

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collateral will be automatically provided for a loan, but when collateral is provided for a loan, it may not be provided for a bond, which is also identified as one factor (see the Uryu comments in IMES [2013]). Additionally, under current accounting standards bonds are subject to fair value measurement unless held to maturity, while loans do not require fair value measurement. It may also therefore be that loans are used to minimize the impact on capital adequacy (see the Uryu comments in IMES [2013]). See Section 5 regarding the impact of changes in choices for sources of financing.

[37] See Bharath, Sunder, and Sunder [2008].

[38] Article 446 and Article 461 of the Companies Act, Articles 156-158 of the Ordinance on Company Accounting, etc.

[39] The Council of the European Communities [1977].

[40] This directive does not require member countries to incorporate the content of the directive wholesale into their national laws, but instead binds them to the achievement of the results the directive targets. The nature and means of implementation are at the discretion of countries, and there are differences in the content of specific regulations from country to country. However, there is also a series of directives (The Council of the European Communities [1978], etc.) that intends to harmonize within the EU the accounting standards that provide the basis for dividend restrictions.

brought forward and sums placed to reserve in accordance with the law or the statutes (Article 15:1:c).

3.3.2 Impact of the expansion of fair valuation

The expansion of fair valuation increases room for management estimation and discretion included in unrealized profit and accounting information. This increases the potential to pay dividends even though there is no cash (or highly liquid assets deemed equivalent to cash) to fund them and to use inappropriate estimates to pay excessive dividends. If this damages corporate assets or impedes the repayment of debt, it constitutes an impediment to the interests of creditors.[41]

These problems grow larger in the course of efforts to converge international accounting standards and the resulting expansion of fair valuation, and countries around the world are now discussing how to respond. This has resulted in the priority in accounting information being on providing useful information on the measurement of assets and liabilities rather than on the role of providing a calculation basis for distributable amounts, with dividend restrictions being served by adjustments in the form of exclusions of unrealized profit and valuation profit or loss, where there is large room for management estimation and discretion.

As an example from Japan, with the introduction of market valuation to financial instruments (1999), recommendations from the Business Accounting Council regarding the need to adjust the accounting system and Commercial Code resulted in the Ministry of Finance and the Ministry of Justice establishing a "Research Group on Adjustments to the Commercial Code and Corporate Accounting" to investigate whether it was advisable to draw a line between the valuation of assets and the calculation of the distributable amounts. The research group, agreeing that a line did indeed need to be drawn, said that it would be appropriate to in principle not include appraisal profit derived from market valuation in distributable amounts. The Commercial Code was amended as a result in 1999 to exclude appraisal profit derived from market valuation from distributable amounts.[42]

Under the Companies Act that took effect in 2006, the Ordinance on Company Accounting stipulates that unrealized profit, appraisal profit of available-for-sale

[41] However, the distribution of income not backed by cash as dividends cannot be flatly declared inappropriate (see the Kurasawa comments in IMES [2013]). The argument can be made that the exclusion of unrealized profit and appraisal profit from the distributable amount results in a transfer of wealth from shareholders to creditors, and it is possible that creditors are overprotected.

[42] The idea of separating the valuation of assets from the calculation of the distributable amount was pursued even further in amendments to the Commercial Code in 2002, and the Commercial Code delegates to Ministry of Justice ordinance (Ordinance for Enforcement of the Commercial Code) the formulation of asset valuation regulations for the purpose of enabling speedier adaptation to changing accounting standards.

securities ("other securities" in Japanese GAAP),[43] and a part of the goodwill equivalent[44] be excluded from distributable amounts.

British Companies Act uses certain standards to distinguish between realized profit and unrealized profit and only allows realized profit to be included in distributable amounts (known as the "realized profit test"). Under this provision, the Institute of Chartered Accountants in England and Wales and the Institute of Chartered Accountants of Scotland formulate practical guidelines defining the nature of realized profit,[45] which they do by stating that profit shall be treated as realized only when realized in the form of cash or of other assets the ultimate cash realization of which can be assessed with reasonable certainty[46]. Under this standard, profit on fair value measurement of financial instruments, for example, is not included in realized profit if measured using techniques other than data from observable markets.[47]

Meanwhile, there are also attempts to apply different accounting standards to consolidated financial statements and non-consolidated financial statements so that the standards applied to the non-consolidated financial statements used in dividend restrictions reduce the scope of fair value measurement. Attempts to separate consolidated and non-consolidated financial statements were used, for example, in Germany and France when introducing IFRS. Rather than taking special steps regarding the calculation of distributable amounts, they decided that IFRS would not be applied to non-consolidated financial statements, but instead, their own national standards maintained. In Germany, application of IFRS to the consolidated financial statements of listed companies became mandatory in 2005, and there was a discussion at this time about whether to allow the application of IFRS to non-consolidated financial statements, but the difficulty of harmonizing the Commercial Code, which imposes a strict capital maintenance doctrine based on cost-based measurement of assets, and IFRS ultimately resulted in an obligation to create non-consolidated financial statements

[43] With respect to "other securities", appraisal profit is not included in the distributable amount, but appraisal loss is deducted from it (Article 461:2:6 of the Companies Act, Article 158:2 of the Ordinance on Company Accounting). Land revaluation difference is treated in the same manner as "other securities" (appraisal profit not included, appraisal loss deducted) (Article 461:2:6 of the Companies Act, Article 158:3 of the Ordinance on Company Accounting). For trading securities, valuation profit or loss that is reflected in the current profit/loss is also reflected in the distributable amount.

[44] If the goodwill adjustment (total amount of 1/2 of the goodwill posted to the assets plus deferred assets) is greater than the total amount of capital and statutory reserves (legal capital surplus and legal retained earnings), a certain portion thereof (the amount by which the goodwill adjustment exceeds the total amount of capital and statutory reserves [if 1/2 of the goodwill exceeds the total amount of capital, statutory reserves and other capital surplus, the total amount of other capital surplus and deferred assets]) is deducted from the distributable amount (Article 461:2:6 of the Companies Act, Article 158:1 of the Ordinance on Company Accounting).

[45] ICAEW and ICAS [2010].

[46] ICAEW and ICAS [2010], para.3.3.

[47] ICAEW and ICAS [2010], para. 4.4. However, this would not be so where part of the profit can be closed out independently of the rest and that part may be realized pursuant to the guidance on close out (paras. 4.4-4.6).

based on national standards (specifically, the asset valuation standards set forth in the German Commercial Code).

3.3.3 Re-examining the effectiveness of dividend restrictions in creditor protection

We have so far considered the impact of the expansion of fair valuation in terms of the responses by Japan and Europe to adjust the method of calculating distributable amounts or to employ accounting standards that reduce the scope of fair value measurement in the calculation of distributable amounts, but still maintain the idea of dividend restrictions based on the capital maintenance doctrine. There are some, however, who question whether dividend restrictions based on the capital maintenance doctrine are really effective in creditor protection because companies are unable to make adjustments for their future financial status and liquidity in light of the risks, etc. to which they are exposed. In these discussions, the "insolvency test" is advocated as being effective. The "insolvency test" is a rule requiring managers to confirm that it is possible to repay debt, in light of the company's financial status and liquidity, even after paying dividends.[48] This is incorporated in many of the state-level corporate laws in the United States.[49] In EU countries where IFRS has been introduced, there are examples of concurrent use of dividend restrictions based on the capital maintenance doctrine and the "insolvency test."[50] Likewise, when Australia introduced IFRS (2005), it also added an "insolvency test" to its corporate law. These responses can be viewed as attempts to ensure the effectiveness of dividend restrictions-based creditor protection by supplementing it with the "insolvency test" because of the potential for its effectiveness to decline as a result of the expansion of fair valuation.

[48] Common practice is to require companies to meet certain standards for debt ratios and liquidity ratios in order to ascertain the financial status and liquidity of the company. In some cases, managers are also obligated to sign statements attesting to the performance of insolvency tests.

[49] Yoshihara [1985] discusses the insolvency test introduced in California state corporate law in 1975 and finds that its introduction restored the effectiveness of dividend restrictions.

[50] During the early 2000s, there was discussion in Europe regarding dividend restrictions prompted by the expansion of fair valuation. For example, the EU Commission established a High Level Group of Company Law Experts in 2001, and the UK established an Interdisciplinary Group on Capital Maintenance in 2003. These groups expressed concern that the expansion of fair valuation exacerbated the problem of lack of sufficiently effective creditor protection from dividend restrictions based on capital maintenance doctrine, and advocated the introduction of “insolvency test” (for details see High Level Group of Company Law Experts [2002] and Rickford [2004]).

3.4 Impact on financial regulation and supervision ("Basel requirements")

3.4.1 Use of accounting information in financial regulation and supervision ("Basel requirements")

Supervisory authorities oversee and regulate financial institutions and financial markets from the perspective of protecting depositors and other creditors[51] and ensuring the stability of the financial system.[52]

The framework for financial regulation and supervision established by the Basel Committee on Banking Supervision for the purpose of stabilizing the international financial system (referred to as the "Basel requirements" below) has three pillars: minimum capital requirements (Pillar 1); supervisory review process (Pillar 2); and market discipline (Pillar 3). These pillars play mutually complementary roles in ensuring the soundness of banks and other financial institutions.[53]

The Basel requirements make broad use of accounting information. In minimum capital requirements (Pillar 1), capital serves as the numerator in the calculation of capital adequacy, and it is calculated on the basis of accounting information. In supervisory review process (Pillar 2), accounting information is also used as basic information for the regulatory monitoring of financial institutions. In market discipline (Pillar 3), accounting information is used as a tool for discipline on the assumption that market participants and depositors, etc. understand accounting information.

3.4.2 Impact of the expansion of fair valuation

If the expansion of fair valuation results in the posting of figures calculated on the basis of unrealized profit and value in use in the financial statements, accounting information used to calculate capital will include many elements that cannot serve as loss absorption buffers. In these situations, there will presumably be a deviation between accounting capital and the regulatory loss absorption buffer (capital) in Pillar 1 (minimum capital requirements). This deviation is currently only limited, and the Basel requirements have been revised and adjusted to exclude from the calculation of capital appraisal profit on liabilities that result from changes in the entity's creditworthiness and are therefore difficult to deem loss absorption buffers.

However, as the expansion of fair valuation continues, accounting information would contain more room for management estimation and discretion, which will widen the deviation. In Pillar 2 (supervisory review), accounting information has less usefulness to supervisory authorities as monitoring information. This may result in supervisory

[51] Depositors are also protected with after-the-fact relief measures by deposit insurance systems.

[52] In the payment and settlement system, there is the externality of the network effect by which the default of one financial institution produces a chain reaction among other payment and settlement system participants which, if left unaddressed, can lead to "market failure."

[53] See Basel Committee on Banking Supervision [2004].

authorities requiring the submission of other information in addition to accounting information, which could raise the monitoring costs[54] to supervisory authorities and the reporting costs to financial institutions. Additionally, in Pillar 3 (market discipline), there is the potential to make accounting information less understandable to market participants and depositors.

3.4.3 Regulatory response since the financial crisis

A number of responses have been attempted in financial regulation and supervision, not only to the impact of the expansion of fair valuation, but also to the impact of the financial crisis beginning in 2008. For example the new Basel requirements introduced in 2010 ("Basel III" below)[55] have stricter criteria for inclusion in capital, which provides the numerator for the calculation,[56] and also stricter regulations on Tier I from the perspective of the loss-absorption capacity of capital.[57] There are also new liquidity regulations[58] and leverage rules etc. from the perspective of discouraging liquidity risks and excessive risk-taking.[59] In response to the criticism that minimum

[54] For example, in Spain, the introduction of IFRS resulted in a change from national standards to IFRS (IAS 39) for the establishment of allowances for doubtful accounts. As a result, supervisory authorities could no longer depend on accounting information to measure the internal risk at financial institutions and were forced to expend considerable resources evaluating financial institutions' risk profiles on their own (Bushman and Landsman [2010], Barth and Landsman [2010]).

[55] Acknowledging the mistrust that had emerged regarding the existing Basel requirements (Basel II; Basel Committee on Banking Supervision [2004]), at the time of the financial crisis, the Basel Committee on Banking Supervision published "Basel III: A global regulatory framework for more resilient banks and banking systems," based on the discussions in the institutions above it, the Group of Central Bank Governors and Heads of Supervision (GHOS) and G20 (September 2010).

[56] Software, defined benefit plan assets, appraisal profit on liabilities resulting from changes in the entity's creditworthiness, and similar items are excluded from common equity Tier I capital, and there are stricter criteria for the inclusion of deferred tax assets and investments in non-consolidated financial institutions.

[57] Basel II imposed minimum capital requirements on Tier I and capital, while Basel III categorizes Tier I as "common equity Tier I capital" and "other Tier I capital," and imposes minimum capital requirements on "common equity Tier I capital" as well.

[58] See Basel Committee on Banking Supervision [2010b].

[59] With the transition to Basel III there has been a greater awareness of the need to ensure overall soundness and liquidity, but there have also been moves to revise the traditional conservative treatment of counting a part of unrealized profit towards capital. For example, in Japan, under Basel II, only 45% of the pretax appraisal profit from valuation differences of available-for-sale securities ("other securities") and land revaluation differences could be counted towards Tier II, but under Basel III, the full value (after adjustment for tax effects) can be counted towards common equity Tier I. On this point, Note 10 to Basel III states "the Committee will continue to review the appropriate treatment of unrealized gains, taking into account the evolution of the accounting framework."

capital requirements increase procyclicality during financial crisis,[60] the new regulations contain measures that reduce procyclicality.[61]

Another criticism is that market participants were unable to fully ascertain a bank's financial state during financial crisis, which lead to speculative trading based on hunches and disruption of markets.[62] To address this, there are measures designed to improve the disclosure of risk information, etc. The Financial Stability Board has also established a task force under it to improve the disclosure of the banks,[63] and the task force has published a report containing concepts for disclosure improvement.[64]

4. Methods of Providing Information in Light of the Contracting Role

4.1 Information in the body of financial statements that fulfills the contracting role

Section 3 examined the impact of the expansion of fair valuation on the use of accounting information in contracts. It found that information in the body of financial statements had become more difficult to use directly in contracts, which had led to responses in contracts requiring information to be revised and adjusted prior to use. This observation indicates that the expansion of fair valuation may diminish the

[60] It should be noted that among empirical research, there is little that provides experiential backing to the idea that fair value measurement amplifies business cycles. For a discussion of the relationship between minimum capital requirements and procyclicality, see Kusano [2012].

[61] In addition to measures to dampen any excess cyclicality of capital requirements and to achieve the broader macroprudential goal of protecting the banking sector from periods of excess credit growth, it has also been proposed to include measures to promote forward looking provisioning and conserve capital to build buffers at individual banks and the banking sector from periods of excess credit growth (Basel Committee on Banking Supervision [2010a, b]).

[62] However, the usefulness of accounting information (including fair value) assumes non-crisis conditions. During financial crisis or other periods of stress, the regulatory usefulness of accounting information declines. In relation to fair value measurement, the liquidity risks confronting individual banks during stress (risks from unique factors for the bank, not the nature of assets) are not necessarily reflected by fair value measurement, and there is the potential for deviation between accounting capital and the information required by supervisory authorities (for example, capital based on more conservative measurement).

[63] The Enhanced Disclosure Task Force (EDTF) was established in May 2012. It is notable that the task force membership is entirely private-sector (banks, investors, accounting standards setters, ratings agencies, etc.).

[64] EDTF [2012]. The report identifies seven basic principles for the disclosure of transparent, quality information: 1) clear, balanced (qualitative and quantitative), and understandable; 2) comprehensive, including all the bank's key activities and risks; 3) presenting relevant information; 4) reflecting how the bank manages its risks; 5) consistent over time; 6) comparable among banks; and 7) provided on a timely basis. It also contains recommendations on specific disclosure items and content for areas like corporate governance and risk management strategy, capital adequacy, and risk information broken down by risk category. While the report is not legally binding, many of the specific recommendations are expected to be phased in by large internationally active banks in 2012 and 2013.

usefulness from the perspective of the contracting role of accounting as regards the direct use of information in the body of financial statements in contracts.[65] Responses attempt to eliminate from contracts information that has a low degree of verifiability like unrealized profit and valuation profit or loss with room for management estimation and discretion. This suggests that information in the body of financial statements requires the attribute of verifiability to fulfill the contracting role through direct use in contracts,[66] but the expansion of fair valuation may undermine this attribute.

It should be emphasized that this does not result in information in the body of financial statements no longer being used in contracts. Rather, contract parties and regulatory actors continue to use information in the body of financial statements, but revise and adjust it to eliminate information of low verifiability. It could therefore be possible to argue that, from the perspective of the contracting role, the decline in the usefulness of information in the body of financial statements resulting from the expansion of fair valuation can be recovered through revisions and adjustments that restore verifiability.[67] One of the ways that makes these revisions and adjustments possible is the classification of information in the body of financial statements according to that which contains unrealized profit and room for management estimation and discretion, and that which does not. For example, the financial covenants of debt contracts make less use of B/S information, but not of P/L information.[68]

In light of this, it can be concluded that the usefulness from the perspective of the contracting role will be maintained for information in the body of financial statements that is directly used in contracts provided that the information can be revised and

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[65] However, it is also possible that fair value measurement will enable earlier identification of violations of contractual terms. It is not clear whether debtor companies agreeing to change contracts did so because the usefulness of the old contracts could not be maintained or because the contracts were too effective.

[66] Watts [2003] and Kothari, Ramanna, and Skinner [2010] identify verifiability as one attribute required for accounting information to play the contracting role. IASB [2010] defines verifiability as the ability of different knowledgeable and independent observers could reach consensus, although not necessarily complete agreement, that a particular depiction is a faithful representation (complete, neutral, and free from error) (IASB [2010], QC12, QC26). Verification can be direct and indirect. Direct verification means verifying an amount or other representation through direct observation, for example, by counting cash. Indirect verification means checking the inputs to a model, formula or other technique and recalculating the outputs using the same methodology (IASB [2010], QC27, Tokuga [2008]). Market prices clearly have a high degree of direct verifiability (whether fair market values or non-fair market values), but it is difficult to directly verify the fair value of items that do not have active markets, and it is possible that the application of fair value measurement reduces the overall verifiability of accounting information.

[67] Guay and Verrecchia [2006] expresses the opinion that conservative revisions and adjustments of accounting information by contractual parties will be effective in reducing the agency costs of debt contracts. In contrast to this opinion, Beatty, Weber and Yu [2008] finds that the revision of accounting information in debt contracts is not very widespread and notes the possibility that creditors will be unable to obtain the information they require only with revisions and adjustments. It is conceivable that the potential for this occurring will increase as the use of fair value measurement expands.

[68] See Note 32.

adjusted to exclude information of low verifiability like unrealized profit and valuation profit or loss with room for management estimation and discretion. As long as the classification of information in the body of financial statements enables easy revision and adjustment that assures verifiability, the expansion of fair valuation will probably not result in significant problems for the contracting role.

4.2 Relationship with the valuation role

In our investigations to this point, we have observed the fact that the expansion of fair valuation has not, at least for the moment, caused significant problems for the contracting role of accounting. Next, we consider whether there are significant differences between the information that fulfills the valuation role, and the information that fulfills the contracting role through direct use in contracts.

We begin by confirming the underlying assumption that the expansion of fair valuation plays the valuation role as intended by the accounting standards setters. We observed how information in the body of financial statements fills the valuation role in light of the findings from empirical research into the value relevance between fair value information and share prices, etc.[69] These findings confirm that, at least at the present point in time, even with financial institutions that hold relatively large numbers of financial instruments, full fair value accounting for financial instruments is not necessarily suitable from the perspective of the valuation role,[70] and for non-financial instruments, fair value measurement is even less suitable.[71] Having observed that, it must be noted that there are among assets and liabilities subject to fair value measurement those for which the usefulness of information in the body of financial statements is improved from the perspective of the valuation role, and those for which it is not. The conclusion is that the standard for distinguishing between the two is differences in business models (not merely whether they are for the purpose of holding, but the objective form by which the invested cash will be recovered).[72] In other words,

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[69] For details, see IMES [2012]. Landsman [2007] contains a survey of empirical research. A comprehensive survey including more recent literature will be found in Tokuga [2012].

[70] The value relevance of fair value information has been generally confirmed for securities (Barth [1994], Ahmed and Takeda [1995], Petroni and Wahlen [1995], Park, Park, and Ro [1999]). However, there are differences in value relevance according to the level of credibility of the input information used. Compared to Level 1 and Level 2 fair value information, low-credibility Level 3 fair value information has been confirmed to have less value relevance. A number of studies also have confirmed the value relevance of fair value information for derivatives, as their positions (assets or liabilities) and classifications (trading or non-trading) are clarified (Venkatachalam [1996], Seow and Tam [2002], Brickner [2003], Ahmed, Kilic, and Lobo [2006]). However, the verification of value relevance for loans is inconsistent, and there is very little verification of the value relevance for deposits and liabilities (Nelson [1996], Eccher, Ramesh, and Thiagarajan [1996], Barth, Beaver, and Landsman [1996], Beaver and Venkatachalam [2003]).

[71] According to Tokuga [2012], there is little positive impact from fair value information that can be verified for non-financial instruments.

[72] Based on these conclusions, the financial asset categorization provisions in IFRS 9 can be deemed appropriate from the perspective of the valuation role in that the rule states that the contractual cash

for assets and liabilities held for the purpose of earning trading income (trading securities, etc.), only changes in the market price of the asset or liability can be expected to result in the earning of income, and it is therefore desirable to use fair value measurement to provide information on the price at which the asset or liability can be sold at that point in time. By contrast, for assets and liabilities to be held or used for the purpose of gaining or producing income (plants and held-to-maturity securities, etc.), information on the income actually generated by the asset or liability each term and corresponding expenses is more valuable than information on the price at which the asset or liability can be sold, and it is desirable that that information be adjusted for cost-based measurement. In this case, investors can use income information for the term (for example, net income as a proxy variable for permanent income) to measure corporate value.[73, 74]

Working from the assumption that we can distinguish between assets and liabilities suitable to fair value measurement and assets and liabilities suitable to cost-based measurement, we can consider the variance between information in the body of financial statements that plays the valuation role and information in the body of financial statements that plays the contracting role. First, assets and liabilities held for the purpose of gaining or producing income are suited to cost-based measurement, and their information in the body of financial statements can be assumed to have sufficient verifiability to play the contracting role. On the other hand, for assets and liabilities held for the purpose of earning trading income, fair value measurement may increase volatility and room for management estimation and discretion is large (particularly Level 3 fair value information), which reduces the verifiability of information in the body of financial statements and therefore potentially diminishes the usefulness from the perspective of the contracting role. However, on this point, as discussed above, it

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flow characteristics of financial assets should be taken into account in addition to the entity's business model for managing financial assets (para. 4.1.1).

[73] One of the unique features of this concept is that it categorizes assets and liabilities in terms of qualitative aspects rather than formal aspects (for example, loans and real estate). A similar idea is presented in Saito [2013] Section 1 Chapter 2. In actual practice, however, it is difficult to make across-the-board classifications according to whether the purpose is to earn income from trading or flow (for instance, even for the same parcel of real estate, the decision about whether it is rational to seek trading income or to seek rental [flow] income may change depending on circumstances in the real estate market), so it will not necessarily be easy to formulate specific categorization standards or apply them in practical, institutional settings.

[74] Opinions are divided on the question of whether market prices should continue to be used for assets and liabilities subject to fair value measurement from the perspective of the business model when market liquidity has dried up and reliable fair value measurement is impossible (see IMES [2012]). Tokuga [2012] proposes a mixed attribute accounting model that utilizes both fair value measurement and cost-based measurement as a realistic and rational accounting model. If the "accounting profit model" (model that reflects flow on profit/loss and a part of the appraisal difference on assets/liabilities in current accounting period) is used as the base for such a model, the standard for distinguishing between fair value measurement and cost-based measurement will be the existence of goodwill (differences in business models). However, if the "net assets value model" (model that seeks to express economic value as net assets value by pursuing fair value measurement of assets/liabilities) is the basis, then the standard for distinguishing will be the robustness and verifiability of the measured figures.

can be assumed that at the current point in time this is within the scope for which verifiability can be assured through revisions and adjustments making use of classifications in profit/loss statements.

These considerations lead to the conclusion that there is significant overlap at the current point in time between the information that plays the valuation role and the information that plays the contracting role in the body of financial statements.[75]

Obviously, if costs are incurred to revise and adjust for contractual purposes, information in the body of financial statements will not be directly used in contracts, but utilized by some other method. For example, as observed in 3.2, in addition to revising and adjusting accounting information, debt contracts also use or make concurrent use of cash flow information and other non-accounting information in financial covenants, and in some cases, there are also changes in choices for sources of financing. If the impact of these responses is considered non-negligible,[76] it is necessary to investigate alternative methods rather than having a single piece of information in the body of financial statements play both the valuation role and the contracting role. One of these is the separation of consolidated and non-consolidated reporting. Consolidated financial statements have responsibility for the valuation role, while non-consolidated financial statements have responsibility for the contracting role. This method is considered able to restore the usefulness of information in the body of financial statements from the perspective of the contracting role.[77] In this case,

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[75] However, information that plays the valuation role is not thought to be completely the same as information that plays the contracting role. This paper merely finds that when a single piece of information in the body of financial statements provides accounting information that plays the valuation role also fulfills the contracting role, there is considerable overlap between the two. Because of this, there is indeed the potential that accounting information that is useful from the perspective of the valuation role may not be useful from the perspective of the contracting role (or vice versa). Different authors express different opinions on this point. For example, Suda [1993] says that the usefulness in forecasting future income may be useful from the perspective of the valuation role, but not necessarily so from the perspective of the contracting role. Lambert [2010] says that the information required by the valuation role of accounting is information that estimates future cash flow, while the information required by the stewardship role (contracting role) is information that affects future cash flow. In many cases, a single piece of accounting information will end up being useful for both, but there could be information that is useful for the valuation role and not for the contracting role (becomes noise; for example information that includes volatility not resulting from the actions of managers). The facts observed in this paper do not necessarily support or refute either opinion. In light of the facts observed in the Section 3, the opinion of this paper is that, differences in information that serves the valuation role and information that serves the contracting role are not so great as to make it impossible for both roles to be served by information in the body of financial statements.

[76] See Section 5.

[77] In addition to the impact on the contracting role of the expanded application of fair value measurement, it must also be noted that there are differences from country to country in the content of contracts and it will therefore be difficult to harmonize accounting standards from the perspective of the contracting role. Because of this, accounting standards for the contracting role need to be separate from accounting standards that are internationally harmonized to fulfill the valuation role (though a partial revision of the standards may suffice). It may be possible to electively cause non-consolidated financial statements to play this role.

however, one must still take account of the damage and costs resulting from the provision of two different forms of accounting information.

4.3 The role of non-financial statement accounting information

We have to this point considered only information in the body of financial statements, but the contracting role of accounting is fulfilled not only through direct use in contracts, but also through the provision of useful information. It is therefore necessary to consider what kinds of information are useful for contracts, including footnote information, Management's Discussion and Analysis (MD&A) information, and other accounting information.[78]

On this point, from the perspective of the contracting role, information in the body of financial statements must presumably have a degree of verifiability, but risk information, corporate governance information, and other similar information may be useful for contracts even if verifiability is low. For example, the relative amount of risk underlying accounting profit used to measure performance in executive compensation can be useful in the accurate valuation of that performance. Even if the amount of income is the same, income earned by the management taking risk and income earned without risk have different implications. In debt contracts, risk information is useful to creditors in ascertaining the company's future financial status. The increase after the financial crisis in the use of leverage covenants in financial covenants in order to ascertain the status of the company's risks is one manifestation of this. Meanwhile, there is greater emphasis on risk management. Dividend restrictions recognize the importance of liquidity risk, as can be seen from the introduction of the "insolvency test" and similar measures, while in financial regulation and supervision, "Basel III" introduces liquidity regulations and leverage rules, and there are also efforts to improve the disclosure of risk information to ensure discipline. In addition to this risk information, information on corporate governance, which to some extent controls management estimation and discretion, is also useful.

Through the expansion of fair valuation, changes in market environments, financial crises and other factors, these kinds of information are becoming more necessary and useful to contracts, and the provision of this information together with other accounting information is desirable as a means of supplementing and complementing information in the body of financial statements.[79, 80] This information is also useful from the perspective of the valuation role.

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[78] The investigations through Section 4.2 at the very least find no significant divergence between the goal hypothesis of this paper (see Note 8) and observed fact. In other words, this paper confirms that financial reporting for the valuation role achieves to some extent the policy objectives of IASB and FASB to satisfy the needs of various users of accounting information other than investors. In Section 4.3, we investigate ways of providing information, including footnote information and MD&A information, that more fully achieve IASB and FASB policy objectives.

[79] However, this is not just a question of simply increasing the volume of other accounting information. The unlimited expansion of disclosure could, if anything, reduce the quality of information. The same concerns were expressed in a discussion paper on improvements in footnote

5. Conclusions: Issues for Future Research

Through the observations above, we have investigated ways of providing information that fulfill the valuation role while not creating significant problems for the contracting role. We have derived some hypothetical conclusions. First, there will be no significant problems in the contracting role of accounting, if the information in the body of financial statements used directly in contracts is able to be revised and adjusted in a way that eliminates unrealized profit and valuation profit or loss with room for management estimation and discretion. Second, if one uses the standard of differences in business models to distinguish, from the perspective of the valuation role, between assets and liabilities subject to fair value measurement and assets and liabilities subject to cost-based measurement, there is considerable overlap between information that plays the valuation role and information that plays the contracting role. Finally, it is also found desirable that risk information, corporate governance information, and other similar information that is useful in contracts but has low verifiability be provided in the form of footnote information, etc. that supplements and complements information in the body of financial statements. Providing information in the body of financial statements and other accounting information in this manner is one way to provide information that fulfills the valuation role of accounting while not raising significant problems for the contracting role.

Obviously, when observing the impact of the expansion of fair valuation on the use of accounting information in contracts, it is important to study the impact on corporate behavior, and this is a point for future research.

One of the issues to be investigated would be the impact on companies' choices for sources of financing. As observed in Section 3.2, when it becomes more difficult to use financial covenants as a means of reducing agency costs, companies may shift from the issue of bonds, which entails high agency costs, to syndicated loans or private borrowings, where agency costs are lower. There is thus a need to study the impact on bond markets, market liquidity, and also financial institution credit and liquidity risks on corporate fund-raising costs.

This paper has pointed to verifiability as an attribute required of information in the body of financial statements from the perspective of the contracting role. Another required attribute would be conservatism, in other words, the need for the recognition of

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information disclosure published in 2012 by FASB and the European Financial Reporting Advisory Group (EFRAG) (FASB [2012], EFRAG [2012]). EFRAG [2012] argues that investigations of the scope of footnote information should be based on the needs of specific users and that importance and cost-benefits should be taken into account. FASB [2012] says that the primary purpose is not to reduce the volume of footnote information, but that it is expected that a focus on important information will result in lower volumes.

[80] An open discussion on disclosure sponsored by IASB in January 2013 included opinions that while investors wanted managers to explain the background ("story") to accounting treatment, information in the body of financial statements also needed verifiability and comparability (see the Ouchi comments in IMES[2013]).

profit to have a higher degree of verifiability than the recognition of loss.[81] This idea leads to the conclusion that there are differences in the degree of verifiability required for profit and loss. In Section 3, we observed that dividend restrictions create this asymmetry by not including appraisal profit in the distributable amount but deducting appraisal loss from it; in financial regulation and supervision, we observed efforts to require more conservative treatment in the calculation of capital.[82] It is difficult at this point in time to reach conclusions about the usefulness of conservatism from the perspective of the contracting role, and this is an issue that will require further study. Even if it is found to be useful, there will be a need to study the impact on corporate investment behavior (for example, underinvestment).

In addition to studies of the impact on corporate behavior, there is also a need to study the impact when changes in accounting standards produce changes in corporate behavior that then change the environment for the accounting system (the legal system and contractual practices, etc.). This paper has studied the short-term impact of the expansion of fair valuation on the assumption that changes in accounting standards do not change aspects of the environment other than the accounting system. However, there is need to study from a longer-term perspective whether, when changes in corporate behavior result in changes to the environment, the expansion of fair valuation diminishes the usefulness of accounting information from the perspective of the contracting role.

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[81] The interpretation of conservatism in Basu [1997] is that a higher degree of verification is required for the recognition of good news than the recognition of bad news in the financial statements. See also Watts [2003].

[82] See Note 62.

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