Understanding the Issues

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Credit Standing and Liability Measurement

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Introduction

In February 2000, the Board issued FASB Concepts Statement No. 7, *Using Cash Flow Information and Present Value in Accounting Measurements.* Since then, the Board has incorporated the ideas from Concepts Statement 7 in Exposure Drafts on impairment of long-lived assets and asset removal obligations. Respondents to those Exposure Drafts have raised concerns about several elements of those drafts that carried forward ideas from Concepts Statement 7.

FASB pronouncements usually provoke some controversy, and Concepts Statements are no exception. The principle objections raised in recent Exposure Drafts are largely the same objections raised when the Board was deliberating Concepts Statement 7. They focus on three areas:

- Use of the *expected-cash-flow approach* in developing present value measurements
- Use of *fair value* as the objective for measurements on initial recognition and subsequent fresh-start measurements that employ present value
- Inclusion of the *entity's credit standing* in the measurement of its liabilities.

Concepts Statement 7 is a departure from previous parts of the Board's conceptual framework. This Concepts Statement focuses on measurement with greater specificity than its predecessors. For the first time, it articulates a single objective for measurements on initial recognition and for subsequent fresh-start measurements, although that objective is limited to measurements that employ present value. It introduces techniques and ideas that have not been a common part of the accountant's toolkit, at least not explicitly. However, the principles articulated in Concepts Statement 7 carry forward ideas that first appeared in accounting literature in the early 1970s. The new techniques and ideas implement, at a very basic level, principles of economics and finance that date back to the 1950s and before.

The FASB recognizes its responsibility to maintain a continuing dialogue with constituents, especially when it introduces new ideas. To judge by the comment letters, many have interpreted Concepts Statement 7 as far more complex and difficult than the Board intended. Others may not have accepted the rationale behind the Board's conclusions. With that in mind, the Board and staff have prepared a series of articles to communicate both its rationale and its expectations for applications of Concepts Statement 7.

Wayne S. Upton

This is the fourth in a series of articles that explores the application of Concepts Statement 7. In this article, we turn our attention to the role of an entity's credit standing in measuring the fair value of its liabilities.

Few issues in accounting generate the kind of gut-level reaction that this issue seems to provoke. One correspondent termed the idea of including an entity's credit standing in the measurement of its liabilities a "perfidious doctrine." Others argue that reporting the effect of changes in an entity's credit standing is "counterintuitive" or even "dangerous."

While many have argued passionately for excluding the effect of the entity's credit standing, most have focused their attention on two points—reporting changes in credit standing and the role of credit standing in reporting complex liabilities like insurance and pensions. Few have considered the issue in accounting for a simple borrowing transaction, but all liabilities build on that simple transaction. Reducing the analysis to a basic level—accounting for a simple pure-discount (zero-coupon) note—highlights the conceptual and practical problems that arise from *not* incorporating credit standing in liability measurements. This paper examines the credit-standing issue at that level.

The issue of credit standing in liability measurement can be summed up in two questions:

1. When a liability is first recognized in financial statements, does the relevant measure of a liability *always* include the

effect of the obligated entity's credit standing, *sometimes* include the effect or *never* include the effect?

2. Should the answer differ for measurements at initial recognition and subsequent measurement (when the subsequent measurement is a fresh-start measurement)?

In examining those questions, it's worthwhile to stipulate two basic points:

1. The simple act of borrowing money at prevailing interest rates is not an event that gives rise to gain or loss. Under normal commercial circumstances, an entity gives a promise (the note or bond—a financial instrument) and receives assets with a value commensurate with the value of the promise.
2. A fair value measurement system should not attach different measurements to assets or liabilities that are economically the same. As a corollary to this second point, assets or liabilities that are economically different should not appear to be the same.

A Simple Case

Should Credit Standing Affect the Measurement on Initial Recognition?

Company A issues a pure-discount (zero-coupon), non-prepayable, 10-year $10,000 note to a lender. Consistent with Company A's AA-rated credit standing, the note is discounted at a 7% annual rate and Company A receives $5,083 in cash. Under today's GAAP, Company A records a liability of $5,083.

On the same day, Company B issues a pure-discount, non-prepayable, 10-year $10,000 note. Consistent with Company B's B-rated credit standing, the note is discounted at a 12% annual rate and Company B receives $3,220 in cash. Under today's GAAP, Company B records a liability of $3,220.

On the same day, the rate appropriate to comparable U.S. Treasury instruments is 5.8%.

Illustration 1

Accounting on Initial Recognition
Current U.S. GAAP
dr. (cr.)

	Cash Proceeds	Note Payable
Company A Note	$5,083	$(5,083)
Company B Note	3,220	(3,220)

Analysis

The cash proceeds received by A and B clearly reflect their respective credit standing and clearly represent the fair value (on an entry-value basis) of their respective liabilities. However, some have argued that both are "going concerns [that] should be expected to make good on their debt, regardless of source, as long as the debt is contractual and measurable." If we follow that line of argument, both companies should record a liability of $5,690—the present value at a risk-free rate of 5.8%.

The measurement at 5.8% produces an interesting result. In each case, the company's borrowing leaves its net financial position unchanged. Company B received cash of $3,220 in exchange for a promise with a fair value of $3,220. Nothing happened to change the net equity of the company. However, excluding the effect of Company B's credit standing and recording the liability at $5,690 necessarily produces a reported loss of $2,470 on the day it borrows money (the debits must equal the credits). Company A would report a smaller loss, owing to its superior credit standing. Few managers would willingly accept this accounting result. Nor should they.[1] So the answer to the first question posed in the introduction doesn't seem to be "never include credit standing." Any measurement that reports a loss from the simple act of borrowing at the market rate must be rejected.

Illustration 2

Accounting on Initial Recognition
Measurement Excludes Credit Standing
dr. (cr.)

	Cash Proceeds	Note Payable	Loss from Borrowing
Company A Note	$5,083	$(5,690)	$ 607
Company B Note	3,220	(5,690)	2,470

Here, some might argue that we have created a straw man. While a few commentators have argued for the accounting portrayed in Illustration 2, most agree that simple commercial borrowing at market rates should not give rise to gain or loss. However, many argue that credit standing should be excluded in special cases. Those special cases typically involve liabilities like pensions, provisions and insurance that lack the obvious connection to cash inflows found in our simple note. However, *every* individual future cash outflow paid on a liability, whether a loan, a pension or an insurance benefit, is fundamentally the same as the maturity of a pure-discount note. Pensions, insurance and other liabilities have some additional uncertainties but the fundamentals don't change. Cash flows are cash flows, and every

[1] Alternatively, each company could record the liability at $5,690 and record an asset (or a liability valuation account). There is considerable economic theory behind that approach. In 1974, Nobel Laureate Robert Merton observed that debt-like instruments can be analyzed as a combination of a default-free obligation and an option-like asset. This asset represents the value of the shareholders' right to "put" the corporation's assets to debt holders in the event of bankruptcy. Merton's analysis is unfamiliar to many accountants and actuaries, but it is a cornerstone of modern financial economics.

liability is either a promise to pay cash, to deliver assets and services with values expressed as cash or to incur other liabilities expressed as cash. Any measurement that excludes credit standing has the effect of front-ending the loss portrayed in Illustration 2 that effect just isn't as obvious as in a cash transaction.

Does the current GAAP initial measurement of the companies' liabilities somehow violate the idea of the entity as a going concern? Of course not. Like most measurements at initial recognition, $5,083 and $3,220 represent the value of assets received (cash) in exchange for the promise given—fair value. The creditors do not expect either company to default. Neither company's managers plan to default. The exchange price represents a market expectation that, on average, a given number of borrowers like Companies A and B will default during the life of the obligation. Market participants demand a price (a fair value) that will compensate for that expectation.

So the answer to question 1 must be that liability measurements on initial recognition should *always* incorporate the effect of the obligated entity's credit standing. That is already the case when measurement is based on the amount of a cash exchange. There is no logical reason for a different answer when the measurement is based on a present value or other technique.

Should Credit Standing Affect Subsequent Fresh-Start Measurements?

It is now the first day of year 6, and Company B's credit standing has improved to a AA rating. It issues a new pure discount 5-year, non-prepayable $10,000 note. Consistent with Company B's new and improved credit standing, the note is discounted at a 7% annual rate. Company B receives cash of $7,130 (assuming flat yield curves). Company B now has two, five-year pure discount liabilities on its books. If the accounting measurement excludes changes in credit standing, the original note now has a balance of $5,675 (consistent with the original 12% rate). The new note has a balance of $7,130.

Analysis

By any analysis, Company B's two notes are economically identical. Both notes require that Company B pay $10,000 five years hence. Yet, excluding the change in Company B's credit standing makes them appear as if they are different. Some have argued that including changes in the entity's credit standing does not "give shareholders an accurate reading of the company's true position." This simple case suggests the opposite. Excluding changes in credit standing leads inevitably to measuring two identical liabilities at different amounts. That must surely provide an "inaccurate" reading.

Illustration 3

Accounting for Company B's Notes
Current U.S. GAAP
dr. (cr.)

	Balance Sheet		Income Statement	
	Cash Proceeds	Note Payable	Interest Expense	Change in Credit Standing
Note 1				
Year 1, Day 1				
Initial proceeds	$3,220	$(3,220)		
Year 1 accruals		(386)	$386	
Year 2 accruals		(433)	433	
Year 3, Day 1				
Rating upgrade from B to A		—		—
Year 3 accruals		(485)	485	
Year 4 accruals		(543)	543	
Year 5 accruals		(608)	608	
Year 6, Day 1				
Rating upgrade from A to AA		—		—
Note Balance		$(5,675)		
Note 2				
Year 6, Day 1				
Initial proceeds	$7,130	$(7,130)		

Illustration 4 portrays a measurement system that incorporates the changes in Company B's credit standing. The first change, from B-rated to A-rated, takes place at the beginning of year 3. The interest rate on A-rated obligations is assumed to be 9%. Interest then accrues at the new 9% rate. The second change, from A-rated to AA-rated, takes place at the beginning of year 6. As indicated earlier, the assumed interest rate on AA-rated obligations is 7%.

Yes, recognizing the improvement results in a decrease in shareholders' equity (a loss), all other things being equal. But isn't that economic reality? We can view the right side of a balance sheet as the rights of two classes of claimants against the entity's assets—creditors and owners. Improving credit standing increases the *relative* position of the creditor class against the owner class.

Does a measurement that incorporates changes in Company B's credit standing violate the idea of the entity as a going concern? Of course not—no more than did the measurement at initial recognition. Again, the fair value of Company B's promise does not represent the amount that Company B expects to pay. Instead, it represents the market's overall evaluation of promises made by companies like Company B. The measurement is a *value*, rather than an estimate of the cash to be paid at the note's maturity.

We return then to the question posed in the introduction. Is there a justification for different treatment in initial and subsequent measurements? Is it appropriate to include credit standing in the initial measurement and exclude credit standing in a subsequent measurement of fair value? The answer must be no. The two notes pictured in Illustrations 3 and 4 are economically identical, and basic economics tells us that economically identical cash flows must necessarily have the same fair value.

What Happens If the Measurement Shifts from Entry-Value to Exit-Value?

So far, the analysis has focused on the entry value of liabilities. Concepts Statement 7 adopts an exit-value approach. Paragraph 75 articulates the objective this way:

> When using present value techniques to estimate the fair value of a liability, the objective is to estimate the value of the assets required currently to (a) settle the liability with the holder or (b) transfer the liability to an entity of comparable credit standing.

Suppose now, that we alter the note terms slightly.

Company B's note is assumable, but only by a new borrower with at least a AA-credit rating. It is now the first day of year 6, and Company B's credit standing has *not* improved; the Company is still rated B. As in the previous examples, interest rates have not changed and the yield curve is flat. Company B wishes to transfer its note (carrying amount of $5,675—see Illustration 3) to Company A.

Company A is willing to assume the note, but demands $7,130 to do so. From Company A's standpoint, assuming Company B's

Illustration 4

Accounting for Company B's Notes
Including Changes in Credit Standing
dr. (cr.)

	Balance Sheet		Income Statement	
	Cash Proceeds	Note Payable	Interest Expense	Change in Credit Standing
Note 1				
Year 1, Day 1				
Initial proceeds	$3,220	$(3,220)		
Year 1 accruals		(386)	$386	
Year 2 accruals		(433)	433	
Year 3, Day 1				
Rating upgrade from B to A		(980)		$980
Year 3 accruals		(452)	452	
Year 4 accruals		(492)	492	
Year 5 accruals		(537)	537	
Year 6, Day 1				
Rating upgrade from A to AA		(630)		630
Note Balance		$(7,130)		
Note 2				
Year 6, Day 1				
Initial proceeds	$7,130	$(7,130)		

note is the same as issuing a new Company A note, it ought to have the same price.

Analysis

Some have argued that $7,130 must be the fair value of Company B's note because the AA market is the only one available. Company B is precluded from settling with an "entity of comparable credit standing," so the fair value must be based on the market price that is available to Company B, right? Wrong.

The fundamental flaw in this reasoning is that it confuses the value of the liability in question with the observed market price of a different liability. There can be no dispute that $7,130 is the market price of something (promises made by Company A), but it is not the price of promises made by Company B.

If Company B decides to pay Company A's price to settle, it is paying the combined amount for two elements. The first element is the fair value of Company B's liability ($5,675). The second element is the value ($1,455) of a credit upgrade from B-rated to AA-rated status. Unless and until Company B decides to settle, it does not have the upgrade. Accounting should not confuse recognition of an upgrade that Company B has not acquired with measurement of Company B's liability.

The problem of deriving a fair value of one thing from the observed price of something else isn't really all that new or difficult. Consider the example from a previous article in this series.

> When estimating fair value, we must be sure that the estimate is for the asset or liability that is recognized in the financial statements, and not some other item. For example, most automobiles sold in the southern U.S. are equipped with air conditioning. The observed market price of automobiles assumes that they are similarly equipped. If the entity owns a fleet of automobiles without air conditioning, the observed market price of automobiles with air conditioning must be adjusted before it represents the estimated fair value of those assets recognized in the entity's financial statements.

Most accountants would agree that the estimated fair value of the cars in question is the observed price of cars with air conditioning, less the cost of installing an air conditioning system. Similarly, the fair value of Company B's loan is the observed price ($7,130), less the cost of obtaining the credit upgrade inherent in the observed price ($1,455), or a net amount of $5,675.

How Do Guarantees, Regulation and Similar Enhancements Affect the Measurement?

Suppose that on the first day of year 6, Company B purchases (for $1,455) a credit guarantee or other enhancement that raises the rating of its note from B-rated to AA-rated. How would that purchase affect the measurement of its liabilities? Is the enhancement Company B's asset?

Analysis

This can be a confusing question. The upgrade clearly changes the fair value of Company B's note from $5,675 to $7,130. But the credit guarantee doesn't seem to meet the definition of an asset. After all, the "probable future benefits" of this contract, if paid at all, will go to the holders of Company B's note.

True, but the credit upgrade allows Company B to be treated as a AA-rated company rather than a B-rated company. For example, the upgrade may allow Company B to attract new lenders or to qualify for certain contracts. That AA-rated status is the benefit that makes this upgrade Company B's asset. If Company B's managers did not expect that sort of benefit, they would not have entered into the upgrade contract.

Illustration 5 shows the accounting for Company B's purchase of a credit enhancement.

Illustration 5

Traditional Presentation[2]

Year 6, Day 1
dr. (cr.)

	Cash	Enhancement Asset	Note Payable	Income Statement
Beginning balance	$ 5,675		$(5,675)	—
Purchase of enhancement	(1,455)	$1,455		—
Change in value of note payable due to purchase of enhancement	—	—	(1,455)	$1,455
Ending balance	$ 4,220	$1,455	$(7,130)	$1,455

[2]Subsequent accounting for this asset is linked to subsequent accounting for the related liability. If the liability is reported in subsequent periods at fair value, then most would agree that the asset would be measured at fair value. If the liability is reported at amortized cost, then most would agree that the asset would be amortized as an adjustment of the interest rate on the liability.

This analysis of credit enhancements may seem a bit obscure, but it is critical. Many industries operate under a combination of government controls and insurance that allows entities to borrow at rates much lower than they could otherwise obtain. U.S. government insurance of bank deposits under $100,000 is one example. The combination of state regulatory regimes and guaranty funds for some types of insurance is another. Does the effect of the entity's credit standing take account of those enhancements? Building on an analysis like the preceding illustrations, the Board concluded that it does. Paragraph 79 of Concepts Statement 7 reads:

> The effect of an entity's credit standing on the fair value of particular liabilities depends on the ability of the entity to pay and on liability provisions that protect holders. Liabilities that are guaranteed by governmental bodies (for example, many bank deposit liabilities in the United States) may pose little risk of default to the holder. Other liabilities may include sinking-fund requirements or significant collateral. All of those aspects must be considered in estimating the extent to which the entity's credit standing affects the fair value of its liabilities.

How Do Prepayment Provisions Affect the Measurement?

So far, our illustrations have assumed that the loans in question cannot be prepaid (or otherwise redeemed) prior to maturity. But most loans can be prepaid, usually for an amount stipulated in the original loan agreement. How does the obligated entity's ability to prepay a loan interact with the effect of the entity's credit standing?

Analysis

Suppose we revisit Company B on the first day of year 6. Company B's credit standing has improved from the original B-rated to AA-rated. The fair value of Company B's loan, without considering the ability to prepay, is $7,130. However, let us assume that this loan allows Company B to prepay based on the original proceeds, plus accrued interest at the original interest rate of 12%. Company B could pay off the loan for $5,675.

In this case, the ability to prepay alters the fair value of Company B's obligation. Paragraph 75 of Concepts Statement 7 describes the measurement this way:

> When using present value techniques to estimate the fair value of a liability, the objective is to estimate the value of the assets required currently to (a) settle the liability with the holder or (b) transfer the liability to an entity of comparable credit standing.

Because Company B could settle the liability with the holder (prepay), the amount required to settle with the holder and the amount required to transfer to a third party should be the same, or very nearly so. The ability to prepay effectively places a ceiling on the fair value of Company B's liability.

Conclusion: Counterintuitive Results?

Some argue that incorporating credit standing produces counter-intuitive reporting. They observe that a decrease in an entity's credit standing would, if incorporated in measurement, produce a decrease in the recorded liability. The offsetting credit to this debit would be a gain. The entity would appear to be profiting from its deteriorating financial condition. On the other hand, an increase in an entity's credit standing would produce an increase in the recorded liability. The entity would appear to be worse off as a result of the improvement.

Those results are certainly unfamiliar, but are they really counterintuitive? A balance sheet is composed of three classes of elements—the entity's economic resources (assets), claims against those resources held by nonowners (liabilities) and the residual claims of owners (equity). In a corporation, the value of owners' residual claims cannot decline below zero; a shareholder cannot be compelled to contribute additional assets. When an entity's credit standing changes, the relative values of claims against the assets change. The residual interest—the stockholders' equity—can approach, but cannot go below, zero. The value of creditors' claims can approach, but probably can never reach, default risk-free. Traditional financial statements have ignored those economic and legal truisms, so any measurement more consistent with real-world relationships will necessarily be unfamiliar.

Incorporating the entity's credit standing in the measurement of its liabilities will no doubt remain a contentious issue. For many, the idea violates long-held notions about the concept of an entity's obligations and its duty to creditors. However, a measurement system that does not incorporate credit standing will not be "fair value" by any recognizable use of the term. Moreover, such a system will fail to provide the comparability and objectivity that motivates many to observe that fair value better serves the needs of financial statement users.

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