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Retiree Pension and Health Benefits

Accounting for retiree pension and health benefits is complex. It involves actuarial assumptions, obligations measured on a discounted basis, and benefits that may be settled many years after an employee renders the related service.

The Financial Accounting Standards Board's (FASB) Accounting Standards Codification Topic 715, "Compensation—Retirement Benefits" (ASC 715), sets forth the United States Generally Accepted Accounting Principles (US-GAAP) related to accounting for retiree benefits. The International Accounting Standards Board's (IASB) International Accounting Standard 19, "Employee Benefits" (IAS 19), prescribes the IASB's retiree benefit accounting standards.

A retiree benefit plan is an agreement between an employer and its employees whereby the employer agrees to provide employees, for services rendered prior to retirement, certain retiree benefits such as a pension and health-care coverage (referred to as "other postretirement benefits"). The principal accounting issues associated with these arrangements are (a) how to measure and recognize the cost of the plan to the employer during the employee's service period and (b) the employer's current obligation to provide these future benefits.

This note is divided into five parts, which cover (1) some general observations on pension and health plans, (2) ASC 715's pension accounting rules, (3) ASC 715's other postretirement benefits accounting standards, (4) IAS 19's pensions and other post-employment benefits standards, and (5) some comments on financial analysis.

The objectives of postretirement benefits accounting are:

- 1. To enhance the relevance and representational faithfulness of the employer's reported results of operations by recognizing net periodic pension cost and net periodic other postretirement benefit cost as employees render the services necessary to earn their pension and other postretirement benefits.^{1, 2}
- 2. To enhance the relevance and representational faithfulness of the employer's statement of financial position by including a measure of the obligation to provide pension and other

Professor David F. Hawkins prepared this note as the basis for class discussion.

¹ Pension plan accounting uses the term "net periodic pension cost" rather than "net periodic expense" because part of the cost recognized in a period may be capitalized along with other costs as part of inventory. The same reason underlies the use of the term "net periodic postretirement benefit cost."

² US-GAAP pension benefit accounting standards are based on the expense accounting model. This model's objective is to get the pension expense amount right. This focus is counter to the ASC's content, which is structured using an asset-and-liability model as its basic premise. This model's objective is to get the balance sheet right.

postretirement benefits based on a mutual understanding between the employer and its employees of the terms of the underlying plan.

- 3. To enhance the ability of users of the employer's financial statements to understand the extent and effects of the employer's undertaking to provide pension and other postretirement benefits to its employees by disclosing relevant information about the obligation and cost of the pension and other postretirement benefit plans and how those amounts are measured.
- 4. To improve the understandability and comparability of amounts reported by requiring employers with similar plans to use the same method to measure their pension and other postretirement benefit obligations and the related costs of the postretirement benefits.³

Unless specified otherwise, this note deals with single-employer defined benefit plan accounting and analysis.

I. Pension Plans: General

A full understanding of pension benefit economics, accounting, and the related analytical issues requires basic appreciation of the actuarial valuation techniques, funding instruments, and methods involved in determining the financial provisions for pension benefits.

The three most popular types of corporate pension plan are the defined contribution plan, the profit-sharing plan, and the defined benefit plan. Some corporations have replaced their traditional defined benefit plans with cash-balance plans, a type of defined benefit plan. An employer may maintain a single-employer pension plan or participate in a multiemployer plan, to which two or more unrelated employers contribute. Some companies use more than one type of pension plan to satisfy their pension obligations.

A defined contribution plan provides each participant with an individual account to which the employer is obligated to make periodic contributions. The employee's ultimate pension payments depend solely on the amount contributed to the account and the gains or losses earned. The employer is only liable for contributions to the plan, not for benefits payable to the retired employees.

A profit-sharing plan is similar to a defined contribution plan. As its name implies, the employer agrees to assign a portion of the company's profits to the employee's pension fund. The amount contributed may or may not be set by formula.

A defined benefit pension plan specifies that the employer will provide each retired employee with a specified pension payment, usually based on factors such as age, years of service, and salary.

Under the cash-balance version of the defined benefit plan, the employer creates hypothetical employee accounts to which it contributes a fixed percentage of the employee's pay each month, as well as interest on the balance in the employee's account. At the time an employee terminates employment or retires, the employee receives a lump-sum payment equal to his or her account balance.

Actuarial Valuation

Actuarial valuation is the process of determining the amounts needed to finance a pension plan. The process relies on three principal concepts. First, the valuation is for a closed group of employees. Second, the ultimate cost of the plan is primarily the present value, as of the valuation date, of

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³ ASC 715.

expected future benefit payments. Third, the valuation is merely an approximation because of uncertainties inherent in the actuarial assumptions underlying the calculations. After the valuation of a pension plan is determined, it is sometimes separated into two portions: (a) retroactive pension costs or benefits assigned on account of services rendered in years prior to the inception or current modification of the pension plan and (b) pension benefits or costs based on service after the plan's inception or current modification. In making the actuarial valuation, however, these costs are not considered separately.

Assumptions

When actuaries estimate the cost of a pension plan, they must make a number of assumptions regarding uncertain future events. For example, they have to estimate the expected rate of return on the pension fund, the fund's administrative expenses, and the amounts and timing of future benefits. The future-benefit estimates, in turn, may involve estimates of future employee compensation levels, cost-of-living indexes, mortality rates (both before and after retirement), retirement ages, employee turnover, vesting privileges, and government-provided benefits.

Clearly, it is most unlikely that everything will occur exactly as the actuarial assumptions have projected, so it is necessary to review and change those assumptions from time to time. If the original assumptions turn out to have been optimistic, there will be an actuarial deficiency.

Funding Instruments and Arrangements

Typically, employers make some financial provision for the current and future benefits they are obligated to pay under their pension plans. Among a variety of funding instruments, the most popular are trust agreements (trust fund plans) and contracts with life insurance companies (insured plans).

Insured plans cover a number of possible arrangements. For example, individual policies providing death and retirement benefits may be issued to a trustee for each employee. A similar arrangement is a group of annuity contracts issued to the employer. Both of these arrangements specify the premiums and benefits.

Trust fund plans require the employer's contributions to be made to a trustee, who invests the funds and pays retirement benefits according to the terms of the trust agreement. The trustee may be an individual, a group of individuals, or a bank. Depending on the terms of the trust agreement, the trustee may have full power to select investments or may be subject to the employer's general direction.

Government Regulation

In many countries, employee pension plans are administered by the government, using a mix of employee, employer, and general taxation funding. Typically, these plans do not present significant accounting issues for employers, but accounting issues do arise when government plans are supplemented in whole or in part by employer corporations. Because these employer plans are usually subject to government regulation, knowledge of the regulations can be critical to understanding the nature of the pension plan liability reported on the employer's balance sheet.

In the United States, for example, the Employee Retirement Income Security Act (ERISA) sets minimum eligibility, funding, and vesting requirements. In addition, the law imposes an obligation on employers to pay insurance premiums to fund plan failures. The Pension Benefit Guaranty

Corporation administers this insurance scheme. If an employer becomes insolvent, the Pension Benefit Guaranty Corporation assumes responsibility for the employer's pension plan. ERISA also sets regulatory reporting standards for employers and pension trusts. These reports are filed with the Department of Labor.

Income Tax Considerations

Globally, most pension plans are designed so that the employer contributions are deductible for tax purposes during the year contributed. There are several other tax aspects that should be noted. First, the tax treatment of pension costs usually follows cash, rather than accrual, accounting. Second, the earnings on qualified pension investments are often tax-free. Third, employer contributions to the fund may not be taxable income to employees until distributed as retirement benefits.

Pension Accounting

Pension accounting is based on these fundamental concepts:

- 1. **Accrued cost.** The cost of an employer's pension plan should be accrued over the covered employee's service period.
- 2. **Net cost.**There is one pension cost. It is the sum of at least three items: (a) the compensation cost of pension benefits promised to employees, (b) the interest cost resulting from the deferred payment of those benefits, and (c) the results of investing in assets to fund the promised benefits.
- 3. **Delayed recognition.** Certain changes in the pension obligation and plan assets are not recognized as they occur but are gradually and systematically spread over subsequent periods.
- 4. **Offsetting.** The plan assets and obligations can be netted against each other since (a) the employer has considerable control over them and (b) the substantial risk and rewards associated with them are in large part borne by the employer.
- 5. Defined Contribution Plan Accounting Illustrated

Pension costs are accounted for on an accrual basis. The following illustration is fairly straightforward, since the company has a defined contribution plan and funds all or part of its periodic pension cost as incurred.⁴

Under its defined contribution plan agreement, Company X's periodic pension cost is \$100,000. It funds all of this defined contribution plan's periodic cost as incurred. The accounting entries are:

D	r. I	ension (Cost (1	to record	the cost)	\$100,000
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Cr. Pension Liability (to record the funding obligation) \$100,000

Dr. Pension Liability (to extinguish the funding obligation) \$100,000

Cr. Cash (to reduce cash) \$100,000

⁴ Accounting for a defined benefit plan is more complex and will be illustrated later in the note.

\$100,000

The above illustration did not result in a pension-related asset or liability being recorded by Company X.

The next example illustrates a more complex situation in which a company only funds part of its current defined contribution plan's periodic pension cost.

Company Y's periodic pension cost is \$100,000. It only funds \$50,000 of this cost. The resulting accounting entries, based on accrual accounting, are:

Dr. Pension Cost (to record the cost) \$100,000

Cr. Pension Liability (to record the funding obligation)

Dr. Pension Liability (to partially extinguish the funding obligation) \$50,000

Cr. Cash (to reduce cash) \$50,000

In this illustration, Company Y has a \$50,000 unfunded accrued pension obligation.

If Company Y had contributed more than the required periodic contribution of \$100,000 to the plan, the excess would be recognized as a prepaid pension cost.

II. Pension Benefits: ASC 715

ASC 715 specifies US-GAAP for defined contribution and defined benefit pension plans.

Defined Pension Contribution Plans

Defined pension contribution plan accounting is relatively straightforward. It is identical to the accounting example shown above ("Defined Contribution Plan Accounting Illustrated"). The employer is only responsible for depositing an annual defined contribution amount into the employee's retirement account. If the employer's contribution falls short of the defined contribution amount, the employer records a liability for the difference, payable to the employee's account. If the employer's contribution exceeds the defined contribution amount, the employer records the excess as a prepaid pension cost.

Defined Retiree Benefit Plans

ASC 715 requires companies with defined retiree pension benefits plans to use the projected benefit method to measure their current obligation to pay benefits. The projected benefit method is an actuarial present-value calculation that measures a company's current retiree benefit obligation to an employee at the measurement date based on all the retiree pension benefits attributed by the pension benefit plan formula to an employee's service rendered up to the measurement date.⁵ If the

⁵ Actuarial present value is the value, as of a specific date, of an amount or a series of amounts payable or receivable, with each amount adjusted to reflect the time-value of money (through discounts for interest) and the probability of payment (by means of decrements for events such as death, disability, withdrawal, or retirement) between the specified date and the expected payment date.

company's benefit formula is based on future compensation levels, the projected benefit method requires assumptions about future compensation levels be incorporated into the measurement of the pension benefit obligation.

The discount rate used to determine a company's retiree pension benefit obligation should be the interest rate inherent in the price at which the obligation could currently be settled.⁶

ASC 715 requires companies to disclose the details of changes in their retiree benefit obligation. To illustrate, the hypothetical ABC Company's change in benefit obligation disclosure is reproduced in **Table A** below:⁷

Table A

	December 31			
	Pension 2011	Benefits 2010	Other Postretirement Benefits	
			2011	2010
Change in benefit obligation				
Benefit obligation at beginning of year	\$1,246	\$1,200	\$742	\$ 712
Service cost	76	72	36	32
Interest cost	90	88	55	55
Plan participants' contributions			20	13
Amendments	70		(75)	
Actuarial (gain) loss	20		25	
Acquisitions	900		600	
Benefits paid	(125)	(114)	(90)	(70)
Benefit obligation at end of year	\$2,277	\$1,246	\$1,313	\$742

Source: Casewriter.

The components of the change in the benefit obligation include:

- Service cost—the actuarial present value of benefits attributed by the plan's benefit formula to services rendered by employees during that period. The service-cost component portion of the retiree benefit obligation is unaffected by the funded status of the plan.
- *Interest cost*—the increase in the benefit obligation due to passage of time. This rate is the same as the discount rate used to compute the present value of the obligation.
- *Plan participants' contribution*—the change in the obligation related to employee participant contributions.
- *Amendments*—the change in the obligation due to plan amendments.

⁶ The U.S. Securities and Exchange Commission (SEC) expects registrants to use discount rates to measure obligations for pension benefits and postretirement benefits other than pensions that reflect the then-current level of interest rates. The SEC staff suggests that fixed-income debt securities that receive one of the two highest ratings given by a recognized rating agency—for example, a fixed-income security that receives an Aa rating from Moody's—be considered high-quality (ASC 715-20-555)

⁷ Typically, when disclosed in a tabular format, retiree pension benefits data is presented side-by-side with other postretirement benefits data. This note follows that practice.

- Actuarial loss—a change in the obligation resulting from experience different from that assumed or from a change in an actuarial assumption.
- *Acquisitions*—the change in the obligation due to additional obligations assumed by acquiring another company.
- *Benefits paid*—payments to participants, including pension benefits, health-care benefits, death benefits, and benefits due on termination of employment.

In addition to the above components, the effects of changes in foreign-currency exchange rates on the obligations of a foreign operation's plans may be disclosed if the foreign operation's functional currency is not the parent's reporting currency.⁸

Under ASC 715, pension plan assets are measured at their fair value. Companies are required to disclose in the notes accompanying their financial statements the details of the changes in the fair value of their pension plan assets.

For example, the ABC Company's change-in-plan-assets disclosure is shown in Table B below:

Table B

	December 31				
	Pension Benefits		Other Postretirement Benefits		
	2011	2010	2011	2010	
Fair value of plan assets at beginning of year	\$1,068	\$ 894	\$206	\$ 87	
Actual return on plan assets	29	188	5	24	
Acquisitions	1,000		25		
Employer contributions	75	100	137	152	
Plan participants' contributions			20	13	
Benefits paid	(125)	(114)	(90)	(70)	
Fair value of plan assets at end of year	\$2,047	\$1,068	\$303	\$206	

Source: Casewriter.

The components of the change-in-plan-asset disclosure are:

- Actual return on plan assets—the difference between the fair value of plan assets at the end of the period and the fair value at the beginning of the period, adjusted for interest and dividends received and for contributions to and payments of benefits during the period.
- Acquisitions—the change in plan assets arising from an acquisition of another company.

⁸ An entity's functional currency is the currency of the primary economic environment in which the entity operates; normally, that is the currency of the environment in which the entity primarily generates and expends cash. The reporting currency is the currency in which the reporting entity prepares its financial statements.

⁹ The fair value of an investment is the amount that the plan could reasonably expect to receive for it in a current sale between a willing buyer and a willing seller; that is, other than in a forced or liquidation sale. Fair value should be measured by the market price if an active market exists for the investment. If no active market exists for an investment but such a market exists for similar investments, selling prices in that market may be helpful in estimating fair value. If a market price is not available, a forecast expected cash flows may aid in estimating fair value, provided the expected cash flows are discounted at a current rate commensurate with the risk involved.

- Employer contributions—the employer corporation's annual contribution to plan assets.
- *Plan participants' contribution*—the participating employee annual contributions to the benefit plan's assets.
- *Benefits paid*—the benefits paid to retirees.

Under a defined benefit plan, a company's net periodic benefit cost consists of several components, disclosed in the notes to the financial statements. For example, the ABC Company's net periodic pension benefit cost components disclosure as shown in **Table C** below:

Table C

	December 31			
	Net Pension Benefits Cost		Net Other Postretirement Benefits Cost	
	2011	2010	2011	2010
Service cost	\$ 76	\$ 72	\$36	\$32
Interest cost	90	88	55	55
Expected return on plan assets	(85)	(76)	(17)	(8)
Amortization of prior-service cost	20	16	(5)	(5)
Amortization of net (gain) loss	0	0	0	0
Net periodic benefit cost	<u>\$101</u>	<u>\$100</u>	<u>\$69</u>	<u>\$74</u>

Source: Casewriter.

The five components are:

- Service cost—the actuarial present value of benefits attributed by the benefit plan formula to services rendered by employees during that period. This cost is an addition to the benefit obligation.
- Interest cost—the increase in the present value of the benefit obligation due to the passage of time
- Expected return on plan assets—the expected return on plan assets based on the expected long-term rate of return on plan assets and the market-related value of plan assets.¹⁰
- *Amortization of prior-service cost*—the systematic recognition in the net benefit cost over several periods of previously unrecognized prior-service cost.
- Amortization of net (gain) loss—the sum of (a) the difference between the actual return on plan assets and the expected return on plan assets and (b) the amortization of the unrecognized net gain or loss from previous periods.

¹⁰ The market-related value of plan assets is either fair value or a calculated fair value that recognizes changes in fair value in a systematic and rational manner over not more than five years. The expected long-term rate of return on plan assets reflects the average rate of earnings expected on the funds invested or to be invested to provide the benefits included in the projected benefit obligation.

As noted earlier, delayed recognition is one of the four fundamental concepts driving pension benefit accounting. Two applications of this concept are ASC 715's treatment of these items:

- *Unrecognized net actuarial loss (gain)*. This is the cumulative net gain or loss that (a) arises for a change in the value of either the benefit obligation or the plan assets resulting from experience different from that assumed or from a change in actuarial assumption and (b) has not been recognized as part of the net periodic retiree benefit costs.
- *Unrecognized prior-service cost*. This is that portion of the prior-service cost that has not been recognized as part of the net periodic retiree benefit cost.

Initially, these items are recognized in other comprehensive income and then amortized over time as components of the net periodic retiree benefit cost.

Net actuarial loss (gain) is primarily the cumulative difference between the actual return on plan assets and the assumed return on plan assets used to measure net periodic benefit cost. In the case of the ABC Company's pension plan, the company has an unrecognized cumulative loss on the plan's assets that it has not recognized in its financial statements. The reverse is true for the other postretirement benefit plans.

Prior-service cost is the cost of retroactive benefits granted in a plan amendment. These retroactive benefits are recognized as part of the net periodic benefit cost over the estimated remaining work life of the active employees covered by the plan. The unrecognized prior-service cost is that portion of the retroactive benefits not yet recognized as part of the net periodic benefit cost.

Once a schedule of amortization of prior-service cost for a specific amendment has been established, that schedule should not be revised unless a plan curtailment occurs. A curtailment is a significant reduction in, or an elimination of, the defined benefit accrual for present employees' future services. In general, curtailment gains and losses are recognized immediately in income.

ASC 715 requires companies to include the net funded status of their pension plan as an asset (overfunded) or liability (underfunded) on the balance sheet.

In the case of ABC Company, both its pension and its other postretirement benefit plans have unfunded obligations, which is the pension plan's projected benefit obligation and the other benefit's accumulated benefit obligation.

The ABC Company net retiree benefit funded status is:

Table D

		December 31			
	Pension	Pension Benefits		Other Benefits	
	2011	2010	2011	2010	
Funded status	<u>\$(230)</u>	<u>\$(178)</u>	<u>\$(1,010)</u>	<u>\$(536)</u>	

Source: Casewriter.

Numerous disclosures are included in the notes accompanying the financial statement to help financial statement users understand the plan's nature and funded status, details of key accounting

entries and balances, and the judgments, assumptions, and risks associated with the company's pension plan accounting and financial condition.

Defined Benefit Plan Accounting Illustrated

As a consequence of its defined benefit pension plan, Company Z's net periodic pension cost is \$100,000. The company funds all of this cost. Despite this funding, the company's pension plan unfunded pension obligation increases by \$50,000. The accounting entries are:

Dr. Pension Cost (to record the cost) \$100,000

Cr. Pension Liability (to record the funding obligation) \$100,000

Dr. Pension Liability (to extinguish funding obligation) \$100,000

Cr. Cash (to reduce cash) \$100,000

Dr. Other Comprehensive Income (to offset credit entry) \$50,000

Cr. Pension Liability (to record change in plan funding) \$50,000

The amounts recognized in "Other Comprehensive Income" are pension-related credits and costs—such as prior-service costs or credits—not yet recognized as components of net periodic cost.

III. Other Postretirement Benefits: ASC 715

Under ASC 715, the accounting for other postretirement benefits is similar to the required accounting for retiree pension benefits. The most significant differences are outlined below.

The benefit obligation measurement differs. The other postretirement benefits obligation is an accumulated benefit obligation. An accumulated benefit obligation is the actuarial present value of benefits (whether vested or nonvested) attributed by the benefit formula to employee service rendered before a specified date and based on employee service and compensation (if applicable) prior to that date. The accumulated benefit obligation differs from the projected benefit obligation in that it does not include an assumption about future compensation levels.

The discount rate used to compute the other postretirement benefits obligation need not be the same as the one used to compute the retiree pension benefits obligation.

While the other postretirement benefits obligation is an actuarial present value amount, it can incorporate explicit reasonable assumptions about future events. Most of the assumptions are unique to other postretirement benefits accounting. They include future per-capita claims cost by age, health-care cost trend rates, and medical coverage to be paid by government authorities and other health-care benefits providers.

Interim Financial Statement Disclosures

ASC 715 requires interim-period financial reports to disclose (a) the amount and components of the retiree benefit cost recognized during the interim period and (b) the total amount of the

employer's contributions paid and expected to be paid during the current fiscal year, if significantly different from the amounts previously disclosed.

Unless a business entity remeasures both its plan assets and its benefit obligations during the fiscal year, the funded status it reports in its interim-period statement of financial position is the same asset or liability recognized in the previous year-end statement of financial position adjusted for (a) subsequent accruals of net periodic benefit cost that exclude the amortization of amounts previously recognized in other comprehensive income (for example, subsequent accruals of service cost, interest cost, and return on plan assets) and (b) contributions to a funded plan or benefit payments. Sometimes, a business entity remeasures both plan assets and benefit obligations during the fiscal year. For example, a significant event such as a plan amendment, settlement, or curtailment may call for a remeasurement. Upon remeasurement, a business entity adjust its statement of financial position in a subsequent interim period to reflect the overfunded or underfunded status of the plan consistent with that measurement date.

IV. Retiree Benefits: IAS 19

IAS 19 is broader in scope than ASC 715. In addition to specifying IFRS for retiree pensions and other retiree benefits, such as health care, it also covers IFRS for short-term employee benefits such as wages and salaries, other long-term employee benefits such as long-service leave, and termination benefits.¹¹ IAS 19's basic principle is that the cost of providing employee benefits should be recognized in the period in which the benefit is earned by the employee, rather than when it is paid or payable.¹²

Convergence

In recent years, IAS 19 and ASC 715 have converged to such an extent that the IASB and FASB accounting standards for retiree benefits (both pension and health) are now, for the high level accounting purpose of this technical note, substantially the same.¹³

Because IAS 19's application is global rather than local, it must consider many more retiree benefit situations than ASC 715 does. For example, like ASC 715, IAS 19 requires an entity to determine the rate used to discount future employee benefits by reference to market yields or high-quality corporate bonds. However, if there is no deep market in corporate bonds, as is the case in many countries, the entity may use the market yield on government bonds.

IAS 19 requires the use of the projected unit credit method to determine the present value of the defined retiree benefit obligation. In general, the results of applying this method are comparable to the results of applying ASC 715's prescribed projected benefit method, which is a form of the projected unit credit method.

 $^{^{11}}$ Deloitte Touche Tohmatsu, IAS Plus, "IAS 19 Employee Benefits," 2010.

¹² IAS 19 requires recognition of short-term employee benefits when the employee has rendered service in exchange for these benefits. Other long-term employee benefits are accounted for in a fashion similar to that used for retiree benefits, except that actuarial gains and losses and past-service cost are recognized immediately. Termination costs are recognized when an entity is committed to a termination.

¹³ There are some terminology differences between the two standards. For example, IAS 19 uses the term "past service cost" rather than ASC 715's "prior service cost" to describe the cost of retroactive plan amendments.

On August 20, 2009, the IASB published for comment a proposal to distinguish between the different types of gains and losses arising from defined benefit plans. The proposal would include the service cost in operating profit and loss, interest cost in finance costs in profit and loss, and remeasurements in other comprehensive income. This treatment of gains and losses would be at odds with ASC 715's classification of the comparable items.

V. Financial Analysis

The analysis of net periodic retiree benefit costs and obligations can be difficult for statement users. The subject is complex; much of the information needed to fully evaluate the appropriateness of a company's policies, estimates, and actuarial assumptions may not be disclosed; and the estimates and actuarial assumptions employed can vary between companies. Nevertheless, statement users must do the best they can with the available data, since a company's retiree benefit accounting and funding practices can significantly influence the level and quality of its earnings.

Risk Assessment

The disclosures required by ASC 715 and IAS 19 are intended to make financial statement users better able to assess the degree of risk associated with a corporation's retiree benefit plans. This risk comes in many forms:

- *Business risk*—the risk that cash may have to be diverted from funding corporate operations to cover retiree benefit obligation shortfalls.
- *Debt-rating risk*—the risk that an unfunded retiree benefit obligation may contribute to a debt-rating downgrade.
- *Accounting risk*—the risk that the unfunded retiree benefit obligation may lead to a recognition of a pension liability.
- *Investment risk*—the risk associated with retiree benefit plan investments, particularly the greater risk associated with increasing investments in high-return—high-risk asset classes.
- *Financial-leverage risk*—the risk associated with using corporate debt capacity to fund unfunded retiree benefit obligations.
- Accounting-quality risk—the risk that investors may judge the company's earnings as being low-quality due to retiree benefit measurement assumptions that are perceived to be aggressive.
- *Regulatory risk*—the risk that mandatory retiree benefit contributions and/or higher insurance premiums may be required by law.¹⁴

ABC Company Example

To illustrate the type of risk analysis described above, consider the ABC Company's illustrative disclosures included in this note. Both its pension plan and its other postretirement benefit plans are

¹⁴ For example, the U.S. Pension Protection Act of 2006 requires U.S. companies with underfunded pension plans to pay higher premiums to the Pension Benefits Guarantee Corporation.

underfunded. Should this underfunding persist or increase, there would be a potential for the following:

- *Business risk*. Resources earmarked for funding growth may have to be diverted to the plan instead, or the company may have to issue its own equity to the plan, diluting the stockholders' interests.
- *Debt-rating risk*. The unfunded amount, combined with the company's existing balance-sheet and other off-balance debt, may lead to a debt-rating downgrade.
- Accounting risk. Continued underfunding may lead to recognition of even higher balance sheet liabilities.
- *Investment risk*. The company might try to close the underfunding gap by making more risky retiree benefit plan investments.
- Financial-leverage risk. The company may have to borrow to close the underfunding gap.
- Accounting-quality risk. A second consideration pushing the company to invest in higher-risk
 plan assets is a need to bolster its assumed rate of return on plan assets. If the company
 adopts a rate of return that is perceived as being aggressive, investors may downgrade their
 assessment of the quality of the company's earnings.
- *Regulatory risk*. Some future law may require the company to fully fund its pension plan and/or pay higher pension plan insurance premiums.

Key Assumptions

When analyzing other postretirement benefit obligation disclosures, statement users should focus on the following key assumptions:

- Under certain circumstances, management may, when forecasting future other postretirement benefit costs, assume that future modifications will be made to the existing plan. Assuming aggressive future plan modifications that result in fewer benefits, lower coverage caps, and higher employee contributions can lower a company's other postretirement benefit obligation and cost significantly.
- Management must project the expected type and timing of future benefits. For example, assuming low levels of long-term health-care benefits can reduce other postretirement benefit cost materially.
- 3. Medical coverage provided by government authorities and other third-party providers of health-care benefits reduces an employer's health-care obligation to employees. Assumptions must be made about primary and supplemental coverage availability.
- 4. The projected inflation rate of health-care cost assumption is the most critical management judgment entering into the measurement of other postretirement benefit obligations and costs. Low health-care cost inflation-rate assumptions can significantly reduce the obligation and cost values.
- 5. The period over which benefits are expected to be provided should be based on the same mortality tables used for pension measurement purposes. The use of aggressive mortality tables lowers both the obligation and the cost for pension and other postretirement benefits.

Management must determine the discount rate to apply to reduce the projected level of future benefit costs to their present value. A combination of a high discount rate and a low-cost inflation rate will dramatically reduce the actuarial present value of a company's other postretirement health obligations and costs.

Different Views

There is considerable controversy as to how statement users should view underfunded retiree benefit plans. Some regard it as an acceptable form of off-balance-sheet financing. They recognize that, while companies have an obligation to meet their retiree obligations as those obligations mature, they seldom need to fully fund their plans in order to do so. It is also argued that a company may be able to earn more on funds not contributed to retiree benefit plans than the plan could have earned on these funds and that this, in turn, improves the employee's current and future financial positions.

Others view underfunded retiree benefit plans as a "red flag." In their view, if management is unable to fund fully, there must be some unfavorable reason. This concern is often justified, particularly if a company is under pressure from employees to fund retiree benefit plans.

Some view a plan's unfunded amount as something akin to a liability of the employer. They believe the relative degree of financial risk that analysts should attach to underfunded pension obligations can be measured by comparing the unfunded obligation with the owners' equity in the company. The higher this ratio of unfunded obligation to owners' equity, the greater the financial risk to shareholders. In addition, the higher the percentage of total unfunded obligation which is unfunded vested obligation, the higher the level of financial risk, since vested benefits are pension benefits are due to an employee irrespective of whether the employee continues in the service of the employer.

A similar view of underfunding leads some investors to treat the underfunded amount as debt when valuing securities. For example, they would deduct the after-tax equivalent of the underfunded amount from their calculation of enterprise value to arrive at a company's value to stockholders.

Many retiree benefit plans are overfunded. Typically, statement users regard overfunding positively. It reduces the company's need to fund the plan currently, which may allow the company to retain more cash for other corporate purposes in difficult times.

Statement users should always pay close attention to the assumptions made in the measurement of retiree benefit obligations. Relatively small changes in the discount rate, in the expected return on plan assets, and in the rates used to project variables such as future salaries and health-care cost inflation can significantly influence the size of the obligation and the related costs. Statement users should always compare a company's assumptions in these areas with the assumptions made by managers of comparable companies. Adoption of relatively optimistic assumptions by management may indicate a lower quality of earnings relative to comparable companies.