

Appendix 2

Supplementary Information

Normative Databases

In the absence of credible plan experience, a normative database can provide support for assumptions about the probability of future events or likely relationships between variables. Examples of normative databases include published mortality and disability tables, proprietary rate manuals, and experience on similar retiree group benefit plans. However, normative databases also have limitations, including the following:

1. normative databases lose relevancy over time;
2. a normative database may not be appropriate for the particular situation at hand; and
3. many normative databases have not been subject to rigorous development and review.

Measurements Using Premium Rates

A premium is the price charged by a risk-bearing entity, such as an insurance or managed care company, to provide risk coverage. The premium usually has a basis in the expected value of future costs, but the premium will also be affected by other considerations, such as marketing and profit goals, competition, and legal restrictions. Because of these other considerations, a premium for a coverage period is not the same as the expected cost for the coverage period.

The demographics of the group for which the premium was intended may be different from the demographics of the group being valued. When these two groups are different, the premiums are unlikely to reflect the expected health care costs for the group being valued, even if it is a subset of the total group for which the premium was determined. In particular, the expected value of future costs for a group of retirees is unlikely to be the same as for a group consisting of actives and the same retirees. Examples of this are shown in the “Participant Contributions” section below.

This standard notes numerous ways the demographics of two groups can differ, but a difference that is quite likely to have an effect on rates is a difference in average age, or age distributions, of two groups. This, of course, is particularly likely to occur when one group contains retirees and active employees while a second group consists only of retirees. But differences can also be significant within a group made up entirely of retirees, even retirees who are all eligible for Medicare. When a rate applies over a broad age range, it may misrepresent the average cost at applicable ages much older or younger than the central age of the range to which the rate applies. Consequently, many actuaries use a separate initial per capita health care rate assumption for each age within a range where there are wide variations, such as rates that differ for every age

from 60 to 75 or from 55 to 80. (This also may have an effect on costs in future years and is addressed again below in the “Health Care Trend Rate” section.)

The term “premium rate” is used for both insured group plans and self-insured group plans. In the case of self-insured plans, the “premium rates” may also be referred to as “budget rates” or “phantom premiums.” Future changes in insured premiums are frequently affected by the experience of the insured group. When they are not directly affected by the experience of any one group, but rather by experience of a community of groups, the plans are referred to as “community-rated.” Further comments about these common types of retiree group benefit plan premiums follow:

1. **Self-Insured Premiums**—Some self-insured plans have expenditures that the plan sponsor refers to as “premium rates.” These rates may reflect the experience of retirees, active employees, or both. Also, the rates may reflect only expected claims experience, or may include other adjustments (such as administrative expenses and stop-loss claims and premiums). Furthermore, the rates may reflect the effect of the plan sponsor's contribution or managed care strategy.
2. **Community-Rated Premiums**—In some regulatory jurisdictions, community-rated premium rates are required by statute for some fully insured plans. There is variation in the structure of community-rated premium rates. For example, retirees not eligible for Medicare may be included with active employees in a community-rated premium category, while retirees eligible for Medicare may be included in a separate community-rated premium category. There are also different community-rating methodologies, some incorporating group-specific characteristics. Note that a community-rated premium including both retirees not eligible for Medicare and active employees probably understates the expected claim cost for the retirees alone. If the insurer appears to be committed to continuing such subsidy for the retirees, there is some justification for valuing future retiree costs for the postretirement plan sponsor with the community rate as the basis, although the plan sponsor may want to know of the apparent subsidy and the possibility that it might not be available in the future. There is also some justification for valuing future retiree costs with the higher expected claim cost for retirees as the basis, since the subsidy may disappear.
3. **Other Fully Insured Plans**—In addition to community-rated plans, there are other types of fully insured plans and there can be some variation in how actual plan experience affects the premiums. The same comments mentioned above for self-insured premiums apply here.

Health Care Trend Rate

The health care trend rate reflects the change in per capita health claims cost over time. The trend rate may differ by major cost components such as hospital, prescription drugs, other medical services, Medicare offsets, and administrative expenses. The health care trend rate is affected by the following interdependent factors:

1. Inflation—General economic inflation defined as price changes over the whole economy.
2. Medical Inflation—Changes in the per-unit prices of medical supplies and services covered by the plan.
3. Covered Charges—The definition of charges that are covered by the plan will determine how inflation and medical inflation affect per capita health care claims cost. For example, if the plan pays benefits based on a fixed schedule of benefits, the cost of services is controlled by the plan's schedule. If the services on the schedule and the dollar amounts are not changed, the underlying cost inflation of the plan will be zero.
4. Utilization of Services—This factor considers the change in frequency of health care by type of services over time, as well as the nature of services due to changes in medical practice and technology.
5. Leveraging Caused by Plan Design Features—The net plan cost under health plan designs with fixed-dollar cost-sharing will increase faster than the total costs. For example, for a prescription drug costing \$50 today and a plan design with a \$20 copay per prescription, a 20% increase in the cost of the drug (from \$50–\$60) will increase the net plan cost by 33%, from \$30 (\$50–\$20) to \$40 (\$60–\$20).
6. Aging—The aging of the covered population may have contributed to historical health care cost changes. The use of age-graded per capita health care rates for projecting future health care costs removes this aging component from the future trend assumption.
7. Participation—If a lower percentage of eligible individuals elect coverage (for example, because of increasing participant contribution rates or competing plans such as HMOs), per capita health care claims costs may increase due to adverse selection.

Interaction Between Trend and Plan Provisions

Plan provisions and health care trend rates in combination impact the projected net per capita health care rates. Examples of the interaction of plan provisions and health care trend rates include the following:

1. Covered charges can be affected by limits on allowable provider fees and the plan's Medicare integration approach. Benefit plan provisions may help in identifying these limits, as well as what services are covered.
2. Health plan deductibles may or may not be set at a fixed-dollar amount. Health care trend will, over time, erode the relative value of a fixed-dollar deductible.
3. Coinsurance payments may be expressed as a percentage or fixed-dollar amount. Again, over time, trend will erode the relative value of a fixed-dollar coinsurance.

4. The Medicare program provides coverage for most U.S. retirees over age 65; however, the retiree group benefits plan may cover a different mix of services than Medicare. Trend rates may differ between Medicare-covered services and the retiree group benefit.
5. Other payments or offsets may exist, such as subrogation recoveries or plans other than Medicare. These payments or offsets may change in the future.
6. Lifetime and other maximum dollar limits also affect claims costs, and the effect can change over time.

Participant Contributions

Participant contributions are very important to the financial understanding of how retiree health plans work. Plan sponsors must advise participants and plan administrators as to the specific dollar amounts of currently required contributions. Plan sponsors usually have administrative policies for determining future contributions (formulas, subsidy limits, or overall contribution philosophy). Based on the required contributions, an individual will decide whether to participate, which may result in adverse selection.

Formulas, subsidy limits, and the contribution philosophy of the plan sponsor are subject to different interpretations about what data and techniques are to be used in deriving the current monthly contribution used in the measurements of retiree group benefit obligations. Here are two examples:

1. The plan sponsor's stated policy is that retirees who are not yet Medicare eligible will contribute 50% of the cost of their health care benefits. However, the plan sponsor determines a retiree contribution of \$100 per month (\$1,200 per year) based on average annual per capita health care claims of \$2,400 for active employees and pre-Medicare retirees combined. When the actuary evaluates the claims experience of pre-Medicare retirees separately from that of the active employees, the actuary determines that the average annual claim per retiree is \$4,000. So the plan sponsor subsidy is really \$2,800 or 70%, not the stated 50%.
2. A "defined dollar benefit" plan sponsor will pay \$2,000 annually toward retiree health care coverage for retirees who are not Medicare eligible. The plan sponsor determines an annual retiree contribution of \$500 based on average per capita claims of \$2,500 for active employees and pre-Medicare retirees combined. However, when the actuary evaluates the claims experience for pre-Medicare retirees, the average annual claims per retiree is determined to be \$4,500. The actual plan sponsor subsidy is \$4,000 (\$4,500 average claims per retiree less \$500 retiree contribution)—double the "defined dollar benefit" of \$2,000.

Once the contribution is determined for the current year, future increases can then be incorporated into the model. The contribution increase assumption is often a function of the

claims trend assumption. If the model assumes contributions increase at the same trend as assumed for age-specific claims rates, the projected contributions will not have a constant relationship to projected claims, due to the aging of the population.

Some plans impose conditions such that contributions will begin a certain pattern at some triggering point in the future. This can happen in a number of ways, but the most common may be the use of “cost caps,” where the sponsor has limited its subsidy to an annual amount per capita that has not yet been reached. Participant contributions may or may not be required currently, but after the cap is reached participant contributions are to absorb all the additional costs. After the caps have been reached, this design is akin to the defined dollar approach, but before that point, the plan sponsor’s costs will increase. The assumptions about future health care trend rates (interacting with the cost caps) will increase projected costs to a time when the caps are reached, and thereafter participant contributions will increase.

Finally, participation rates may be lower when contributions are required. Assumptions about lower participation rates can vary by small amounts and yet result in large differences in present values. Furthermore, lower participation may result in adverse selection on the part of participants. The combination of lower participation and adverse selection assumptions may or may not be significant in a measurement model.

Assets

Retiree group benefits are generally not subject to minimum funding requirements; however, a number of plan sponsors have, for various reasons, accumulated assets dedicated to fund the retiree group benefits. These assets provide some measure of financial security for the participants and reduce the plan sponsor's unfunded obligation, thereby reducing the future funding needs.

1. Dedicated Assets—Certain assets set aside to provide for the plan sponsor’s modeled benefit may partially or completely offset the retiree group benefit obligation. Examples include the following:
 - a. whole life insurance policies held by the plan sponsor to cover some of the plan sponsor’s retiree death benefits;
 - b. welfare benefit trusts (for example, VEBAs in the U.S.); and
 - c. section 401(h) accounts in a qualified pension plan in the U.S.
2. Non-Dedicated Assets—Several plan sponsors have purchased life insurance policies (so called corporate-owned life insurance or COLI policies) with the intent that the proceeds of the policies will “fund” emerging retiree welfare benefits. Even though these policies may have been “earmarked” for funding retiree group benefits, they remain corporate assets and are not taken into account in measuring the plan sponsor’s unfunded obligations.

Compliance with Other Requirements

The following provide guidance for the measurement of retiree group benefit obligations performed for specific purposes. The list represents rulemaking bodies and specific references as of the publication date of this standard, and is not intended to be exhaustive.

1. Financial Accounting Standards Board (FASB)—Accounting for financial statements for companies that comply with U.S. generally accepted accounting principles (GAAP). Current standards applicable to retiree group benefits include SFAS Nos. 88, 106, 132, and 135.
2. American Institute of Certified Public Accountants (AICPA)—The AICPA provides audit and accounting guidelines for its members. Current guidelines include the AICPA Audit and Accounting Guide, *Audits of Employee Benefit Plans*, and Statements of Position (SOP) 01-2, *Accounting and Reporting by Health and Welfare Plans*, and 94-6, *Disclosure of Certain Significant Risks and Uncertainties*.
3. U.S. Internal Revenue Code (IRC)—Various sections of the IRC govern the funding of retiree group benefits, including sections 401(h), 404, 419, 419A, 420, and 512, and the regulations and other rulings that interpret the code.
4. Cost Accounting Standards Board (CASB)—The CASB is responsible for developing accounting standards for U.S. government contracting. Current applicable standards are CAS 412, 413, 416, and the proposed CAS 419.
5. Federal Acquisition Regulations (FAR)—The FAR are regulations governing the acceptability of costs for U.S. government contracts. FAR 31.205-6 provides guidance for retiree group benefit costs.
6. Government Accounting Standards Board (GASB)—The GASB promulgates accounting standards for state and municipal governments. GASB 26 provides rules for disclosure of retiree group benefit obligations.
7. National Association of Insurance Commissioners (NAIC)—The NAIC provides model regulations for insurance company accounting that individual states may use directly or modify for their particular circumstances. The NAIC has issued Statement of Statutory Accounting Principles No. 14 that addresses rules for insurance companies with retiree group benefits.
8. International Accounting Standards Committee (IASC)—The IASC issues international accounting standards that each country's accounting profession may use as its GAAP. IAS 19 provides guidelines for retiree group benefit plans.