RWW

The Pension Deception

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Pension Plans

Many people dream of their retirement days. We hope that when that day comes, we can crack open that nice nest egg and have sufficient income stream to live comfortably. Perhaps take several vacation cruises here and there. To realize this dream, every worker plans his or her personal finances accordingly. Sure it sounds simple enough; however, the behind-the-scenes involved with retirement plans resemble something more like rocket science, especially for the plan sponsors and the professionals that serve such plans.

For decades, firms have used pension plans for both attracting workers and securing tax advantages. Employers (plan sponsors) could choose from a variety of qualified and nonqualified retirement plans tailored to their needs. A qualified plan sponsor must meet standards set by the Internal Revenue Code (IRC) and the Employee Retirement Income Security Act of 1974 (ERISA). Companies prefer such plans because they allow some maneuverability around financial reporting and tax issues. These qualified plans include the commonly used defined benefit (DB) plans, defined contribution (DC) plans, and hybrid plans. A nonqualified plan does not meet IRC or ERISA standards. Sponsors that opt for these plans do not receive tax benefits; on the other hand, nonqualified plan sponsors obtain more flexibility.

Lately, many companies have opted to select or switch to defined contribution plans to take advantage of tax treatments and limited investment performance risk. Under defined contribution plans, employees bear all of the investment risk and reward. These plans include profit sharing, 401(k), employee stock ownership plan (ESOP), among others. Accounting for DC plans is less of a hassle to the sponsor who benefits from a more straightforward booking method than that for DB plans. Companies typically recognize DC costs and expenses as contributions are made. The only notable complexity in DC accounting may arise when valuing a private company for an ESOP.

Under a defined benefit plan, the employer makes contributions to a fund of plan assets. Ideally, the sponsor will use these assets to pay retirees an agreed level (usually a function of the employees' salary levels). Firms using DB plans bear all the risks and rewards from the funded portfolio. Depending on the plan agreement, the sponsor will use these funds to pay the retiree some type of lifetime annuity or a lump sum payment. Retirees above the age of 59 ½ avoid withdrawal penalties, while early (before 59 ½) withdrawals result in penalty payments. This report will discuss some of the fundamentals involved with accounting for defined benefit plans, and why the defined benefit system is currently in jeopardy.

Pension Obligation Components

The Financial Accounting Standards Board (FASB or the Board) was created to establish and improve standards of financial accounting and reporting. FASB accomplishes these tasks by setting Statements of Financial Accounting Standards (SFAS). These rules mark the guidelines for various aspects of financial regulation. One rule that involves pension plans includes SFAS 87. Among numerous rules the standard had set, SFAS 87 requires companies to apply projected salaries when calculating pension costs. Given this, a closer look at the components of the projected benefit obligation (PBO) will shed light to the complexities surrounding pension accounting.

When we use the PBO figure, we consider the firm as a going-concern. These pension obligations are highly sensitive to the assumption values used to estimate future benefits. As with many cash flow models, the PBO requires a projected level and assumed discount rate to calculate the present value of the service cost. Theoretically, this discount rate (cost of capital) should be the rate at which the pension obligation can currently be settled. This means that if the company wanted to terminate the plan, the value of the pension obligation could be invested in an annuity equal to the discount rate. By doing so, the plan sponsor would meet future benefit obligations, given that all other assumptions hold.

One should keep in mind that higher assumed discount rates typically lead to lower PBO and accumulated benefit obligation (ABO) values, and lower rates tend to translate into higher PBO and ABO. The discount rate has opposite effects on service costs and interest cost, however, changes in discount rates will typically have a bigger impact on service cost. This would truly depend on the benefit participants' current ages, expected salary levels, retirement date expectations, and life expectancies. Unfortunately, most of this information is omitted from annual reports. To understand the concept of service costs, one should have a grasp on how present value (PV) computations work.

Another vital assumption falls on the rate of compensation growth. This rate only affects PBO since ABO is based on current salary levels. The calculated PBO value bases its obligation on projected salary levels. Using the PBO assumes that the employees will remain with the firm until retirement and receive a function of the projected salary level upon retirement. The firm's management typically makes these influencing assumptions each year-end, not on a more current basis. These figures, along with other actuarial assumptions, will at times vary from year-to-year and allow some malleability of the PBO balances.

Five factors affect the annual change in the PBO balance and include:

- *Service cost* – Present value of future employee benefits earned for the current period.
- *Interest cost* – Portion of the obligation increase due to accretion of the discount rate (discount rate multiplied by the beginning PBO balance).
- *Actuarial gains and losses* – Change in PBO due to change in actuarial assumptions (i.e. retirement dates, mortality, discount rate, etc.).
- *Prior service cost* – Change in PBO due to plan amendments (i.e. contract renegotiation).
- *Benefits paid* – Amount paid to retired employees.

Pension Plan Assets

Deriving the fair value of plan assets presents a more straightforward calculation than that of the benefit obligations. Factors that affect the annual change in the plan assets balance include:

- *Employer contributions*
- *Return on assets* – actual annual return earned from the plan portfolio (i.e. capital gains, dividends and interest).
- *Benefits paid*

What's Reported (What You See Isn't What You Really Get)

The funded status of the plan reveals the difference between the plan assets and obligations. When assets exceed obligations, the plan is overfunded; and when obligations exceed assets, the plan is underfunded. While this figure indicates the economic asset or liability of the plan, U.S. GAAP currently allows certain smoothing adjustments to the reported accounting asset or liability. The smoothing techniques will likely reverse in the near future, which is discussed later.

The funded status (based on PBO) stays off balance sheet until the status is adjusted for unrecognized actuarial gains and losses, unrecognized prior service cost, and unrecognized transition asset or liability. These unrecognized assets or liabilities total the net amount that has not yet been amortized. The PBO funded status adjusted for net unrecognized (unamortized) assets or liabilities create the net accumulated prepaid or accrued pension cost, which is the value that gets booked.

SFAS 87 currently allows smoothing mechanisms (i.e. amortizing of the unrecognized gains losses, etc.) so that firms could avoid volatility in reporting pension costs. When this amount exceeds 10% of the larger of the PBO and fair value of assets, the deferrals are then amortized. This is known as the corridor approach.

These smoothed components include:

- *Expected return on assets* – Estimated long-term rate of return on plan assets
- *Amortization of prior service cost* – This PBO cost is amortized and not fully expensed when incurred.
- *Amortization of gains and losses* – Unrecognized gains and losses are the net cumulative differences between actual and expected ROA and between actuarial gains and losses.
- *Amortization of transition asset or liability* – This figure is impacted by the difference between plan accounting treatments prior to SFAS 87 and after SFAS 87. Most firms have now fully amortized much of this portion.

The reported annual pension expense (reported on the financial statement) includes service cost and interest cost (recurring costs), which is then decreased by expected return on plan assets, increased by amortization of prior service cost, and increased or decreased by the amortization of any unrecognized gain or loss and that of transition asset or liability. One should take note that when this expense exceeds employer contribution, an accrued pension cost (liability) is created.

On the other hand, if contributions outweigh the pension expense, a prepaid pension cost (asset) exists for the current period. The accumulated net prepaid/accrued pension cost balance is recognized on the balance sheet and will also equal the difference between the PBO funded status and the net unrecognized costs. One should review the credit and debit bookkeeping of these flows to better visualize the process.

Plan sponsors must love the smoothing part of SFAS 87. Look at it this way - say a company unfavorably renegotiated benefits contracts with the union in their recent meeting. Current service cost will go up which would cause higher pension costs, but the loss on prior service cost is not fully expensed as incurred. Instead, FASB allows companies to delay such costs through amortization (corridor method). These smoothing aspects allow the company to distort true values of the company and have been an ongoing debated topic. If FASB decides to eliminate the smoothing technique, defined benefit plan sponsors could experience devastating hits to their earnings.

To partly offset the smoothing effects, FASB requires the recognition of minimum pension liabilities (MPL) or minimum liability, when applicable. MPL exists when the ABO exceeds plan assets, indicating the true minimum liability to employees based on current salary levels. The Board however does not allow recording of additional assets if plan assets exceed ABO. On the other hand, if ABO exceeds plan assets and if net accrued pension costs already exist on the book as a liability, an additional pension liability (minimum liability allowance) equal to the difference between the MPL and the accrued pension cost is recorded. Simply put, the company must record a liability at least equal to the underfunded ABO amount. This additional liability is offset by an intangible asset (deferred pension cost). Furthermore, when the additional liability surpasses the total unrecognized prior service cost and transition obligations, the excess affects stockholders' equity reported as a contra-equity account (net of taxes and adjusting deferred taxes).

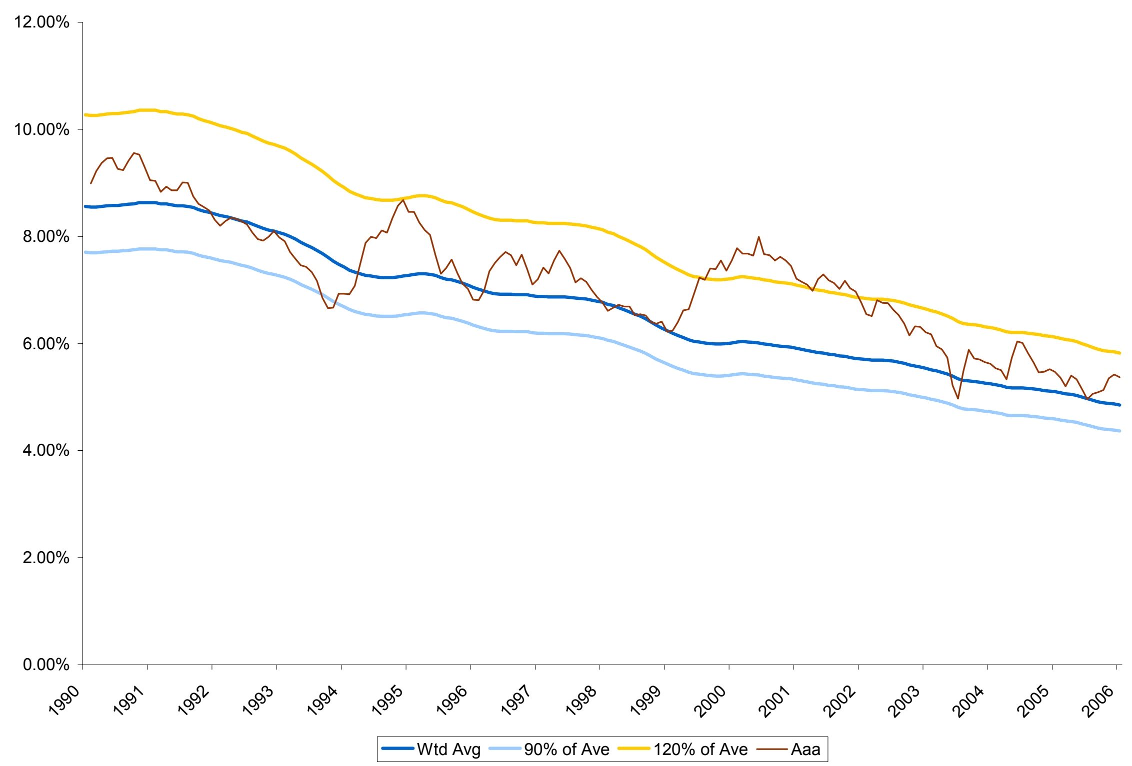
The U.S. GAAP mandates firms use the same actuarial method for calculating benefit obligations and pension costs. However, assumptions significantly affect these numbers, and smoothing components allow companies to somewhat control reported earnings. Underfunded status due to high PBO may tempt a firm's management to adjust some of these key assumptions to paint a better picture of its plan status and hide its true economic pension costs and liabilities.

Nevertheless, one should keep in mind that these key assumptions should stay consistent to their reasonable objective. The discount rate should approximate the rate needed to meet future benefit obligations. The rate of compensation growth should roughly follow wage inflation. The expected return on assets should reflect realistic long-term outlook in investments. With that said, any assumption that diverges widely from the norm will bring question to a plan's true funded status. Regarding the other assumptions not disclosed in the annual reports, their transparencies would definitely help determine the validity of pension numbers. Some additional clarity would be nice, although enough information is there to make reasonable diagnoses.

Key Assumptions

The earlier rules allowed companies to have some flexibility dealing with discount rates. The previously accepted rate had ranged from 90 to 120 percent of the four-year weighted average of the yield on 30 year Treasuries. Some of the more recent rules have applied a variation of calculating discount rates using high-quality corporate bond rates. However, these ranges can give some freedom to manipulate obligations, and the use of past interest rates does not reflect the true current obligation. Some have suggested using current market liability (or mark-to-market) values to accurately measure pension obligations and funded status.

Discount Rate Range



Source: Internal Revenue Service (Weighted 4 year Average of 30 year Treasury), Federal Reserve (Aaa Corporate Bond Rates)

The above chart illustrates the four year weighted average of the 30-year Treasury (including 90 percent and 120 percent thereof) and the market rates of Aaa rated corporate bonds. The chart shows that the 90 – 120 percent range of the 30-year Treasury fairly captures the volatile movements of the high quality corporate bond rates. However, this range has allowed companies some to have room to control reported liabilities. We would also like to point out that the interest rate trend has followed a downward path over the past 15 years. This would have had upward pressures on pension obligations since the discount rates should have reflected this downward trend.

Mercer, a leading pension consulting firm, has indicated that a 30 basis point move in the discount rate could affect a plan sponsor's liability by 3 to 6 percent.[1] We can infer that if a company used current market rates to determine discount rates, then we can expect wide swings in balance sheet accounts to occur. A true liabilities picture will be revealed using more current liabilities, but that comes at the cost of unpredictable earnings.

Another assumption that has allowed companies to avoid volatile financial statements due to pensions comes with the use of expected ROA instead of actual ROA. Critics to the use of expected ROA claim that a company could report higher income levels by having a relatively high expected ROA. A company could virtually report pension income despite having actual losses to plan assets.

On the other hand, proponents of using expected ROA argue that it reduces volatility in financial statements and that cyclical stock market movements will eventually balance the differences. For instance, during a bear market, the expected ROA may be higher (where the sponsor would report relatively higher earnings); however, during a bull market, the expected ROA will understate the asset returns (where the sponsor would recognize lower earnings). The theory makes sense, but that really depends on the integrity of the sponsor and their actuarial assumptions.

Changes to Occur

In its November 2005 meeting, FASB unanimously voted to revise SFAS 87 by eliminating all smoothing components by the year-end of 2006. The Board also sought to revise SFAS 106, which would affect the accounting for Postretirement Benefits Other Than Pensions (i.e. medical and life insurance plans). According Watson Wyatt Worldwide, the revision in SFAS 87 and 106 would decrease reported shareholders' equity of Fortune 1000 firms by 11 percent.[2] This translates to a combined decrease of $336 billion in shareholders' equity.

According to the Watson Wyatt (a leading employee benefits firm) report, the distribution is highly skewed, indicating that the proposal will affect some much more than the average. The hardest hit industries will include durable manufacturing, services, transportation, communication, and utilities. Least affected by the proposal change include finance, insurance and real estate.

The Watson Wyatt report also points out FASB's concern regarding the market's understanding of pension accounting. If the market already comprehends such accounting methods, many of the financials would have been adjusted and reflected in stock prices. Given that such FASB concerns are true and investors have overlooked the pension effects, then we can expect a hit to the stock market. If it's any reassurance to FASB, we (R.W. Wentworth) are fully aware of the importance in making necessary adjustments when analyzing companies.

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1 http://www.mercerhr.com/common/printerfriendlypage.jhtml;jsessionid=LFOWMYERFY0CMCTGOUGCIIQKMZ0QYI2C?indContentType=100&idContent=1196870&indBodyType=D&reference=

2 http://www.watsonwyatt.com/us/pubs/insider/showarticle.asp?ArticleID=15558

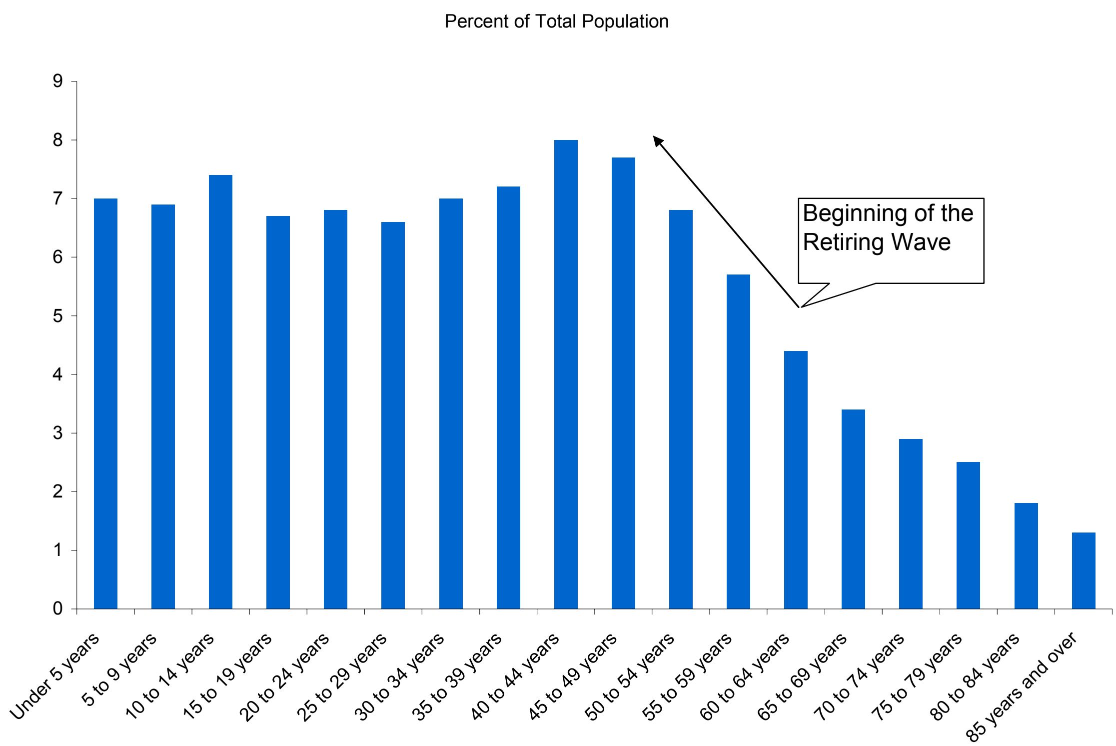
Retiring Wave

This report isn't a manual on adjusting reported financial figures to reflect true economic figures. Instead, we're pointing out the potential pension crisis at hand. The pension accounting guidance allows companies to virtually hide their true pension obligations deep inside the annual reports and off their balance sheets and financial statements.

Several recent events have occurred that could indicate that companies foresee difficulties in meeting their promised obligations to their employees. Many companies have converted their defined benefits plans to defined contributions plans. This conversion shifts the obligation risks from the employer to the employee. In other cases, major companies are currently undergoing restructuring efforts, involving large layoffs and benefits settlement plans.

One should note that such restructuring comes as the forefront of the retiring "baby-boomer" wave nears the shoreline.

Age Distribution

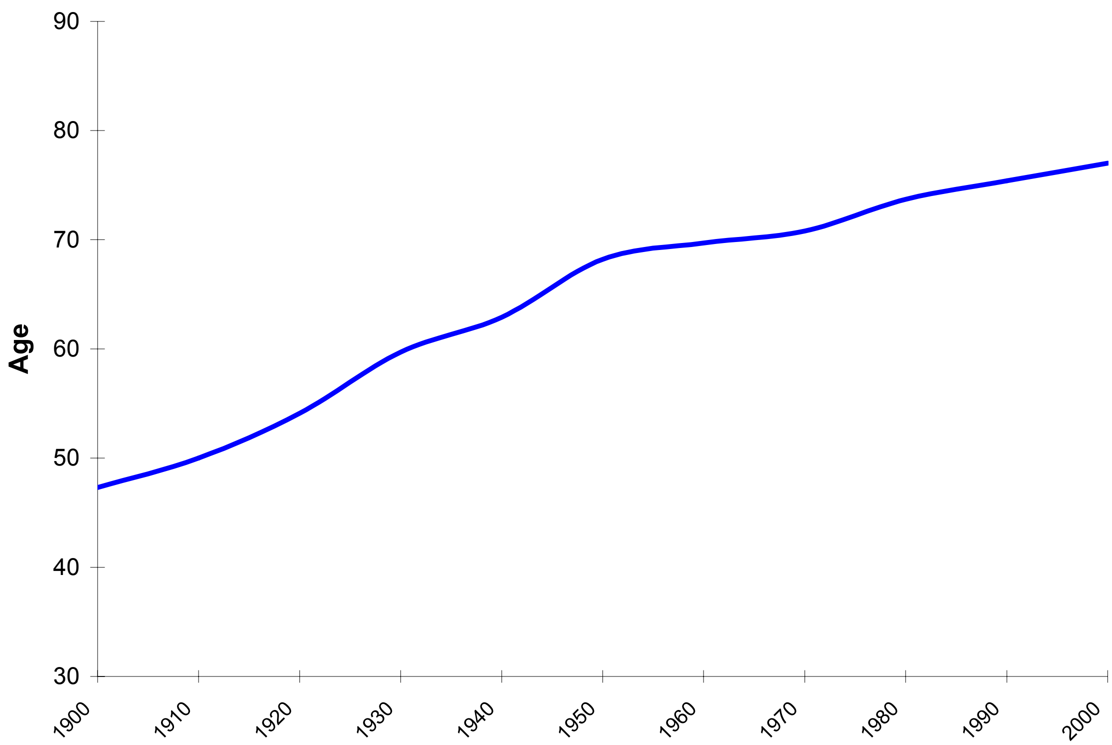


Source: U.S. Census Bureau

Life Expectancy

No one really likes to think about death, but mortality assumptions remain a factor that should not be overlooked. Since defined benefit plans agree to make payments throughout the recipient's life, obligations should correctly factor mortality expectations. Breakthrough in medicine and healthcare has increased people's lifespan. People now live much longer than they did decades ago, as shown in the below table.

Overall Life Expectancy



Source: National Vital Statistics Report

According to the National Vital Statistics Report (2004), overall life expectancy in 2002 reached 77.3 years. The report also estimates that 52 percent will at least reach age 80. As people live longer, defined benefits plan sponsors must make additional payments. Such trends in the upcoming retirees and life expectancies would lead to mounting pension obligations into the future.

Pensions in Trouble

The pension plan picture looks peachy when we experience rising stock markets (high plan assets from strong actual returns) and witness relatively high interest rates (lower PBO due to lower present value from higher discount rates). This was the environment seen heading into 2000. A gloomy pension situation occurred with turn of the new millennium. Stock markets (returns) fell and interest rates dropped, which increased pension obligation values.

The risk associated with pension assets can be estimated by their asset allocation. Average equity allocation amounted to over 64 percent, suggesting that movements in stock markets have a great influence over pension asset returns.[3] The effects from a dismal stock market and falling interest rates quickly shifted many pension plans from experiencing overfunded status to that of underfunded. Defined benefit plans of the Fortune 1000 companies, in aggregate, went from approximately $200 billion surplus to a $137 deficit in 2005.[4] That's just looking at the Fortune 1000 situation; the overall picture shows a bigger problem, which is discussed later.

This reversal of the funded status comes despite the tremendously increasing contributions to these plan assets. Employer contributions of Fortune 1000 firms grew from $16 billion in 2000 to $72 billion in 2003.[5] Tax deductibility and minimum funded status restrictions may have contributed to these differences in employer contributions.[6]

If FASB removes the smoothing components and implements more stringent reporting requirements, we can expect volatile earnings and balance sheets for those industries with heavy defined benefit obligations. In terms of value at risk, these potential pension tribulations are not expected to have material impact in the broader financial markets, however, over 10 percent of the Fortune 1000 companies could experience adverse effects to their core business operations when facing negative shocks in equities.

Some anticipate that the removal of smoothing will trigger a reallocation from equities into fixed income to reduce potential volatility to earnings. Some expect between $250 billion to $600 billion outflow from the stock market.[7] The Russell 1000 has a market capitalization average of $13 billion, suggesting that the expected capital outflow represents between 1.5 and 4.6 percent of the Russell 1000. Such an outflow of capital from stocks into fixed income instruments will also have other influences. The inflow into fixed income will increase demand and prices of such instruments, thereby driving down the rates. This may further support the theory behind the flat or inverted yield curve.

Last Resort

Ideally, a company would exit its pension obligations through a standard termination. This may happen only if the plan has enough assets to pay all benefits owed to participants. The plan

[3] http://www.watsonwyatt.com/us/pubs/insider/showarticle.asp?ArticleID=14863
[4] http://www.watsonwyatt.com/us/pubs/insider/showarticle.asp?ArticleID=14863
[5] http://www.cfo.com/printable/article.cfm/3664980?f=options
[6] http://www.taxpolicycenter.org/publications/template.cfm?PubID=8532, http://www.irs.gov/formspubs/article/0,,id=117542,00.html, http://www.americanbenefitscouncil.org/documents/11-05w_m_mark_sum.pdf
[7] http://www.cfo.com/printable/article.cfm/3664980?f=options

administrator would either purchase an annuity from an insurance company or pay a lump sum amount.

If an insured plan lacks the fully needed assets, then termination may only occur if the company and its subsidiaries meet certain distress tests. Plan sponsors must prove that they cannot financially support the plan. Under such circumstances, the Pension Benefit Guaranty Corporation (PBGC or the Corporation) takes over the plan as trustee. Under certain conditions, PBGC may force an involuntary termination, necessarily forcing the company into bankruptcy. In bankruptcy cases, the PBGC plays a significant role as one of the largest creditor.

ERISA had established the PBGC as a federal government corporation to insure that benefit payments to retirees are properly made. Tax revenues do not fund nor legally back this government corporation; instead, it generates capital from premiums charged to insured plans, assets of the plans it takes over, recoveries from bankruptcy rulings, and returns from invested assets. Although the U.S. government does not technically back the PBGC, political matters may lead to a government bailout in case of PBGC's collapse.

As previously mentioned, many corporations have been moving away from defined benefit plans. This in turn would reduce the need for insured plans for active participants. Even though the number of PBGC insured single-employer defined benefit pension plans has shrunk from 112,000 in 1985 to 29,000 in 2005; the number of insured participants actually grew over that time period.[8] A growing number of large plans under PBGC have contributed to the overall effect. It is necessary to pay close attention to the participant numbers because most of the insured participants encompass those of who have or soon-to-be retired. Most of the younger workforce have been converting to defined contribution plans and only represent an insignificant portion of participants covered by PBGC.

PBGC's short-term obligations (benefit payments) continue to grow while the Corporation's deficits continue to hit record levels. Total participants receiving monthly benefits from PBGC have grown from 226,700 in FY 2000 to 682,820 in FY 2005.[9] We expect this number to continue rising as the accelerating number of people reach retirement age. However, PBGC claims that it has sufficient liquidity to meet obligations for a number of years. Despite this assurance, this government corporation does not enjoy that freedom of time to allow the assets to grow to meet future obligations.

PBGC also estimates that total underfunded status for insured pension plans had surpassed $450 billion, which adds to the dismal outlook in the defined benefits system. This pension deficit equals 3.6 percent of 2005 GDP. Another sign of distress is seen in the growing number of frozen plans, which restricts new entrants into the plan. This may indicate that companies are looking to eventually terminate the plan, if they can afford it.

The PBGC saw its operation recognize positive funded status coming into 2000, but witnessed a quickly reversing trend in the past four years. The following chart points to the deteriorating trend in PBGC's financial position.

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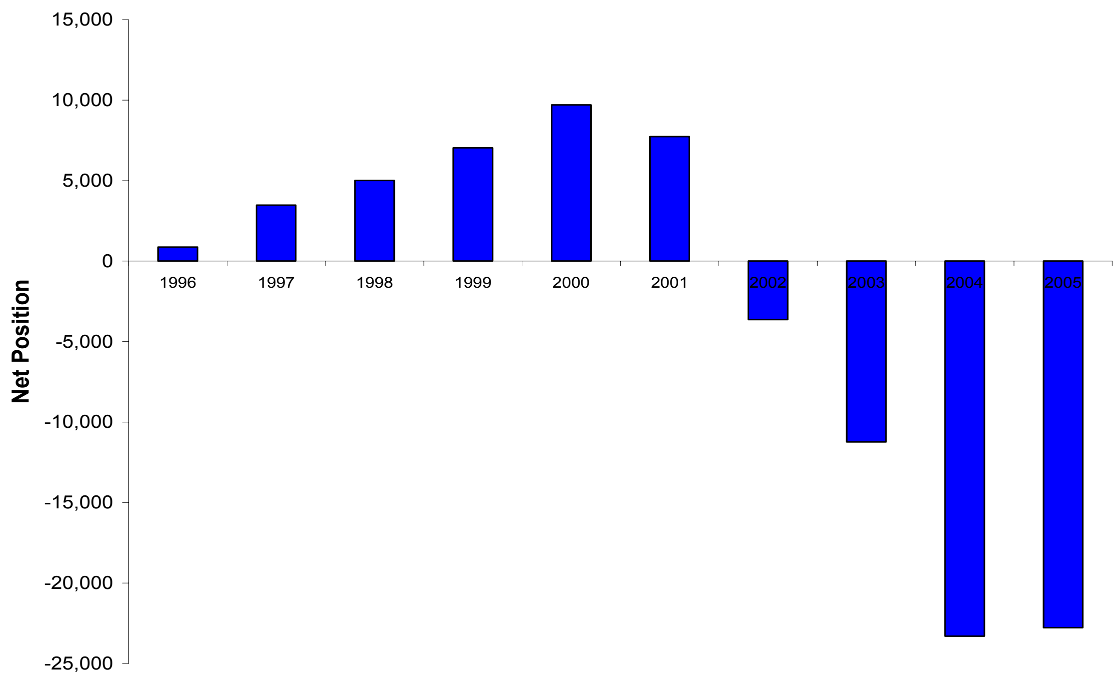
[8] Tax Management Compensation Planning Journal, Vol. 34, No. 1, 01/06/2006
[9] PBGC Performance and Accountability Report - 2005

PBGC's Financial Net Position (Single-Employer Program)



Source: PBGC Performance and Accountability Report – 2005

The growing obligations had overwhelmingly convinced Congress to pass the Pension Security and Transparency Bill of 2005 on November 16th. The bill allowed PBGC to increase its flat-rate premium from $19 per participant to $30 per participant. As of FY 2005, PBGC covered 34.2 million people in the single employer program, implying the $11 increase in the additional premium would add $376 million or reach slightly over $1 billion in total flat premium revenue. This would hardly cover benefit payments, which rose to $3.7 billion in 2005. Certainly, the Corporation possesses other sources such as its variable-rate premium income ($787 million in 2005) to fund liquidation needs. However, as PBGC's financial position indicates, the government corporation's balance of assets and liability is extremely out of order.

The PBGC applies a variable-rate premium that penalizes underfunded plans. This serves two purposes: (1) generate additional revenue to compensate for insuring riskier plans and (2) give an incentive for insured plan sponsors to maintain a fully funded status. However, this penalty fee may also incline the sponsor to make aggressive assumptions for their pension accounting. Nevertheless, the PBGC conducts audits on premium filings to reduce the likelihood of overly aggressive assumptions.

Conclusion

As we can see, the defined benefit system is far from being perfect. The system exhibits a very cyclical nature – plans appears healthy in times of strong stock markets and high interest rates, and tribulations materialize with poor stock market returns and low interest rates. An array of forces indicates that the mounting problems will continue to push the system into jeopardy. Stronger returns in markets and rising rates may alleviate some of the pressures, however, benefit payment obligations will continue to grow at an increasing rate as a growing number of plan participants reach retirement age.

Regulators are currently taking some measures to increase the transparency of pension reporting. Such measures like removing the smoothing technique will not fix the big problem at hand. Initially, this will just make the financial community more aware of the true pension liability that companies have virtually hidden in the past. The true picture will likely be very ugly. At best, this will force the current defined benefit sponsors to take conservative steps.

The new rules may persuade companies to make better assumptions on expected ROA and true liabilities. Furthermore, companies may avoid abusing pensions during renegotiations with unions. Without the amortization of losses of prior service costs, companies will likely have to expense such costs instead of amortizing them over several years.

Additionally, companies cannot simply rely on the PBGC without causing some potentially devastating spillover effects. The Corporation has absorbed a growing number of pension obligations. Such growing obligations warrant some serious concerns. We have pointed out that PBGC's deteriorating financial situation has led the Corporation to question its ability to pay future obligations. The PBGC will likely take aggressive measures before throwing in the towel. Such steps will include increasing premiums and closely monitoring the plans it insures. If such obligations continue to grow towards unmanageable levels currently seen, then a government bailout appears certain at the cost to taxpayers.

Many have compared this underfunded pension crisis to that of the S&Ls of the 1980's. This was one of the earlier crises Mr. Greenspan faced after taking over as Chairman of the Federal Reserve. Perhaps one of Mr. Bernanke's crises has been building up in the defined benefit system.

For questions and/or R.W. Wentworth & Co., Inc.'s (RWW) forecasts and advisory services, contact the following:

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