# FYI: An Update on Emerging Issues in Banking

## Could a Bull Market Be a Panacea for Defined Benefit Pension Plans?

January 13, 2004

### Overview

Declining stock valuations, a sustained period of low interest rates, structural changes in the workplace, and a regulatory and accounting structure in need of reform have coalesced into a "perfect storm" for U.S. corporate defined benefit pension plans. Even though the stock market recently has rebounded, the Pension Benefit Guaranty Corporation (PBGC) estimates that U.S. pensions in defined benefit plans were underfunded by more than $350 billion as of September 15, 2003.

The PBGC was created by the Employee Retirement Income Security Act of 1974 (ERISA) to protect retirement benefits of American workers in private defined benefit pension plans. The PBGC insures more than 32,000 private defined benefit pension plans valued at an estimated $1.5 trillion, but the cushion to protect these plans has eroded. The value of the agency's single employer insurance program declined dramatically from a $9.7 billion surplus in 2000 to an estimated $8.8 billion deficit in August 2003 (see Chart 1 below).

The erosion in PBGC's cushion was caused by several factors, including losses sustained by the assumption of several large plans, the negative effects of a depressed stock market on defined benefit pension plan asset valuations, and pension liabilities that have increased because of low interest rates. According to the PBGC, 12 years of premiums, at current premium levels, would be required to cover claims from 2002 alone. Other long-term problems adversely affecting the PBGC include a declining base of participants in defined benefit plans and a resulting concentration in traditional manufacturing firms that face stiff global competition. Due to the severity of the problem, the General Accounting Office placed PBGC's single insurer program in the "high risk" category in July 2003, adding it to the list of government programs in need of urgent attention. [1]

A short-term solution to some problems with pension funding rules has been passed by the U.S. House of Representatives and will be considered by the U.S. Senate early in 2004. This short-term solution involves replacing the thirty-year Treasury rate currently used to discount pension funding obligations with a blend of corporate bond rates for two years. Since corporate bond rates are higher than Treasuries, this proposal will lessen pension liability in the short term. There is widespread recognition that reform is needed to address the long-term fundamental challenges facing defined benefit pension plans and the PBGC. However, a consensus for change has not developed among key stakeholders, including Congress, the accounting profession, business leaders, and labor.

This report describes the serious challenges and outlook facing the PBGC and corporate defined benefit pension plans, and examines the effects on financial institutions insured by the FDIC. Defined benefit pension problems can affect the competitiveness and cash flow of sponsoring companies, some of which borrow from FDIC-insured institutions.

high-risk plans are classified as reasonably possible." The definition of high-risk plan is based on several criteria, including Chapter 11 bankruptcy of the sponsor.

[19] McKinnon, John D. "Pension Agency Warns Against Corporate Relief," *The Wall Street Journal Online*, November 12, 2003.

[20] Dale, Arden. "FASB Keeps Existing Format For Corporate Pension Data," *The Wall Street Journal Online*, November 11, 2003.

[21] Hewitt Associates, "Regulatory Uncertainty Eroding Employer Support for Pension Plans, Hewitt Study Shows," January 6, 2004, press release.

[22] Brandon, George. "Companies to Get Relief on Pension Contributions," *Kiplingerforecasts.com*, December 31, 2003.

[23] SNC is a program operated jointly by federal bank and thrift supervisors that seeks to provide an efficient means of reviewing large, syndicated credits. SNC credits reviewed included a mix of companies, some of which sponsor defined benefit pension plans.

[24] Flanagan, Terrence. "General Motors Debt Rating Lowered; Ford May be Cut," *Bloomberg*, October 17, 2002.

[25] Shirouzu, Norihiko and Joseph B. White. "S&P Downshift Ford's Debt Rating - Move Reflects Skepticism About Big 3," *The Wall Street Journal*, November 13, 2003.

[26] Manor, Robert and Christopher Steiner. "Steel Mill Retirees Feel Pinch From Caps," *Chicago Tribune*, November 5, 2003.

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**About *FYI***
*FYI* is an electronic bulletin summarizing current information about the trends that are driving change in the banking industry, plus links to the wide array of other FDIC publications and data tools.

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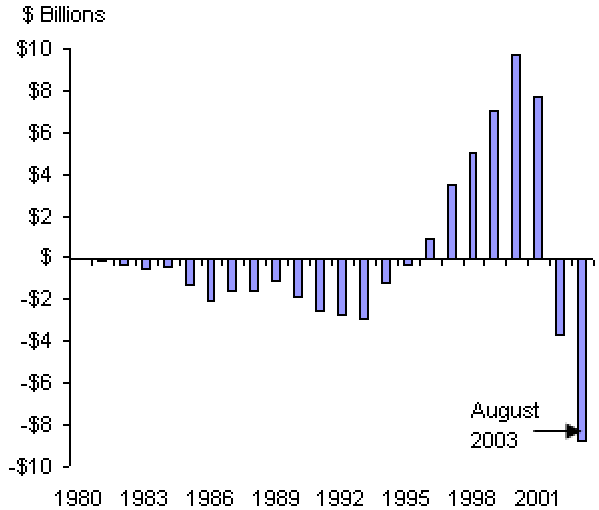
Chart 1

**The Value of the PBGC Single Employer Program Has Declined to Historic Lows (Net Position Assets Less Liabilities)**




Source: Pension Benefit Guaranty Corporation, August 2003 estimate is from testimony provided September 15, 2003 to Congress.

## Role of the PBGC

The PBGC guarantees benefits in most private sector defined benefit pension plans, including cash balance plans. It does not guarantee defined contribution plans, federal or state pension plans or executive-only pension plans, pension plans of foreign workers, and small professional pension plans (fewer than 25 participants). The number of single-employer defined benefit plans insured by the PBGC has declined substantially, from 112,000 in 1985 to 30,600 in 2002.[2] Since the 1980s, many corporations have shifted away from defined benefit plans and into defined contribution plans, seeking to transfer the liability for retirement saving to workers and retirees.

| Types of Pension Plans | | |
|---|---|---|
| **Defined Benefit Plans** refer to a traditional pension plan in which a company offers certain payment during retirement based on some formula that usually includes years worked and salary. | **Defined Contribution Plans**, such as 401(k) plans, feature a contribution from the company and/or employee, and the payment at retirement will vary depending on how much money has accumulated over the course of a career. | **Cash Balance Plans** are a hybrid, although they are technically categorized as defined benefit plans. Typically, cash balance plans credit workers with a percentage of pay each year plus interest. At retirement, the benefit can be converted to a lump sum payment or an annuity. |

The PBGC operates two programs. The **Single Employer fund** is the largest with assets of $25.4 billion as of year-end 2002 and an estimated net position (assets less liabilities) of negative $8.8 billion as of August 31, 2003. The **MultiEmployer fund** holds assets of $944 million and has a net position of $158 million for the same period.[3] The PBGC protects plan assets valued at approximately $1.5 trillion.

Insurance premiums paid by the participating defined benefit pension plans, investment income from assets, and assets acquired from failed pension funds are the PBGC's primary funding sources. However, these income sources have not kept pace with the growth in pension claims or in pension underfunding. While the PBGC has a borrowing line with the U.S. Treasury, currently it is only $100 million.

### The Magnitude of the Problem

According to data provided in a Federal Reserve study, all U.S. pension plans lost an estimated $1 trillion during the recent downturn in the stock market.[4] Even so, pensions are an important part of the household asset mix. To put the importance of pension assets in context, Gary Shilling, President of A. Gary Shilling & Company, reports that all U.S. pension assets represented well over 100 percent of disposable income in 2002.[5]

As a result of defined benefit pension fund asset erosion, several firms have terminated their plans, and many others have become significantly underfunded. The Federal Reserve study found that 353 of the S&P 500 corporations had defined benefit pensions at year-end 2002; ninety-one percent of these plans were underfunded by an aggregate $222 billion. Moreover, defined benefit plans sponsored by several large corporations – for example, Delta Airlines, Goodyear Tire, General Motors (GM), and McDermit International – at one time reported funding gaps in excess of their 2002 market capitalization.

The PBGC sustained the largest one-year financial loss in its 28-year history in 2002, primarily due to record losses from completed and probable plan terminations. According to the agency's 2002 annual report, financially weak companies sponsored plans with $35 billion in unfunded vested benefits as of year-end 2002. About half this $35 billion represented underfunding in the troubled airline and steel industries. By the end of fiscal year 2003, the amount of defined benefit plan underfunding in financially troubled companies could more than double, possibly exceeding $80 billion.[6]

### Pension Plan Obligations Can Hurt Corporate Cash Flow and Competitiveness

The U.S. automobile industry shows the effects of higher pension costs on the bottom line. The results of a Prudential Financial study state that pension and retiree benefits represent $631 of the cost of every Chrysler vehicle, $734 of the cost of every Ford vehicle, and $1,360 of the cost of every GM car or truck.[7] In contrast, an article in the ***Detroit Free Press*** reported that pension and retiree benefit costs per vehicle at the U.S. plants of Honda and Toyota are estimated to be $107 and $180, respectively.[8]

An article in ***Bloomberg Markets*** points to a report by an automotive industry analyst with UBS Securities indicating margins for GM and Ford have fallen from 8 percent during the 1950s to 3 percent in 2002 and are likely to decline further as foreign companies expand product offerings.[9] In such a low margin business, retiree costs significantly impact a company's cash flow and competitiveness. Indeed, this article notes that GM recently has used about $13 billion of a $17.6 billion debt offering – the largest ever made by a U.S. company – to help close its pension gap.[10] On average, GM will pay a 7.54 percent yield on the debt, and hopes to earn 9 percent on the proceeds contributed to its pension fund.[11] While cash flow requirements have been eased for now, if this long term expectation regarding returns proves problematic over time, GM will need to find other sources to pay their obligation.

### Concerns on Both Sides of the Balance Sheet Challenge Pension Plans

Pension asset allocations are heavily weighted to equities. According to the PBGC, the typical U.S. defined benefit plan holds 63 percent of assets in equities, 30 percent in fixed income, and 7 percent in other assets. In comparison, the PBGC points out that insurance companies that act as trustees for pension type annuities typically hold 4 percent in equities, 87 percent in fixed income, and 9 percent in other assets, clearly a more conservative mix.

The pension investment mix contributes to the volatility of defined benefit pension fund balances. Heavy equity positions were favorable for sponsoring companies during the unprecedented stock market gains of the 1990s. In fact, PBGC reports that plan sponsors made very little in the way of cash contributions between 1995 and 1999, relying instead on investment returns to fund pension contributions. However, when the stock market began its slide in 2000, asset values dropped markedly. Of particular concern were declines in the value of defined benefit pension plan assets in funds sponsored by companies in troubled industries, where earnings were not sufficient to make up the shortfall.

Some have argued that the stock market decline was an anomaly, and that the stock market's solid performance in 2003 and thus far in 2004 will buoy asset values and income. Indeed, a recent ***Wall Street Journal*** article emphasizes that because of stock market performance and an intersection of accounting and tax rules, companies currently have an incentive to put money in their defined benefit pension plans.[12] However, while there has been a "bounce" in asset values and income from an improving stock market, again, it may be unrealistic to expect that the stock market will experience the extraordinary level of returns of the 1990s over the long term.[13]

There appears to be little in the way of short-term improvements to problems on the liability side of pension plan balance sheets. The sustained period of low interest rates has increased the present value of plan benefit obligations because more money has to be invested at the lower rates to pay future obligations. Moreover, structural changes in the workplace present unique challenges to pension plans and the PBGC. For instance, longer life expectancies have lengthened retirement, requiring greater payouts that will heighten plan benefit obligations.[14] Also, traditional manufacturing industries face higher pension and health care costs due to an increasing number of older and retired workers. In fact, retirees already outnumber active workers in some old-line industries, such as steel.

In general, there has been a shift in U.S. industry away from heavy manufacturing to service and knowledge-based companies. These "new economy" companies and their workers tend to prefer the flexibility and lower variable costs associated with other retirement planning tools, such as defined contribution plans and stock benefit plans. This has shrunk the pool of defined benefit plan participants leading to a concentration in plans operated by traditional manufacturers.

### Regulatory and Accounting Rules May Exacerbate Underfunding

During recent Senate testimony, PBGC's Executive Director, Steven Kandarian, outlined what his agency believes are weaknesses in funding rules that have contributed to the current underfunding problem.[15] PBGC considers the reform of these rules critical to a resolution of current problems.

According to Mr. Kandarian, funding targets are set too low. Employers can stop making contributions when the defined benefit plan is funded at 90 percent of "current liability." The "current liability" calculation assumes a going concern valuation of assets and liabilities that can deviate substantially from the actual value when the plan is terminated. Additionally, the thirty-year Treasury rate (an instrument that is no longer issued) is used to discount the liability, rather than a rate that reflects the actual cash flow that will be needed to pay pension benefits according to actuarial assumptions. As a result of using a current liability calculation and a discount rate that does not match cash flows, risk to the PBGC may be understated. For example, according to the filing with the PBGC just prior to plan termination, the US Airways pilots' plan self-reported that it was 94 percent funded on a current liability basis. At termination, however, it was found to be only 35 percent funded on a termination basis, underfunded by $2.2 billion.[16]

Under current pension regulatory rules, most companies pay the same premium rate, regardless of financial condition, although PBGC has a limited "variable" premium system applicable only to underfunded plans. The PBGC has expressed a preference to move to something similar to the FDIC's risk-based premium system whereby rates would be based on the type and level of risk posed by each plan to the pension system as a whole. Without reform, some caution that healthy companies with well-funded plans may elect to leave the PBGC system over time (a situation termed "adverse selection"), rather than subsidize poorly funded plans. If such an exodus were to occur, it could cause future revenue shortfalls and concern for the PBGC's long-term viability.

The Financial Accounting Standards Board (FASB) issued FASB Statement No. 132 (*Employers' Disclosure about Pensions and Other Postretirement Benefits*) on December 23, 2003. The standard requires that companies provide more details about their plan assets, benefit obligations, cash flows, benefit costs, and other relevant information.

Very recently, some companies have been contributing large amounts to their defined benefit pension plans. Controversial accounting rules allow companies to use expected, rather than actual, rates of return to measure how pension plan funding affects earnings.[17] These rules contribute to pension funding volatility as they provide an incentive to companies to fund pensions when it is advantageous to the corporate bottom line, rather than when pension plans need funding. However, the availability of this expected rate of return accounting treatment may not continue into the future. In its September 2003 Exposure Draft that preceded FASB Statement 132, the FASB indicated that while measurement and recognition are not being addressed at this time, a future project covering those areas is being considered.

**Current Reporting Requirements and Oversight of Pension Funds are Limited**

Complex defined benefit pension fund accounting rules and regulations can materially affect company earnings and balance sheets; yet a clear understanding of a company's pension activity is often difficult to determine from financial statements and accompanying notes. FASB 132 should improve financial reporting going forward, but regulatory reporting requirements remain problematic.

For its part, the PBGC receives beginning of year asset and liability figures from most insured plans unless the plan becomes severely underfunded. However, this information can be significantly dated. Current pension regulations allow plan sponsors to report asset information as late as nine and one-half months after year-end to the Department of Labor. By the time the PBGC receives the information, liability information is almost two years old. As mentioned, another concern is that the liability information is reported on a current liability basis, rather than the termination basis, which would provide a much more accurate assessment of actual liability the PBGC would incur if required to take over a plan.

Moreover, defined benefit plans ***self report*** when they become underfunded. When underfunded plans sponsored by an employer exceed $50 million, additional reporting is required. Nevertheless, the PBGC has limited ability to make a routine independent assessment of each insured pension fund until the fund's financial condition becomes problematic. Once a pension fund has been identified as a "Probable" or "Reasonably

Possible" claim, PBGC's Early Warning system staff will try to negotiate funding improvements or other protections if they think such actions are warranted.[18] However, the PBGC has little in the way of enforcement authority, other than the ability to terminate the plan and act as trustee of the assets.

Once a plan is taken over by the PBGC, new rules apply, including maximum annual pension payout limits ($43,977 for 2003) that may reduce the benefits that employees were expecting to receive. Importantly, the liability incurred is not a sum certain value. Rather, the PBGC is responsible to pay a retirement annuity for the rest of the participant's life, a significant obligation. Ultimately, pension liability relies on numerous assumptions, including employee retirement age, future compensation, and mortality, as well as discount rates and investment returns.

### Plans Would Address Short-Term Underfunding of Defined Benefit Pensions

Certain industries, airlines in particular, with concentrations of underfunded pensions are lobbying Congress for temporary relief from requirements to make up the shortfalls. The ***Wall Street Journal*** has reported that the White House and the PBGC have strongly opposed legislative relief proposals (PBGC estimates that relief as proposed could add $40 billion to the underfunded balance), but other lawmakers see some form of relief as a way to preserve the viability of pensions over the long term.[19]

On October 8, 2003, the U.S. House of Representatives passed the "Pension Funding Equity Act of 2003" (H.R. 3108) -- legislation that would provide a two-year corporate bond replacement rate for the thirty-year Treasury rate.[20] Since corporate bond rates are higher than Treasuries, this approach would lessen liability in the short term. However, the House bill also provides partial relief for airline companies from requirements to make up pension shortfalls.

Under an agreement between the leadership of both parties, in January the Senate will consider a narrower version of the House bill dealing with the two-year replacement rate. The Senate leadership has agreed to limit amendments to this narrow bill, possibly speeding up the enactment of a final House/Senate compromise pension bill early in 2004.

### The Outlook is Mixed for Pension Funds – Can the Level of Underfunding Be Overcome in the Long Term?

The performance of stocks and bonds is of course tied to economic and geopolitical developments, making it difficult to gauge pension fund asset returns. Defined benefit pension fund administrators may adopt a more conservative asset risk allocation that not only would minimize volatility, but also would make it less likely that companies could realize large gains, as was the case in the late 1990s. At that time, excess funded positions reduced pension fund contribution requirements and bolstered corporate earnings.

Several scenarios also are possible on the liability side. Should interest rates rise, defined benefit pension liabilities would decline. However, if long-term rates rise too rapidly, bond portfolio valuations could fall as well given the inverse price/yield relationship. If legislation is enacted that would mandate a change in the discount rate from a thirty-year U.S. Treasury rate to a corporate bond rate, underfunding might improve in the short run. However, unless a long-term solution is adopted that requires the discount rate to reflect the actuarially calculated future liability, instances in which pension funds fall far short of actual liabilities will continue to occur. Additionally, should relief from catch-up provisions be granted to one or more industries, PBGC's already weak financial condition would be stressed further.

As stressed companies continue to post substandard profits, management may decide to terminate traditional defined benefit plans and move into other employee retirement vehicles, such as 401(k) plans. In fact, one survey concludes that unless Congress and regulators provide funding relief, an estimated 21 percent of employers with defined benefit plans intend to freeze benefits while 17 percent would halt benefits to new employees.[21] However, the ability of corporations to unwind or unilaterally modify existing retirement programs remains unclear. In one case with potentially significant ramifications, International Business Machines Corporation was successfully sued by employees that claimed the conversion in 1999 from a traditional defined benefit program to a cash-balance program unfairly penalized older employees. As a result, the Internal Revenue Service has established a moratorium on issuing determination letters that would approve new conversions pending the outcome of this and several other recent court cases. According to ***Kiplingerforecasts.com***, the Senate Bill to be considered in early 2004 will also end the moratorium on conversions and resolve legal issues raised by two appeals court rulings.[22]

### Implications for the Banking Industry

It is difficult to determine whether pension obligations are already adversely affecting corporate credit quality at banks because information on individual loans is not publicly available. However, the results of the 2003 Shared National Credit Review (SNC) indicated that, in general, the quality of large bank loans has stabilized, although adversely-rated loans remain at an elevated level requiring close vigilance.[23] Financial institution examiners during the SNC Review considered pension liabilities when evaluating credit to companies with defined benefit plans and ensured that bankers were also considering this factor in underwriting decisions.

However, pension liabilities are hurting companies' debt ratings. For instance, GM's long-term credit rating was lowered to two notches above junk status by Standard & Poors (S&P) on October 17, 2002, due largely to pension liabilities.[24] S&P downgraded Ford's long-term debt rating to just above junk status on November 12, 2003, citing competitive pressures and a lack of pricing power stemming in part from pension and health care liabilities.[25] Among other things, credit rating downgrades can result in increased borrowing costs for companies.

Pension underfunding could also have a secondary effect on consumers, particularly in areas with a greater share of retirees and areas with large concentrations of workers employed in old-line industries (e.g. auto, steel, and air transportation). Seizure of plans by the PBGC could reduce benefits. Retirees in these instances could have less disposable income that, while difficult to measure, could have something of a "ripple effect" on local economies. For example, The ***Chicago Tribune*** recently reported that hundreds of employees who took early retirement from Bethlehem Steel were shocked to see their pensions reduced from up to $30,000 a year to less than $18,000.[26]

In his October 14, 2003 testimony, PBGC Director Steven Kandarian noted that in a worst-case scenario, the PBGC could take on so many claims from underfunded pension plans that a taxpayer bailout could be the only recourse. This could weaken public confidence in pension funds and constrain consumer and business spending. If companies were required to immediately re-fund pension shortfalls, cash flows would be directed away from capital investment, expansion, and debt service. Old-line industries would be particularly hard hit, and the global competitiveness of these companies undoubtedly would suffer. In this scenario, the FDIC would expect that corporate credit quality would be affected. However, even if this very serious scenario does not develop, bankers and financial institution supervisors should closely monitor pension trends and cash flows regarding the implications of underfunded pension plans.

[1] According to the GAO, historically, high-risk areas have involved traditional vulnerabilities due to their greater susceptibility to fraud, waste, abuse, and mismanagement. As the GAO's high-risk program has evolved, the agency has increasingly used this designation to draw attention to areas associated with the economy, efficiency, effectiveness, and accountability of government programs and operations.

[2] PBGC Pension Insurance Data Book 2002.

[3] The multiemployer fund covers pension plans set up by collectively bargained agreements involving more than one unrelated employer, generally in one common industry.

[4] "Underfunding of Private Pension Plans," Federal Reserve Bank of San Francisco, June, 13, 2003, http://www.frbsf.org/publications/economics/letter/2003/el2003-16.html. Note: the $1 trillion loss was calculated from 1999 to 2002.

[5] Shilling, Gary. "Pension Profits Become Corporate Costs," *Forum on Emerging Issues*, October 2003.

[6] Testimony by Steven A. Kandarian, PBGC Executive Director, before the Senate Special Committee on Aging, October 14, 2003.

[7] "Analyzing The Big Three's Pension and OPEB Costs," *Prudential Financial Research*, July 15, 2003.

[8] Butters, Jamie. "UAW To Target Chrysler For Talks, Analyst Says Improved Benefits May Come At The Cost Of Jobs," *Detroit Free Press*, March 19, 2003.

[9] Lippert, John. "Detroit Breakdown," *Bloomberg Markets*, October 2003.

[10] Ibid.

[11] Ibid.

[12] Schultz, Ellen E., and Theo Francis. "GM, Others Boost Their Earnings By Pouring Billions Into Pensions" *The Wall Street Journal*, December 4, 2003.

[13] The compounded growth rate for the Standard and Poor's 500 Index was 15.6 percent during the 1990s, more than twice the rate during the preceding twenty years (1970 - 1990).

[14] The PBGC estimates that the average number of years spent in retirement for males increased from 11.5 years between 1950 and 1955 to 18.1 years during the late 1990s.

[15] Kandarian, Steven A., October 14, 2003.

[16] Ibid.

[17] Schultz, Ellen E. and Theo Francis. December 4, 2003.

[18] According to the PBGC 2002 Annual Report, "The PBGC specifically reviews each plan identified as high risk and classifies those plans as probable if, based on available evidence, PBGC concludes that plan termination is likely. Otherwise,

| Chart 1 | |
|---|---|
| **The Value of the PBGC Single Employer Program Has Declined to Historic Lows (Net Position Assets Less Liabilities)** | |
| **Date** | **$ Millions** |
| 1980 | -95 |
| 1981 | -189 |
| 1982 | -333 |
| 1983 | -523 |
| 1984 | -462 |
| 1985 | -1,325 |
| 1986 | -2,026 |
| 1987 | -1,549 |
| 1988 | -1,543 |
| 1989 | -1,124 |
| 1990 | -1,913 |
| 1991 | -2,503 |
| 1992 | -2,737 |
| 1993 | -2,897 |
| 1994 | -1,240 |
| 1995 | -315 |
| 1996 | 869 |
| 1997 | 3,481 |
| 1998 | 5,012 |
| 1999 | 7,038 |
| 2000 | 9,704 |
| 2001 | 7,732 |
| 2002 | -3,638 |
| Aug-2003 | -8,800 |
| Source: Pension Benefit Guaranty Corporation, August 2003 estimate is from testimony provided September 15, 2003 to Congress. | |