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The Present and Future of Pension Insurance

In the last two years, a large number of defined benefit pension plans swung from record overfunding to record underfunding, exposing many workers and retirees to pension risk. The Pension Benefit Guarantee Corporation (PBGC), established by Congress in 1974, mitigates the pension risk to some extent by providing pension insurance. However, many of the same factors that put defined benefit pension plans in deficit also have left the PBGC facing its largest deficit in its history. Recently, the U.S. General Accounting Office put the corporation's single-employer pension insurance program in its "high risk" category, reporting to Congress that the insurance program needs "urgent attention" and change. This Economic Letter discusses pension insurance, including how it works, the financial health of the pension insurer, and what can be done to improve it.

Overview of pension insurance

The PBGC was established by the Employee Retirement Income Security Act (ERISA) of 1974 to protect participants in defined benefit pension plans from plan terminations that do not have sufficient assets to pay promised benefits. While PBGC is a government corporation, it is not formally backed by the full faith and credit of the U.S. government, nor does it receive any federal tax money, although it does have a line of credit from the U.S. Treasury. The PBGC operates as a self-funded corporation that derives its financial resources from four sources: insurance premiums paid to the corporation by defined benefit pension sponsors; assets of pension plans that the pension insurer has assumed from terminated plans; recoveries in bankruptcy from former plan sponsors; and earnings on invested assets.

The PBGC administers separate insurance programs to protect participants in single-employer and multiemployer plans. At this point, only the single-employer plan is in deficit, so it is the focus of this discussion. Under its single-employer program, the PBGC will terminate and take over a pension plan when: (i) a pension plan runs out of money, (ii) a company liquidates and has an underfunded plan, or (iii) a sponsoring company demonstrates it cannot continue funding a pension plan and stay in business. Upon taking over a pension plan and its assets, the PBGC assumes responsibility for paying benefits to current and future retirees, but all benefit accruals, vesting, and other regular plan obligations cease at that point.

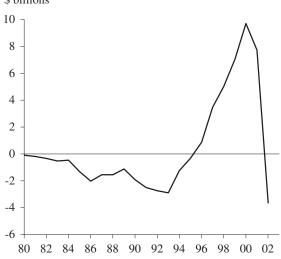
The pension insurance coverage offered by the PBGC is subject to a maximum statutory limit stipulated by the ERISA, which is adjusted annually. However, when the PBGC assumes responsibility for a terminated plan, the coverage limit is set permanently at the level specified for that year. For example, for plans that were terminated in 2002, the maximum annual pension guarantee by the PBGC to workers who retire at age 65 is \$42,950 yearly for a single life annuity, and is less (more) for those who retire earlier (later) than age 65; for plans terminated in 2003, that maximum guaranteed amount rose to \$43,980. Of course, a participant may receive higher benefits than the maximum guarantee if the pension plan has adequate resources at termination.

Financial status of the PBGC

Figure 1 shows the net position, defined as the difference between total assets and total liabilities, of the PBGC's single-employer program. The corporation's liabilities reflect its obligations for pension payments to retirees of terminated plans that were taken over by the pension insurer. The net position was in deficit from its inception until 1996; it then turned into a surplus that peaked at \$9.7 billion in 2000. By 2002, the net position had fallen to a deficit of \$3.6 billion; according to its 2003 midyear unaudited financial statement, the deficit is currently about \$5.4 billion. The sharp drop in the net position was mainly a result of terminating several very large pension plans, including LTV Steel and Polaroid in 2002, Bethlehem Steel, National Steel, and US Airlines Pilots in 2003. At the same time, declining stock prices eroded the PBGC's financial assets, while lower interest rates raised the

Figure 1 Net position of PBGC's single-employer program





value of the PBGC's liabilities, further driving down its net position.

It is useful to put the \$5.4 billion deficit in perspective. Currently, the PBGC's single-employer program insures pension benefits worth approximately \$1.5 trillion, making the deficit about 0.36% of insured benefits. At the height of the most recent banking crisis in 1991, the Federal Deposit Insurance Corporation bank insurance fund had a \$7 billion deficit while insuring against \$1.9 trillion of bank deposits at that time, so that the reserve ratio also was at negative 0.36%. During the savings and loan crisis, the Federal Savings and Loan Insurance Corporation showed a \$6.3 billion reserve deficit, or about 0.71% of \$890 billion insured deposits in 1986 that eventually ballooned to \$75 billion, or about 8% in two years before collapsing.

Despite the PBGC's record deficit, it remains liquid and is able to meet current promised payments. Of the over \$25 billion financial assets held in its single-employer program, the PBGC contends that 98% were held in marketable assets as of 2002. The PBGC's primary sources of cash are from premium receipts and investment activities. If funds from these sources are insufficient to meet operating cash needs, the corporation has a \$100 million line of credit from the U.S. Treasury, which it has never used. Thus, in the near term, it appears that the PBGC should have no difficulties in making benefit payments and meeting financial obligations stemming from its operations.

The future of pension insurance

The PBGC faces multiple challenges. In addition to the record deficit on its balance sheet, several very large defined benefit pension plans currently insured by the corporation show substantial underfunding (see Kwan 2003). The latest data indicate that total underfunding in single-employer defined benefit plans insured by the PBGC currently stands at over \$300 billion. Although many underfunded plans are sponsored by financially sound companies that pose relatively low risk to the pension fund insurer at the moment, a number of pension plans with sizable underfunding are sponsored by less financially sound companies. For example, using the bond rating as a rough indicator for financial soundness, the ten pension plans with the largest underfunding by S&P 500 companies that have below-investment-grade bond ratings had a total underfunding of \$16.7 billion as of 2002. If a few of these sponsoring companies were to encounter financial difficulties, termination of these large underfunded pension plans could add to the corporation's already large deficit position. Therefore, to be sustainable, the PBGC must take steps to shore up its financial position.

In the near term, it appears that the agency may need to recapitalize itself by raising insurance premiums. Absent any government bailout, the two main sources of funds to deal with the corporation's net position are insurance premiums paid by sponsoring companies and returns from PBGC's investment portfolio. Without any extraordinary market movements, the expected return from the corporation's asset portfolio would not be enough to correct its deficit position.

Thus, to recapitalize the insurance fund, the PBGC needs to work with its insurance premium. Currently, the corporation charges a flat-rate premium and a variable-rate premium. The flat-rate premium is \$19.00 per plan participant, and the variable-rate premium is \$9 per \$1,000 of unfunded vested benefits with no maximum. This premium schedule has been in effect since 1996. Indeed, the \$19.00 flat-rate premium has not been raised since 1991; while the 0.9% variable rate premium schedule also has been in place since 1991, it was capped at \$53 per participant until 1994 and the cap was raised twice before it was abolished in 1996.

Notice that as an insured pension plan swings from overfunding to underfunding, the variable-rate premium kicks in, which by itself would increase the premium received by the pension insurer and hence would help to alleviate its deficit. However, recapitalizing the pension insurance fund fully would require raising the insurance premium. How much the premium needs to be raised would depend on how fast the corporation wants to recapitalize the fund as well as on detailed projections of future underfunding and asset returns which are beyond the scope of this article.

Over the longer term, a case can be made to reform the overall pension insurance pricing structure. In theory, in order to be fully self-funded, the pension insurer must be able to charge an actuarially fair insurance premium. In other words, over the long run, the premium rate should be adjusted so that the net position of the insurance fund reverts to zero. One way to achieve this is to have a pricing structure that varies with the net position at the PBGC, so that some form of automatic recapitalization is built into the insurance pricing. For example, the insurance premium would rise when the net position falls below a certain threshold and would drop when the net position is above a certain threshold.

Another reason for reforming the pension insurance pricing is that the pricing scheme is based on only the number of participants and the amount of underfunding in the pension plan, and not on the risks of the sponsoring companies or pension fund assets. Consider two pension plans that are similar in terms of their size and the amount of underfunding but that differ in that one plan is sponsored by a AAA-rated company while the other is sponsored by a financially weak firm with a much higher chance of bankruptcy. Since both plans have the same amount of underfunding, the current pension pricing charges both plans the same insurance premium. However, it is quite clear that the plan sponsored by the weaker firm is riskier, so its insurance premium should be commensurately higher. Compounding this risk assessment is the asset risk in the pension plan. From the option

pricing theory literature, it is well known that the cost of insuring a plan that invests in riskier assets is higher than the cost of insuring a plan that invests in less risky assets. And the theory was borne out in fact during the banking crises of the 1980s—especially the S&L crisis, when banks and S&Ls had incentives to take on excessive risk because of the cost of deposit insurance did not rise with their risk-taking. Thus, it seems wise to apply the hard lessons we learned from those crises to pension insurance pricing, as it bears many important similarities to deposit insurance.

Conclusions

Pension insurance is designed to protect workers and retirees in the event that their defined benefit pension plans are terminated when the sponsoring company goes under. However, the PBGC, the pension insurer itself, has a \$5.4 billion deficit, the largest deficit in its history. Moreover, with over \$300 billion in underfunding in defined benefit plans that are insured by the agency, terminations of more underfunded plans would further weaken the PBGC's financial position. To restore financial health to pension insurance, it appears that policymakers may need to raise insurance premiums to recapitalize the pension insurance fund in the near term. More fundamentally, the current insurance pricing scheme, which does not take into consideration either firm risk or asset risk, may need to be reformed to reflect the true cost of insurance in order to attain structural soundness for the insurance fund over the longer run.

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Reference

Kwan, S. 2003. "Underfunding of Private Pension Plans." FRBSF Economic Letter 2003-16 (June 13). http:// www.frbsf.org/publications/economics/letter/2003/ el2003-16.html ECONOMIC RESEARCH

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