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Outlawing Pension-Funding Shortfalls

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OUTLAWING PENSION-FUNDING SHORTFALLS

*Eric D. Chason**

Before ERISA, employees faced a large risk that their employers would default or renege on pension obligations. By creating a federal guarantor of pensions (the PBGC), ERISA has greatly reduced this risk. All else being equal, low-risk pensions are worth more to employees but cost more to provide. Congress has never had a coherent policy on who should pay for these extra costs. Moreover, legal scholars have failed to create a theoretical framework for dealing with these costs, focusing instead on the supposed “moral hazard” that the PBGC guaranty creates. This Article inserts itself into the scholarly vacuum, asserting that employers should bear the full cost of providing low-risk pensions to their employees.

The only practicable way to force employers to bear these costs is by requiring pension plans to be fully funded. Current law, however, tolerates persistent pension-funding shortfalls with a set of accounting conventions that allow employers to defer and spread funding obligations over several years. Only the powerful tax incentives of the Internal Revenue Code have the potential to draw employers to full funding. Unprofitable employers, however, will not respond to these incentives, choosing instead the subsidized guaranty offered by the PBGC. Because the PBGC guaranty is essentially a guaranty of corporate debt, the subsidized guaranty distorts the efficiency of capital markets. Outlawing pension-funding shortfalls would eliminate these subsidies.

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I. INTRODUCTION

The Employee Retirement Income Security Act of 1974¹ (ERISA) relies on two methods to secure payment of pension benefits. Employers must set funds aside in trust. They must also buy insurance from the Pension Benefit Guaranty Corporation (PBGC).

¹ Pub. L. No. 93-406, 88 Stat. 829 (1974).

Yet, the current system has produced large deficits for the PBGC and high-profile failures of pension plans. These problems prompted Congress to overhaul the system of pension funding with the Pension Protection Act of 2006 (PPA 2006).²

PPA 2006 may reduce, but will not solve, the problems of pension funding and insurance. The funding and insurance rules have been, and will remain, incoherent without further reform, for Congress has never had a coherent policy in mind when drafting them. Policymakers and scholars often assume that pension-funding rules should balance the interests of different constituents.³ Retirees want their pension benefits to be secure. Current employees want security as well, but also the opportunity to earn more benefits in the future. Employers want flexibility over plan contributions and low PBGC premiums. Taxpayers, if they pay attention at all, want to avoid, or at least mitigate, any bailout of the PBGC. Because these interests are irreconcilable, Congress has been responding to cacophony. The result is a broken system of pension funding and insurance.⁴

This Article does not seek to rebalance the interests of different political groups. Instead, it tries to identify and justify the goals that pension-funding rules should — and can actually — achieve. It then tries to sketch a system of pension funding and insurance that would satisfy these goals.

The first goal is the *risk-minimization goal*. It holds that employees should bear little or no risk that employers will default on pension obligations. Without pension regulation, employees face significant default risk. Their employer could file for bankruptcy or even change its mind about the payment of benefits. To a large extent, ERISA satisfies the risk-minimization goal with its system of benefit vesting, PBGC insurance, and plan funding.

The second goal is the *employer-internalization goal*. It holds that employers should bear the cost of achieving the risk-minimization goal. It applies to employers individually and does not require strong

² Pub. L. No. 109-280, 120 Stat. 780 (2006) (codified as amended in scattered sections of 26 U.S.C. and 29 U.S.C.).

³ Cf., e.g., Kathryn J. Kennedy, *Pension Funding Reform: It's Time to Get the Rules Right (Part 2)*, 108 TAX NOTES 1039, 1041 (2005) (stating that “a balanced pension reform cannot be accomplished without compromises” and listing ten “factors [that] should be utilized in critiquing any reform”).

⁴ For an excellent and detailed description, see Kathryn J. Kennedy, *Pension Funding Reform: It's Time to Get the Rules Right (Part 1)*, 108 TAX NOTES 907 (2005). For a brief overview of legislation up to 2003, see Jeremy Gold, *Stopping the Insanity in Pension Funding*, CONTINGENCIES, Sept.-Oct. 2003, at 34.

employers to protect the employees of weak employers. The current system allows persistent plan underfunding and charges a scanty premium for PBGC insurance. Congress has failed the employer-internalization goal. Even PPA 2006, arguably the most significant revision of pension law since ERISA was passed, will let underfunding continue. Thus, financially weak employers can continue to shift some of their pension costs to financially strong employers. Taxpayers still face the risk of bearing these costs in the future.

Two practices have plagued pension funding since the passage of ERISA. One is amortization of losses. Rather than forcing employers to make up funding shortfalls on a yearly basis, ERISA allows employers to defer shortfalls for years. The other practice is “smoothing.” Rather than forcing employers to value assets and liabilities at current market values, ERISA allows employers to use historical averages. Amortization and smoothing both mask financial risk. Nevertheless, financial-market volatility is often what creates funding shortfalls.⁵ These shortfalls are breaches that may widen, not aberrations that should be wished away. Someone must bear the costs of funding shortfalls. The employer-internalization goal places them upon the employer.

To satisfy the two goals, this Article proposes a system of full funding of pension obligations. Full funding would end amortization and smoothing. It would also minimize the role of PBGC insurance, which is needed only if there are funding shortfalls. Even under the proposal, PBGC insurance would still be needed. However, it would protect only against short-term financial volatility and against differences between estimated and actual plan liabilities.

Part II of this Article describes the risk-minimization goal. This goal is uncontroversial, but its implementation increases the expense of pension obligations. Thus, the goal affects the employer-internalization goal, described in Part III. Part III also describes how tax deductions for contributions lure only financially strong employers into funding their plans. By charging all employers for coverage that benefits only the weak, the PBGC effectively subsidizes the pension plans of financially weak employers. Indeed, the value of the subsidy grows as financial strength weakens. Part IV sketches a system of full funding that would implement the employer-internalization goal for all employers, weak and strong. Part V provides a brief conclusion.

⁵ See Lawrence N. Bader & Jeremy Gold, *Reinventing Pension Actuarial Science*, THE PENSION FORUM, Jan. 2003, at 1, 12 (“Volatility is a property of markets; it is not a disease for which accounting is the cure.”).

II. RISK-MINIMIZATION GOAL

A. *The Purpose of ERISA*

Risk minimization is central to ERISA. Prior to the passage of ERISA in 1974, prefunding of pension obligations was almost wholly discretionary on the part of the employer.⁶ The lack of collateral exposed employees to the risk of default if the employer went bankrupt or terminated the plan. This risk became reality in 1963 when Studebaker Corporation closed its South Bend, Indiana, manufacturing plant. The plant shutdown led to Studebaker's termination of its underfunded, union-negotiated pension plan. The plan had enough assets to pay full benefits to those who had already reached age sixty. After satisfying the claims of the sixty-and-over workers, the plan had few assets to satisfy the claims of younger workers. Some received benefits worth about 15% of the face value of their claims. Some received nothing at all. The Studebaker incident was a sensation, leading to Congressional hearings and media scrutiny of pension funding. Even though Congress waited another eleven years to pass ERISA, the Studebaker incident remained vivid in the minds of policy makers and is recognized as a catalyst for the passage of ERISA.⁷

Mandatory prefunding of pension obligations is the first defense against employer default.⁸ All pension plans must have assets held in trust, pursuant to a written instrument.⁹ The trust subjects plan administrators to fiduciary duties. ERISA clarifies these duties by directing the fiduciary to hold assets for the exclusive benefit of the employees.¹⁰ Calculating the amount that employers must contribute to their plans is the subject of Part III.C.

ERISA also regulates default risk by mandating vesting. Therefore, a plan cannot condition benefits on the financial health of

⁶ See JOHN H. LANGBEIN & BRUCE A. WOLK, PENSION AND EMPLOYEE BENEFIT LAW 355 (3d ed. 2000). An employer that stopped funding a plan might cause all benefits in the plan to vest — but only to the extent the plan was already funded. See Treas. Reg. § 1.401-6(a) (1963); see also Treas. Reg. § 1.401-6(c) (1963) (describing the types of funding failures that would trigger vesting).

⁷ For a more comprehensive treatment of the Studebaker incident, see James A. Wooten, "The Most Glorious Story of Failure in the Business": *The Studebaker-Packard Corporation and the Origins of ERISA*, 49 BUFF. L. REV. 683 (2001).

⁸ See Kennedy, *supra* note 4, at 910–11.

⁹ See ERISA §§ 402(a), 403(a), 29 U.S.C. §§ 1102(a), 1103(a) (2006).

¹⁰ ERISA § 404(a), 29 U.S.C. § 1104(a) (2006).

the employer or on service beyond five or seven years (depending on the schedule chosen).¹¹ The protection of vesting also includes protection against plan amendments that would cut back previously earned benefits.¹²

In summary, funding, fiduciary regulation, and vesting are at the core of ERISA and implement the risk-minimization goal. Because those elements only partially implement the risk-minimization goal, Congress created a system of pension insurance to guaranty payment of pension benefits. This guaranty is discussed in the next Part.

B. Government Guaranty against Default

ERISA created the PBGC to guaranty the payment of most private, defined-benefit pension benefits.¹³ The guaranty protects employees against the risk of default when an employer terminates its pension plan. The guaranty does not directly benefit employers, who are responsible for funding plan shortfalls unless their plans are terminated (typically in bankruptcy or liquidation).¹⁴ The indirect benefits of the guaranty to the employer are the subject of Part III.E.

ERISA caps the level of guaranteed benefits.¹⁵ For plans terminating in 2006, the cap is a yearly benefit, starting at age sixty-five, of \$47,659.¹⁶ The cap is reduced if the employee elects a form of payment different from a single-life annuity starting at age sixty-five.¹⁷ Often, reductions reflect the early start of payments before age sixty-

¹¹ See I.R.C. § 411(a).

¹² See I.R.C. § 411(d)(6).

¹³ The guaranty does not extend to defined contribution plans (such as 401(k), 403(b), 457 plans, and ESOPs); very small plans with twenty-five or fewer active participants; plans maintained for a select group of management or highly compensated employees; governmental plans; church plans; and welfare plans, such as retiree medical plans. See ERISA § 4021(a), (b), 29 U.S.C. § 1321(a), (b) (2006) (describing inclusions and exclusions from coverage).

¹⁴ See discussion *infra* Part III.B (comparing pension obligations with debt obligations).

¹⁵ See ERISA § 4022, 29 U.S.C. § 1322 (2006).

¹⁶ See Press Release, Pension Benefit Guaranty Corp., PBGC Announces Maximum Insurance Benefit for 2006 (Dec. 12, 2005), <http://www.pbgc.gov/media/news-archive/2005/pr06-09.html>. The cap applies to all pensions of any one person. Thus, if someone is a participant in two failed plans, a single cap still applies; the cap is determined at the time of the last plan termination affecting the participant. See ERISA § 4022B, 29 U.S.C. § 1322b (2006); 29 C.F.R. pt. 4022B.1(a) (2006).

¹⁷ See ERISA § 4022(b)(3), 29 U.S.C. § 1322(b)(3) (2006) (referring to the “actuarial value of a monthly benefit in the form of a life annuity commencing at age [sixty-five]”).

five or the value of survivor benefits (e.g., a 50% survivor annuity for a spouse).

The guaranteed amounts are well below the largest benefits that a pension plan can provide under the tax laws. For 2006, the largest amount allowed is a yearly benefit of \$175,000.¹⁸ Because very few employees approach this amount,¹⁹ the PBGC cap will cover most pension benefits payable to employees.²⁰

When a plan fails, employees have claims against the PBGC and remaining plan assets. The allocation of plan assets is, however, inconsistent with the PBGC guaranty. Regardless of the size of their benefits, employees who started (or could have started) receiving benefits three or more years before termination have the highest priority claim against plan assets.²¹ Such employees might continue to receive full benefits above the cap, even if the PBGC must step in to pay the benefits of other employees.²²

When underfunded plans terminate and trigger the PBGC guaranty, the PBGC receives the assets of terminated plans. The PBGC needs other assets to pay for the shortfall. To do this, the PBGC collects annual premiums.²³ An annual, flat fee of \$30 per covered employee applies to every single-employer plan covered by the PBGC guaranty program.²⁴ The \$30 fee is fixed. It applies regardless of the funding quality of the plan, the financial well being

¹⁸ See I.R.C. § 415(b)(1) (establishing \$160,000 cap); I.R.C. § 415(d) (subjecting the cap to cost-of-living increases); I.R.S. News Release IR-2005-120 (Oct. 14, 2005) (stating that the year 2006 cap is \$175,000).

¹⁹ Consider a rather rich formula that pays benefits equal to 1.5% percent of compensation times years of service. If a participant had thirty years of service, he would not reach the Pension Benefit Guaranty Corporation (PBGC) cap unless his compensation was \$105,909 or more. The Internal Revenue Code (Code) places a cap of \$220,000 on compensation that can be used to calculate pension benefits. See I.R.C. § 401(a)(17) (establishing a \$200,000 cap on compensation subject to cost-of-living increases); I.R.S. News Release IR-2005-120 (Oct. 14, 2005) (stating that the year 2006 cap is \$220,000). If a participant had \$220,000 or more of compensation, he would not reach the PBGC cap unless he had fifteen or more years of service. Therefore, for participants commencing benefits at age sixty-five, the PBGC cap is relevant only to well-paid, long-service employees.

²⁰ See LANGBEIN & WOLK, *supra* note 6, at 901.

²¹ See ERISA § 4044(a)(3), 29 U.S.C. § 1344(a)(3) (2006). I am assuming that the plan did not contain employee contributions. Cf. ERISA § 4044(a)(1), (2), 29 U.S.C. § 1344(a)(1), (2) (2006) (giving highest priority to employee contributions).

²² See ERISA § 4044(a)(4), 29 U.S.C. § 1344(a)(4) (2006).

²³ See ERISA § 4005, 29 U.S.C. § 1305 (2006); DAN MCGILL ET AL., *FUNDAMENTALS OF PRIVATE PENSIONS* 815 (8th ed. 2005).

²⁴ See ERISA § 4006(a)(3)(A)(i), 29 U.S.C. § 1306(a)(3)(A)(i) (2006).

of the employer, or even the amount of benefits promised to employees.

The PBGC also collects another fee, called the “variable-rate premium,” from some underfunded plans. The variable-rate premium is equal to 0.9% of the plan’s underfunded amount, calculated on an annual basis.²⁵ Yet, the 0.9% premium is inadequate because it is less than the default premiums demanded by corporate bond markets. Data on corporate bonds for the week ending January 13, 2006 are shown below:²⁶

TABLE I.

U.S. Treasury bond, 10-year constant maturity	4.41%
U.S. Treasury bond, 20-year constant maturity	4.65%
Moody’s Seasoned Aaa Index	5.29%
Moody’s Seasoned Baa Index	6.24%

For the best credit risks, the 0.9% default premium could be appropriate. For the Baa grade and below, it clearly fails. Because the worst credit risks have the highest likelihood of paying the variable rate premium, the 0.9% fee is too small.

In recent years, the most prominent plan failures have been of airlines and steel manufacturers in Chapter 11 bankruptcy. Starting in 2006, ERISA imposes a surcharge on employers that terminate underfunded plans in Chapter 11 bankruptcy. The annual surcharge is \$1250 per participant for the three years after plan termination.²⁷

ERISA imposes no duty on the federal government to maintain the PBGC’s solvency.²⁸ If the PBGC ever goes insolvent, retirees might find their benefits cut, even though the PBGC guaranteed them. After all, a guaranty is only as good as the guarantor. Many observers think Congress would bail out the PBGC and its covered employees in the event of failure, much as it bailed out the savings and loan industry in the early 1990s.²⁹

In summary, the PBGC guaranty achieves the risk-minimization

²⁵ See ERISA § 4006(a)(3)(A)(i), (E), 29 U.S.C. § 1306(a)(3)(A)(i), (E) (2006).

²⁶ Federal Reserve Statistical Release, Selected Interest Rates (Jan. 17, 2006), available at <http://www.federalreserve.gov/releases/h15/20060117/h15.pdf>.

²⁷ See ERISA § 4006(a)(7), 29 U.S.C. § 1306(a)(7) (2006).

²⁸ See ERISA § 4022(g)(2), 29 U.S.C. § 1322(g)(2) (2006) (“The United States government is not liable for any obligation or liability incurred by the [PBGC].”).

²⁹ Cf. Richard A. Ippolito, *How to Reduce the Cost of Federal Pension Insurance*, 523 CATO INST. POL’Y ANALYSIS 1, 2 (2004), available at <http://www.cato.org/pubs/pas/pa523.pdf>.

goal by eliminating much (but not all) of the default risk that employees face. A system of user fees currently pays for this guaranty, but the system has a weak correlation to default risk and fails to keep the PBGC solvent. The next Part describes other protections for employees and shows how these protections tend to discourage the funding of pension plans.³⁰

C. Regulation of Pension Settlements

The risk-minimization goal makes it expensive for companies to settle their pension obligations. The anti-alienation rule of ERISA prohibits employers from bargaining with employees over the settlement of pension obligations.³¹ Therefore, outside of bankruptcy or liquidation, the only ways for employers to discharge pension obligations are through regulated lump-sum payments, annuity purchases, and risk-free funding. Each of these methods has low risk, entailing interest rates lower than those at which employers can raise other sources of funds. This Part will show why those lower interest rates cause employers to resist funding their pension plans.

An employer might try to discharge its pension obligations by paying a lump sum. Usually, an employee's pension benefit is stated as a single-life annuity that the employee may start taking at age sixty-five. ERISA allows pension plans to pay benefits in a lump sum after an employee ends employment.³² These lump-sum options are increasingly common,³³ but ERISA regulates their calculation. In order to arrive at a lump sum, the age sixty-five annuity must be converted to present value using mortality and interest assumptions. Before PPA 2006, ERISA obliged plans to calculate the lump sum using the interest rate on the 30-year Treasury bond.³⁴ After PPA 2006, lump-sum payments will be valued using the yield on high-grade corporate debt.³⁵

Regulating lump sums is necessary to implement the risk-

³⁰ Cf. William Sharpe, *Corporate Pension Funding Policy*, 3 J. FIN. ECON. 183 (1976) (examining the effect of the PBGC guaranty on funding).

³¹ See I.R.C. § 401(a)(13)(A).

³² Pension payments before termination are generally prohibited. See Treas. Reg. § 1.401-1(a)(2)(i) (1976).

³³ See U.S. GEN. ACCOUNTING OFFICE, *THE PENSION BENEFIT GUARANTY CORPORATION AND LONG-TERM BUDGETARY CHALLENGES* 11 (2005) (describing increasing prevalence of lump-sum distributions from defined benefit plans).

³⁴ See Treas. Reg. § 1.417(e)-1(d)(3)(i) (2003).

³⁵ See Pension Protection Act of 2006 § 302(b), I.R.C. § 417(e).

minimization goal. Pension obligations are low risk and should be valued as such. However, the implementation causes employers to resist funding and other settlements of their pensions. It will usually cost employers more to borrow from outsiders than from their pensioners.

To see this, suppose a company has a stylized pension that obliges the employer to make a \$1 million balloon payment in ten years. The company can borrow money at 7%, but lump-sum distributions must be valued using a 5% interest rate. Essentially, the employer is borrowing from the employee at the regulated rate of 5% rather than the market rate of 7%.

The employer is considering two options for dealing with the pension plan. The first is simply to wait ten years and pay the \$1 million. The second is to discharge the pension today with a lump-sum payment; the employer obtains the funds for the lump sum by borrowing, with repayment in ten years. Thus, comparing year ten cash flows will identify the better approach.

The waiting approach obviously produces a year ten cash outflow of \$1 million. The borrowing approach, however, produces a higher year ten outflow. ERISA mandates a lump-sum payment of \$606,531³⁶ which is \$1 million discounted for ten years at 5%. However, the employer must repay this amount using a higher interest rate of 7%. The \$606,531 debt grows to \$1,221,403³⁷ in ten years. Discharging the pension with outside borrowing is expensive because it subjects the employer to an interest-rate whipsaw. In essence, the employer would be refinancing its pension debt by giving up a low 5% interest rate in exchange for a high 7% interest rate.

A similar whipsaw applies if the employer settles its obligation with an annuity contract or plan funding.³⁸ Annuity contracts have low risk and will be valued using an interest rate that is likely lower than the employer's cost of borrowing. The yields published by the PBGC to value annuities are lower than the long-term risk-free rate.³⁹

³⁶ $\$1,000,000 \div (e^{10 \times 0.05})$.

³⁷ $\$606,531 \times (e^{10 \times 0.07})$.

³⁸ Readers familiar with academic finance may feel uneasy about these assertions. I am not saying that shareholder value falls when the company borrows at 7% in order to buy a 5% risk-free bond. What reduces shareholder value is the transfer of the proceeds to the employee in satisfaction of the pension.

³⁹ The Internal Revenue Service (Service) reported rate of interest on 30-year Treasury securities for November 2005 is 4.73%. I.R.S. Notice 2005-96, 2005-2 C.B. 1209. The PBGC interest rates for valuing annuity benefits for the month of November 2005 are 3.70% for the first 20 years following the date of plan termination

Similarly, plan funding must be in risk-free assets to achieve a true settlement. Otherwise, the employer remains subject to the risk of default on plan investments. Only if it fully funds the plan and has the plan invest in U.S. Treasury bonds will the employer be able to discharge its pension obligations completely. The discount rate for such a portfolio would be the long-term risk-free rate.⁴⁰

Thus, the cost of discharging pension obligations with full funding or annuity contracts is similar to that of discharging the obligations with lump-sum payments. In each case, liabilities must be measured according to some settlement rate of interest. This rate would differ based upon the settlement chosen (lump sum, risk-free funding, or annuity purchase).⁴¹ The important thing, however, is that the settlement rate will often be lower than the rate at which the employer could borrow funds. Because of this fact, plan funding and other settlements tend to be expensive.

In summary, ERISA reinforces the risk-minimization goal by regulating the valuation of lump-sum distributions and by prohibiting sales by employees of their pension benefits. These regulations protect employees from selling their benefits too cheaply, but they also show how the risk-minimization goal affects employer incentives. The funding decision affects the value of the company because pension obligations, unlike other obligations of the company, are regulated to be low risk. In order to discharge pension obligations completely, employers can choose from three types of settlements: regulated lump sums, full funding with risk-free assets, or low-risk annuity contracts. However, employers cannot ordinarily borrow funds at the low interest rates associated with these settlements. Thus, without tax incentives, employers will resist funding their pension obligations.

and 4.75% thereafter. PENSION BENEFIT GUARANTY CORP., INTEREST RATE UPDATE (Oct. 15, 2005), <http://www.pbgc.gov/practitioners/interest-rates/content/Month2005/ir15126.html>; cf. U.S. GEN. ACCOUNTING OFFICE, SINGLE-EMPLOYER PENSION INSURANCE PROGRAM FACES SIGNIFICANT LONG-TERM RISKS, 49–52 (2003) (comparing termination interest rates with 30-year Treasury interest rates).

⁴⁰ See Lawrence N. Bader, *Pension Deficits: An Unnecessary Evil*, FIN. ANALYSTS J., May-June 2004 at 17 [hereinafter Bader, *Unnecessary Evil*]; Bader & Gold, *supra* note 5, at 5.

⁴¹ Statement of Financial Accounting Standards No. 87, the accounting standard for pensions, adopts a similar concept of settlement rates. EMPLOYERS' ACCOUNTING FOR PENSIONS, Statement of Financial Accounting Standards No. 87, § 77 (Fin. Accounting Standards Bd. 1985).

D. Irrelevance of Moral Hazard

Part II.C showed why employers would resist plan funding without the allure of tax benefits. This Part shows that employees have no reason to counteract this resistance. As a result, the main reasons that employers fund their plans are to receive tax benefits and to comply with the funding rules of ERISA.

Employees covered by the guaranty have little reason to worry about plan funding. Without the PBGC guaranty, the employees would surely worry and might even demand more secure funding for their pension benefits. Because of the PBGC guaranty, extra funding gives the employees little extra security. Thus, the employer's funding decision and the employees' desires are hardly related at all.⁴²

The employees' indifference to funding presents a technical case of moral hazard. Ultimately, we will see that the case is merely technical and tells us very little of importance about pension funding and insurance. Since, however, moral hazard is such a common critique of the current system,⁴³ it is addressed here. What is moral hazard? In *Game Theory and the Law*, the authors note:

Insurance contracts must also take into account a *moral hazard problem*, a problem of hidden action. An insurer is not able to learn exactly how an individual behaves once the insurance contract is purchased. Hence, the contract cannot be written in a way that protects the insurance company from

⁴² Professor Keating makes a similar point. He says:

While the ability of employers to affect pension funding is fairly clear, the role of the employees in avoiding the risk of underfunding should not be overlooked. In the LTV Supreme Court case, the PBGC stressed how employees can influence the funding levels of their promised pensions. One of the reasons the PBGC does not completely cover all pension benefits is that employees will have some incentive to insist to their employers that pension plans be adequately funded — the so-called “co-insurance feature” of the system.

Daniel Keating, *Pension Insurance, Bankruptcy and Moral Hazard*, 1991 WIS. L. REV. 65, 75 [hereinafter Keating, *Moral Hazard*]. Indeed, some empirical evidence supports the notion that the PBGC guaranty actually reduced funding quality. See RICHARD A. IPPOLITO, *THE ECONOMICS OF PENSION INSURANCE* 95, 125–295 (1989).

⁴³ See, e.g., Keating, *Moral Hazard*, *supra* note 42, *passim*; Nicholas J. Brannick, Note, *At the Crossroads of Three Codes: How Employers Are Using ERISA, the Tax Code, and Bankruptcy to Evade Their Pension Obligations*, 65 OHIO ST. L.J. 1577 *passim* (2004).

individuals taking actions they would not take if they did not have insurance.⁴⁴

Other standard works state that hidden action is the meaning of moral hazard.⁴⁵ The essence of this hidden action is that it is conduct that contractual parties or regulators cannot control cost effectively.

However, moral hazard implies a level of futility that is absent from the ERISA context. A typical case of moral hazard involves the standard of care that an insured exercises over insured property. Buyers of home insurance will lower the precautions they take against fire and theft. Insurers and buyers would be better off if they could execute enforceable contracts that say, "The insured shall exercise the same standard of care over the property that he would exercise if the policy were not in place." Enforcing such a clause is absurd, because the insurer must be able to determine the actual standard of care exercised and the standard of care that would have been exercised had the contract never existed. Because insurers cannot enforce this clause, the standard of care exercised by insurance buyers will fall.

The literal definition of moral hazard does apply to employees. Because of the PBGC guaranty, they have no reason to demand greater funding or conservative investment of funds. However, there is no need to worry about whether the employees bargain for the right

⁴⁴ DOUGLAS G. BAIRD ET AL., *GAME THEORY AND THE LAW* 153 (1998).

⁴⁵ See DAVID M. KREPS, *A COURSE IN MICROECONOMIC THEORY* 577 (1990) (referring to moral hazard as the problem where "one party to a transaction may undertake certain actions that (a) affect the other party's valuation of the transaction but that (b) the second party cannot monitor/enforce perfectly"); ANDREU MAS-COLELL ET AL., *MICROECONOMIC THEORY* 477 (1995) (referring to moral hazard as the case of hidden action); HAL R. VARIAN, *MICROECONOMIC ANALYSIS* 298–99 (3d ed. 1992) (stating that the problem of moral hazard in insurance contracts would disappear if insurers could observe the level of care taken by their insureds). Some scholars define the term differently. Judge Posner calls moral hazard "The tendency of an insured to relax his efforts to prevent the occurrence of the risk that he has insured against because he has shifted the risk to an insurance company." RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* 121 (6th ed. 2003). This formulation is close to hidden action, although it would cover precautions that might be controlled by contract, such as a home-insurance discount for the use of sprinklers. Professor Richard Ippolito gives a broad definition that moral hazard occurs "when mispricing arises in a buyer-seller contract." RICHARD A. IPPOLITO, *ECONOMICS FOR LAWYERS* 350 (2005). Professor Keating calls it "[t]he problem . . . that those who are insured against certain risks have an incentive to use less than optimal care to avoid those risks." Keating, *Moral Hazard*, *supra* note 42, at 67–68. For a detailed examination of moral hazard, see Tom Baker, *On the Genealogy of Moral Hazard*, 75 TEX. L. REV. 237 (1996).

level of funding. All that matters ultimately is the level of plan funding, which is not hidden and can be regulated. ERISA should simply require funding that minimizes the risk of default. Part III lays out the case for full funding. Part IV sketches a proposal that would implement full funding.

III. EMPLOYER-INTERNALIZATION GOAL

A. Introduction

The previous Part identified the risk-minimization goal as central to ERISA. This goal holds that employees should face little if any default risks on their pensions. This Part will discuss the employer-internalization goal, which holds that employers should bear the cost of accomplishing the risk-minimization goal, but only with respect to their own employees. Part III.B will show how pension obligations are like debt obligations, because employers can avoid paying these costs only through liquidation or bankruptcy.

Unless plans are fully funded, the avoidance of pension obligations in liquidation or bankruptcy violates the employer-internalization goal. Part III.C will show how ERISA falls short of requiring funding that would satisfy the employer-internalization goal. Yet, employers are free to contribute more than what is required by the funding rules. The main reason to do so would be tax benefits. Part III.D examines the interaction of the funding rules and the rules for tax deductibility. The conclusion is that employers with high costs of borrowing and low marginal tax rates will resist funding their plans.

Part III.E uses this conclusion to build a normative case for the employer-internalization goal. Current law subsidizes underfunding by companies with high borrowing costs and low tax rates. Thus, current law can be seen as a form of lemon socialism, where weak companies are subsidized at the expense of the strong.

B. Obligation to Pay

A pension plan is an obligation to pay cash in the future.⁴⁶

⁴⁶ Cf. John Ralfe et al., *Pensions and Capital Structure: Why Hold Equities in the Pension Fund?*, N. AM. ACTUARIAL J., July 2004, at 103. Ralfe states:

Pension promises represent a debt owed by the company to the pension plan members. Pension liabilities are economic liabilities of the company, not the pension plan, as the company has to make good shortfalls in the pension plan. The pension represents a debt owed by the company to the

Because pension plans typically cover large groups of employees, the law of large numbers allows employers and their actuaries to project a reasonably accurate schedule of cash payments to be made in the future. These cash payments are like debt repayments. ERISA makes the pension promise enforceable in federal court and prevents an employer from conditioning payments on having enough profits or the like. Before ERISA, employers could terminate underfunded plans without incurring any obligation to fund the shortfalls. Because there was no federal pension guaranty at that time, participants potentially bore the full loss without any further claim against the employer.⁴⁷

Even in its early days, ERISA allowed at-will termination of underfunded plans, but protected the employees with the PBGC guaranty of benefits. The PBGC had some recourse when an employer terminated an underfunded plan. The plan termination gave the PBGC all plan assets plus a claim against the employer for the shortfall. But, the claim was limited to 30% of the net worth of the employer and its controlled group.⁴⁸ This structure led financial economists to conclude that the employer essentially held a put option. The economists thought that ERISA allowed a company to force (put) its pension liabilities upon the PBGC in exchange for giving up the plan assets and 30% of the company's net worth.⁴⁹ The put right was unilateral, as it was not conditioned upon bankruptcy or other financial distress. Because of this ability to avoid pension liabilities, some economists questioned whether pension plans could be thought of as debt.⁵⁰

The unilateral put right was ended in 1986, with the passage of the Single-Employer Pension Plan Amendments Act (SEPPA).⁵¹ SEPPA

pension fund members.

Id. at 104. Keating, *Moral Hazard*, *supra* note 42, at 77 ("When a company underfunds its pension plan, the firm is in effect 'borrowing' money from the PBGC on an unsecured basis similar to a firm's drawing down an unsecured line of credit.").

⁴⁷ See LANGBEIN & WOLK, *supra* note 6, at 910.

⁴⁸ See MCGILL ET AL., *supra* note 23, at 806–07.

⁴⁹ Cf., e.g., Sharpe, *supra* note 30, at 185 (creating a model where "[i]f there is a shortfall, the employees will receive only [the plan assets], and the company will not be liable for the deficiency").

⁵⁰ See *id.*

⁵¹ Single-Employer Pension Plan Amendments Act of 1986, Pub. L. No. 99-272, 100 Stat. 82 (codified as amended in scattered sections of 29 U.S.C.). Recent commentators remain under the misimpression that total liability is 30%. See, e.g., MYRON S. SCHOLES ET AL., *TAXES AND BUSINESS STRATEGY: A PLANNING APPROACH* 270 (3d ed. 2005) ("After the passage of ERISA, firms can now put the pension plan

established three types of plan terminations. If a plan is fully funded, the employer can terminate it at will after complying with PBGC procedures in a "standard termination."⁵² The plan terminates by offering annuity contracts (issued by insurance companies) and lump-sum distributions to the participants. The standard termination fully discharges the claims of the employees and removes the PBGC from any potential liability for the plan.⁵³

SEPPA established two procedures by which underfunded plans could terminate. They are a "distress termination,"⁵⁴ and an "involuntary termination."⁵⁵ Both types of terminations are conditioned upon financial distress by the employer.⁵⁶ Termination by either method is usually used during liquidation or Chapter 11 reorganization.⁵⁷ The distinction between the two is that the employer institutes a distress termination, whereas the PBGC institutes an involuntary termination.⁵⁸ Without terminating the underfunded plan, the employer will need to contribute funds to the plan according to the funding requirements of the Internal Revenue Code (Code) and

assets plus 30% of the market value of the company to the Pension Benefit Guaranty Corporation (PBGC) to satisfy the pension claims.").

⁵² See ERISA § 4041(a), 29 U.S.C. § 1341(a) (2006) (setting forth exclusive means for plan terminations); ERISA § 4041(b), 29 U.S.C. § 1341(b) (2006) (describing standard terminations).

⁵³ For example, the PBGC takes the position that it has no obligation to insure benefits if an insurance company fails to pay on the annuity contracts. See PBGC Letter on PBGC Liability for Payment of Benefits in Case of Annuity Contract Failure, *reprinted in* 18 BNA PENSION REP. 850 (1991). Moreover, the PBGC takes the position that the employer itself has no such liability. See PBGC Letter on Plan Sponsor Liability after Purchase of Group Annuity Contract, *reprinted in* 18 BNA PENSION REP. 850 (1991).

⁵⁴ See ERISA § 4041(c), 29 U.S.C. § 1341(c) (2006).

⁵⁵ See ERISA § 4042, 29 U.S.C. § 1342 (2006).

⁵⁶ See ERISA § 4041(c)(2)(B), 29 U.S.C. § 1341(c)(2)(B) (2006); ERISA § 4041(a), 29 U.S.C. § 1342(a) (2006).

⁵⁷ See Frank Cummings, *Pension Plan Terminations — Single Employer Plans*, TAX MGMT. PORTFOLIO (BNA) No. 357-3d, at A-18 (2002).

⁵⁸ *Id.* at A-17 to -18. In Chapter 11 reorganization, a collective-bargaining agreement can prevent termination of the plan. See ERISA § 4043(a)(3), 29 U.S.C. § 1341(a)(3) (2006). Collective bargaining agreements do not prevent the PBGC from seeking an involuntary termination of the plan. See *id.* Chapter-11 employers often ask the PBGC to seek an involuntary termination in order to overcome collective bargaining agreements. See, e.g., *Pension Benefit Guar. Corp. v. LTV Corp.*, 496 U.S. 633, 640 (1990) ("LTV, however, could not voluntarily terminate the Plans because two of them had been negotiated in collective bargaining. LTV therefore sought to have the PBGC terminate the Plans.").

ERISA.⁵⁹ Thus, distress termination and involuntary termination are the only ways to avoid the pension liabilities of underfunded pension plans.

The PBGC does receive debt claims following distress or involuntary terminations for the funding shortfall of the plan.⁶⁰ The claim is for the value of *all* benefits (not just those benefits that the PBGC guaranties) under the plan, minus the value of plan assets.⁶¹ Thus, the claim of the PBGC goes beyond its own financial exposure to guaranteed benefits.⁶² It acts as more than a mere guarantor with a right of subrogation against the debtor. It is also a collection agency for employees, with the authority to seek funds from the employer to pay benefit obligations in excess of those it has guaranteed.⁶³ For example, suppose that a plan terminates with \$10 million in assets, \$10 million in PBGC-guaranteed benefits, and \$5 million in other benefits. The PBGC receives a claim for the \$5 million shortfall, enforceable on behalf of employees, even though the PBGC has no liability of its own. If the liability exceeds 30% of the combined net worth of the employer and its affiliates, then the liability exceeding such 30% may be deferred on commercially reasonable terms.⁶⁴

Upon a distress or involuntary termination, the PBGC receives a lien in the property of the employer and its affiliates, capped at 30% of the combined net worth of their total property.⁶⁵ If termination occurs after bankruptcy, the automatic stay will prevent the PBGC from perfecting its lien.⁶⁶ The resulting inability of the PBGC to perfect its lien usually leaves it as an unsecured creditor in bankruptcy. As a result of its unsecured status, the PBGC will likely recover only a portion of its claim. If the termination occurs in Chapter 11, the PBGC may even receive stock in the bankrupt

⁵⁹ See *infra* Part III.C for a discussion of these requirements.

⁶⁰ See Daniel Keating, *Chapter 11's New Ten-Ton Monster: The PBGC and Bankruptcy*, 77 MINN. L. REV. 803, 813–15 (1993) [hereinafter Keating, *Ten-Ton Monster*] (describing the PBGC claims after plan termination).

⁶¹ See ERISA § 4001(a)(18), 29 U.S.C. § 1301(a)(18) (2006).

⁶² Cf. ERISA § 4001(a)(17), 29 U.S.C. § 1301(a)(17) (2006) (defining “amount of unfunded guaranteed benefit liabilities” to cover only those benefits guaranteed by the PBGC).

⁶³ See ERISA § 4022(c), 29 U.S.C. § 1322(c) (2006) (stating that the PBGC will pay additional benefits attributable to its recovery efforts).

⁶⁴ See ERISA § 4062(b)(2), 29 U.S.C. § 1362(b)(2) (2006).

⁶⁵ See ERISA § 4068(a), 29 U.S.C. § 1368(a) (2006).

⁶⁶ See Keating, *Ten-Ton Monster*, *supra* note 60, at 827.

employer to satisfy its claim.⁶⁷ The potential to perfect a lien is important, even if the PBGC rarely does so. Outside of bankruptcy or liquidation, few plan sponsors attempt distress terminations because the PBGC could perfect its lien.

A distress or involuntary termination is more limited than a bankruptcy discharge. A significant difference is the power of the PBGC to restore the terminated plan to the employer if the employer later has a significant improvement in financial health.⁶⁸ Another difference is the surcharge that the PBGC imposes on plans that terminate in Chapter 11 bankruptcy — \$1250 per participant per year for three years following termination.⁶⁹ Thus, employers must actually pay a substantial fee to discharge their pension obligations in Chapter 11. These two differences (restoration and surcharge) are minor and illustrate that discharging pension obligations is actually more difficult than discharging other debt.

In summary, employers have a legal obligation to pay pension obligations that is similar to the obligation to pay debt. Employers can terminate fully funded plans at will, but must be in financial distress (typically bankruptcy or liquidation) to terminate underfunded plans. Termination gives the PBGC claims against the employer (and affiliates) for any funding shortfall. Thus, employers can avoid their pension obligations, but can do so only in the way they avoid other obligations — through bankruptcy or liquidation.

Recall, however, that the risk-minimization goal minimizes the risk of employer default faced by employees. The employer-internalization goal is thwarted if employers escape pension obligations after bankruptcy or liquidation. Someone other than the employer bears the burden of these obligations. Full funding of pension plans would be needed to achieve the employer-internalization goal and the failure of current law to achieve this goal is introduced in the next Part.

C. Obligation to Fund

1. Introduction

Part II demonstrated that ERISA largely achieves the risk-minimization goal. Its ultimate failure to achieve the employer-

⁶⁷ See Michael Schroeder, *Big Stakes in Ailing Airlines Raise Questions for U.S. Pension Agency*, WALL ST. J., Nov. 3, 2005, at A1.

⁶⁸ See ERISA § 4047, 29 U.S.C. § 1347 (2006).

⁶⁹ See *supra* note 27 and accompanying text.

internalization goal is established in this Part.

Part II.B showed how the premium charged by the PBGC barely relates to risk of default. Thus, the premium system fails to achieve the employer-internalization goal. Part III.B showed that employers do have a legal obligation to pay pension obligations, but this obligation can be avoided by plan termination in bankruptcy or liquidation. Employers need to internalize the cost of paying pension obligations for all contingencies, whether or not they end up in bankruptcy or liquidation. Thus, the law of plan terminations falls short of the employer-internalization goal.

Posting enough collateral by funding the pension obligation would satisfy the employer-internalization goal and ERISA does require some plan funding. As this Part will show, however, ERISA falls well short of the full funding that would be need to satisfy the employer-internalization goal.

2. Discounting Pension Liabilities to Present Value

The starting point for the funding rules is a determination of the plan's liabilities. Pension plans represent an employer's obligation to pay cash in the future and these obligations are valued by discounting to present value. The crucial assumption in this valuation is the interest rate used, as higher interest rates lead to lower present values. A leading treatise notes:

The present value of a series of future contingent payments is a function of the rate of investment return, or of interest at which the payments are discounted — the higher the interest assumption, the smaller the present value. Pension plan costs and liabilities are extremely sensitive to the interest assumption in the valuation formula because of the long time-lapse between the accrual of a benefit credit and its payment. The precise impact of the interest assumption depends upon [other actuarial assumptions]; but it is a fairly sound generalization that, for a typical plan, a change (upward or downward) of 1[%] in the interest assumption (e.g., an increase from 6 to 7[%]) alters the long-run cost estimate by about 25[%].⁷⁰

⁷⁰ MCGILL ET AL., *supra* note 23, at 611–12. Other sources suggest that the 25% figure is too high. See, e.g., Daniel Farley, *Selecting a "Liability Appropriate" Fixed Income Mgt Approach*, POINT OF VIEW, Dec. 15, 2003, <http://www.ssga.com/library/>

In recent times, the funding rules have specified two rates for valuing pension liabilities: high-grade corporate bonds and 30-year Treasury bonds. Current law uses high-grade corporate bonds.⁷¹

To see the practical difference between the two rates, consider that a 1% increase in the discount rate might lower the reported value of pension liabilities by 10% to 25%.⁷² The high-grade corporate bond rate for December 2003 was 5.81%,⁷³ whereas the 30-year Treasury rate for December 2003 was 5.07% — a difference of 0.74%.⁷⁴ Compared to the Treasury rate, the corporate rate might lower the reported value of plan liabilities by 7.4% to 18.5%. Higher interest rates produce lower liabilities, at least on paper. These lower liabilities reduce the obligation to fund a plan.

Full implementation of the risk-minimization goal implies that the 30-year Treasury rate is correct. If pension obligations are to be truly risk free, then they must be discounted at a risk-free rate. It is a false argument that plans are able to earn rates of return higher than the risk-free rate by investing in equities or corporate bonds. This argument confuses earned returns and expected returns. A plan can expect a higher rate of return by investing in risky assets, but it must subject itself to risk in order to earn it. The higher return is not earned until after the risk turns out well. If the risk turns out badly, asset values fall, creating a funding shortfall. Thus, a mismatch between the fixed liability and the risky asset endangers plan funding.⁷⁵ Indeed, the mismatch between plan assets and liabilities is a major cause of the current problems of the PBGC.⁷⁶

The value of a liability is the cost of discharging it, whether or not the debtor sets aside high-yield or low-yield assets to fund it. Consumers do not get to discount their debt payments by paying them

povw/danfarleyselectingaliabilty20031215/page.html (asserting that a typical plan has a liability duration of ten to fifteen years).

⁷¹ See I.R.C. § 412(b)(5). PPA 2006 will change the calculation of this rate starting in 2008. Then, the funding rules will incorporate a yield curve (e.g., with short-term rates applying to short-term obligations). See Pension Protection Act of 2006 § 112, I.R.C. § 430.

⁷² See *supra* note 70 and accompanying text.

⁷³ I.R.S. Notice 2004-34, 2004-1 C.B. 848.

⁷⁴ I.R.S. Notice 2004-3, 2004-1 C.B. 391.

⁷⁵ See G. Bennett Stewart III, *Pension Roulette: Have You Bet Too Much on Equities?*, HARV. BUS. REV., June 2003, at 104, 105.

⁷⁶ See Zvi Bodie, *On Asset-Liability Matching and Federal Deposit and Pension Insurance*, FED. RES. BANK OF ST. LOUIS REV., July-Aug. 2006, at 323 [hereinafter Bodie, *Asset-Liability Matching*].

off in stock rather than cash and plan sponsors should not either.⁷⁷

There are, however, legitimate arguments for using something higher than the risk-free rate. Unlike Treasury bonds, the PBGC guaranty carries some risk of default and the guaranty is capped. Also, employers can use the high-grade corporate bond rate to settle their pension obligations. Starting in 2008, employers will calculate lump-sum distributions using high-grade corporate bond yields. And, it is possible that employers can satisfy their pension obligations by purchasing annuity contracts that are valued using something higher than the risk-free rate.⁷⁸

This Article will leave the correct discount rate as an issue needing more research. Part IV.B does suggest a bifurcated approach that would value PBGC guaranteed benefits at the risk-free rate and other benefits at some higher rate. What should be clear, however, is that liabilities should be valued using current, not historical, interest rates. The problem of smoothing over asset and liability values with historical averages is discussed in the next Part.

3. Smoothing Assets and Liabilities Using Historical Averages

Rather than value assets at current fair market value and liabilities at current interest rates, the funding rules allow plans to use average asset values and average interest rates, determined over an historical period. These smoothing rules continue a theme first discussed in the prior subpart — protecting employers from financial market volatility. As in the prior subpart, however, volatility creates real shortfalls, which the PBGC guaranties. Left unfunded, these shortfalls violate the employer-internalization goal. Yet, the funding rules are drafted specifically to wish away shortfalls created by volatility.

In valuing assets, Treasury regulations currently allow smoothing of asset values over five years.⁷⁹ PPA 2006 also allows for smoothing with historical averages, but only over two years. The asset smoothing rules do limit deviations from current values; the resulting average

⁷⁷ Cf. Lawrence N. Bader, *The Case Against Stock in Corporate Pension Funds*, PENSION SEC. NEWS, Feb. 2003, at 17 (“[C]ompanies add no value for shareholders by doing what the shareholders could do for themselves — investing in publicly traded securities.”).

⁷⁸ But cf. Bader, *Unnecessary Evil*, *supra* note 40, at 19 (“[A]nnuity purchase rates are unlikely to be significantly (if at all) below liabilities that combine Treasury rates with the demographic assumptions used for funding the plans.”).

⁷⁹ I.R.C. § 412(c)(2)(A).

must be between 90% and 110% of the fair market value of plan assets.⁸⁰ In valuing liabilities, current law allows plans to average the discount rate over four years.⁸¹ PPA 2006 shortens the averaging period to two years.⁸² Unlike the smoothing rules for asset valuations, the interest smoothing rules do not limit deviations from current interest rates.

These smoothing mechanisms mask the shortfalls created by financial volatility. Suppose that, last year, a plan was fully funded (but just barely). If interest rates fall one percentage point (e.g., from 7% to 6%), liability values would almost certainly rise by at least 10%.⁸³ Adding a 10% decline in the plan's asset values could create a funding shortfall of 20%, based on market values. Because of smoothing conventions, the funding rules recognize only a fraction of the true shortfall that has been created.

But employees and the PBGC are exposed to underfunding based on market values, not accounting conventions and wishful thinking. Smoothing violates the weak form of the random walk theory of asset prices (also known as the efficient market theory). If an asset is worth \$100 today, its value from last year has no effect on its expected value a year from now. Moreover, the smoothing rules implicitly allow an employer to satisfy liabilities with assets valued at historical prices. The prior subpart showed how incredible it would be to apply the funding rules to consumer debt, noting that consumers cannot discount debt payments by paying with high-yield stock rather than zero-yield cash.⁸⁴ For the same reason, consumers cannot ask their lenders to accept payment in stock based on values from last year.

But smoothing is not the most significant failure of the funding rules. Even after obscuring the values of assets and liabilities, the funding rules allow employers to defer the obligation to satisfy the resulting short fall. This deferral mechanism is discussed in the next subpart.

4. Deferring Shortfalls Using Amortizations and Waivers

Achieving the employer-internalization goal would require full funding of pension plans at all times. The previous subpart showed how accounting conventions obscure the measurement of funding

⁸⁰ See Pension Protection Act of 2006 § 112(a), I.R.C. § 430(g)(3).

⁸¹ See I.R.C. § 412(b)(5).

⁸² See Pension Protection Act of 2006 § 112(a), I.R.C. § 430(h)(2).

⁸³ See *supra* note 70 and accompanying text.

⁸⁴ See *supra* text accompanying note 77.

shortfalls. This subpart shows that the funding rules fail to require full funding of the incorrectly measured shortfall.

Current law and PPA 2006 both require annual contributions to underfunded plans equal to the normal cost, which is the portion of liabilities attributable to the current year.⁸⁵ But plans can have very large shortfalls independent of the normal cost. For example, an employer might voluntarily increase liabilities by increasing plan benefits. Or financial volatility might produce funding shortfalls when asset values fall and liability values rise (in response to falling interest rates). Current law allows plans to amortize these liabilities over periods ranging from five to thirty years.⁸⁶ PPA 2006 provides a single period of seven years to amortize most other liabilities.⁸⁷ More lenient rules apply to the airlines.⁸⁸ Thus, neither PPA 2006 nor current law tries to force employers to fund their plans fully.

Plans with very poor funding may face additional contributions. However, these contributions still fall short of full funding. In simplified terms, current law requires an additional contribution if the plan is less than 80% funded (and possibly if the plan is less than 90%). The additional contribution is between 18% and 30% of the plan's underfunding; the applicable percentage depends on the severity of underfunding. PPA 2006 calculates additional contributions differently, requiring them if plan funding is below two thresholds. The first threshold is a current-year funding level of 80% using ordinary actuarial assumptions. The second threshold is a previous-year funding level of 70% using more stringent actuarial assumptions. These percentages are phased in from 2008 to 2011. A plan that meets neither threshold will have its required contribution increased according to the more stringent assumptions and will pay an additional charge of \$700 per participant and 4% of plan liabilities. More lenient rules apply to the automobile industry.⁸⁹

The precise details of this system are not, however, very important. What is important is that both current law and PPA 2006 tolerate funding shortfalls over extended periods of time. Employers are responsible for immediate funding of only a fraction of the

⁸⁵ See I.R.C. § 412(b)(2)(A); Pension Protection Act of 2006 § 112(a), I.R.C. § 430(a)(1)(A). No contribution is required, however, if the plan is fully funded. See I.R.C. § 412(c)(6); Pension Protection Act of 2006 § 112(a), I.R.C. § 430(a)(2).

⁸⁶ See I.R.C. § 412(b)(2)(B).

⁸⁷ See Pension Protection Act of 2006 § 112(a), I.R.C. § 430(c)(2).

⁸⁸ See Pension Protection Act of 2006, Pub. L. No. 109-280, § 402(a), 120 Stat. 780, 922.

⁸⁹ See Pension Protection Act of 2006 § 112(a), I.R.C. § 430(i)(4)(C).

funding shortfalls in their plans.

Employers can avoid making even this contribution by obtaining a funding waiver from the Internal Revenue Service (Service), which may waive the required contributions if the employer is “unable to satisfy the minimum funding standard . . . without temporary substantial business hardship . . . and if application of the [funding] standard would be adverse to the interests of plan participants in the aggregate”⁹⁰ A key reason for granting the waiver is the fear that the plan would be terminated unless a waiver is granted.⁹¹ Waived liabilities must be amortized over five years.⁹²

Funding waivers are particularly incoherent compared to the additional contributions required from poorly funded plans. On the one hand, the funding rules excuse the shakiest companies from making contributions if they successfully plead their case to the Service. On the other hand, the funding rules require enhanced contributions from companies with the most poorly funded plans. Even the institutional goals of the agencies are crossed. The Service administers the funding rules and sees tax revenues increase when employers make lower plan contributions. The PBGC administers the insurance system and sees its risk exposure increase when employers make lower plan contributions. Funding waivers are thus a fitting end to the brief review of the funding rules contained in this Part.

5. Summary

In summary, neither current law nor PPA 2006 achieves the employer-internalization goal. Both sets of law distort the measurement of assets and liabilities by allowing employers to use historical values and smoothing rather than market values. More importantly, both sets of law fail to require full funding of the shortfalls that are recognized under the flawed standards. Instead, employers can amortize the shortfalls over five or more years. Finally, and perhaps most perversely, both sets of law allow employers to avoid paying the insufficient funding obligations by seeking a waiver from the Service — an institution that has no discernable interest in the sufficiency of plan funding.

As a result, current law and PPA 2006 subsidize the underfunding of pension plans. But, how much should the American public care?

⁹⁰ I.R.C. § 412(d)(1).

⁹¹ See I.R.C. § 412(d)(2)(D).

⁹² See I.R.C. § 412(b)(2)(C).

Pension subsidies, paid for by taxpayers, are nothing new. Taxpayers are already subsidizing pension plans through the Code at an *annual* expense that is far greater than the overall deficit of the PBGC.⁹³ The remainder of this Part will discuss why the PBGC subsidy is particularly objectionable, thus supplying normative support for the employer-internalization goal. To this end, the next Part will develop a theory of funding to show why financially strong employers tend to fund their plans while financially weak ones resist funding.

D. Taxes, the Cost of Capital, and the Funding Decision

Without the regulation and tax structure of pension law, employers might be indifferent to funding their pension plans. Companies might borrow from outsiders and replace pension debt with outside debt.⁹⁴ Shareholders may not care whether their company owes money to an employee or a bank. Part II.C, however, showed why employers care. Pension regulation makes funding a plan expensive. Because pension obligations are regulated, they must be discounted at low interest rates. If these low rates are lower than the rates at which employers could borrow, employers will resist plan funding. In addition, the funding rules require only a fraction of full funding. However, as discussed in this Part, the taxation of pensions could prompt an employer to fund above the minimum amount.⁹⁵

Without the cash on hand to fund the plan, employers could borrow from third parties. Borrowing to fund the pension plan merely replaces one creditor (the employees) with another (the third-

⁹³ The tax subsidy for these plans is about \$108 billion per year. See STAFF OF JOINT COMM. ON TAXATION, 109TH CONG., ESTIMATES OF FEDERAL TAX EXPENDITURES FOR FISCAL YEARS 2005–2009, at 38 (Joint Comm. Print 2005). Perhaps half of that can be attributed to defined-benefit pension plans. In comparison, recall that the expected deficit for all claims the PBGC expects to pay is \$23.1 billion.

⁹⁴ See Bader, *Unnecessary Evil*, *supra* note 40, at 15.

⁹⁵ See Regina T. Jefferson, *Defined Benefit Funding: How Much is Too Much?*, 44 CASE W. RES. L. REV. 1, 52 (1993) (“[A]n employer subject to federal income tax is usually reluctant to contribute more than can be deducted in a plan year . . .”); cf. Fischer Black, *The Tax Consequences of Long-Run Pension Policy*, J. APPLIED CORP. FIN., Winter 2006, at 8 (examining the tax incentives to fund a pension plan); Irwin Tepper, *Tax and Corporate Pension Policy*, 3 J. FIN. ECON. 183 (1976). One might be able to create an elaborate story in which employers fund their plans as a way to signal its true cost to outside investors. This seems unlikely as the essence of funding is to harm outside investors by exempting assets from their claims. Moreover, funding levels are determined by actuarial methods, the results of which can be simply communicated to outside investors.

party lenders). The interest cost of new debt is a proxy for the cost of other sources of capital. Rather than borrowing to fund the plan, the company could also issue new equity or use working capital. Those decisions are about the company's capital structure. Under the Modigliani-Miller theorem the decision does not affect company value unless the decision affects taxes and transactions costs.⁹⁶

So, this Part will assume that the source of funding comes from outside borrowing, but the analysis would hold if funding came from another source. This Part will compare the cost of leaving a plan unfunded with the cost of paying lump sums. Lump-sum payments are computationally convenient and reflect the cost of discharging pension obligations. Paying the lump sum is simply one type of settlement. Other types of settlement (full funding and annuity purchases) would be analyzed exactly the same way after identifying the appropriate settlement rate.

Recall the stylized pension plan and example in Part II.C. There, the employer had a pension plan that will pay \$1 million in ten years. The employer can borrow at 7%, but the statutory rate for valuing lump sums is 5%. The employer looks at two approaches: wait-and-pay (under which the employer does no funding and pays the pension in ten years) and borrow-to-pay (under which the employer borrows the funds needed to pay a lump sum). The example in Part II.C showed that the employer would resist settling the pension today and would choose wait-and-pay approach.⁹⁷

Let us introduce the effect of taxation and suppose the employer is subject to a 50% income tax rate. Now, the employer will pursue the borrow-to-pay approach. The employer will see that the wait-and-pay approach results in a year ten cash outflow of \$500,000. Code section 404 denies the employer any deduction for the pension expense until funding actually occurs.⁹⁸ Because the \$1 million payment would be deductible — but only in year ten — it costs the employer only \$500,000. The borrow-to-pay approach results in the employer paying a lump sum of \$606,531, which is \$1 million discounted by the settlement rate of 5%. A contribution of \$606,531 is deductible and has an after-tax cost of only \$303,265. The employer borrows this amount and pays an after-tax rate of interest at only 3.5%; the true cost of borrowing is reduced to reflect the value of the tax deduction. If the employer structures the debt as a balloon

⁹⁶ See POSNER, *supra* note 45, at 476.

⁹⁷ See *supra* notes 36–40 and accompanying text.

⁹⁸ See I.R.C. § 404.

repayment in ten years,⁹⁹ it will need to repay \$430,354¹⁰⁰ in ten years.

Comparing the year ten cash outflows, the wait-and-pay approach costs \$500,000 and the borrow-to-fund approach costs \$430,354. So, the employer will choose to fund the plan and pay the lump sum.

The after-tax cost of borrowing accounts for the difference in the two examples. In the zero-tax example, it truly cost the employer 7% to borrow funds. In the 50%-tax example, it cost the employer only 3.5% to borrow funds. Thus, the relevant question is whether the after-tax cost of borrowing is above or below the settlement rate. If it is above, the employer does not fund. If it is below, the employer does fund.

Although the settlement rate is the same for all employers, the marginal tax rate and borrowing rate vary widely.¹⁰¹ Financially strong employers tend to have low borrowing rates and high tax rates. As a result, they will tend to fund their plans. Financially weak employers tend to have high borrowing rates and low tax rates. As a result, financially weak companies will tend to resist funding their plans.¹⁰²

⁹⁹ Repayment of the interest in ten years does not prevent an accrual-method taxpayer from deducting interim interest. Most corporate employers are accrual basis taxpayers. See I.R.C. §§ 446, 448. Accrual basis taxpayers may deduct items before cash payment, if the item is represented by a liability, once “all the events have occurred that establish the fact of the liability, the amount of the liability can be determined with reasonable accuracy, and economic performance has occurred with respect to the liability.” Treas. Reg. § 1.446-1(c)(1)(ii)(A) (2006); see also I.R.C. § 461(h)(2)(A)(i) (stating that economic performance by employer occurs when employee performs services). This “all-events test” is the key to accrual accounting and would allow the employer to deduct compensation paid with borrowed funds plus any interest expenses.

¹⁰⁰ $\$303,265 \times (e^{10 \times 0.035})$.

¹⁰¹ The before-tax borrowing rate could be determined by looking at publicly traded debt. The tax rate (which determines the after-tax borrowing rate) is more complicated. Perhaps the best concept here is of a marginal tax rate: the present value of any additional taxes incurred by reason of an additional dollar of income. For many corporations, an additional dollar of current income can affect the tax liabilities for prior and later tax years (e.g., because of the carry back and carry forward of net operating losses). Financial economists have used sophisticated techniques to estimate marginal tax rates for corporations. See generally SCHOLES ET AL., *supra* note 51, at 184–93.

¹⁰² Cf. Andrew H. Chen & James L. Bicksler, *The Integration of Insurance and Taxes in Corporate Pension Strategy*, 40 J. FIN. 943 (1985) (identifying the “tax effect” and the “insurance effect” as the two main determinants of a corporation’s funding strategy). Empirical research has linked poor financial health and low pension funding. See U.S. GEN. ACCOUNTING OFFICE, RECENT EXPERIENCES OF LARGE DEFINED BENEFIT PLANS ILLUSTRATE WEAKNESSES IN FUNDING RULES 4 (2005); Watson Wyatt, *Cashing In: Do Aggressive Funding Policies Lead to Higher Credit*

The normative implications of this failure are discussed in the next Part.

E. Lemon Socialism and Subsidized Underfunding

By insuring pension obligations against employer default, the PBGC guaranty satisfies the risk-minimization goal. However, by collecting inadequate premiums and demanding minimal contributions, the funding and insurance rules fail to satisfy the employer-internalization goal. Thus, current law and PPA 2006 subsidize underfunded pension plans. This Part will describe how the PBGC subsidy harms the beneficial discipline of capital markets.

Premium payments by well-funded plans have kept the PBGC from collapse. Some have even suggested that transfers were an intentional part of “industrial policy” at the time ERISA was passed.¹⁰³ Such transfers run the risk of creating an adverse-selection problem, driving the best risks out of the insurance pool and leaving only the worst.¹⁰⁴ Although transfers among employers might be political reality, they are not good policy.

Ultimately, the PBGC subsidy might cost taxpayers, who could be called upon for a savings-and-loan-style bailout. Taxpayers already subsidize pension plans through the Code at an *annual* expense that is far greater than the overall deficit of the PBGC.¹⁰⁵ Unlike the tax subsidy, however, a PBGC subsidy interferes with workings of capital markets. Rather than exploring the fiscal cost of a PBGC bailout (which could be large),¹⁰⁶ this Part will instead focus on how the PBGC guaranty interferes with capital markets.

Capital markets channel scarce resources to projects with the highest returns. Projects with low or negative expected returns do not receive funding. By distorting this channeling mechanism, the subsidized PBGC guaranty allows employers to pursue risky and low-return projects. To see how, suppose that, instead of guarantying pensions, the government agreed to guaranty any commercial debt. The only qualification is that the borrower must agree to give up any

Ratings?, INSIDER, Oct. 2005, <http://www.watsonwyatt.com/us/pubs/insider/showarticle.asp?ArticleID=15305>.

¹⁰³ See Zvi Bodie, *What the Pension Benefit Guaranty Corporation Can Learn from the Federal Savings and Loan Insurance Corporation*, 10 J. FIN. SERVICES RES. 83 (1996).

¹⁰⁴ See *id.* at 84.

¹⁰⁵ See *supra* note 93.

¹⁰⁶ See Bodie, *Asset-Liability Matching*, *supra* note 76, at 324–28.

tax deduction for the interest expense. The hypothetical guaranty would be enormously expensive for taxpayers. But, let us ignore taxpayer expense, as we are with the PBGC guaranty. Is there any other reason for society to reject the hypothetical loan guaranty? The answer turns out to be “yes,” because the guaranty diverts scarce capital to wasteful and risky projects.

The proper channeling of capital, without the interference of federal loan guaranties, can be illustrated as follows. Suppose that ABC Co. is being formed. Currently, the risk-free rate of interest is 5% and ABC Co. is looking to borrow funds. Fortunately for ABC Co., lenders are risk neutral in this hypothetical world. Risk neutrality does not, however, mean that ABC Co. can borrow at 5%. Instead, it means that lenders must expect a 5% return, after accounting for the risk of default. After all, corporate shareholders enjoy limited liability and even risk neutral lenders need more than 5% interest to offset the chance that they would not be repaid.¹⁰⁷ So, before Lend Co. lends \$1 million to ABC Co. for one year, Lend Co. needs to expect a payment of \$1,050,000.

Now, suppose that ABC Co. would be capitalized solely with the loan from Lend Co. ABC Co. is considering a project that requires a \$1 million investment, has a 50% chance of complete loss of the \$1 million, and a 50% chance of a return of the \$1 million plus an additional \$900,000. The cash flows from the project are as follows:

TABLE II.

<i>Cash Flows from Project</i>		
Year 1		\$ (1,000,000)
Year 2	50% Chance	\$ 0
	50% Chance	\$ 1,900,000
	Expected Value in Year 2	\$ 950,000

Lend Co. would not lend the money to ABC Co. without the federal loan guaranty. Even if Lend Co. could reap all of the returns from the project, it can expect to receive only \$950,000. However, Lend Co. needs an expected payment of \$1,050,000 to generate a 5% return.

Lend Co.’s refusal to lend the \$1 million is a good thing from the perspective of society. The project has an expected loss of 5%. Because the risk-free rate is 5%, there must be other, worthier projects that produce returns of at least 5%. Society is better off if Lend Co. finances those projects rather than the one ABC Co. is considering.

¹⁰⁷ Even without formal limits on liability, there would still be a risk of default.

In contrast, suppose the federal government guarantied the debt. Lend Co. is now perfectly willing to lend the \$1 million as it is assured of repayment. The shareholders of ABC Co. are now on board as well and stand to make a handsome profit. If the project succeeds, they will make \$850,000 (i.e., the \$1,900,000 return minus the \$1,050,000 payment of principal and interest to Lend Co.) If the project fails, they make or lose nothing and the federal government pays off Lend Co. Thus, the ABC Co. shareholders have an expected payment of \$425,000 on the project.

TABLE III.

<i>Cash Flows to Shareholders with Federal Guaranty</i>		
Year 1		\$ 0
Year 2	50% Chance	\$ 0
	50% Chance	\$ 850,000
	Expected Value in Year 2	\$ 425,000

But the federal guaranty has not made the project any better for society. It is the same loser that it was before. The guaranty has, however, made the project a winner for ABC Co. and Lend Co.¹⁰⁸ The guaranty burdens society in two ways. First, taxpayers must pay for the guaranty. In this example, the payment is \$1,050,000 if the project fails. Second, scarce capital is being diverted into a risky and wasteful project.

Moreover, the diversion benefits only the financially weak firms that are willing to give up the tax deduction in exchange for the guaranty. Strong companies with high marginal tax rates and low costs of borrowing will reject the guaranty. Companies with low marginal tax rates and high costs of borrowing will accept the guaranty. Federal loan guaranties allow the weakest companies to pursue overly risky, perhaps even wasteful, projects. They can be seen as a form of “lemon socialism,”¹⁰⁹ subsidizing the least viable

¹⁰⁸ This is simply a variation of the well-known incentive that limited liability equity holders have to shift risk to their creditors. See FRANK H. EASTERBROOK & DANIEL R. FISCHEL, *THE ECONOMIC STRUCTURE OF CORPORATE LAW* 50 (1991).

¹⁰⁹ Cf. Timothy A. Canova, *The Transformation of U.S. Banking and Finance: From Regulated Competition to Free-Market Receivership*, 60 BROOK. L. REV. 1295, 1338 n.140 (1995) (“If socialism is a system of public ownership of the means of production, ‘lemon socialism’ refers to a system of government purchase and/or subsidy for unproductive or failing sectors of the economy. The government buys a lemon rather than nationalizing a Cadillac.”); George Will, *Hot Tubs and Cold Moralizing*, WASH. POST, Jan. 8, 2006, at B7 (equating “lemon socialism” with “tax subsidies for failing businesses that the market says should fail”). The phrase has

firms in their pursuit of wasteful, risky investments.

Of course, there are differences between a general loan guaranty and a pension guaranty. Companies cannot raise unlimited funds at zero transaction costs using their pension plans. The PBGC premiums have some relationship to risk and partial plan funding is required. Also, pension plans are subject to notoriously heavy regulation. Nonetheless, underfunded pension plans allow employers to finance a portion of their labor costs and less economically viable companies will underfund to take advantage of the subsidized PBGC guaranty. Underfunded pensions are government guaranteed debt. Thus, the social cost of the PBGC guaranty is essentially the same as that of the guaranteed commercial loan. Eliminating this lemon socialism through full funding is the subject of the next Part.

IV. DESIGNING A FULL FUNDING REGIME

A. Introduction

Congress needs to revisit the pension funding and insurance rules to satisfy the risk-minimization and employer-internalization goals. There are three potential ways for ERISA to satisfy these goals: (1) greatly increasing the priority of the PBGC during employer bankruptcy or liquidation; (2) directing the PBGC to charge market-based premiums; and (3) requiring full funding of plans.

Some legal commentators have asserted that first-priority lien in bankruptcy would help solve the funding crisis.¹¹⁰ Then, so long as the employer had enough gross assets to satisfy its pension claims, funding and the PBGC guaranty would be irrelevant (although the PBGC would retain its role as debt collector). Other voluntary creditors could protect their interests by demanding that the employer fund its plan and secure its pension obligations. Such a system would doubtlessly impose transition costs on existing creditors who would see their existing priority fall behind the PBGC's. Without transition rules, the first-priority lien may violate the takings clause of the Constitution¹¹¹ and effective transition rules may well be impossible to

been attributed to John Kenneth Galbraith. See Paul Stephen Dempsey, *Taxi Industry Regulation, Deregulation & Reregulation: The Paradox of Market Failure*, 24 TRANSP. L.J. 73, 76 n.8 (1996).

¹¹⁰ See Keating, *Moral Hazard*, *supra* note 42, at 100–01; cf. Keating, *Ten-Ton Monster*, *supra* note at 60, *passim* (describing the low priority that the PBGC claims receive in bankruptcy).

¹¹¹ Cf., e.g., *E. Enters. v. Apfel*, 524 U.S. 498, 528–29 (1991) (“[L]egislation might

draft into law.

Another approach would be to allow the PBGC to charge market premiums for its guaranty. As a federal institution, the PBGC would face severe difficulties setting market prices for its premiums. The PBGC would be handicapped in pricing risk, which turns not only on funding levels but the credit quality of the employer. Even if the PBGC could price risk, it would need to do so on a case-by-case basis. The determinations would be made in agency hearings, not commercial negotiations. Effective funding reform should minimize the role of the PBGC, not expand it.

Requiring private insurance would be problematic as well.¹¹² There is no history of private pension insurance in this country and it is unclear that any insurers would actually supply such a product. Of course, insurers would be willing to issue annuity contracts that pay benefits, but such contracts are simply another form of plan funding.

The most difficult problem with private insurance would be keeping it from lapsing before bankruptcy. Consider, again, our stylized pension that pays a \$1 million lump sum in ten years. It is currently unfunded, but guaranteed by a private insurer under a policy that lasts for one year. Now, suppose that the employer hits financial difficulty, making bankruptcy very likely. There is no problem if the employer goes bankrupt in the next year while covered by the insurance. But, what if the employer is still distressed, but not yet bankrupt, after the insurance expires in one year? Since bankruptcy is very likely, the insurer will probably charge a premium that is almost the cost of full funding. Rather than paying this high premium, the employer might simply enter bankruptcy without pension insurance. Unless there is some mechanism to ensure that private insurance would be renewed, coverage could routinely lapse and violate the risk-minimization goal.

The remaining option is to require full funding and this approach is feasible. Congress has amended the rules several times, most recently with PPA 2006, and Congressional staff know how to draft funding standards and related transition rules. Focusing on the

be unconstitutional if it imposes severe retroactive liability on a limited class of parties that could not have anticipated the liability, and the extent of that liability is substantially disproportionate to the parties' experience.").

¹¹² Richard Ippolito has proposed a combination of PBGC reform and private insurance. He would have all plan sponsors belong to a common pool governed by a board elected by the plans. The board would set rates according to market principles, but plans could opt out if they buy private insurance. See Ippolito, *supra* note 29, at 13-15.

funding standards would also minimize the role of federal regulators, as there would be no role for funding waivers or determining the creditworthiness of employers that have fully funded plans. Employers would, instead, rely on the existing actuarial profession to satisfy their obligations. Since plan funds are held in trust, past funding does not need to be renewed, as private insurance would. The remainder of this Part sketches a practicable system that would minimize funding shortfalls while respecting employer freedom.¹¹³

B. Measurement of Pension Assets and Liabilities

The key to outlawing plan-funding shortfalls is an accurate, periodic measure of assets and liabilities at fair market value. The difference between asset and liability values represents the exposure that retirees and the PBGC have to employer default. Eliminating this exposure should be the goal of the funding rules.

Valuing assets should be straightforward but has been obscured by the current funding rules. Subpart III.C.3 described the practice of smoothing. Rather than requiring current, fair market value for assets, the funding rules allow the use of historical averages calculated over the prior two to five years. But only current value describes the amount of assets available to satisfy claims. Historical prices are irrelevant to current values and to future returns. In other words, the market has no memory.¹¹⁴ The funding rules should forget historical prices as well.

For similar reasons, the funding rules should forget past liabilities and interest rates. Current law allows employers to value liabilities using a historical average of interest rates. Historical prices tell us nothing about the current cost of funding or even the future of interest rate movements. Debt markets forget about historical interest rates and the funding rules should as well.

Smoothing of assets and liabilities allows employers to avoid making contributions in response to volatility. But, such volatility has costs, which the employer-internalization goal places upon the employer.¹¹⁵ An abrupt fall in assets and rise in liabilities creates a real funding shortfall that needs to be remedied. The funding rules treat such shortfalls as aberrations that will pass, rather than breaches

¹¹³ See Jeremy Gold, *Never Again: A Transition to a Secure Private Pension System*, J. PORTFOLIO MGMT., Fall 2005, at 92.

¹¹⁴ See RICHARD A. BREALEY ET AL., PRINCIPLES OF CORPORATE FINANCE 349–50 (8th ed. 2006).

¹¹⁵ See Bader & Gold, *supra* note 5, at 9.

that may widen. Indeed, financial volatility is what moved the PBGC from surplus to deficit status at the beginning of this new century.¹¹⁶

Thus, assets should be measured at current, fair market value and liabilities should be valued at an appropriate, current rate of interest. Part II.C discussed the idea of a “settlement rate,” which is the discount rate that would be used if the employer tried to discharge its pension obligations. The correct settlement rate is subject to debate. If the risk-minimization goal is to be fully implemented, then employee pensions must be risk free. And, risk-free pensions must be valued according to the risk-free rate of return on Treasury bonds.

However, current law does not make pensions completely risk free. Employees suffer default risk on benefits above the PBGC cap and the PBGC is not even backed by the federal government. Employers can also terminate plans by buying annuity contracts, which have some default risk. A new funding regime could possibly divide plan liabilities. Liabilities that are insured by the PBGC would be valued at the risk-free rate. Other liabilities would be valued at some higher but still conservative rate of interest. The yield on high-grade corporate bonds may be appropriate for this purpose.

In summary, the funding rules should value assets and liabilities at current values rather than historical averages. This approach would identify shortfalls caused by volatility rather than allowing employers to hide them with smoothing rules.¹¹⁷ The details of valuing liabilities may require more study, but this Article suggests a bifurcation approach. All benefits guaranteed by the PBGC would be discounted to present value using the risk-free rate on Treasury bonds. All other benefits would be discounted to present value using a conservative rate based on corporate bonds.

C. Plan Funding and Investing

The valuation described in the prior Part would occur annually and would expose any shortfalls in plan funding. Funding shortfalls may exist for several reasons: because the plan was never well funded in the first place; because of volatility of assets and liabilities; or because the employer amended the plan to grant new benefits. Under the proposal of this Article, the employer would be liable to fund the shortfalls immediately, regardless of their cause. The proposal would prohibit the amortization or waiver of funding shortfalls.

¹¹⁶ See Bodie, *supra* note 76, at 325–26.

¹¹⁷ See Bader & Gold, *supra* note 5.

Plan liabilities would also grow each year as covered employees perform more service and earn more compensation. The employer would need to forecast the present value of additional benefits that will accrue under the plan for the current year. Unless the plan was sufficiently overfunded, the employer would need to contribute an amount to pay for these additional accruals.¹¹⁸ As the proposal ensures that plans are fully funded on a current basis, past contributions over the minimum (i.e., credit balances) have no place in calculating actual contributions.

The proposal of this Part allows employers and plan fiduciaries to retain their freedom over plan investments. Plan fiduciaries could continue to invest in equities, even though equity investments create a large mismatch between assets and liabilities. The only limit would be the existing rules on fiduciary investing from ERISA.¹¹⁹

Equity investing by plans runs counter to financial theory, which suggests that employers should invest pension assets in a fixed-income portfolio rather than in equities.¹²⁰ Plan investments in equities create financial volatility that exposes employees and the PBGC to risk of loss. Theoretically, equities do not create value for shareholders, because shareholders can buy their own equities on the market.

It is tempting to require plans to comply with this theory. For better or for worse, however, the notion that equities are a suitable plan investment is firmly fixed in the world of pensions. Moreover, requiring investment in fixed-income securities could disrupt capital markets, causing a disruption in the investment strategies already mapped out for billions of dollars of assets.

The proposal allows plans to cling to equity investments, but makes employers responsible for any resulting shortfall. Employers can continue to play the stock market, but would need to face margin calls for the full shortfall. Equity investing in particular can cause a mismatch between assets and liabilities. If the mismatch produces losses, the employer would need to make them up on an annual basis. If the mismatch produces gains, the gains would offset the need to make future contributions. The margin call, not regulation, protects against mismatches between assets and liabilities. If, however, the plan fails before it can make a margin call, the PBGC would still need to insure benefits, as discussed in the next Part.

¹¹⁸ *Id.* at 9–10.

¹¹⁹ For an overview, see LANGBEIN & WOLK, *supra* note 6, at 802–52.

¹²⁰ See SCHOLES ET AL., *supra* note 51, at 264–67.

D. Insurance for Actuarial Mistakes and Short-Term Volatility

Any reform requiring full funding would, as a practical matter, require a lengthy transition period (perhaps five or even ten years). After some point in the future, however, employers would need to have fully funded plans. The role of the PBGC as guarantor should diminish over the course of the transition but would not completely end.

After the transition, the proposal of this Part leaves the PBGC with a reduced but continued role.¹²¹ Employees would still face default risk from short-term fluctuations in assets and liabilities, from valuations of liabilities that fall short of actual experience, and from fraudulent behavior. Because the proposal strives to eliminate underfunding, claims against the PBGC would become extraordinary.

There are even good reasons for the PBGC to become wholly supported by taxpayers under the proposal. Without systematic underfunding, the lemon socialism of the current PBGC guaranty disappears. Thus, the guaranty would have little or no impact on economic efficiency. If premiums were charged, they would almost certainly be flat-rate premiums. Such premiums do not reflect risk and do not further the employer-internalization goal.

Public funding would also force Congress and the PBGC to become more vigilant watchdogs of pension funding. It is all too easy under the current arrangement for Congress to cut special deals for the worst risks with special funding rules and the like. The effects of those deals are pushed into the future and wished away by interposing the PBGC. Wishful thinking would be far harder if Congress needed to fund it with appropriations.

V. CONCLUSION

Low-risk pensions minimize the default risks faced by employees. They do not bear any costs associated with default. Congress failed to assign these costs in a coherent manner under current law and PPA 2006. Rather than assigning the appropriate cost to each employer, Congress has allowed it to rest, collectively, on financially strong employers. If the PBGC fails, the costs may end up resting on taxpayers in the future. The cure is a system of full funding, which would make each employer responsible for the costs of delivering low-risk pensions to its own employees.

¹²¹ See Bader, *Unnecessary Evil*, *supra* note 40, at 18.