

Arguments about Asymmetry of Risks and Rewards and Deferred Wages in Pension Plans

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Executive Summary

A Conceptual Framework

Defined-benefit (DB) plans create fixed claims and liabilities and residual claims and liabilities. Employees in a DB plan receive a fixed claim to pension benefits, while the plan incurs a fixed liability to pay those benefits. If a DB plan's assets exceed its liabilities (a pension surplus), the party entitled to surplus assets holds the residual claim. If the liabilities of a DB plan exceed its assets (a pension deficit), the party responsible for the shortfall incurs residual liability. The debate over pension surpluses involves conflicting claims about how the residual claims and liabilities in DB plans *are* allocated and how these claims and liabilities *ought to be* allocated. All parties to the debate agree, however, that ownership of surplus should be governed by what I call the *quid pro* principle: the benefit of a pension surplus should belong to the party who bore the burdens that produced the surplus. In the discussion that follows, the *quid pro principle* provides the benchmark for assessing claims to surplus entitlement.

The Asymmetry Argument

The asymmetry argument views DB plans as contracts in which employees forgo wages in return for a fixed claim to pension benefits. The Pension Benefits Act (PBA) requires employers that sponsor a DB plan to maintain a separate pension fund that secures the plan's obligations. If a plan develops a deficit, the PBA and its regulations make the employer liable for funding the deficit. If the plan develops a surplus, current law grants employees a residual claim to some or all of the surplus when a plan winds up. Proponents of the asymmetry argument contend that the funding regime is asymmetric because the employer alone bears the residual liability for pension deficits while it must share pension surpluses with employees. They claim that this asymmetry discourages employers from funding and may provoke employers to shift to DC plans. A symmetric allocation of burdens and benefits, in which employers' residual liability for all deficits was balanced by a residual claim to all surpluses, would be fairer to employers and more protective to employees.

Under the PBA, a pension surplus is the excess of a plan's assets over its "liabilities" for pension benefits. Presumably a plan's "liabilities" should correspond to the benefits employees believe they are earning. As section 3.2 explains, however, it is not entirely clear what level of pension benefits employees believe they are earning. At any given time, the service an employee has already performed may lead to her receiving a quit benefit, a wind-up benefit (which is larger than her quit benefit), or a stay benefit (which generally is larger than her wind-up benefit). If, as the *quid pro quo* principle suggests, employees pay for the pension benefit they expect to receive, which level of benefit are employees paying for? Unless this ambiguity can be resolved, the asymmetry theory may not provide clear guidance on surplus issues.

To gauge the validity of the asymmetry argument requires addressing three broad issues: (1) Is the pension-funding regime asymmetric? (2) If the pension-funding regime

is asymmetric, is this a problem? For example, does asymmetry discourage employers from funding pension obligations or induce employers to drop DB plans in favor of defined-contribution (DC) plans? (3) If asymmetry creates adverse incentives, do these incentives have harmful effects? For example, does asymmetry reduce the level of solvency in pension plans?

Whether the pension-funding regime is asymmetric depends on who bears the burden of pension deficits, who pays for pension surpluses, and who benefits from pension surpluses. The incidence of these burdens and benefits depends on the policies that produce a surplus or deficit and the context in which the surplus or deficit arises. There are two major reasons for deficits and surpluses: funding policy and investment policy. (See sections 4.1.1 and 4.1.3) If an employer pursues a policy of overfunding pension obligations (perhaps by funding on the basis of conservative actuarial assumptions), a plan is likely to develop a surplus. If an employer pursues a policy of underfunding (perhaps by funding on the basis of aggressive actuarial assumptions), a plan is likely to develop a deficit. A plan with a policy of investing in risky assets or mismatching its assets and liabilities may develop a surplus or deficit depending on experience in capital markets. Surpluses and deficits occur in two contexts: ongoing plans or plans that wind up.

Section 4.1.2 analyzes the context of pension bargaining and concludes that, with one significant exception, employers generally bear the burden of pension deficits in an ongoing plan. Because employers are legally obligated to fund pension deficits, it is difficult for them to shift this burden to employees. This analysis does not apply, however, when a pension deficit is the result of a benefit increase that creates unfunded pension liabilities. In such a case, the employer can require the employees to bear the burden of the deficit as a condition for granting the increase.

When a plan winds up, the incidence of a deficit depends on the employer's solvency. If the employer is solvent, the PBA requires it to fund a wind-up deficiency, in which case the stockholders bear the burden. If the employer is insolvent, employees bear the burden of deficits that result from adverse investment experience or other actuarial losses. If employees are aware of this risk, they can demand a risk premium. If employees have received a risk premium, granting them a surplus entitlement compensates them twice. If employees have not received a risk premium, the analysis in section 5.2 suggests that surplus entitlements leave much to be desired as compensation for insolvency risk. If the employer is insolvent and a pension deficit is the result of a benefit increase that the employer has not fully amortized, the employees cannot be said to bear a burden because they did not pay for the benefits that they will not receive.

As is the case with pension deficits, funding policy and investment policy are the major reasons for pension surpluses. If a surplus is the result of a policy of overfunding, it seems unlikely that employees bore the burdens that produced the surplus. As section 4.1.4 explains, because employers possess extensive control over business operations and plan administration, they generally get the benefit of surpluses in an ongoing pension plan. It makes little sense for employees to bear the burden of overfunding when the

surplus will inure to the employer's benefit. A surplus also may be the result of a policy of choosing risky investments or mismatching a plan's assets and liabilities. Such a policy exposes employees to insolvency risk, which, as noted above, may lead them to demand a risk premium.

As section 4.1.4 explains, whether employers or employees get the benefit of pension surpluses depends on the context in which a surplus arises. When a plan winds up, some or all of the surplus belongs to the employees. In an ongoing plan, the benefit of a pension surplus generally inures to the employer.

Because surplus entitlements are very different in ongoing and wound-up plans, it matters greatly where the line between "ongoing" and "wound up" is drawn and who draws the line. This highlights the importance of the Supreme Court of Canada's decision in *Monsanto Canada v. Ontario (Superintendent of Financial Services)*, 242 D.L.R. (4th) 193 [2004]. The Court held that the surplus entitlements of members and former members affected by a partial wind-up vest when the partial wind-up occurs, rather than when the plan as a whole winds up. The line *Monsanto* establishes between ongoing and wound-up plans gives employers much less control over surpluses than if the Court had held that surplus entitlements do not vest until a plan winds up entirely. Whatever may have been the case before the Court decided *Monsanto*, this decision does appear to create significant asymmetry.

Table 1 on page 5 summarizes the benefits and burdens of pension funding.

As section 5.1 explains, the claim that asymmetry reduces an employer's incentive to fund is both less compelling and more complicated than it seems. An employer's contribution to a pension fund will decrease the plan's deficit or increase the surplus. If an employer must share the surplus, it necessarily gets less benefit from a contribution that produces or increases a surplus than if the employer owned the entire surplus. All other things equal, a regime that gives an employer exclusive ownership of pension surpluses gives the employer more of an incentive to contribute.

This point is even more compelling if the employees' residual claim is viewed as a liability rule that requires the employer to pay damages if the plan winds up with a surplus. From the employer's perspective, a rule that gives employees a residual claim to a wind-up surplus is no different in effect than a rule that makes the employer liable for damages if the plan winds up with a surplus. Tort law requires people to pay damages for harms that result from negligent conduct as a means of inducing people to avoid negligent conduct. In like manner, a rule that requires an employer to pay "surplus damages" gives employers an incentive to avoid conduct that produces pension surpluses.

But viewing the employees' surplus entitlement as a liability rule also highlights the fact that an employer does not incur liability for making contributions to its pension plan. It incurs liability for winding up a plan with a surplus. Contributions are not the only source of pension surpluses. Investment policy also plays a major role. In particular, an investment policy that mismatches the investments and liabilities of a

pension plan will produce pension surpluses (or deficits). The critical role of investment policy implicates broader regulatory and policy issues, such as the policy that allows employers to make lower pension contributions when their plan selects risky or mismatched investments and the trade-off between ensuring that pension promises are paid and ensuring that pension promises are large enough to support a comfortable retirement.

Table 1
Benefits and Burdens of Pension Funding: The Bottom Line

Who Bears the Burdens of a Pension Deficit?

1. If a plan is ongoing, employers bear the burden of a deficit caused by adverse investment experience or other actuarial losses.
2. If a plan is ongoing, employees bear the burden of a deficit caused by a benefit increase that creates unfunded liabilities.
3. If a plan winds up and the employer is solvent, stockholders bear the burden of a deficit caused by adverse investment experience, other actuarial losses, or a benefit increase that creates unfunded liabilities.
4. If a plan winds up and the employer is insolvent, employees bear the burden of a deficit caused by actuarial losses. If employees are aware of this risk, they can demand a risk premium. If employees do not bargain a risk premium, section 5.2 suggests that entitlement to a share of a wind-up surplus is a poor substitute.

Who Bears the Burden of Policies That Produce Pension Surpluses?

5. If a surplus is the result of a policy of overfunding, it is unlikely that employees bore the burden of the policy. But see discussion in section 3.2.
6. If a surplus is the result of a policy of mismatching investments, the employer bears most of the downside risk but the policy also exposes employees to insolvency risk. If employees are aware of this risk, they can demand a risk premium. If employees do not bargain a risk premium, section 5.2 suggests that entitlement to a share of a wind-up surplus is a poor substitute.

Who Gets the Benefit of Pension Surpluses?

7. If a plan is ongoing, the employer gets the benefit of pension surpluses.
 8. If a plan winds up, employees receive some or all of the surplus.
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Section 5.2 suggests that the incoherent allocation of surplus entitlements may pose a greater threat to DB plans than any asymmetry in the burdens and benefits of pension funding. The rules governing residual claims to pension surplus create sequential entitlements. Employers get the benefit of surplus in an ongoing plan, while employees get some or all of the surplus when a plan winds up. The sequential character of these entitlements means that the employer cannot benefit from the surplus in an ongoing plan without reducing the surplus that will be available to employees when the plan winds up. Moreover, the sequencing of entitlements gives the employer an incentive

to get as much benefit as it can from pension surpluses while the plan is ongoing. This structuring of entitlements is bound to – and does – produce conflict.

Proponents of the asymmetry argument claim that the mismatch in the burdens and benefits of pension funding makes DB plans more burdensome, which hastens the ongoing shift from DB to DC plans. As section 5.3 explains, whether asymmetry in the funding regime gives employers an incentive to shift to DC plans depends on how it affects the relative costs and benefits of DB and DC plans as perceived by the parties to the pension bargain. As Richard Ippolito has argued, DB plans are complex arrangements that play out over many decades. As a result, it is often very difficult for employees to weigh the burdens and benefits of a DB plan. Because DB plans are hard to assess, they require a significant degree of trust from employees. In contrast, DC plans require much less trust because they are (or appear to be) transparent. If the structure of surplus rights produces conflict that undermines employees' trust in DB plans, employers will have all the more reason to prefer DC plans.

Section 6.1 discusses a natural experiment on the effect of surplus entitlements on funding practices. Between 1986 and 1990, the U.S. Congress passed a series of laws that impose excise taxes on pension assets that revert to an employer after a DB plan terminates. These taxes create residual claims that parallel surplus entitlements in Ontario. Employers own the surplus in an ongoing plan, but when a plan terminates with a surplus the excise tax gives the federal government a residual claim to most of the surplus. Research on the excise tax suggests that it has had a very detrimental effect on the solvency of DB plans in the United States. Over the last two decades, there have been major changes in actuarial assumptions and contribution levels. In a period in which equity markets produced unprecedented gains, the funding status of DB plans declined. The apparently deleterious effects of the U.S. excise tax deserve close consideration from policymakers in Ontario.

The Deferred-Wage Argument

According to the deferred-wage argument, employees are owners of the pension fund, rather than creditors whose debt is secured by the fund. Proponents of the deferred-wage theory claim that employers bargain employees' pay on a *total-compensation* basis. Employers and employees agree on the total compensation employees will receive then apportion this amount among the various components of compensation such as wages, pensions, and other employee benefits. Employers and employees estimate the level of contributions needed to pay for pension benefits. Employers then withhold this amount from employees' wages and contribute it to the pension fund. Proponents of the deferred-wage argument contend that employees own the "deferred wages" the employer contributes to the pension fund every bit as much as they own the wages they receive on payday. The employees' ownership of pension contributions entails that they own the pension fund. As owners of the pension fund, employees are entitled to the entire benefit of the fund, including any surplus that develops.

Section 8.1 looks at how the proponents of the deferred-wage model use this argument. The deferred-wage model only comes into play when the model conflicts with the governing documents of a pension plan. In other words, proponents invoke the deferred-wage argument when plan or trust documents include language that conflicts with the implications of the model. When the governing documents of a plan are ambiguous, advocates use the deferred-wage model to justify an interpretation that accords with the view that pension contributions are deferred wages. In such a case, the deferred-wage argument justifies an interpretation that has a textual basis in the governing documents of the plan. When the governing documents of a plan contradict the deferred-wage model, however, the model justifies decisions and policies that override the express provisions of a plan in favor of an interpretation that has no basis in the plan text. The latter use of the deferred-wage model raises the question whether it is a good idea to use a theory of the pension bargain to override provisions in plan documents that are the result of actual bargaining between employers and employees.

The deferred-wage argument reasons that employees own the pension fund because they own the money their employer contributes to the fund. This line of reasoning considers the employees' ownership of amounts withheld from their wages as a *sufficient condition* for their ownership of the pension fund. As section 8.2 explains, the employees' ownership of the money their employer contributes to the pension fund may be a *necessary condition* for the employees to own the fund, but it is not a sufficient condition. There are a variety of circumstances in which a sequence of transfers that is virtually identical to the sequence hypothesized by the deferred-wage model leads to the provider of capital becoming a creditor with a fixed claim to regular payments from the recipient of the provider's capital but with no residual claim to surplus revenues that arise from the recipient's use of the capital. This analysis undermines the inference that employees, as providers of the "deferred wages" their employer contributes to the pension fund, necessarily retain ownership of the assets in the pension fund.

Section 8.3 points out a contradiction in the deferred-wage model. Proponents of the deferred-wage argument contend that employees agree to forgo an amount of wages that will fund the estimated cost of the fixed benefits promised by a pension plan, while their employer agrees to contribute these forgone wages to the pension fund. If the employer and employees overestimate the cost of pension benefits and the plan ends up with a surplus, proponents of the deferred-wage argument contend that employees, who "overpaid" for pension benefits, should receive the benefit of their overpayment. This line of reasoning involves a contradiction. According to the deferred-wage argument, the employer and employees estimate the level of pension contributions based on the assumption that employees will receive a fixed claim to pension benefits. If employees are entitled to the pension surplus, this assumption turns out to be wrong because the deferred-wage model gives employees both a fixed claim to pension benefits *and* a residual claim to any surplus that develops. In this way, the deferred-wage argument implies that employees get more than it assumes they bargained for.

The deferred-wage argument holds that employers and employees negotiate employees' pay on a total-compensation basis. Pension contributions are a component of

total compensation, so employees allow their employer to withhold from their wages the money the employer contributes to the pension fund. Recent experience illustrates that fluctuations in interest rates or equity markets may have a dramatic effect on the contributions an employer must make to its pension plan. If, as the deferred-wage argument contends, pension contributions are forgone wages, there should be a strong inverse correlation between pension contributions and wages. The very significant increases in pension contributions that employers recently have experienced should have produced a corresponding reduction in wages. As section 8.4 explains, both logic and evidence suggest that no such reduction occurred. Yet if employees' wages are not reduced by the full amount of their employer's pension contributions, stockholders bear some of the burden of pension contributions. If this is so, a key premise of the deferred-wage argument – that is, that all pension contributions are deferred wages – is false.

1. A Conceptual Framework

If a defined-benefit (DB) pension plan has more assets than liabilities, who should own “surplus” assets that are not needed to meet the plan’s benefit obligations – the employer that sponsors the plan or the employees? This section spells out a conceptual framework for assessing the various arguments that address this issue. As I explain below, a defined-benefit pension plan gives rise to fixed claims and liabilities and residual claims and liabilities. The debate over ownership of pension surpluses involves conflicting claims about how the residual burdens and benefits of a DB plan *are* distributed and how these burdens and benefits *ought to be* distributed. Although participants in the debate disagree about whether the employer or employees should own the residual claim to pension surpluses, they agree that surplus ownership should be decided in accordance with the *quid pro quo* principle. That is, the party who bears the burdens that produce a pension surplus should get the benefit of the surplus. The *quid pro quo* principle guides much of the analysis of surplus entitlements in this essay.

The debate over ownership of pension surpluses has been couched in terms of “two philosophies [that] are in fundamental opposition to each other.”¹ One “philosophy,” the asymmetry argument, views defined-benefit plans as contractual arrangements in which employees forgo wages in return for their employer’s promise of fixed pension benefits. The Pension Benefits Act (PBA) and its regulations require employers that sponsor a DB plan to establish a separate financing vehicle for pension obligations and to reserve sufficient assets to satisfy the plan’s liabilities. These regulatory mandates make the employer responsible for remedying the deficit when a plan’s liabilities exceed the assets in the pension fund. The asymmetry argument contends that the burdens and benefits of pension funding are asymmetric because employers are liable for pension deficits while employees get much of the benefit of pension surpluses. Proponents of this argument warn that the imbalance in the burdens and benefits of maintaining a DB plan discourages employers from funding pension obligations and may lead employers to abandon DB plans in favor of DC plans.

Critics contend that these claims of asymmetry are overblown. While employers do incur the *legal liability* for pension deficits, critics claim that the real *economic burden* of deficits falls on employees. They also note that employers derive significant benefits from pension surpluses by taking contribution holidays and using surplus funds to pay for other personnel costs such as subsidized early-retirement benefits. In light of the real economic burdens and benefits of pension funding, critics argue that employees should get more of the benefit of pension surpluses. In particular, there should be stricter regulation of contribution holidays and of employers’ use of pension surpluses to finance early-retirement windows. Critics also reject the asymmetry argument’s analysis of the incentives created by the pension-funding regime. Some critics deny that the pension-funding regime leads employers to reduce pension contributions. Others admit that the

¹ Malcolm Kern’s Submission in Response to Finance Canada’s Regulatory Framework for Federally Regulated Defined Benefit Pension Plans consultation, September 15, 2005 (available at http://www.fin.gc.ca/consultresp/PPBnfts_40e.html).

rules governing surpluses may discourage employers from funding but argue that the proper response to this disincentive is stricter funding standards that will force employers to keep pension plans solvent.

The second “philosophy,” the deferred-wage argument, views employees as owners of the pension fund, rather than creditors. Proponents of the deferred-wage model claim that employers and employees bargain on a total-compensation basis. After first negotiating the total compensation employees will receive, employers and employees allocate this amount among wages, pension contributions, insurance benefits, and other components of total compensation. As part of this allocation process, employers and employees estimate the cost of the fixed benefits promised by the pension plan. Employees authorize their employer to withhold this amount from their wages, while their employer agrees to contribute these “deferred wages” to the pension fund. Advocates of the deferred-wage argument contend that employees own their employer’s pension contributions every bit as much as they own the wages they receive on payday. As owners of the forgone wages their employer contributes to the pension fund, employees become owners of the fund itself and are entitled to the benefit of all assets held in the fund.

To flesh out the asymmetry and deferred-wage arguments, it helps to take a relatively abstract view of pension plans. DB plans promise employees a retirement benefit calculated according to a formula in the plan. In such an arrangement, the employees acquire a *fixed claim* against the plan, while the plan incurs *fixed liabilities* to the employees. The PBA requires employers to create a separate financing vehicle for pension obligations and regulates employer contributions to this vehicle. These legal mandates give rise to *residual claims* and *residual liabilities*. A residual claim entitles its holder to “whatever remains after all revenues [of an enterprise] have been collected and all debts, expenses, and other contractual obligations have been [provided for].”² In the pension context, residual claims come into play when a plan has more than enough assets to satisfy employees’ fixed claims for pension benefits. A residual liability arises when the revenues of an enterprise are not sufficient to pay “all debts, expenses, and other contractual obligations” of the enterprise. Residual liabilities come into play when the fixed claims against a DB plan exceed the assets set aside to pay those claims. Table 2 details the residual claims and liabilities that arise under a DB plan.

Table 2
Residual Liabilities and Claims in a DB Plan

| | On-Going Plan | Wound-Up Plan |
|---------|-----------------------------|----------------------------|
| Deficit | On-Going Residual Liability | Wind-Up Residual Liability |
| Surplus | On-Going Residual Claim | Wind-Up Residual Claim |

The asymmetry and deferred-wage arguments make conflicting claims about how the law *actually* allocates the residual liabilities and claims involved in DB plans and how

² Paul Milgrom and John Roberts, *Economics, Organization and Management* (Englewood Cliffs, N.J.: Prentice Hall, 1992), 291. I have adapted Milgrom and Roberts’s definition to the DB context by substituting “provided for” for “paid.”

the law *ought to* allocate these residual liabilities and claims. The asymmetry argument contends that employers are solely responsible for the residual liabilities of a DB plan while employees own a residual claim to pension surpluses. (See Table 3) If DB plans are to remain viable, proponents of the asymmetry argument contend that policymakers must allow for symmetrical allocation of the burdens and benefits of pension funding. Specifically, employers should be compensated for their exclusive liability for pension deficits by receiving sole ownership of pension surpluses. (See Table 4)

Table 3
Actual Allocation of Residual Liabilities and Claims
According to Proponents of the Asymmetry Argument

| | On-Going Plan | Wound-Up Plan |
|---------|--|--|
| Deficit | On-Going Residual Liability – Employer | Wind-Up Residual Liability – Employer |
| Surplus | On-Going Residual Claim – Employer³ | Wind-Up Residual Claim – Employees Alone or Employer and Employees |

Table 4
Normatively Correct Allocation of Residual Liabilities and Claims
According to Proponents of the Asymmetry Argument

| | On-Going Plan | Wound-Up Plan |
|---------|--|---|
| Deficit | On-Going Residual Liability – Employer | Wind-Up Residual Liability – Employer |
| Surplus | On-Going Residual Claim – Employer | Wind-Up Residual Claim – Employer |

Critics contest the empirical claims and causal inferences of the asymmetry argument. They claim that employees, rather than employers, bear most of the economic burden of pension deficits, while employers derive substantial benefit from pension surpluses. (See Table 5) According to the critics, greater regulation of employers’ use of pension surpluses – in particular, contribution holidays – would bring about a more symmetrical and, thus, fairer distribution of pension burdens and benefits. (See Table 6)

³ The Supreme Court of Canada’s decision in *Monsanto Canada v. Ontario (Superintendent of Financial Services)*, 242 D.L.R. (4th) 193 [2004], did not diminish employers’ entitlement to surplus in an ongoing plan. In *Monsanto*, the Court chose between alternative rules for determining when a plan winds up for purposes of determining surplus entitlements. By choosing a broader definition of what counts as a partially wound-up plan, the Court necessarily chose a narrower definition of what counts as an ongoing plan.

Table 5
Actual Allocation of Residual Liabilities and Claims
According to Critics of the Asymmetry Argument
And Proponents of the Deferred-Wage Argument

| | On-Going Plan | Wound-Up Plan |
|---------|--|---|
| Deficit | On-Going Residual Liability – Legal Liability – Employer Economic Burden – Employees | Wind-Up Residual Liability – Legal Liability – Employer Economic Burden – Employees |
| Surplus | On-Going Residual Claim – Employer | Wind-Up Residual Claim – Employees Alone or Employer and Employees |

Table 6
Normatively Correct Allocation of Residual Liabilities and Claims
According to Critics of the Asymmetry Argument

| | On-Going Plan | Wound-Up Plan |
|---------|--|---|
| Deficit | On-Going Residual Liability – Legal Liability – Employer Economic Burden – Employees | Wind-Up Residual Liability – Legal Liability – Employer Economic Burden – Employees |
| Surplus | On-Going Residual Claim – Employees (and Employer?) | Wind-Up Residual Claim – Employees (and Employer?) |

Proponents of the deferred-wage model generally offer the same account of the existing allocation of pension benefits and burdens as critics of the asymmetry argument. (See Table 5) But the deferred-wage argument does more than respond to the claims of the asymmetry argument. It also proposes an alternative “philosophy” of the pension bargain in which employees are the owners of the pension fund. Under this line of reasoning, employees rightfully should own the residual claim to any surplus in the fund. (See Table 7)

Table 7
Normatively Correct Allocation of Residual Liabilities and Claims
According to the Deferred-Wage Argument

| | On-Going Plan | Wound-Up Plan |
|---------|---|--|
| Deficit | On-Going Residual Liability – Employees | Wind-Up Residual Liability – Employees |
| Surplus | On-Going Residual Claim – Employees | Wind-Up Residual Claim – Employees |

As the foregoing discussion suggests, proponents and critics of the asymmetry and deferred-wage arguments disagree about who bears the burdens of pension deficits and who should receive the benefits of pension surpluses. They agree, however, on the normative principle that should govern ownership of pension surpluses. A surplus should belong to the party who paid for it. The consensus about how surplus entitlements should

be decided recognizes that market transactions almost always involve a *quid pro quo*.⁴ One party agrees to surrender goods only because the other party agrees to surrender goods in return. Each party aims to get what it pays for and to make the other party pay for what the other party gets. (Call this the *quid pro quo principle*.)

In the discussion that follows, the *quid pro quo* principle serves as a benchmark for assessing claims about who should own the residual claim to pension surpluses. An informed, self-regarding party in a market transaction will not bear a burden unless it expects to receive a benefit. If a party to the pension bargain claims to have borne a particular burden under circumstances that make it seem unlikely that the party could expect to receive a corresponding benefit, the *quid pro quo* principle suggests that the claim is implausible. In such a case, the burden of proof should shift to the party making the seemingly implausible claim to explain

- (a) why, as a matter of fact, the party reasonably did expect to receive a benefit in return for bearing the particular burden in question or
- (b) (i) why it was reasonable for the party to have borne the burden in question notwithstanding that it could not reasonably expect to receive a benefit for doing so and (ii) why the party should receive a benefit when it did not undertake to bear the burden with an expectation of receiving a benefit (i.e., when there was no reliance).

The same skepticism and burden of proof are appropriate when a party claims entitlement to a particular benefit but seems unlikely to have borne a corresponding burden.

The Asymmetry Argument

2. Concepts and Logic of the Asymmetry Argument

- a. The compensation package employees receive is the product of a bilateral bargaining process in which an employer and its employees try to negotiate the best deal they can for themselves.
- b. An employer and its employees can negotiate a compensation package in which employees receive all of their compensation in the form of wages (i.e. money compensation paid currently) or they can negotiate a package that includes both wages and non-wage compensation such as retirement or insurance benefits.
- c. An employer will not provide non-wage compensation unless employees “buy” that compensation by giving up wages at least equal in value to the employer’s net cost of providing the non-wage compensation.

⁴ See generally Charles E. Lindblom, *The Market System* (New Haven: Yale University Press, 2001), 11.

- d. Employees will not forgo current wages in return for the employer's promise of non-wage compensation unless that compensation is worth at least as much as the wages that employees forgo.
- e. When an employer and its employees bargain to create and maintain a DB plan, the employees agree to forgo current wages in return for the employer's promise to pay fixed pension benefits. The employer and its employees bargain over both the fixed pension benefits payable under the explicit benefit formula and the level of contributions that will be necessary to fund the fixed benefits promised by the plan.
- f. To calculate the level of contributions that will be necessary to fund the fixed benefits promised by the plan, the employer and employees must make assumptions about the future course of important variables such as interest rates, investment returns, mortality experience, and turnover rates.
- g. Pursuant to their bargain, the employer withholds the agreed-upon contributions from employees' wages and transfers the amounts withheld to the trust or insurance company that holds the pension fund.
- h. When an employee receives wages or salary, the employee becomes the owner of the funds he or she receives.
- i. The wages that employees agree to forgo in pension bargaining are akin to the premium an individual pays when she purchases an annuity from an insurance company. Employees surrender ownership of their forgone wages in return for the employer's promise to pay a fixed benefit calculated under the benefit formula in the plan text. The employer's promise gives rise to a fixed liability to pay the benefits promised by the plan. The existence of this legal obligation makes the employees creditors with a fixed claim to the vested benefits they accrue under the formula in the plan.
- j. If the assumptions used to calculate pension contributions turn out to be too optimistic, the pension fund will end up with insufficient funds to meet accruing pension obligations and the plan will have a deficit. In such a case, it generally will be necessary for additional funds – special payments – to be contributed to the plan to make up the difference between the plan's liabilities for fixed benefits and the assets reserved to meet those liabilities.
- k. In a traditional DB plan, the residual liability to contribute funds to eliminate a wind-up deficiency or a deficit in a continuing plan falls solely on the employer.
- l. If the assumptions used to calculate pension contributions turn out to be overly conservative, the pension fund will end up with more assets than are needed to meet the fixed benefits promised to employees.

- m. In contrast to the rules for pension deficits, when a plan develops a surplus the *substantive* rules of law governing residual claims to a pension surplus may give the employees ownership of all or part of the surplus. Even if the substantive rules governing entitlement to a pension surplus establish the employer as the sole owner, the *procedural* rules governing access to surplus generally prevent the employer from gaining access to the surplus unless it shares some of the surplus with employees.
- n. Because employers believe they are unlikely to get the full benefit of a pension surplus, they will reduce the amount of their pension contributions in order to avoid building up a surplus. If employers make smaller pension contributions, employees will be exposed to greater risk that their plan will become insolvent.
- o. The laws and regulations governing entitlement and access to pension surpluses make it more burdensome for employers to maintain DB plans. The increasing regulatory burdens on DB plans give employers an incentive to shift to less burdensome arrangements such as DC plans.

3. Contested Concepts in the Asymmetry Argument

3.1 Is the Pension Fund “Collateral” or “Property”?

The asymmetry argument is premised on the view that pension schemes are contracts. In this view, employees are creditors who have a contractual right to the fixed benefits promised by their plan. The pension fund is “collateral” for this promise. The existence of collateral makes employees’ claims more secure, but employees’ rights are (or should be) limited to their fixed claim for benefits calculated in accordance with the formula in the plan. When pension plans are viewed as contracts, “any part of the fund not required to secure the scheme’s fixed benefits should belong to the employer.”⁵ The other major perspective on pension schemes – the “deferred wage” or “total compensation” view – contests the idea that employees’ rights under a pension plan are limited to their fixed benefits. According to the deferred-wage theory, employees do not surrender ownership of the wages they forgo in return for their employers’ promise of pension benefits. In reality, the employer makes its pension contributions with funds owned by the employees. For this reason, the employees are *owners* of the assets in a pension fund, rather than mere lien-holders against those assets. From this perspective, the concept of the pension fund as “collateral” makes no sense.⁶ See sections 7 and 8 for discussion of the deferred-wage perspective on pensions.

⁵ Richard Nobles, *Pensions, Employment, and the Law* (Oxford: Clarendon Press, 1993), 167. For a similar formulation, see Eileen E. Gillese, “Pension Plans and the Law of Trusts,” *Canadian Bar Review*, vol. 75 (1996), 236.

⁶ See, e.g., Kaplan, *Pension Law*, 555-56 (“Surplus is sometimes characterized by employer advocates qualitatively distinguishing it from the assets in the pension fund necessary to discharge the so-called pension ‘promise.’ The ‘promise’ in this case refers to the pension benefit calculated under the plan’s defined benefit formula and, therefore, excludes the surplus.”).

3.2 The Concept of “Liability” Is Ambiguous

Proponents of the asymmetry argument claim that employers bear the burden of the funding and investment policies that produce pension surpluses. (See section 4.1.3 below.) Under the Pension Benefits Act, “surplus” is “the excess of the value of the assets of a pension fund related to a pension plan over the liabilities under the pension plan, both calculated in the prescribed manner.”⁷ In other words, the surplus is the *residual* that is left after subtracting a plan’s liabilities for fixed benefits from the assets held by the pension fund. Whether there is a surplus and how large the surplus is depend on the magnitude of the fixed claims against the pension fund (“the liabilities under the pension plan”). As explained below, at any point in time, an employee’s pension credit based on service she *has already performed* may lead to her receiving any one of several different levels of fixed pension benefits. If employees may receive different levels of fixed benefits, then the plan may incur different levels of “liabilities.” The coexistence of different types of “liabilities” with different monetary values makes it hard to know what employees believe they are earning and, thus, are willing to pay for. Yet if one cannot determine what sort of benefits employees paid for, it is impossible to know who bears the burden of the funding policies that produce pension surpluses. This ambiguity in the concept of “liabilities” compromises the asymmetry theory’s usefulness as a guide for policy with respect to pension surpluses.

If the content of the pension promise is clear, the *quid pro quo* principle allows one to derive a relatively detailed account of pension bargaining.⁸ For example, suppose employers believe they are promising and employees believe they are earning the benefit an employee would receive if she quit or her employer discharged her. (Call this the employee’s *quit benefit*.)⁹ Suppose further that the pension plan provides a normal retirement benefit that entitles an employee to receive a single-life annuity beginning at age 65 in an amount equal to 1% multiplied by her period of membership in the plan multiplied by her final salary.¹⁰ If the employee became a member of the plan when she was age 30, is currently age 50, and has a current salary of \$50,000, she has earned an annuity of \$10,000 per year beginning when she is 65.¹¹ If the employee quit or were discharged, she would be entitled to a deferred annuity on these terms.¹²

If employees believe they are earning quit benefits, the *quid pro quo* principle implies that, in each period of employment, they will be willing to forgo wages equal to

⁷ PBA § 1(1).

⁸ For the sake of simplicity, I assume in the exposition that follows that employees do not receive compensation in a form other than wages or pensions.

⁹ For this term, see Richard A. Ippolito, *Pension Plans and Employee Performance: Evidence, Analysis, and Policy* (Chicago: University of Chicago Press, 1997), 11.

¹⁰ $.01 \times \text{years} \times \text{final salary}$.

¹¹ $.01 \times 20 \times \$50,000$.

¹² See Ari Kaplan, *Pension Law* (Toronto: Irwin Law 2006), 229 (“Where an employee resigns from employment or is dismissed for cause, there is no pension accrual beyond the effective date the employee terminates employment and plan membership.”). If the employee is dismissed other than for cause, she may be entitled to additional benefit accruals during a statutory or common-law notice period. *Id.* 229-30.

the discounted present value of the additional accrual in their vested pension benefit during the period. (Call the additional accrual in an employee's benefit during a period of employment the *marginal accrual*.) To calculate the present value of an employee's marginal pension accrual, one must apply a discount rate. Because there is little risk that an employer will default on its obligation to pay wages and because the employer has no less of a legal obligation to keep its pension promises than its wage promises, employees should discount the value of pension accruals at the risk-free rate and give up wages equal to this amount.¹³ More precisely, the value of the marginal accrual in an employee's quit benefit should equal the market value of a risk-free security that promises a stream of payments that matches the additional vested pension payments earned during the period.¹⁴ (Call such securities *matching investments*.) If the employee agrees to forgo wages equal to the present value of the marginal accrual in her quit benefit discounted at the risk-free rate *and* the employer contributes all of the employee's forgone wages to the pension plan (call this amount the *full-funding contribution*) *and* the plan uses the contributed funds to purchase a matching investment, then the employee's expectation of receiving her pension accrual will be as secure as her expectation of receiving the wages she surrendered. (Call this the *full-funding ideal*.) If an employer follows the full-funding ideal, an employee's wages in a period of employment will equal her total compensation less the present value of the marginal accrual in her quit benefit discounted at the risk-free rate.¹⁵

If the employer does not follow the full-funding ideal, the employee will be exposed to risk. Two forms of risk are material – *employer-insolvency risk* and *plan-insolvency risk*.¹⁶ For example, suppose the employer finances its plan on a pay-as-you-go basis. In that case, employees who are vested in their benefit accruals bear employer-insolvency risk because they will not receive their full benefit if the employer becomes

¹³ See David Blake, *Pension Finance* (Chichester, U.K.: John Wiley & Sons, Ltd. 2006), 77-78.

¹⁴ See generally Joint AAA/SOA Task Force on Financial Economics and the Actuarial Model, *Pension Actuary's Guide to Financial Economics* (Society of Actuaries/American Academy of Actuaries, 2006), 25 (available at <http://www.actuary.org/pdf/pension/finguide.pdf>).

¹⁵ My example assumes that the employer and employee can know when the employee will die. Obviously, in particular cases this cannot be known. A plan that covers many members or that purchases annuities from an insurance company can diversify the mortality risk of individual employees and estimate costs based on average mortality figures. If employees on average die sooner (later) than the plan estimates, the plan will have an actuarial gain (loss). See Dan M. McGill, Kyle N. Brown, John J. Haley, and Sylvester J. Schieber, *Fundamentals of Private Pensions*, 8th ed. (Oxford: Oxford University Press), 621. The analysis in section 4.1.2 suggests that the employer bears the risk of actuarial gains and losses when a plan's experience departs from its mortality assumptions.

¹⁶ See Mitchell A. Petersen, "Allocating Assets and Discounting Cash Flows: Pension Plan Finance," November 1995, 9 (available at <http://www.kellogg.northwestern.edu/faculty/petersen/htm/papers/published/labor2.pdf>). Employees also may be exposed to *forfeiture risk* if they do not have a vested right to pension benefits. In the early years of the private-pension system in the United States, some large employers reserved the right to terminate pension benefits even after employees had retired. See Steven A. Sass, *The Promise of Private Pensions: The First Hundred Years* (Cambridge, Mass.: Harvard University Press, 1997), 34, 36 (table 2.1). Most U.S. employers that provide retiree-health benefits reserve this right today. The Pension Benefits Act requires a plan to vest an employee in her quit benefit after she has completed 24 months of continuous membership in the plan. PBA § 37.(2)(b). For this reason, I do not discuss forfeiture risk in this paper.

insolvent and liquidates.¹⁷ If employees bear insolvency risk and are aware of this risk, the *quid pro quo* principle implies that the employer will have to compensate them.¹⁸ In the absence of such compensation, employees will prefer to receive wages (which are a sure thing) rather than pension promises (which are risky).¹⁹ The employer can reduce the employees' exposure to employer-insolvency risk (and the premium for this risk) by funding pension promises in advance. If employees forgo wages equal to the present value of the marginal accrual in their quit benefit discounted at the risk-free rate *and* the employer contributes this amount (the full-funding contribution) to the pension fund *and* the plan purchases matching investments, the employees will face no plan-insolvency risk. If employees face no plan-insolvency risk, they face no employer-insolvency risk. Thus, if the employer follows the full-funding ideal, there will be no risk premium, and an employee's wage for the period will equal her total compensation less the present value of her marginal accrual in her quit benefit discounted at the risk-free rate.

There are two main ways in which an employer can depart from the full-funding ideal. If the employer contributes less than the full-funding contribution, the plan may end up with insufficient assets to meet its obligations. That is, employees are exposed to plan-insolvency risk. If the plan winds up with a deficiency, the employer must contribute the amount necessary to fund the deficiency.²⁰ This claim against the employer exposes employees to employer-insolvency risk. If the employer is solvent, pension claims will be paid in full. If the employer is insolvent, employees will receive a payout that is less than their legal entitlement (except to the extent that the shortfall is guaranteed by a third-party guarantor such as the Pension Benefits Guarantee Fund).²¹ If

¹⁷ In an insolvency proceeding, plan members would be unsecured creditors. In the absence of statutory provisions granting special treatment to pension benefits, they could expect to receive a payout equal to the present value of their vested benefit multiplied by the ratio of the employer's unencumbered assets (reduced by the cost of the insolvency proceeding) to its liabilities. See generally William Sohn, "When Is a Pension Plan Adequately Funded?" *The Pension Forum*, vol. 9 (June 1996), 2-3.

¹⁸ See Richard A. Ippolito, "Bankruptcy and Workers: Risks, Compensation and Pension Contracts," *Washington University Law Quarterly*, vol. 82 (2004), 1257 ("If one starts with the assumption that workers sacrifice wages . . . to obtain a pension with certainty, then they require a rebate . . . in consideration of accepting the risk that they might receive a lesser amount upon a bankruptcy, . . . which just says that workers require compensation for accepting risk."). See also David McCarthy, "Occupational Pension Scheme Design," in Gordon L. Clark, et al., *The Oxford Handbook of Pensions and Retirement Income* (Oxford: Oxford University Press, 2006), 549, 552 (Table 27.1). To the extent that a third-party insurer guarantees pensions in case of employer insolvency, the employees will not demand a risk premium. *Id.*

¹⁹ The discussion in the text assumes that employees are aware of and can estimate the insolvency risk they face. Reality may depart from these assumptions in several ways. First, employees may be completely unaware of or oblivious to insolvency risk. In this case, employees could be informed of this risk. Second, employees may be generally aware of insolvency risk but not possess the information needed to gauge this risk. In this case, employees could be provided information about insolvency risk. Third, employees may be generally aware of insolvency risk and have access to information about it but unable to process the information. The existence of mandatory minimum standards for funding pension obligations may reflect a judgment that the third possibility applies. As I note in section 5.3, even with regulation to make pension promises more secure, it may require a considerable degree of trust for employees to be willing to participate in a defined-benefit plan.

²⁰ Pension Benefits Act, §75.(1). See Kaplan, *Pension Law*, 541-42.

²¹ If a plan with a deficiency winds up and the employer is insolvent and liquidates and the plan document allocates plan assets to employees in proportion to the value of the pension claims, an employee can expect

employees are aware of their risk exposure, they will demand a risk premium. In such a case, an employee's wages for a period will equal her total compensation reduced by the value of the marginal accrual in her quit benefit discounted at the risk-free rate and increased by a premium for bearing insolvency risk.

A pension scheme also departs from the full-funding ideal if the plan purchases investments that carry a risk of default or promise payouts that do not match the payment stream promised to employees. (Call such investments *mismatched investments*). For example, the employer might invest in bonds with payment schedules that match the pension payments owed to employees but that carry a non-diversifiable risk of default. Because the bonds may default, there is a risk that the plan will become insolvent. A similar analysis applies if the employer invests in securities such as equities that do not promise fixed payments that track the payments promised to employees. In either case, the employees will be exposed to plan-insolvency risk, which in turn exposes them to employer-insolvency risk.²² Because wages are a sure thing and pension promises are not, employees will have to be compensated for this risk. As in the case when the employer does not contribute all of the employee's forgone wages to the pension fund, the employee's wage for the period will equal her total compensation for the period reduced by the value of the marginal accrual in her quit benefit discounted at the risk-free rate and increased by a premium for bearing insolvency risk.

If it were clear that employers and employees believed they were bargaining for quit benefits, this framework would be a useful guide for addressing legal and policy issues affecting pension funding. If a dispute arose about whether the employer or employees were entitled to a pension surplus, it might be possible for judges or policy-makers to assess the parties' claims by making *measurements*. For example, some representatives of organized labour argue that employees should receive an entitlement to some or all of the surplus that emerges in a pension plan because the employees bear insolvency risk. Applying the quit-benefit framework, one could look to see whether the employees had received a risk premium that fully compensated them for bearing insolvency risk. If the employer had paid such a premium, then granting employees surplus rights would amount to double payment.²³ If the employer had not paid a risk premium, then it might be appropriate to grant employees surplus entitlements as compensation. As I explain below, it seems unlikely that the pension bargain reflects quit benefits.

The leading alternative to the idea that employees and employers bargain for quit benefits is the implicit-contract model. According to this view, a pension plan is part of a

to receive a payout equal to the sum of (a) the value of her vested benefit multiplied by the ratio of the plan's assets to its liabilities and (b) the portion of her vested benefit that is not paid from plan assets multiplied by the ratio of the employer's unencumbered assets (reduced by the cost of the insolvency proceeding) to its liabilities.

²² See, e.g., William Sohn, "When Is a Pension Plan Adequately Funded?" 6 ("If we accept, as we must, the legitimacy of investing in unmatched securities we must also accept a risk of insolvency on a termination basis.").

²³ See Ippolito, "Bankruptcy and Workers," 1261.

long-term relationship between an employer and its employees.²⁴ For this reason, the pension bargain reflects the projected benefit an employee expects to receive if she stays with her firm until normal retirement age (call this a *stay benefit*), rather than the quit benefit she will receive if she quits or is discharged.²⁵ For example, suppose the employee in the example above remains with her employer until age 65, at which time her annual salary is \$100,000. If she retires at age 65, she will be entitled to an annual pension of \$35,000.²⁶ As described above, when the employee is age 50, her twenty years of service from age 30 to age 50 entitle her to a quit benefit of \$10,000 per year beginning at age 65. If she remains with her employer until age 65, however, the portion of her pension that derives from her service from age 30 to age 50 will be \$20,000.²⁷ According to the implicit-contract model, employees believe they are earning – and *forgo the wages necessary to pay for* – the stay benefit they expect to receive if they remain with their employer until normal retirement age. Thus, the implicit-contract model implies that at age 50 the employee in the example will have given up enough wages to pay for a stay benefit of \$20,000 per year beginning at age 65, while the quit-benefit model implies that she will have forgone only enough wages to pay for a benefit of \$10,000 per year.

The hypothesis that employees believe they are earning stay benefits is plausible because many plans link benefits to final salary and because employers commonly fund based on the assumption that employees will receive their projected benefit.²⁸ Moreover, it is common for employers with plans that do not explicitly calculate pensions in terms of final earnings (e.g., flat-benefit or career-average plans) to grant regular benefit increases so that the level of benefits moves in step with wages.²⁹ Yet the key claim of the implicit-contract model – that employees give up more wages than are necessary to pay for their quit benefit – appears to violate the *quid pro quo* principle. Quit benefits are vested benefits, so it makes sense that employees would forgo wages to pay for their quit benefit. But why would employees agree to forgo an additional amount of wages to fund a stay benefit that they may never receive? According to the implicit-contract theory, it

²⁴ See generally Richard A. Ippolito, *Pensions, Economics and Public Policy*, 37-42, and James E. Pesando, “The Usefulness of the Wind-Up Measure of Pension Liabilities: A Labor Market Perspective,” *Journal of Finance*, vol. 40 (July 1985), 927-29. A good introduction to implicit contracting in labor markets is H. Lorne Carmichael, “Self-Enforcing Contracts, Shirking, and Life Cycle Incentives,” *Journal of Economic Perspectives*, vol. 3 (Autumn 1989), 65-83.

²⁵ For this concept, see Ippolito, *Pension Plans and Employee Performance*, 11. See also Ippolito, *Pensions, Economics and Public Policy*, 42-46.

²⁶ $.01 \times 35 \times \$100,000$.

²⁷ $.01 \times 20 \times \$100,000$.

²⁸ See Financial Services Commission of Ontario, *Funding Defined Benefit Pension Plans: Risk-Based Supervision in Ontario, Overview and Selected Findings, 2002-2006* (March 2007), 5, 8 (large minority of plans link pension benefits to final salary and fund based on projected benefits).

²⁹ See Robert C. Kryvicky, “The Funding of Negotiated Pension Plans,” *Transactions of the Society of Actuaries*, vol. 33 (1981), 409; Richard A. Ippolito, *Pensions, Economics and Public Policy*, 38 n. 1; Canadian Institute of Actuaries, *Standards of Practice – Practice-Specific Standards for Pension Plans*, Document 206036, April 2006 [Revised May 2006], 3008 (“The actuary’s advice on funding may . . . anticipate an expected amendment to the plan that increases its benefits” if “the plan, while nominally a career average pension plan, may effectively have been operating, and may be expected to continue to operate, as a final earnings pension plan as a result of periodic increases in accrued benefits to reflect current earnings.”).

may make economic sense for an employer and its employees to enter into a long-term employment contract pursuant to which the employer withholds a portion of the employee's compensation then repays this amount (perhaps in the form of a pension) at the end of the contract term *contingent upon* the employee having complied with the terms of the long-term contract.

For example, suppose an employer hires an employee, promises the employee a fixed wage, and gives the employee clear instructions about what the employee is supposed to do. How does the employer know that the employee is complying with its instructions? It is costly for employers to monitor their employees. For this reason, it may make sense for an employer to withhold a portion of the employee's wage as a bond, monitor the employee sporadically, and fire the employee if she is caught "shirking." Because employees have a vested right to their quit benefit, the quit benefit cannot function as a bond. If the pension bond is to be contingent upon compliance with the long-term contract, the employer must withhold an additional amount from employees' wages over and above the cost of quit benefits. An employee who has surrendered wages at the rate necessary to pay for a stay benefit but who is fired for misconduct will receive only her quit benefit. She forfeits the difference in value between her stay benefit and her quit benefit. The prospect of this *pension capital loss* lessens employees' incentives to shirk and reduces the employer's monitoring costs.³⁰

The bond created by this long-term contract makes it less likely that the employee will yield to temptation, but it creates temptation for the employer. For virtually her entire career, the value of the wages an employee has forgone will be greater than her vested (quit) benefit. All other things being equal, it appears that the employer could fire the employee, pay her the quit benefit, and pocket the difference between the stay benefit and quit benefit.³¹ Unless the employer can credibly commit that it will not yield to this temptation, the employee will not agree to the contract. One way to make the employer's promise credible would be to draft an explicit contract term that makes the employer legally liable to pay an employee's stay benefit if the employee is fired without cause. The employment contracts that cover the great majority of employees do not include such a provision. According to the implicit-contract theory, this is because the cost of enforcing such a provision makes it infeasible. For example, if an employee alleged a breach, the parties would incur the costs of adjudication by a third party. Moreover, while the facts that are relevant to deciding whether there was cause for the employee's dismissal may have been observable by the employer and employee, many of these facts "would be difficult to establish in a court."³² Consequently, there would be a significant likelihood that the adjudicator would make a mistake.

³⁰ For "pension capital loss," see Ippolito, *Pension Plans and Employee Performance*, 11. See also Steven A. Sass, "Crisis in Pensions," *Regional Review*, vol. 3 (1993), 14.

³¹ See Dan M. McGill, et al., *Fundamentals of Private Pensions*, 8th ed. (Oxford: Oxford University Press, 2004), 495-96.

³² Carmichael, "Self-Enforcing Contracts, Shirking, and Life Cycle Incentives," 67. See also *id.* 66 ("If an agreement *is to be legally enforceable*, it must condition future behavior only on variables which are *verifiable*. These variables are observable by the firm, the workers, and an outside enforcement agency such as the courts.") (italics added).

These impediments explain why most employment contracts do not include language making the employer liable to pay a stay benefit to employees who are discharged for a cause other than misconduct, but they do not explain why employees would agree to a long-term contract in which their employer makes an *implicit* promise not to fire them without cause. It does not make sense for employees to agree to an employment contract that subjects them to forfeiture of a portion of their wage deferrals unless there is an alternate enforcement mechanism. According to the implicit-contract theory, the employer's stake in maintaining its reputation makes the employer's implicit promise to honor the long-term employment contract "self-enforcing." Although an employer may have a short-term incentive to cheat employees by firing them and claiming the difference between their stay and quit benefits, action of this sort will damage the employer's reputation with current and prospective employees. As Carmichael puts it, "If a firm starts to deny a larger proportion of older workers their bonuses, the other workers may begin to suspect that they will be treated in the same way in the future. The firm will therefore find it harder to hire new workers and harder to prevent its other workers from cheating."³³ According to this logic, a rational firm will not cheat by firing an employee if the present value of the costs incurred as a result of harm to the firm's reputation exceeds the difference in value between the employee's quit benefit and her stay benefit.

In this way, the implicit-contract theory reconciles the *quid pro quo* principle with an arrangement in which employees forgo wages in excess of the value of their vested (quit) benefit. But if employees expect to receive (and pay for) stay benefits, it becomes much more difficult to present a clear account of the particulars of the pension bargain.³⁴ For example, while the employer and employee presumably know the current wage on which the employee's quit benefit is based, they will not know the final salary that will be used to calculate the stay benefit until the employee reaches retirement age. And while the quit-benefit model bases pension liabilities on enforceable legal obligations, the implicit-contract model bases "liabilities" on an unwritten and therefore nebulous commitment by the employer to continue its plan on more or less the same terms.³⁵ Finally, the implicit-contract model assumes that the reason employers and employees leave key terms of the pension bargain unwritten is that it would be difficult for an independent adjudicator to understand the parties' relationship well enough to make a correct decision if one of the parties claimed that a breach had occurred.³⁶ If this assumption is true (and what excuse does either party have for leaving important contract terms unwritten if it is not true), then it may be very difficult for policy-makers to understand pension bargains well enough to make sensible pension policy.

³³ *Id.*, 72.

³⁴ Bob Baldwin offers a similar catalog of the uncertainties attendant to valuing stay benefits in "Financing Defined Benefit Pension Plans," Canadian Labour Congress Research Paper # 32, 3-4 (available at http://canadianlabour.ca/index.php/Bob_Baldwin_Papers/487).

³⁵ For this criticism, see Jeremy Bulow, "What Are Corporation Pension Liabilities?" *Quarterly Journal of Economics*, vol. 97 (August 1982), 435-52; Jeremy Gold, "Retirement Benefits, Economics and Accounting: Moral Hazard and Frail Benefit Designs," *North American Actuarial Journal*, vol. 9 (1995), 88-111.

³⁶ See Carmichael, "Self-Enforcing Contracts, Shirking, and Life Cycle Incentives," 66-67.

These and other complications of the implicit-contract model lead some commentators to prefer the quit-benefit model. Adopting this approach might be reasonable if employees stood to receive quit benefits in a wind-up. Under Ontario law, however, total or partial wind-up of a pension plan triggers “statutory entitlements and protections . . . that are additional to the entitlements . . . [an affected employee] otherwise would have had, had [that employee] terminated employment and plan membership in the normal course of business.”³⁷ (Call this a *wind-up benefit*.) These statutory rights – particularly, grow-in rights – may make an employee’s wind-up benefit significantly larger than her quit benefit.³⁸ The PBA and regulations require employers to fund “solvency liabilities,” which include, with some important exceptions, “the liabilities of a plan determined as if the plan had been wound up. . . .”³⁹ Because employers must fund certain wind-up benefits and because employees may receive wind-up benefits, the *quid pro quo* principle implies that an employer will attempt to charge employees for some or all of the cost of these benefits.⁴⁰ Unfortunately, estimating how much of her current wages an employee would give up in return for the possibility of receiving wind-up benefits involves uncertainties of the sort raised by stay benefits. For example, how much of her wages should an employee give up in return for wind-up benefits when she cannot assess the likelihood that her plan will wind up?

Table 8 assumes that the asymmetry theory is valid (i.e., employees do not receive surplus entitlements). It lists a variety of circumstances that may affect the retirement benefit an employee will receive based on service she has already performed. Depending on the circumstances, an employee may become entitled to any one of three different levels of benefit, which, in turn, will make her plan responsible for one of three different levels of liability. There are a variety of reasons to doubt that the most transparent and tractable liability measure – the quit benefit – reflects what employees believe they have earned. For one thing, if employers must fund some wind-up benefits and employees may receive wind-up benefits, employers will attempt to make employees pay for at least some wind-up benefits. And if the implicit-contract theory is correct, employees surrender the still larger amount of wages necessary to fund stay benefits.

³⁷ Kaplan, *Pension Law*, 532.

³⁸ See Kaplan, *Pension Law*, 532. See also Seller, *Ontario Pension Law Handbook* (“The [PBA] provides members with certain enhanced rights and entitlements on the wind up of a pension plan which may increase the liabilities under the plan (and thus, the funding costs to the employer).”); Watson Wyatt, *Pension Plan Solvency: Weathering the Storm*, September 2003, available at http://www.watsonwyatt.com/canada-english/pubs/specialmemoranda/2003_09.asp (last visited November 18, 2007)(“Depending on the generosity of the plan’s early retirement provisions and the demographics of the plan’s membership,” grow-in rights can increase solvency liabilities [which assume that the plan is being wound up] by more than 35 percent in extreme cases.”).

³⁹ Regulation 909, 1(2).

⁴⁰ If an employer does not charge employees (i.e., withhold from their wages) the additional cost of wind-up benefits before a plan is wound up, the analysis in section 4.1.2 implies that the employees are very unlikely to reimburse the employer for the additional cost of wind-up benefits after the plan is wound up (even if the employees continue to work for the employer). Because the employer is unlikely to recover the additional cost of wind-up benefits after a plan is wound up, it will seek to charge employees for that cost before the wind-up occurs. If employees believe there is a probability that they will receive the larger wind-up benefit, then presumably they should be willing to forgo some additional amount of wages to pay for this benefit.

Table 8
Types of Benefit an Employee May Receive as a Result of Service Already Performed

| | | |
|----|--|---|
| a. | The plan continues and the employee quits. | Quit benefit |
| b. | The plan continues and the employee is discharged for misconduct. | Quit benefit |
| c. | The plan continues and the employee is discharged for a reason other than misconduct. | Quit benefit plus accruals during notice period |
| d. | The plan winds up and the employee continues to work for the employer. | Wind-up benefit |
| e. | The plan winds up and the employee ceases to work for the employer. | Wind-up benefit |
| f. | The plan continues and the employee remains with the employer until she is eligible to receive unreduced benefits. | Stay benefit |

This introduces considerable ambiguity into the asymmetry theory. Proponents of the asymmetry argument claim that employers should own pension surpluses because employers bear the burden of the funding and investment policies that produce surpluses. But whether employers bear the entire burden depends on what benefit employees have paid for and what benefit they receive in a wind-up. Suppose a plan winds up with assets that exceed its liability for wind-up benefits. If employees believed they were earning quit benefits or wind-up benefits, then the analysis in section 4 suggests that they did not bear the burden of the funding and investment policies that produced the surplus. But if employees believed they were earning stay benefits and if they surrendered additional wages to pay for stay benefits, then they would appear to have paid for more than the wind-up benefits they receive.⁴¹ It is difficult to say whether such behavior by the employer breaches the implicit employment contract, however, because the contract is implicit. On the other hand, if employers have not committed to provide anything more than wind-up benefits, why do they cost and fund their plan based on the plan's liabilities for projected (i.e., stay) benefits? Unless these ambiguities in the concept of pension "liabilities" can be resolved, the asymmetry argument will not provide clear guidance for policy with respect to pension surpluses.

⁴¹ It is important to keep in mind that the implicit-contract theory addresses *economic* phenomena that bear no necessary relationship to the funding status of a pension plan. Workers who pay for stay benefits and who quit or are discharged suffer a pension capital loss whether their plan is advance-funded or pay-as-you-go. See Richard A. Ippolito, "Issues Surrounding Pension Terminations for Reversion," *American Journal of Tax Policy*, vol. 5 (1986), 97 ("The gain to the firm is equal to the difference between economic liability [for stay benefits] and legal liability [for termination benefits]: the actual amount of assets in the plan is irrelevant."). Nonetheless, if employees pay for stay pensions *and* if their employer funds on the basis of the plan's projected benefit obligations (as many employers do) *and* if the pension fund has more assets than are necessary to meet its obligation for wind-up benefits, it does not seem unreasonable to infer that employees may have surrendered wages over and above the amount necessary to pay for quit or wind-up benefits and that these additional wage deferrals made their way into the pension fund. If this occurred, then employees may have paid for a portion of a pension surplus that is calculated on the basis of wind-up liabilities.

4. Analytical Issues in the Asymmetry Argument

Section 3 analyzed an ambiguity in the “liabilities” that figure in the calculation of pension surpluses. The ambiguity matters for surplus issues because the existence and amount of a surplus depends on the magnitude of a plan’s “liabilities.” A decision to use one definition of “liabilities” – say, the plan’s liabilities for stay benefits – rather than another – say, the plan’s liability for wind-up benefits – will affect the size of a surplus and may lead to a determination that the plan has a deficit, rather than a surplus.⁴² But resolving the ambiguity discussed in section 3 will not settle the question of who should own a pension surplus. For example, if a final-average salary plan winds up with assets that exceed its “going concern” liability for stay benefits, the surplus will be larger if calculated on the basis of the plan’s liability for wind-up benefits than if calculated on the basis of stay benefits. There will be a surplus in either case, however, and some rule will be necessary to decide who should own the residual claim to the surplus. The gist of the asymmetry argument is that employers should have the residual claim to pension surpluses because employers incur the residual liability for pension deficits. Critics of the asymmetry argument disagree. The discussion in section 4 assesses these competing claims.

4.1 Is the Pension Funding Regime Asymmetric?

4.1.1 Why Do Pension Deficits Arise?

Pension surpluses and deficits may arise in a variety of ways. Kaplan numbers among the reasons for surpluses “the use of conservative financial, demographic, and other assumptions by an actuary when determining an employer’s annual normal cost to fund the pension benefits; changes in annuity purchase rates; reductions in employee participation rates in the pension plan, particularly among non-vested employees; events arising in connection with a purchase or sale of a business; and the extent of any provisions in the plan terms for inflation protection.” “The operation of the same factors that give rise to a surplus,” he notes, “can also result in the creation of a solvency deficiency or unfunded liability.”⁴³ Two reasons for surpluses and deficits, both of which involve departures from the full-funding ideal, are particularly important. A plan may develop a pension deficit because an employer pursues a policy of underfunding

⁴² See, e.g., Canadian Labor Congress’s Submission in Response to Finance Canada’s Regulatory Framework for Federally Regulated Defined Benefit Pension Plans Consultation, September 15, 2005, available at http://www.fin.gc.ca/consultresp/PPBnfts_38e.html (last visited August 29, 2007) (“If a sponsor can terminate a plan that is underfunded on a going concern basis and recover a solvency surplus, and face no liability for the unfunded liability on a going concern basis, then perverse incentives are in place.”).

⁴³ Kaplan, *Pension Law*, 556-57. See also Daniel Fischel and John H. Langbein, “ERISA’s Fundamental Contradiction: The Exclusive Benefit Rule,” *University of Chicago Law Review*, vol. 55 (1988), 1149 (Because of the “host of future variables” that affect its cost, “the potential for underfunding or for overfunding inheres in the nature of a defined benefit plan.”).

pension promises or because the plan follows an investment policy that mismatches its investments and liabilities.⁴⁴

4.1.1.1 Deficits as a Result of a Policy of Underfunding

What precisely does it mean for an employer to pursue a policy of underfunding?⁴⁵ The quit-benefit model provides a relatively straightforward way of thinking about this question. If employees believe they are earning quit benefits, they should be willing to surrender wages in an amount equal to the present value of the marginal accrual in their vested benefit discounted at the risk-free rate. The risk that an employer will fail to pay wages is quite small, and the employer's obligation to perform the pension promise is no less a legal liability than its promise to pay wages. By implication, the employees' pension claims should be no less secure than their wage claims. If the employer contributes an amount equal to the present value of an employee's marginal pension accrual discounted at the risk-free rate (the full-funding contribution) and the plan invests this amount in matching investments, the employee's claim to pension benefits will be roughly as secure as her claim to the wages she surrendered in payment for her pension benefits. If an employer contributes less than the full-funding contribution, it underfunds the pension promise and, consequently, exposes the employee to insolvency risk.

In practice, pension liabilities are discounted at rates that are higher (often much higher) than the risk-free rate. When people speak of pursuing a policy of *overfunding* a pension plan, they do not mean that employers are making contributions that are larger than the full-funding contribution. They mean that employers are making contributions based on conservative actuarial assumptions. In such a case, the employer makes contributions that are larger than the contributions called for by the best estimate of the expected return on the plan's investments. If an employer "overfunds" in this manner, it becomes more likely that the plan will develop a surplus. More precisely, the expected value of the surpluses that may arise if the employer follows such a policy exceeds the expected value of the deficits that may arise. Similarly, a policy of full-funding implies that the expected value of the surpluses that may arise from such a policy equals the expected value of the deficits that may arise, while a policy of underfunding implies that the expected value of the deficits that may arise from such a policy exceeds the expected value of the surpluses that may arise. Unlike the full-funding ideal, "overfunding" by means of conservative actuarial assumptions does not guarantee that the plan will not become insolvent. For this reason, the policy of overfunding via conservative actuarial assumptions exposes employees to insolvency risk.⁴⁶

⁴⁴ See David Blake, "Does It Matter What Type of Pension Scheme You Have?" *Economic Journal*, vol. 110 (Feb. 2000), F68.

⁴⁵ In speaking of a policy of underfunding, I do not mean to imply that employers do not comply with the minimum funding rules in the PBA. The minimum funding rules allow an employer to pursue a policy of underfunding.

⁴⁶ The point of making this observation is not to say that plans should contribute or invest otherwise but to recognize that a policy of "overfunding" by using conservative actuarial assumptions exposes employees to risk.

There are a variety of circumstances in which an employer may contribute less than the contribution necessary to fully fund the plan's current obligations. For example, newly-created plans commonly grant benefits to employees for service performed before the plan's inception. This creates a past-service liability. Rather than immediately funding the entire past-service liability, employers generally amortize the liability over a term of years.⁴⁷ Similarly, it is common for employers that sponsor flat-benefit or career-average-salary plans to increase benefit levels periodically and to apply the higher benefit level to past service.⁴⁸ By increasing the value of past service, the employer creates new liabilities for the plan. Employers generally amortize such past-service liabilities over a term of years. This creates what might be called a policy of short-term underfunding. That is, the employer's amortization of past-service liabilities implies that it will not have made the contributions necessary to fund these liabilities until the end of the amortization period. Moreover, if, as is commonly the case, the amortization period is longer than the collective-bargaining cycle and the employer bargains benefit increases in each round of collective bargaining, the plan will incline toward deficit. Unless the performance of the plan's investments makes up the shortfall, the plan may never have enough assets to meet its liabilities.⁴⁹

A more common circumstance in which employers contribute less than the full-funding contribution occurs when the plan chooses a mismatched investment allocation that promises a higher expected return than do matching investments.⁵⁰ If a plan invests in risky securities and, in particular, in equities, current actuarial practice allows an actuary to value pension obligations using a discount rate that includes the risk premium the actuary expects the plan to earn on its investments. By including the risk premium in the discount rate, the actuary anticipates the higher returns that more risky investments should produce. Because there is an inverse relationship between the discount rate and the present value of future pension payments, the higher discount rate reduces the present value of future obligations below what it would have been if the employee had used the risk-free rate.⁵¹ The lower present value allows the employer to make a contribution that is smaller than the full-funding contribution. If the anticipated higher return does not occur, however, the plan is likely, all other things equal, to develop a deficit.

⁴⁷ See generally James A. Wooten, *The Employee Retirement Income Security Act of 1974: A Political History* (Berkeley: University of California Press/Milbank Memorial Fund/Employee Benefit Research Institute 2004), 57-61.

⁴⁸ See Baldwin, "Financing Defined Benefit Pension Plans," 10.

⁴⁹ See, e.g. Financial Services Commission of Ontario, "Funding Defined Benefit Pension Plans," 6 ("On a solvency basis, flat benefit plans were the least well funded; 376 (95%) of these plans were less than fully funded and 206 (52%) had a solvency ratio of less than 80%."); Canadian Labour Congress's Submission in Response to Finance Canada's Regulatory Framework for Federally Regulated Defined Benefit Pension Plans consultation, September 15, 2005 ("Within the DB world, it is flat benefit plans and career average earnings plans that are most likely to create situations where plans are terminated with insufficient assets to cover liabilities.") (available at http://www.fin.gc.ca/consultresp/PPBnfts_38e.html). For an insightful analysis of the factors that lead flat-benefit plans to be persistently underfunded, see Kryvicky, "The Funding of Negotiated Pension Plans."

⁵⁰ See *Pension Actuary's Guide to Financial Economics*, 26-27.

⁵¹ See *id.*, 27; Keith Ambachtsheer, *Cleaning Up the Pensions Mess: Why It Will Take More Than Money*, C.D. Howe Institute Backgrounder No. 78, February 2004, 3-4 (available at http://www.cdhowe.org/pdf/backgrounder_78.pdf).

It is worth noting that the practice of reducing contributions when a plan pursues a riskier investment policy seems at odds with the analogy that some proponents of the asymmetry argument draw between a DB plan and a secured transaction. The creditor in a secured transaction generally will require more collateral when the collateral is risky. The actuarial practice described above results in the employees, who are figurative secured creditors in this analogy, receiving less collateral when the collateral is risky.

4.1.1.2 Deficits as a Result of a Policy of Mismatching Investments

As explained above, it is theoretically possible for a plan to immunize pension obligations by purchasing a portfolio of risk-free securities that have payout streams that perfectly match the payments promised by the plan.⁵² A pension plan will develop a deficit (or surplus) if the plan's investments promise payouts that do not match the payment streams promised to employees or if the plan's investments carry a risk of default. Investments such as common stocks that do not promise a specific payout generally have higher expected returns, while bonds that carry a risk of default promise higher returns than risk-free investments that promise the same payment stream. Consequently, a plan that invests in equities or in bonds that carry default risk will increase the expected return on its assets (compared to matching investments) as well as the likelihood of a pension surplus. But "[t]aking risk in an attempt to pursue higher return comes at the cost of increased potential for underperformance."⁵³ Through much of the 1980s and 1990s, investment returns were much more favorable than actuaries assumed, so pension plans ended up with large surpluses. The so-called "perfect storm" of the early 2000s had the opposite effect. Sharp declines in equity prices reduced the asset side of the pension ledger at the same time that declining interest rates increased the liability side. The result was a soberingly rapid swing from large pension surpluses to large pension deficits.

4.1.2 Who Bears the Burden of Pension Deficits?

The asymmetry argument claims that there is a mismatch in the burdens and benefits created by the funding regime for defined-benefit plans. In the words of a leading consulting firm, "asymmetry arises from the fact that for most single employer DB plans, the employer is responsible for paying off deficits but often cannot access plan surpluses that may develop as a result of conservative funding policies that incorporate a safety margin in the amounts contributed to a pension plan."⁵⁴ As explained above, there are two primary reasons that plans develop deficits: a policy of underfunding or a policy of mismatching investments. There are two contexts in which the burdens of deficits are borne: a plan that winds up and a plan that continues. As I explain below, whether

⁵² *Pension Actuary's Guide to Financial Economics*, 25.

⁵³ *Id.*, 36. See also Ambachtsheer, *Cleaning Up the Pension Mess*, 4 ("[P]rojecting a positive asset-liability return spread does require actually undertaking mismatch risk between balance sheet assets and liabilities (otherwise, there is no justification for projecting a spread.")).

⁵⁴ Watson Wyatt, "Canadian Pension Plans After the *Monsanto* Decision: A Discussion Paper," November 2004, 2 (available at <http://www.watsonwyatt.com/canada-english/pubs/specialmemoranda/pdf/SM04-03.pdf>).

stockholders or employees bear the burden of a pension deficit depends on the reason for the deficit and the context in which the burden is borne. In an ongoing plan, employees bear the burden of pension deficits that result from plan amendments that increase benefits. Otherwise, the employer bears the burden. In a wind-up, stockholders bear the burden of a deficiency if the employer is solvent. If the employer is insolvent, employees bear the burden unless the deficit is the result of a plan amendment that increases benefits. Employees do not bear a burden when they fail to receive a benefit increase that has not yet been funded because they have yet to pay for benefits they do not receive.

Proponents of the asymmetry argument claim that employers bear the burden of pension deficits. “A plan sponsor is *responsible for funding deficits*,” the Canadian Association of Counsel to Employers declares, “but is virtually unable to access plan surplus, either from a continuing plan or upon wind-up.”⁵⁵ To assess the validity of this claim, it is useful to distinguish between the *legal incidence* and the *economic incidence* of liability for deficits in a pension scheme.⁵⁶ The legal incidence of an obligation falls on the entity that is legally liable for paying the obligation. The economic incidence of an obligation falls on the entity or entities that ultimately bear the economic burden of the obligation. For example, corporations are legally “responsible for” paying the corporate income tax. Economic burdens can only fall on human beings, however, so the economic burden of the corporate income tax clearly must fall somewhere else.⁵⁷ For the same reason, a corporation cannot bear the economic burden of a pension deficit or deficiency. When proponents of the asymmetry analysis claim that employers pay for pension deficits, they mean that owners – generally, stockholders – bear the burden.⁵⁸

When an ongoing pension plan has a deficit, the PBA requires the employer to make special payments that will eliminate the deficiency.⁵⁹ Proponents of the asymmetry argument claim that the employer’s legal liability for special payments entails that the employer bears the burden of deficits in an ongoing plan. “Despite the fact that employers are *required to make considerable contributions in the event of negative experience*,” a consulting firm declares, “the present regime prevents them from benefiting from favourable experience, in the form of any surplus that may exist in the plan at termination.”⁶⁰ Not surprisingly, opponents of the asymmetry argument claim that employees bear at least some – and perhaps all – of the economic burden of special

⁵⁵ Canadian Association of Counsel to Employers’ Submission in Response to Finance Canada’s Regulatory Framework for Federally Regulated Defined Benefit Pension Plans Consultation, September 15, 2005 (italics added)(available at http://www.fin.gc.ca/consultresp/PPBnfts_27e.html)(last visited August 29, 2007).

⁵⁶ Hyatt and Pesando draw the same distinction in Douglas E. Hyatt and James E. Pesando, “The Distribution of Investment Risk in Defined Benefit Pension Plans: A Reconsideration,” *Relations Industrielles*, vol. 51 (Winter 1996), 136.

⁵⁷ See generally Joel Slemrod and Jon Bakija, *Taxing Ourselves: A Citizen’s Guide to the Debate over Taxes*, 3rd ed. (Cambridge, Mass: MIT Press, 2004), 72-79.

⁵⁸ See, e.g., Jack Selody, “Vulnerabilities in Defined-Benefit Pension Plans,” Bank of Canada Discussion Paper 2007-3, 5 and note 14 (available at <http://www.bank-banque-canada.ca/fr/res/dp/2007/dp07-3.pdf>).

⁵⁹ Kaplan, *Pension Law*, 416-18.

⁶⁰ Watson Wyatt Submission on CAPSA Proposed Regulatory Principles for a Model Pension Law, 31 (italics added) (available at http://www.watsonwyatt.com/canada-english/news/pdf/ModelLawSubmission_Final.pdf).

payments. A representative of the Canadian Labour Congress (CLC) writes, “In context, if the need for special payments arises, the employer will do everything possible to recover the amount of the special payments in any one of a variety of ways: lowering wage and salary offers, or postponing or dropping improvements to the pension plan or other benefits. To the extent that an employer successfully offsets the amount of special payments by making a downward adjustment to some other part of the compensation package, the employer has effectively shifted the risk back to the plan members.”⁶¹ Some outside of the Labour camp agree. A consulting firm observes: “In some cases, employees may indirectly share the pension deficit risk as their companies squeeze operational budgets to fund increased pension contributions and consider plan redesign to remove some of the corporate deficit risk in the future.”⁶² A close look at the context in which employers and employees bargain over pension benefits suggests that the economic incidence of a pension deficit in an ongoing plan depends on the reason for the deficit.

According to the *quid pro quo* principle, the compensation package that employees receive is the result of a bargaining process. When employees are represented by a union, the bargaining is explicit. When employees are not represented by a union, the bargaining occurs through the medium of the labour market. In a bargaining process, a party derives leverage from its capacity to withhold some good that its counterparty desires. Employers are required by law to fund deficits in an ongoing plan.⁶³ In other words, when a plan has a deficit, an employer does not have a legal right to refuse to make special payments. Since an employer cannot credibly threaten to withhold a special payment, it is not clear how a pension deficit and the obligation to make special payments can give the employer greater leverage than it would otherwise have to force employees to accept a lower wage. This is not to say that employees are not affected by the employer’s obligation to make a special payment. Employees’ fortunes are closely bound up with the fortunes of their employer, so it is not surprising that an event such as a pension deficit that adversely affects the employer’s balance sheet also affects the employees’ compensation package.⁶⁴ In such a case, however, the effect on employees

⁶¹ Baldwin, “Financing Defined Benefit Pension Plans,” 13. See also CAW-Canada’s Submission in Response to Finance Canada’s Regulatory Framework for Federally Regulated Defined Benefit Pension Plans Consultation, September 15, 2005 (“In the CAW-Canada’s bargaining experience, the employer may absorb the initial cost when market conditions adversely affect the pension fund, but the employer will always pass that cost along in subsequent wage and benefit negotiations.”)(available at http://www.fin.gc.ca/consultresp/PPBnfts_60e.html (last visited August 29, 2007)); CLC’s Submission in Response to Finance Canada’s Regulatory Framework for Federally Regulated Defined Benefit Pension Plans consultation (“To the extent that employers’ special payments to pension plans result in lower pay or downward adjustment to other parts of employees’ compensation, the risk has been shifted to the employees.”).

⁶² Towers Perrin, *White Paper: Renovate to Rejuvenate: Canadians Need a 21st Century Pension Plan*, May 2005, 6 (available at http://www.fin.gc.ca/consultresp/PPBnfts_80e.pdf).

⁶³ Kaplan, *Pension Law*, 417-18.

⁶⁴ See Ippolito, “Bankruptcy and Workers,” 1253 (“[T]he typical employee does not maintain large diversified holdings of financial assets. Indeed, his principle [sic] holdings take the form of the equivalent of company-issued securities, the return on which depends mostly (or completely) on the financial success of his employer.”).

derives from adverse effect the pension deficit has on the employer's broader economic circumstances, rather than from the deficit's connection with the pension plan.

This point may be illustrated by comparing three bargaining scenarios. In scenario A, the assets and liabilities of the pension plan are exactly in balance. Scenario B is identical except that there is a pension deficit that requires the employer to make a \$1 million special payment. Scenario C is identical to scenario A except that the employer has suffered a tort judgment that requires the employer to pay \$1 million in damages. It may be that in scenario B the employer and its employees will negotiate a smaller compensation package than in case A. But if this occurs, is the compensation package smaller because the employer is paying \$1 million *to fund a pension deficit* or because the employer is \$1 million *poorer*? Is there any reason that the employer's legal obligation in scenario C to pay a \$1 million tort judgment should have a different effect on bargaining between the employer and its employees than the employer's legal obligation in case B to make a \$1 million special payment?

In a passage quoted above, a CLC representative claims that "the employer will do everything possible to recover the amount of the special payments in any one of a variety of ways: lowering wage and salary offers, or postponing or dropping improvements to the pension plan or other benefits."⁶⁵ But if the employer can use such tactics to shift the burden of special payments to the employees, why would the employer not use the same tactics to force the employees to bear some of the burden of the tort judgment? Is there any material difference between the special payment in scenario B and the tort judgment in scenario C that would allow the employer to shift the burden of one liability but not the other to the employees? Indeed, the tactics of "lowering wage and salary offers, or postponing or dropping improvements to the pension plan or other benefits" are available as means of reducing employee compensation when there is no pension deficit at all. Why would the employer not use them?⁶⁶ In sum, it is not clear

⁶⁵ Baldwin, "Financing Defined Benefit Pension Plans," 13.

⁶⁶ In "The Distribution of Investment Risk in Defined Benefit Pension Plans," Hyatt and Pesando reach a different conclusion. They first address the issue of underfunding in a labor market in which an employee's pay in each period equals her marginal product in the period (i.e. a spot market). They claim that if an employer had an underfunded pension plan and the employee refused to accept a wage reduction to fund the deficit, "the employer [would] simply terminate the plan." *Id.* at 140. This tactic will only work, however, if the employer is not liable for the deficit when the plan winds up. Because the PBA makes the employer liable for the deficit, a solvent employer cannot credibly threaten to terminate the plan and shift the burden of the pension deficit to its employees. In their discussion of the burden of pension deficits under the implicit-contract model of pensions, Hyatt and Pesando assume that employees' lifetime compensation reflects the value of employer pension contributions rather than the value of employees accruing pension benefits. Under this assumption, if a plan has poor investment experience and the employer has to make larger contributions to fund the fixed benefits promised by the plan, the wage component of employees' lifetime compensation will have to fall so that their "total compensation from the date of hire to the date of retirement [would] be equal to the present value of the employee's marginal product." *Id.* at 141 (mathematical symbols omitted). "Those who support the 'traditional view' regarding the sharing of investment risk in defined benefit pension plans [i.e. the view that the employer bears the burden of funding a shortfall produced by poor investment experience] must argue that" employee's lifetime compensation reflects "the employee's accruing pension benefit, *not* the employer's contribution." *Id.* The analysis in the text provides such an account. Employees' level of compensation reflects the value of accruing pension benefits, rather than the value of employer pension contributions, because the employer

why or how the existence of a pension deficit and of a legal obligation to fund that deficit would give the employer special leverage in its bargaining with employees.

The foregoing analysis does not apply to all pension deficits. When an employer with a flat-benefit or career-average plan grants benefit increases that apply to prior service, a past-service liability is created. If the past-service liability pushes a pension plan into deficit, the PBA will require the employer to make special payments to pay off the unfunded liability.⁶⁷ In contrast to the situation discussed above, here there is bargaining between the employer and its employees *before* the creation of the liability that gives rise to the special-payment obligation. If the employees do not agree to forgo wages in an amount that will offset the special payments, the employer will not agree to higher benefits. There will be no benefit increase to fund. Thus, employees generally will bear the burden of pension deficits that result from a plan amendment that grants a retroactive increase in benefits.⁶⁸

A pension deficit also imposes burdens when a plan winds up. If a wound-up plan has insufficient assets to meet its liabilities, the PBA requires the employer to fund the deficiency.⁶⁹ If the employer is solvent, the stockholders likely bear the burden of the deficiency because the employer will not be in a position to shift the liability to the employees. If the employer liquidates, there will be no further bargaining with the employees. If the employer remains in business after the wind-up, its obligation to fund the deficiency will not create leverage in bargaining with employees because the employer cannot threaten to withhold payment of the liability (the payment is statutorily mandated) or threaten to withhold future benefit increases (the plan has been wound up). In contrast, if a plan winds up with a deficit and the employer is insolvent, it is likely that at least some employees will not receive all of the benefits to which they are entitled.⁷⁰ Labour advocates cite this as a reason for rejecting the asymmetry argument and granting employees a surplus entitlement.⁷¹ Whether the employees bear the burden of the pension deficit in case of employer insolvency, however, depends on how the deficit arose.

is in a position to demand that employees forgo wages to pay for their accruing pension benefits but is not in a position to demand that employees forgo wages to pay for plan deficits that result from poor investment experience.

⁶⁷ See Baldwin, "Financing Defined Benefit Pension Plans," 10.

⁶⁸ Selody makes a similar point. See "Vulnerabilities," 5 [§§ 3.1 and 3.2].

⁶⁹ PBA § 75.(1). See generally Kaplan, *Pension Law*, 542-44.

⁷⁰ See Kaplan, *Pension Law*, 544-45. See also Murray Gold, "Current Pension Issues and Trends," 10, available at http://canadianlabour.ca/updir/Murray_Gold_current_pension_issues_12-2005.pdf (last visited October 20, 2007); Mercer Human Resource Consulting, *Funding Defined Benefit Pension Plans: A Better Way*, September 2005, 2 (available at <http://www.mercer.com/referencecontent.jhtml?idContent=1196340>); Ontario Bar Association, Recommendations on CAPSA Proposed Funding Principles for a Model Pension Law, December 23, 2005 ("We also recognize that plan members do in fact bear some of the risk of defined benefit pension plans; among other things, they bear the risk of insolvency of the employer.") (available at <http://www.capsa-acor.org/capsa-newhome.nsf/257bb0033af16a0a85256c1a00754637/0aa75164ce68041385256ec8004d83bb?OpenDocument>).

⁷¹ See, e.g., CAW-Canada's Submission in Response to Finance Canada's Regulatory Framework for Federally Regulated Defined Benefit Pension Plans consultation ("Plan members . . . give up immediate wage increases for future pension benefits which . . . may be lost in a bankruptcy . . .").

As I noted in the discussion of deficits in ongoing plans, when an employer amends a plan to increase benefits and the increase applies retroactively, a past-service liability is created. If the plan already has a deficit or if the newly-created liability exceeds the surplus, some or all of the new liability will be unfunded. If the employer becomes insolvent before the end of the period for amortizing the unfunded liability created by a benefit increase, the plan is also likely to be insolvent because the employer will not have made all of the contributions necessary to fund the unfunded liability. Moreover, if the employer grants benefit increases at intervals that are shorter than the amortization period, it becomes very likely that the plan will have a deficit if the employer becomes insolvent. In cases like these, some employees will not receive their full benefit entitlement. But as noted above, in an ongoing plan, employees bear the burden of funding deficits that result from benefit increases. Applying this insight to the wind-up context, if a plan has a deficit because the employer has not fully amortized the unfunded liabilities created by a benefit increase, the employees have not surrendered enough wages to amortize the liability. Can the employees be said to bear the burden of a default with respect to benefit promises they have yet to pay for?

A benefit increase is only one reason that a plan may develop a deficit. A plan also may develop a deficit because it invested in mismatched investments and suffered an adverse shock. If adverse investment experience leads to a pension deficit and the employer becomes insolvent, some employees may not receive their full pension benefit. Indeed, the “correlation of bankruptcy risks with poor performance of the economy as a whole” makes it more likely that employers will become insolvent at a time when stock prices have fallen.⁷² In cases of this sort, employees do appear to bear the burden of the pension deficit. As long as limited liability corporations play a large role in economic life, however, it will be difficult to guarantee that stockholders bear the burden of such a deficit unless the law imposes stringent funding requirements – for example, immediate and mandatory full funding of pension plans.⁷³ Both employer and union representatives likely would oppose such a requirement.⁷⁴ It should be noted, however, that employees

⁷² The quoted language is from Ippolito, “Bankruptcy and Workers,” 1273.

⁷³ See Mercer, Response to CAPSA Proposed Funding Principles, December 5, 2005, 2 (“There may be room in the system for lessening the risk of benefit loss on sponsor bankruptcy, although *the risk cannot be eliminated.*” (italics added))(available at <http://www.capsa-acor.org/capsa-newhome.nsf/257bb0033af16a0a85256c1a00754637/0aa75164ce68041385256ec8004d83bb?OpenDocument>). In this regard, it is worth noting that the PBA includes both a liability rule (the employer is directly liable for the benefits promised by its plan) and a scheme of command-and-control funding regulations that force the employer to fund pension obligations in advance. Perhaps the most important reason for having both a liability rule and funding regulations is that a liability rule alone will not give judgment-proof employers the proper incentive to fund pension promises. See Donald Wittman, *Economic Foundations of Law and Organization* (Cambridge: Cambridge University Press, 2006), 98. A judgment-proof employer has an incentive to underfund, which would increase employees’ exposure to insolvency risk. Public policy explicitly recognizes that employees bear some of the burden of underfunding and imposes minimum funding standards that counteract the incentives of firms that are or expect to become judgment-proof.

⁷⁴ See, e.g., the responses by CAW-Canada, the CLC, the International Association of Machinists, and the Steelworkers to Finance Canada’s proposal to void plan amendments that grant benefit increases that push a plan’s solvency ration below 85%. All are available at http://www.fin.gc.ca/activity/consult/PPBnfts_e.html.

are in a different position than involuntary creditors such as tort victims. If the employer runs its pension plan in a manner that exposes employees to risk and if the employees are aware of this risk, they are in a position to demand a risk premium as compensation.⁷⁵ If employees already have been compensated for insolvency risk, granting them a surplus entitlement compensates them twice.

In sum, analysis of the context of pension bargaining suggests that the incidence of deficits depends on the reason for a deficit and the context in which the burden is borne. If a deficit in an ongoing plan is the result of a benefit increase that creates unfunded past-service liabilities, the burden of funding the deficit falls on employees. Otherwise, the employer will bear the burden of pension deficits in an ongoing plan. In a wind-up, stockholders bear the burden if the employer is solvent. If the employer is insolvent, then employees bear the burden of a deficit except to the extent that the deficit reflects a benefit increase that creates unfunded liabilities that have not been fully amortized. Because employees can bargain with their employer over their compensation package, they could and perhaps did bargain for a risk premium as compensation for the risk created by the pension deficit.

4.1.3 Why Do Pension Surpluses Arise?

The asymmetry argument holds that the employer's burden of funding pension deficits is greater than its benefit from pension surpluses. To state the claim slightly differently, symmetry in pension funding implies that the party who bears the burdens and risks that lead to a surplus should get the benefit of the surplus. This makes it important to understand why and how pension surpluses arise. As is the case with pension deficits, a pension surplus may arise as a result of a firm's funding policy (in this case, a policy of overfunding pension obligations) or because the plan invests in mismatched investments.

4.1.3.1 Surplus as a Result of a Policy of Overfunding

Proponents of the asymmetry argument commonly claim that surpluses develop because the employer has engaged in a conscious policy of overfunding. As I noted in section 4.1.1.1, a policy of overfunding implies that the employer makes larger contributions than would be required to fund the plan's obligations based on the best estimate of the return the plan will earn on its investments. (Call the difference between the employer's actual contribution and the contribution based on the best estimate of the return on the plan's investments an *excess contribution*.) "Because the future cannot be foretold," writes Don Ezra, "the actuary deliberately errs on the side of caution in making his assumptions. In that way he introduces a margin of safety when he calculates his funding target. This is usually quite acceptable to the plan sponsor, who does not want to be told subsequently that the actuary has underestimated the funding target, since this must lead to an unexpected increase in the contribution that the sponsor has to make."⁷⁶

⁷⁵ See generally Reiner Kraakman, et al., *The Anatomy of Corporate Law: A Comparative and Functional Approach* (Oxford: Oxford University Press, 2004), 8-10.

⁷⁶ D. Don Ezra, *The Struggle for Pension Fund Wealth* (Toronto: Pagurian Press Limited, 1983), 36.

Conservative assumptions amount to an implicit policy of overfunding pension obligations. Drawing on this line of reasoning, some proponents of the asymmetry argument claim that employers make (and bear the burden of) excess contributions with the predictable consequence that their plan develops a surplus.⁷⁷

Some critics of the asymmetry argument deny that employers pursue a conscious policy of overfunding. In the words of one Labour advocate, “Employers don’t bargain for pension improvements on the possibility they will cost less than their actuaries advise them – they bargain and plan on the basis that they will have to contribute the amounts that they are advised that the improvements will cost.”⁷⁸ Others concede that some employers follow a policy overfunding but claim that employees bear at least some of the burden of the excess contributions. In the words of the National Automobile, Aerospace, Transportation and General Workers Union of Canada (CAW-Canada), “Plan members also ‘give’ when the plan is funded in a conservative manner. The employer will restrict wage and benefit improvements to offset pension contributions. Thus, plan members have also contributed to the surplus in the pension plan.”⁷⁹

There are several potential responses to these criticisms of the asymmetry argument. The answer to the claim that employers do not engage in a conscious policy of overfunding is that a large number of sources suggest that employers do – or perhaps more accurately, did – fund based on conservative actuarial assumptions that incline plans toward surplus in most foreseeable circumstances.⁸⁰ Moreover, as I explain below, an employer’s control over the employment relationship and plan administration make it much more likely that the employer, rather than employees, will receive the benefit of a pension surplus. The *quid pro quo* principle implies that a party will not bear a burden if it does not expect to receive a benefit. Because it has long been the case that employers are more likely to get the benefit of a pension surplus, if a pension surplus is the result of a policy of overfunding, it seems more likely that the employer bore the burden of the excess contributions.⁸¹

⁷⁷ See, e.g., Watson Wyatt, “Canadian Pension Plans After the *Monsanto* Decision,” 15-16; Towers Perrin, Comments on CAPSA Proposed Funding Principles for a Model Pension Law, November 30, 2005, 12-13 (available at <http://www.capsa-acor.org/capsa-newhome.nsf/257bb0033af16a0a85256c1a00754637/0aa75164ce68041385256ec8004d83bb?OpenDocument>).

⁷⁸ Gold, “Current Pension Issues and Trends,” 11.

⁷⁹ See CAW-Canada’s Submission in Response to Finance Canada’s Regulatory Framework for Federally Regulated Defined Benefit Pension Plans consultation.

⁸⁰ See, e.g., Canadian Institute of Actuaries’ Submission in Response to Finance Canada’s Regulatory Framework for Federally Regulated Defined Benefit Pension Plans consultation, September 2005, available at http://www.fin.gc.ca/consultresp/PPBnfts_7e.html (last visited August 29, 2007)(“Conservatism in setting valuation assumptions is a major source of surplus in the long run for pension plans and it is justified to provide benefit security for plan members”). See also Howard Winklevoss, Mark Ruloff, and Steve Strake, “Managing Volatility in a Mark-to-Market World: The Stochastic Funding Method,” 2005, 6-7 (available at <http://www.soa.org/library/monographs/retirement-systems/the-future-of-pension-plan-funding-and-disclosure-monograph/2005/december/winklevoss-ruloff-strake.pdf>)(describing funding preferences in the U.S).

⁸¹ To see why, imagine the following thought experiment. Suppose an employer directed its pension plan to invest all funds in risk-free securities that exactly matched the payout stream to which members were entitled. In this case, the employer could fully fund pension liabilities by contributing in each period an

If employees bear the burden of the policy of overfunding, as the second critique of the asymmetry argument asserts, then employees make larger wage concessions than are necessary to fund the fixed benefits they earn during the relevant employment period. The larger wage concessions pay for excess contributions to the pension fund. This claim seems implausible because, as explained below, employers generally get most of the benefit of pension surpluses. Moreover, the positions taken by critics of the asymmetry argument make it clear that employees and their representatives recognize (or ought to recognize) that employers are much more likely to get the benefit of a pension surplus. In the document cited above in which the CAW-Canada claims that employees bear some of the burden of overfunding, the union also observes: “From a union perspective, it is hard to see asymmetry when employers have been enjoying the benefits of pension surpluses over the last 20 years.”⁸² If, as this quote suggests, employers derive benefit from pension surpluses by taking contribution holidays, it does not make sense for unions to make larger wage concessions to fund excess contributions. In effect, the union would be committing its members to make a gift to their employer.

In sum, if a pension surplus is the result of a policy of overfunding, employees are unlikely to have paid for the excess contributions that created the surplus. It is important to keep in mind the discussion in section 3.2, however. The analysis in section 4.1.3.1 assumes that employees believe they are earning (and pay for) the sort of “liabilities” that will be used to calculate the pension surplus. If employees in a plan believe they are earning stay benefits *and* their plan winds up *and* surplus is calculated based on the plan’s liabilities for wind-up benefits, employees may well end up paying for some of the surplus. In this case, however, they do not receive less than they paid for because of an error in the allocation of residual claims. They receive less than they paid for because they paid for one type of fixed claim (a stay benefit) and received a different kind of fixed claim (a wind-up benefit) that was worth less. Because key provisions of the implicit contract are unwritten, it will be difficult to discern whether an employer has breached the contract with the aim of depriving employees of the difference in value between stay benefits and wind-up benefits. If a breach of this sort does occur, however, the appropriate remedy would be to give employees the stay benefits they bargained for, rather than a surplus entitlement.

4.1.3.2 Surplus as a Result of a Policy of Mismatching Investments

As I explained in section 4.1.1.2, a pension plan can increase the expected return on its assets by investing in risky securities such as stocks or bonds that carry default risk. An intelligently-constructed policy of investing in risky assets generally will produce

amount equal to the present value of the employees’ marginal benefit accrual discounted at the risk-free rate. To overfund, the employer would contribute some amount in addition to its full-funding contribution. The *quid pro quo* principle implies that an employer will not bear a burden (i.e. pay an excess contribution) unless it expects to receive an equally valuable benefit. If the employer does not believe it will get the benefit of the surplus that develops in the plan, the benefit it expects to receive from an excess contribution will be less than the burden of making the contribution. A self-regarding party would not make the contribution.

⁸² *Id.*

larger investment returns than will a policy of matching plan assets and liabilities.⁸³ In addition, mismatching the duration of a plan's assets and liabilities exposes the plan to interest-rate risk that can generate large surpluses (or deficits). As Selody puts it, "the surplus is the ex post outcome that reflects shocks to the plan, such as a swing in interest rates, that are beyond the control of either members or the plan sponsor. In other words, the actuarial surplus (or deficit) is the outcome of the pension risk borne by the sponsor."⁸⁴ But an investment policy that positions a plan for beneficial "shocks" also will also expose it to adverse "shocks" and expose employees to insolvency risk. This again raises the question whether employees bargained for and received a risk premium.

4.1.4 Who Gets the Benefit of Plan Surpluses?

In contrast to the case with deficits, the source or reason for a surplus plays little or no role in determining who gets the benefit of a pension surplus. Everything depends on context. Whatever its source, when a surplus develops in an ongoing plan, the employer's extensive control over its business operations and its considerable control over the plan allow the employer to get the benefit of the surplus. In contrast, when a plan winds up with a surplus the employees almost always get some of the surplus and sometimes get all of it.

If an overfunded plan winds up, section 79(3)(b) of the PBA provides that the employer may not recover surplus unless "the pension plan provides for payment of surplus to the employer on wind up of the pension plan. . . ."⁸⁵ In *Schmidt v. Air Products Canada Ltd.*, the Supreme Court of Canada held that if "a pension fund is impressed with a trust," "the employer will not be able to claim entitlement to funds subject to a trust unless the terms of the trust make the employer a beneficiary, or unless the employer reserved a power of revocation of the trust at the time the trust was originally created."⁸⁶ The Court further observed that "[a] revocation power must be explicitly reserved in order to be valid."⁸⁷ These holdings in *Schmidt* prevent many employers from gaining access to any surplus that remains upon the wind up of their plan.⁸⁸ And even when a firm can establish an entitlement to a wind-up surplus, the surplus-sharing regulations applied by the Financial Services Commission of Ontario (FSCO) "effectively requir[e] the employer to negotiate the terms of any surplus withdrawal with its employees and pensioners."⁸⁹ In practice, the need to secure the consent of plan members will force the employer to share the surplus with them. The effect of current case-law, statutes, and regulations, then, is that employees usually get some and sometimes get all of the benefit of a wind-up surplus.

⁸³ See Zvi Bodie, "On the Risk of Stocks in the Long Run," *Financial Analysts Journal*, May-June 1995, 19.

⁸⁴ Selody, "Vulnerabilities," 6.

⁸⁵ PBA, § 79(3)(b).

⁸⁶ 115 D.L.R. (4th) 631, 657 [1994].

⁸⁷ *Id.* at 660.

⁸⁸ See generally Kaplan, *Pension Law*, 591-92; Seller, *Ontario Pension Law Handbook*, 84-85.

⁸⁹ Kaplan, *Pension Law*, 570.

When a surplus develops in an ongoing plan, the situation is very different. When a plan is ongoing, employees' options for capturing a share of surplus are very limited. They cannot initiate a wind-up, so their access to surplus depends on the employer or the FSCO over whom they have little or no control.⁹⁰ In contrast, the employer controls business operations and exercises considerable authority over the plan. The employer can deny employees access to pension surplus by refusing to initiate a wind-up and by structuring a personnel action such as a reduction in force to reduce the likelihood that the action will give rise to a partial wind-up.⁹¹ By taking contribution holidays or using surplus to finance an early-retirement window, the employer can pay personnel expenses that otherwise would come out of corporate assets.⁹² Finally, an employer also may be able to use surplus to morph its DB plan into a DC plan.⁹³ Of course, there are also constraints on the employer's use of surplus in an ongoing plan. Procedural impediments make it costly for an employer to withdraw surplus from an ongoing plan.⁹⁴ The terms of a pension trust may prevent an employer from merging an overfunded plan with an underfunded plan with a view to using the surplus in the former to fund the deficit in the latter.⁹⁵ All things considered, however, the employer's direct control over business operations and its direct and indirect control over the plan give it overwhelming advantages in securing the benefit of any surplus in an ongoing plan.

The best evidence is that employers take advantage of their control over pension surpluses. By all accounts, the presence of large surpluses in the 1980s and 1990s allowed many employers to forgo pension contributions.⁹⁶ In the eyes of critics of the asymmetry argument, the long period during which some employers made no contributions refutes claims of an asymmetry in the burdens and benefits of pension funding. "As surpluses have been far more common than shortfalls over the last 30 years," observes the Machinists union, "most employers have in fact contributed less, often much less, than the theoretical costs presented in actuarial valuations."⁹⁷ Critics point to employers' use of surpluses to fund early-retirement subsidies or a DC plan as additional evidence that claims of asymmetry are overblown. According to the CLC, "the widespread and widely acknowledged practice of employers taking contribution

⁹⁰ See Kaplan, *Pension Law*, 504, 505-509.

⁹¹ Not surprisingly, whether a reduction in force should give rise to a partial wind-up is a much-litigated question. See Kaplan, *Pension Law*, 513-16.

⁹² See Anthony Devir, "Fiduciary Obligations and Surplus Issues in Pension Plans: The Employers' Perspective," *Estates, Trusts & Pensions Journal*, vol. 18 (July 1999), 322-29; Seller, *Ontario Pension Law Handbook*, 74-77; Langbein and Fischel, "ERISA's Fundamental Contradiction," 1150 ("[T]he technique of ceasing contributions while creating new liabilities against an overfunded plan is an indirect way for the employer to spend the surplus.").

⁹³ See *Kerry (Canada) Inc. v. DCA Employees Pension Committee*, 2007 ONCA 416, June 5, 2007.

⁹⁴ Seller, *Ontario Pension Law Handbook*, 72-74; Devir, "Fiduciary Obligations and Surplus Issues in Pension Plans," 326-39.

⁹⁵ See Seller, *Ontario Pension Law Handbook*, 78.

⁹⁶ See Régie des Rentes, *Working Paper: Toward Better Funding of Defined Benefit Pension Plans*, 28-29 (available at http://www.rrq.gouv.qc.ca/an/services/Publications/ConsultationRCR_AN.pdf); Gold, "Current Pension Issues and Trends," 10.

⁹⁷ International Association of Machinists and Aerospace Workers, Submission in Response to Finance Canada's Regulatory Framework for Federal Regulated Defined Benefit Plans consultation, September 12, 2005, available at http://www.fin.gc.ca/consultresp/PPBnfts_26e.html (last visited August 29, 2007).

holidays in the 1980s and 1990s is hardly indicative of employers gaining nothing from surpluses and neither, for that matter was the widespread use of surpluses to finance special early retirement programs.”⁹⁸ The President of the CLC speaks of “massive contribution holidays, early retirement buyouts, and benefit improvements,”⁹⁹ while the Bell Pensioners Group complains of employers that “siphon off Defined Benefit surpluses for use in meeting its financial commitments to the new Defined Contribution plan.”¹⁰⁰ The weight of the evidence suggests that the critics are correct. Employers seek and expect to get the benefit of surplus in an ongoing pension plan.¹⁰¹

This expectation explains employers’ harsh response to the Supreme Court of Canada’s decision in *Monsanto Canada v. Ontario (Superintendent of Financial Services)*.¹⁰² Section 70.(6) of the PBA provides that “members, former members and other persons entitled to benefits” who are affected by a partial wind-up of their pension plan “shall have rights and benefits that are not less than the rights and benefits they would have on a full wind up of the pension plan on the effective date of the partial wind up.” The issue in *Monsanto* was whether these “rights and benefits” vest when a partial wind-up occurs or when the plan terminates and fully winds up.¹⁰³ Because surplus entitlements are very different in “ongoing” and “wound-up” plans, it matters greatly where the line between “ongoing” and “wound-up” is drawn and who draws the line. Employers almost certainly have more control over total wind-ups than partial wind-ups, so a holding that employees’ surplus entitlements did not vest until a plan fully wound up would give employers much more control over when their plan “wound up.” Moreover, employees do not get a surplus distribution if there is no surplus to distribute. Because employers can better foresee and control a total wind-up, a holding that surplus entitlements did not vest until a plan completely wound up would make it more feasible for employers to spend down surpluses before employees’ surplus entitlements vested.¹⁰⁴

⁹⁸ CLC’s Submission in Response to Finance Canada’s Regulatory Framework for Federal Regulated Defined Benefit Plans consultation.

⁹⁹ Kenneth V. Georgetti, “Securing DB Pensions: What are the Policy Options?” speech to SEDAP Research Program Conference, November 17, 2006, 5 available at <http://socserv.mcmaster.ca/sedap/p/S10Georgetti.pdf> (last visited October 20, 2007).

¹⁰⁰ Bell Pensioners’ Group Inc., Response to Discussion Paper [Funding Principles] Published by CAPSA, October 2005, 2 (available at <http://www.capsa-acor.org/capsa-newhome.nsf/257bb0033af16a0a85256c1a00754637/0aa75164ce68041385256ec8004d83bb?OpenDocument>).

¹⁰¹ See, e.g., Devir’s explanation of the rarity of surplus withdrawals from ongoing plans: “Because the employer *does not receive the full value* of the surplus under a surplus sharing proposal and because the employer *loses the ability to use surplus to take contribution holidays*, the employer is unlikely to pursue . . . a voluntar[y] plan wind-up unless the employer desires an injection of cash into its business or the surplus is so large that it cannot feasibly be used up in future contribution holidays.” Consistent with the *quid pro quo* principle, employers expect to get a benefit when they spend surplus. “Fiduciary Obligations and Surplus Issues in Pension Plans,” 328-29 (italics added).

¹⁰² 242 D.L.R. (4th) 193 [2004].

¹⁰³ 242 D.L.R. (4th), at 200. The Court did not address the question whether the affected employees were entitled to receive surplus in a wind-up.

¹⁰⁴ See Watson Wyatt, “Canadian Pension Plans After the *Monsanto* Decision,” 21 (“[S]ince partial wind ups can arise very quickly for business reasons, the time available to manage any surplus has shrunk.”). But see also CAW-Canada’s Submission in Response to Finance Canada’s Regulatory Framework for

As it happened, the Court ruled “that s. 70.(6) requires the distribution of actuarial surplus related to the part of the Plan being wound up, on the effective date of the partial wind up.”¹⁰⁵ This gives employers much less control than if the court had held that employees’ surplus entitlements did not vest until a plan fully wound up.

The holding in *Monsanto* makes it worth noting recent economic research that reveals that over the last half century *firm-level* volatility has increased significantly even as volatility in the macro-economy has declined. Using mostly U.S. but also some international data, Comin and Phillippon report: “We find that average industry profit margins have been roughly stable over the past 50 years, because, at any point in time, industry leaders account for most of the sales [in the particular product market], and the profit margins conditional on being a leader have not changed much. However, we show that *expected length of leadership by any particular firm has declined dramatically*.”¹⁰⁶ Greater turnover in industry leadership means more corporate restructuring, which, in light of the holding in *Monsanto*, almost certainly means more distributions of surplus to employees affected by a partial wind-up. This implies that employers can expect to get less of the benefit of pension surpluses in the future.

In assessing concerns about contribution holidays and other means by which employers use ongoing surpluses, it matters greatly how a surplus came into being. If a surplus is the result of a policy of overfunding and the stockholders paid for the excess contributions, it is hard to see why the stockholders should not get the benefit of any surplus that develops. If, on the other hand, employees bore the burden, contribution holidays are worrying because the employer gets a benefit that the employees have paid for. If the surpluses of the 1980s and 1990s were the product of a policy of overfunding, it seems very unlikely that employees would have been willing to pay for excess contributions to their pension fund if their plan did contain language forbidding their employer to take contribution holidays.¹⁰⁷ Absent such language, the prevailing law has given and continues to give employees little expectation of receiving much benefit from a dollar surrendered to fund excess contributions to their pension fund. Writing in 1988, Waters observed: “If the plan is ongoing, and the employer is seeking to have surplus credited to his unpaid current service contribution liability, or to his liability to fund an existing unfunded situation, . . . the current case law suggests this crediting can be done, because *the overwhelming evidence is that it is accepted actuarial practice to have regard to historic as well as current expense factors*.”¹⁰⁸ If, as many critics of the

Federal Regulated Defined Benefit Plans consultation (“The CAW believes that employers have more control over their business operations than Watson Wyatt suggests.”).

¹⁰⁵ 242 D.L.R. (4th), at 215.

¹⁰⁶ Diego Comin and Thomas Philippon, “The Rise of Firm-Level Volatility: Causes and Consequences,” paper written for the National Bureau of Economic Research’s Twentieth Annual Conference on Macroeconomics, July 20, 2005, 20 (italics added), available at <http://pages.stern.nyu.edu/~tphilipp/papers/diego.pdf> (last visited November 2, 2007).

¹⁰⁷ Again, the analysis in the text assumes that employees believe they are earning wind-up benefits so that the ambiguity described in section 3.2 is not present.

¹⁰⁸ Donovan Waters, “The Use of Surpluses in Pension Plans Operating in Ontario,” in *Task Force on Inflation Protection for Employment Pension Plans: Research Studies, Volume 2* (Toronto: Queen’s Printer for Ontario, 1988), 155 (italics added). Waters notes that Reid J.’s dissent in *Ontario Hydro* raised a question on the issue. Nonetheless, contribution holidays were “accepted actuarial practice” at this time.

asymmetry argument insist, the law allows the employer to get the benefit of surpluses in an ongoing plan, why would employees and unions accept the larger wage concessions necessary to fund excess contributions? In the absence of language that explicitly or implicitly forbids contribution holidays, it would not make sense for employees to bear the burden of excess contributions.

The surpluses of the 1980s and 1990s owed a great deal to mismatched investment allocations and good luck. To my knowledge, no one has suggested that the recent decline in the fortunes of pension plans was the result of a change in how plans invested or who did the investing. By all accounts, the pension funding crisis occurred when investment strategies that had produced large gains suddenly confronted a very different set of circumstances. Recent experience strongly supports the views of financial economists who argue that a plan cannot use its investment policy to position itself for a positive shock from financial markets without also exposing itself to the possibility of a negative shock. Such a policy of mismatching a plan's assets and liabilities exposes employees to insolvency risk. The *quid pro quo* principle implies that employees who are conscious of this risk will demand compensation. So it may be that employees demanded and have already received a risk premium to reflect this exposure. In that case, granting employees a property right in pension surpluses would compensate them twice: "once in the form of a risk premium," and again by giving them a surplus entitlement.¹⁰⁹ If employees have not received a risk premium, the analysis in section 5.2 suggests that a residual claim to a wind-up surplus is a poor form of compensation.

5. Is Asymmetry A Problem?

5.1 Does Asymmetry Reduce an Employer's Incentive to Fund?

Advocates of the asymmetry argument contend that employees will be harmed if their benefit rights are "enlarged" to include surplus entitlements because the resulting asymmetry in the funding regime undermines employers' incentives to fund. In the words of the Canadian Association of Counsel to Employers (CACE), "the primary obstacle preventing plan sponsors from adequately funding their plans and building up a funding cushion is the sponsor's inability to claim a refund of surplus and to utilize surplus to fund the obligations of the plan over the long-term."¹¹⁰ "More generous

Writing in the same year, Adell observed that "pension benefit legislation generally allows contribution holidays already. . . ." Bernard Adell, "Pension Plan Surpluses and the Law: Finding a Path for Reform," in *Task Force on Inflation Protection for Employment Pension Plans: Research Studies, Volume 2* (Toronto: Queen's Printer for Ontario, 1988), 242.

¹⁰⁹ See Ippolito, "Bankruptcy and Workers," 1261.

¹¹⁰ Canadian Association of Counsel to Employers' Submission in Response to Finance Canada's Regulatory Framework for Federally Regulated Defined Benefit Pension Plans consultation. See also Kevin J. Asestine, Towers Perrin, to David Hall, CAPSA Secretariat, June 30, 2004, 2 ("The purpose of a pension plan is to provide pensions to plan members. Nothing more. If that purpose is kept in mind, with the protections for plan members that such purpose entails, rather than maximizing the rights of plan members apart from the basic pension promise, pension plans would have a better chance of survival. Legislation and regulatory policies are strangling employers with pension plans.")(available at <http://www.capsa-acor.org/capsa->

funding,” CACE complains, “would not only generate surplus, it is likely to generate protracted litigation and extended periods of uncertainty regarding the financial status of the plan.”¹¹¹

The logic of the argument that asymmetry discourages funding is straightforward. From an employer’s perspective, an additional dollar contributed to the pension fund will add to the plan’s surplus, reduce the plan’s deficit, or both. Assume that an employer must decide whether to contribute an additional dollar to its pension fund and that employees are entitled to a share of any surplus that develops. Assume further that the employer can invest the dollar outside of the pension fund and receive the same tax-exempt return earned on investments held by the fund.¹¹² If the employer contributes a dollar to the pension fund and the plan ends up with a deficit, the deficit will be smaller by the dollar the employer contributed plus the proceeds of investing that dollar. If the employer invests the dollar outside of the pension fund and the plan has a deficit, the employer can contribute the dollar and its investment proceeds to the pension fund and be right where it would have been if it had contributed the dollar to the fund in the first place. Thus, if the pension plan ends up with a deficit, the employer gets the entire benefit of the dollar whether it invests inside or outside of the pension fund. If the employer contributes a dollar to the pension fund and the pension fund has a surplus, the employer will receive less than 100% of the benefit of its contribution because the employees are entitled to a share of the surplus. In contrast, if the employer invests the dollar outside of the pension fund and there is a surplus, the dollar and its proceeds belong to the employer alone. Because the employer expects a higher return from investing outside of the pension fund, it has an incentive to reduce its contributions to the fund.¹¹³

The premises and logic of the asymmetry argument are even more compelling if one views the laws and regulations governing wind-ups as creating a *liability* rule that requires an employer to pay “damages” to employees. In essence, the wind-up rules make an employer liable for “surplus damages” if a plan winds up with a surplus. In the same way that tort liability for harms resulting from negligent conduct creates an incentive to exercise care to reduce the likelihood of harm, the prospect of liability for a pension surplus creates an incentive to avoid conduct that will produce a surplus. In this light, the logic of the asymmetry argument has particular force. But this “liability”

newhome.nsf/257bb0033af16a0a85256c1a00754637/0aa75164ce68041385256ec8004d83bb?OpenDocument).

¹¹¹ Canadian Association of Counsel to Employers’ Submission in Response to Finance Canada’s Regulatory Framework for Federally Regulated Defined Benefit Pension Plans consultation.

¹¹² It simplifies the argument to assume (contrary to fact) that the employer can invest tax-free outside of the pension fund. As note 113 explains, this assumption does not change the lesson of my example.

¹¹³ Of course, the tax treatment of returns on investments in a pension fund is more favorable than for the returns on investments the employer holds directly. This does not alter the basic lesson of the example. Because investments in a pension fund are taxed favorably, the employer will weigh the potential tax gain from investing in the pension fund against the potential loss from surplus distribution to employees. All other things equal, the employer will contribute until the expected gain from lower taxes equals the expected loss from surplus distributions to plan members. So while favorable tax treatment gives an employer an incentive to contribute to the pension fund, this incentive declines as the expected surplus payout to members increases.

perspective on pension surplus also highlights an ambiguity in the argument that asymmetry undermines solvency. When proponents of the asymmetry theory warn of a decline in funding, they seem to be suggesting that employers will make smaller pension contributions. But as I explained above, an employer's funding policy is not the only cause of pension surpluses. Investment policy also plays a large role.

For any given level of contributions, an investment policy that exposes a plan to more market volatility increases the likelihood and likely extent of pension surpluses (and deficits). A plan can reduce its exposure to "surplus liability" either by contributing less *or* by adopting an investment policy that reduces the plan's exposure to market volatility. If the plan chooses the latter course, there will be a reduction in the employer's exposure to "surplus liability." In addition, an investment policy that reduces the volatility of the plan's investments also may reduce employees' exposure to insolvency risk. Under current actuarial practice, however, the selection of an investment policy that exposes the plan to less market volatility will require the employer to make larger out-of-pocket contributions to its pension fund because the risk premium incorporated into the discount rate used to value ongoing liabilities will be smaller.¹¹⁴ In the words of a consulting firm, "A move into bonds would, in all likelihood, increase future contributions assuming that benefits remain the same, since equities are expected to out-perform bonds over the long-term. A move to full immunization (i.e. minimal mismatch) is unlikely, currently, given the impact on future contribution levels."¹¹⁵

These countervailing effects of investment policy on benefit security and contribution levels raise a broader issue of pension policy. In a recent essay, Jeffrey Gordon highlights a trade-off between what he calls the *payment risk* and the *shortfall risk* of retirement-savings arrangements. "'Payment risk' is the risk that a particular pension promise (or expectation) will not be paid in accordance with its terms because of insufficient funding. 'Shortfall risk' is the risk that the promised (or expected) pension payouts will be inadequate for a satisfactory retirement."¹¹⁶ If pension funds move into bonds and especially if funds immunize their obligations, payment risk will decline. At the same time, a shift toward bonds will reduce the expected returns on pension-fund investments and force employers to make larger out-of-pocket contributions. The prospect of larger contributions may lead to smaller pension promises, which, in turn, may make it more likely "that the promised (or expected) pension payouts will be inadequate for a satisfactory retirement." It is beyond the scope of this essay to address the question how best to balance payment risk and shortfall risk. Nonetheless, Gordon's concepts may provide a more useful framework for political debate and policy analysis than do the asymmetry theory or the deferred-wage model of DB plans.

¹¹⁴ See generally Jeremy Gold, "Accounting/Actuarial Bias Enables Equity Investment by Defined Benefit Pension Plans," *North American Actuarial Journal*, vol. 9, no. 3 (1995), 1.

¹¹⁵ Watson Wyatt, "Canadian Pension Plans After the *Monsanto* Decision," 21.

¹¹⁶ Jeffrey N. Gordon, "The 'Prudent Retiree Rule': What to Do When Retirement Security is Impossible?" *Lewis and Clark Law Review*, vol. 11 (2007), 482.

5.2 The Structure of Surplus Entitlements Creates Conflicts of Interest

There is a strong argument to be made that the critical problem facing defined-benefit plans is less an asymmetry in the burdens and benefits of pension funding than the incoherence of the rules that allocate entitlements to pension surpluses. As explained above, the laws governing surplus entitlement create residual claims. There is a “struggle for pension fund wealth” because the residual claims to pension surplus are *sequential*. The employer controls and gets the benefit of the surplus in an *ongoing plan*, while employees get part or all of the surplus when a *plan winds up*. The residual claims to ongoing and wind-up surpluses have different “horizons” because the claimants expect to receive payouts that differ greatly depending on whether the plan is ongoing or wound-up. The employer’s horizon is shorter because it owns the surplus in the earlier period when a plan is ongoing. As Fama and Jensen observe, “[l]imitations on the horizon covered by residual claims cause organizations to bias decisions against alternatives that generate net cash flows beyond the horizon.”¹¹⁷ In other words, employers have an incentive “to get while the getting is good” (i.e., when the plan is ongoing) because they are certain to get less of the surplus when the plan winds up. The employees’ horizon is longer because their residual claims do not mature until the plan or a portion of the plan is no longer “ongoing.” For as long as the plan is ongoing, however, the employees must watch all but helplessly as the employer dissipates their residual claim.

Such an ordering of entitlements is guaranteed to produce conflict. Indeed, the classic conflict between income beneficiaries and remaindermen of a private trust is quite similar and provides an instructive comparison.¹¹⁸ In each case, there is a temporal ordering of claims to a stock of resources. Resources cannot be used by parties whose claim arises in the earlier period (i.e., income beneficiaries; employer with an ongoing plan) without reducing the resources that will be available to parties whose claim arises in the later period (i.e., remainder beneficiaries; employees affected by a wind-up). The conflict is more blatant in the context of a pension plan, however, because a variety of mechanisms that trust law has evolved to manage this sort of conflict are not available. In a private trust, the trustee who decides the allocation between income and remainder beneficiaries generally will not have a direct economic stake in how income is allocated and will be subject to a fiduciary duty of impartiality.¹¹⁹ Obviously, employers do have a stake in the allocation of pension surpluses.¹²⁰ Moreover, in many instances in which an employer takes action that affects the employees’ surplus entitlement, the employer acts

¹¹⁷ Eugene F. Fama and Michael C. Jensen, “Agency Problems and Residual Claims,” *Journal of Law and Economics*, vol. 26 (June 1983), 336.

¹¹⁸ See generally Robert H. Sitkoff, “An Agency Cost Theory of Trust Law,” *Cornell Law Review*, vol. 89 (2004), 650-51.

¹¹⁹ See D.W.M. Waters, *Law of Trusts In Canada*, 2d edition, (Toronto: Carswell Company Limited 1984), 710-12, 787-91. See also Sitkoff, “An Agency Cost Theory of Trust Law,” 651-52.

¹²⁰ For recognition of an inherent conflict of interest when an employer acts as a fiduciary, see Gillese, “Pension Plans and the Law of Trusts,” 229; Daniel Fischel and John H. Langbein, “ERISA’s Fundamental Contradiction: The Exclusive Benefit Rule,” *University of Chicago Law Review*, vol. 55 (1988), 1131 (“ERISA trustees are not the wholly disinterested fiduciaries that the common law of trusts presupposed when crafting its broadly deferential standard of review.”).

as a settlor, rather than a fiduciary, and has no duty to balance its interest against the employees' interests in increased benefits or a wind-up surplus.¹²¹ Finally, as Gillese observes, the duty to act impartially "is not easily reconciled with regular activities in the pension field." This is particularly so where surpluses are concerned. When an employer uses surplus to finance an early-retirement window, "pension trust funds are used to provide a benefit to one group of beneficiaries." How, Gillese asks, can such treatment be deemed impartial?¹²²

The foregoing analysis illustrates an important general point about the incentive structure of enterprises, including DB plans. As Milgrom and Roberts observe, "[t]ying together residual returns and residual control is the key to the incentive effects of ownership."¹²³ In general, it better aligns incentives if the residual right of control over an enterprise belongs to the party with the *most residual* claim to the revenues of the enterprise.¹²⁴ In the case of DB plans, this general rule implies that, if the employer possesses residual control over the plan, the employer should own the most residual claim (i.e., the surplus when a plan winds up). If the employer owns the entire surplus when a plan winds up, however, a rule that allocates ownership of the ongoing surplus to anyone other than the employer will undermine the plan because the employer will have an incentive to wind the plan up to ensure that the employer, rather than the owner of the ongoing surplus, gets the benefit of the surplus.¹²⁵ All of which suggests that if the employer exercises residual control over the plan, the most stable arrangement of surplus entitlements occurs when the employer owns both the ongoing and wind-up surpluses. Even this entitlement structure will be unstable, however, if the employees continue to regard themselves as the owners of surplus assets in spite of the fact that the law allocates surplus entitlements to the employer. In this case, it may be that any arrangement that grants the employer residual rights of control over a pension plan will give rise to conflict over pension surpluses.

The analysis in this section also has important implications for thinking about the risks and rewards of pension funding. Current pension funding practices expose employees to insolvency risk. It may be that employees are aware of this risk and have demanded and received a risk premium as compensation. If they have not received a risk premium, one option for compensating them is to give them a surplus entitlement. Indeed, critics of the asymmetry argument who emphasize the risks borne by employees appear to be making precisely this claim. The analysis in the preceding paragraphs suggests that an entitlement to a wind-up surplus will prove to be a very unsatisfactory form of compensation. The entitlement is not only very contingent. It also allows the

¹²¹ See, e.g. Kaplan, *Pension Law*, 410 ("A contribution holiday is clearly an employer benefit, as the practice exempts the employer from making a remittance in a particular year. It is the employer that reserves the right to design and amend the plan text and, in such matters, the employer will generally be permitted to look at its own self-interests, subject to any limitations in the *PBA* or at common law."). See also, *id.*, 337-341.

¹²² Gillese, "Pension Plans and the Law of Trusts," 245-46.

¹²³ *Economics, Organization and Management*, 291.

¹²⁴ Publicly-traded corporate enterprises provide a very important but explicable exception to this general rule. See Fama and Jensen, "Agency Problems and Residual Claims," 328-32..

¹²⁵ The U.S. experience described in section 6.1 suggests that this would be a considerable problem.

very employer whose practices expose employees to insolvency risk to foil the entitlement by spending down the surplus before the plan is wound up. This suggests that compensating employees by giving them a residual claim to a wind-up surplus might even exacerbate the “struggle for pension fund wealth.”

5.1.3 Does Asymmetry Give Employers an Incentive to Choose DC Plans?

Another important theme in debates about the burdens and benefits of pension funding relates to the role asymmetry may play in the ongoing shift away from DB plans and toward DC plans. Proponents of the asymmetry argument warn that this trend will continue or even accelerate unless lawmakers provide for symmetry in the pension-funding regime. In its submission in connection with Finance Canada’s recent consultation on regulation of defined-benefit plans, for example, FEI Canada warned that “[u]nless the Government of Canada takes immediate action on the solvency funding period while resolving the deficit surplus asymmetry injustice, DB plan sponsors will opt for [among other things] defined contribution plans over a defined benefit plan for new employees. . . .”¹²⁶ On the other side, critics question whether surplus entitlements have played a role in the shift from DB to DC plans. “The decline in defined benefit plan coverage,” Gold observes, “is an international phenomenon, and is driven by many cost and risk factors, of which surplus is only one.” In light of this, he claims, “[g]iving employers greater access to surplus simply will not improve defined benefit coverage.”¹²⁷

Whether asymmetry in the legal rules for defined-benefit plans gives employers an incentive to favor DC plans depends on how asymmetry affects the relative costs and benefits of each sort of plan as perceived by the parties to the pension bargain. A DC plan is relatively transparent. It is easy for employees to understand what they give up in return for employer and employee contributions to their plan. It is also easy for them to understand what they receive. All they have to do is check their pay stub and their account balance. A DB plan is a much more complicated financial arrangement because it performs much more complicated tasks. As Richard Ippolito persuasively argues, the greater complexity of DB plans entails that they require a far greater degree of trust than do DC plans.¹²⁸ For example, when an employer uses surplus for a contribution holiday, how can employees be sure whether the surplus assets rightfully belonged to them or to their employer?¹²⁹ Should they rest easy when their bosses say, “Trust us”? And how can employees be sure that their pension fund has enough assets to meet its liabilities? In 1999, their plan may have been 120% funded on a going-concern basis, but by 2002 the funding level had fallen to 80% on a solvency basis. And high profile cases suggest that

¹²⁶ FEI Canada’s Submission in Response to Finance Canada’s Regulatory Framework for Federally Regulated Defined Benefit Pension Plans consultation.

¹²⁷ Gold, “Current Pension Issues and Trends,” 11.

¹²⁸ See Richard A. Ippolito, “Tenuous Property Rights: The Unraveling of Defined Benefit Pension Contracts in the United States,” *George Mason University School of Law: Law and Economics Working Paper Series* (March 2003)(available at http://ssrn.com/abstract_id=379660).

¹²⁹ For the same issue in a slightly different context, see Kathryn May, “PS Unions Lose \$30B Pension Fight,” *Ottawa Citizen*, November 21, 2007, available at <http://www.canada.com/ottawacitizen/news/story.html?id=67b82575-5e42-4742-ac6e-ea7c7fc60373> (last visited November 25, 2007).

some pension plans are much less secure than they seem. Again, should employees rest easy when their bosses say, “Trust us”?

In a market transaction, a self-regarding party that gives up something expects to get as least as much in return. Employees in a DC plan can see what they get. In a DB plan, it is much more difficult for an employee to understand what she has earned, and the path from giving something to getting something is much longer and much more circuitous. If employees begin to doubt that their employer is keeping its promises in the present (Are contribution holidays theft?) or will keep its pension promises in the future (and in a DB plan employees are unlikely to know for certain that the employer has kept its promise until long after they can do anything to protect themselves from the employer’s breach), they will place less value on the benefits the plan promises. This, in turn, may make them less willing to forgo the wages necessary to finance the plan. In this way, Ippolito observes, “a wedge develops between the value of the pension as perceived by workers, and the cost of providing the pension absorbed by the sponsor.”¹³⁰ If the employer is committed to its DB plan, it will bear the burden of this wedge. If not, it will transition to a DC plan. While the shift toward DC plans in Canada has been much less pronounced than in the United States, there is reason for concern that asymmetry or, more likely, the incoherent allocation of surplus entitlements will produce a “lemons market” that will cause employees to undervalue DB plans and hasten the decline in DB coverage.¹³¹

6. Empirical Issues Relevant to the Asymmetry Argument

6.1 The U.S. Excise Tax on Reversions of Pension Assets

Proponents of the asymmetry argument warn that employers will fund their pension plans less generously if employees are granted surplus entitlements. As I explained in section 5.1.2, asymmetry may be less of a threat to DB plans than the allocation of surplus entitlements. In the mid 1980s and 1990 the U.S. Congress passed legislation that allocates entitlements to pension surpluses in a manner that bears a considerable resemblance to surplus entitlements under Ontario law. For this reason, the U.S. legislation constitutes a natural experiment that may provide important insight into the future course of pension funding in Ontario. The results of this experiment are certainly a cause for concern. The evidence suggests that the excise tax on reverted pension assets precipitated a major shift in funding practices that resulted in markedly lower solvency ratios for DB plans in the United States.

¹³⁰ Ippolito, “Tenuous Property Rights,” 17.

¹³¹ Ippolito uses the concept of “lemons market” to describe the situation of DB plans in the United States. A lemons market emerges when sellers (employers) have information about the quality of a product (DB plans) that cannot be communicated credibly to buyers (employees). Even if employees trust their own employer, widely publicized instances in which another employer “steals” pension surpluses or in which a plan sponsored by a large employer is discovered to be seriously underfunded may lead employees to question the quality of their own pension plan. In light of the complex character of a DB plan, it may be difficult for their employer to persuade them that it is offering a “high-quality” DB plan. *Id.*, 15-18.

Before 1988, U.S. law governing DB plans allowed an employer to use pension surpluses to take contribution holidays but forbade withdrawal of surplus assets from an ongoing plan. An employer could withdraw surplus funds, however, by terminating its plan and taking a reversion of the funds that remained after satisfaction of the plan's benefit obligations.¹³² In the mid 1980s, rising stock prices buoyed the assets of pension plans at the same time that high long-term interest rates reduced liabilities. As a result, many plans developed large surpluses. The prohibition on surplus withdrawal from ongoing plans led a number of large employers to terminate their plan and take a reversion of surplus assets. In some instances, the termination occurred only after outside investors engineered a takeover of the plan sponsor.¹³³ Congress responded in 1986 by imposing an excise tax of 10% on plan assets that reverted to an employer when a plan terminated. The aim of the excise tax was not to prevent reversions but to prevent tax arbitrage. The excise tax recaptured the higher investment return earned by assets held in a tax-exempt pension trust.¹³⁴ Congress increased the excise tax to 15% in 1988 and then to 50% in 1990. The 1990 legislation clearly meant to do more than prevent tax arbitrage. Reverted funds are included in the employer's income and, thus, subject to the corporate income tax, so the combined income and excise taxes on reversions could exceed 80%.¹³⁵ In the wake of these excise taxes, terminations of pension plans for reversion fell off dramatically.

The excise tax creates surplus entitlements that closely parallel surplus entitlements in Ontario. As in Ontario, the employer has a residual claim to the surplus in an ongoing plan. U.S. employers possess a variety of options for drawing on surplus, including contribution holidays and funding of early-retirement benefits.¹³⁶ And as in Ontario, when a plan terminates a new residual claim arises. In the United States, the claim belongs to the government, rather than to employees.¹³⁷ From the employer's perspective, however, this is a distinction without a difference. The key point is that in the United States, as in Ontario, termination of an overfunded pension plan forces the employer to pay "surplus damages."

Richard Ippolito has made a compelling case that the reversion tax precipitated a sharp decline in funding. In the wake of the excise taxes, employers made important changes to their funding practices. For example, there was a wholesale shift in actuarial cost methods and key actuarial assumptions. Between 1980 and 2004, the share of DB plans in the U.S. that used unit-credit actuarial cost methods increased from 20% to 76%.

¹³² E. Thomas Veal and Edward R. Mackiewicz, *Pension Plan Terminations*, 2nd ed. (Washington: Bureau of National Affairs, 1998) 162.

¹³³ John H. Langbein, Susan J. Stabile, and Bruce A. Wolk, *Pension and Employee Benefit Law*, 4th ed. (New York: Foundation Press, 2006), 250-251.

¹³⁴ See Jack L. VanDerhei and Scott E. Harrington, "Pension Asset Reversions," in John A. Turner and Daniel J. Beller, eds., *Trends in Pensions* (Washington, D.C.: U.S. Government Printing Office 1989), 188-89.

¹³⁵ Richard A. Ippolito, "Reversion Taxes, Contingent Benefits, and the Decline in Pension Funding," *Journal of Law and Economics*, vol. 44 (Apr. 2001), 203; Langbein, et al. *Pension and Employee Benefit Law*, 255.

¹³⁶ See Langbein, et al. *Pension and Employee Benefit Law*, 256-57.

¹³⁷ The U.S. reversion tax allows an employer to escape some of the tax by spending some of the surplus on plan participants. See Langbein, et al., *Pension and Employee Benefit Law*, 255.

Over the same period, the average spread between interest assumptions and salary scale grew from around 1.8% to around 3.3%. Both changes resulted in lower contribution obligations for plan sponsors.¹³⁸ The consequence of these and other changes was a decline in the solvency levels of DB plans during a period of unusually strong investment returns.¹³⁹ “In 1986,” Ippolito writes, “there was \$125 in pension assets for every \$100 in liabilities in the typical defined-benefit plan. By 1995, there was only \$107 in assets for every \$100 in liabilities.”¹⁴⁰ Moreover, this “dramatic change in pension funding . . . predominantly affected the best-funded plans.”¹⁴¹ It is significant that there was a large effect among strong employers that presumably could afford to fund more aggressively. This fact buttresses the argument that the change in incentives brought about by the excise tax on reversions is the cause of decline in solvency. A recent follow-up study prepared for the Society of Actuaries corroborates Ippolito’s analysis and conclusions.¹⁴²

¹³⁸ “The Impact of Reversion Taxes on Pension Plan Funding,” report prepared for the Society of Actuaries, January 2007, 23 [Chart C], available at <http://www.soa.org/research/files/pdf/Reversion.pdf>. See also, Ippolito, “Reversion Taxes, Contingent Benefits, and the Decline in Pension Funding,” 207 and note 17 (noting shift toward use of higher discount rates to calculate ongoing liabilities). For a claim of a similar shift in actuarial practices in Canada, see Greg Hurst, “Lies, Damn Lies, and Canada’s Pensions Funding Crisis,” *Benefits and Pensions Monitor*, February 2006, available at www.heath.ca/tb/articles/BPM_Feb06_Hurst.pdf.

¹³⁹ See Veal and Mackiewicz, *Pension Plan Terminations*, 161 (“It may just be coincidence, but the 1987-1997 stock market boom, the strongest in history, saw a decline in the aggregate surplus assets in defined benefit plans.”).

¹⁴⁰ Ippolito, “Reversion Taxes, Contingent Benefits, and the Decline in Pension Funding,” 204.

¹⁴¹ *Id.*, 206.

¹⁴² See “Impact of Reversion Taxes on Pension Plan Funding,” 3-9.

The Deferred-Wage Argument

7. Concepts and Logic of the Deferred-Wage Argument

- a. The compensation package employees receive is the product of a bilateral bargaining process in which an employer and its employees try to negotiate the best deal they can for themselves.
- b. An employer and its employees can negotiate a compensation package in which employees receive all of their compensation in the form of wages (i.e. money compensation paid currently) or they can negotiate a package that includes both wages and non-wage compensation such as retirement or insurance benefits.
- c. An employer will not provide non-wage compensation unless employees “buy” that compensation by giving up wages at least equal in value to the employer’s net cost of providing the non-wage compensation.
- d. Employees will not forgo current wages in return for the employer’s promise of non-wage compensation unless that compensation is worth at least as much as the wages that employees forgo.
- e. When an employer and its employees bargain to create and maintain a DB plan, the employees agree to forgo current wages in return for the employer’s promise to pay fixed pension benefits. The employer and its employees bargain over both the fixed pension benefits payable under the explicit benefit formula and the level of contributions that will be necessary to fund the fixed benefits promised by the plan.
- f. To calculate the level of contributions that will be necessary to fund the fixed benefits promised by the plan, the employer and employees must make assumptions about the future course of important variables such as interest rates, investment returns, mortality experience, and turnover rates.
- g. Pursuant to their bargain, the employer withholds the agreed-upon contributions from employees’ wages and transfers the amounts withheld to the trust or insurance company that holds the pension fund.
- h. When an employee receives wages or salary, the employee becomes the owner of the funds he or she receives.
- i. An employee is as much the owner of the wages the employer withholds and contributes to the pension fund as he or she is the owner of the wages the employer pays directly. For this reason, so-called “employer” contributions to a pension fund are, in reality, employee contributions.

- j. If the assumptions used to calculate pension contributions turn out to be too optimistic, the pension fund will end up with insufficient funds to meet accruing pension obligations and the plan will have a deficit. In such a case, it generally will be necessary for additional funds – special payments – to be contributed to the plan to make up the difference between the plan’s liabilities for fixed benefits and the assets reserved to meet those liabilities.
- k. In a traditional DB plan, the residual liability to make special payments to eliminate a wind-up deficiency or a deficit in a continuing plan falls on the employer. In practice, employers shift the burden of special payments to employees.
- l. If the assumptions used to calculate pension contributions turn out to be overly conservative, the pension fund will end up with more assets than are needed to meet the fixed benefits promised to employees.
- m. Because employees own pension contributions every bit as much as they own their wages and because the employer shifts the residual burden of pension deficits to employees, employees should receive the entire benefit of surpluses that develop in the pension fund.

8.1 The Logic and Function of the Deferred-Wage Argument

The asymmetry argument is premised on the view that a single-employer DB scheme implements a contract between an employer and its employees. The employees forgo wages in return for the employer’s promise of fixed pension benefits and, in doing so, become creditors. The employer collateralizes its pension obligations by contributing to the pension fund. The employees, thus, are secured creditors. They possess a lien against the pension fund but their claim is – or, more accurately, should be – limited to the value of the fixed benefits promised by the plan. The deferred-wage or total-compensation theory takes a very different view. Gillese summarizes the theory as follows:

[W]hen employers bargain with employees, they determine how much they are willing to pay employees in total. Employers may pay the whole amount in wages or they may pay a certain wage and provide certain benefits in addition to wages. The money employers pay employees consists of the direct compensation and the indirect compensation, wages, and in this case, the money deposited into the pension fund. The two together are the compensation to which the employee is entitled. The money put aside to fund the pension promise would have gone to the employees in the form of higher wages had it not been placed in trust to fund the promised pensions.¹⁴³

¹⁴³ Gillese, “Pension Plans and the Law of Trusts,” 237. While Gillese offers a very succinct summary of the deferred-wage theory, she does not endorse it.

Proponents of the deferred-wage theory contend that employees own the forgone wages their employer contributes to the pension fund. It follows that employees are not lien holders but owners of the assets in the pension fund. As such they are entitled to the benefits of ownership, including, among other things, exclusive rights to the assets in the pension fund.

In assessing the deferred-wage theory, it helps to consider its application to a different sort of enterprise. The economist Steven Cheung has analyzed patterns of agricultural contracting that bear a remarkable resemblance to different forms of retirement plans.¹⁴⁴ Each farming arrangement involves a landowner who furnishes capital, a farmworker who contributes labor, and decisions about what will be planted and how intensively the land will be cultivated. In practice, three forms of contracting emerge. In the employment model of agricultural contracting, the farmworker provides labor in return for a fixed claim to wages, while the landowner retains a residual claim for the value of the crop net of the wage payment and other expenses. The landowner also possesses the residual right of control to decide what will be planted and how intensively the land will be cultivated. Alternatively, the parties may choose a fixed-rent model for the enterprise. In that case, the landowner leases the land to the farmworker in return for a fixed claim to rent, while the farmworker receives a residual claim. In a leasing arrangement, the farmworker generally retains the residual right of control.¹⁴⁵ Finally, the parties may choose a share tenancy, in which case the rental payment to the landowner “is a contracted percentage of the output yield from the tenant per period of time.”¹⁴⁶ In other words, both parties receive a contingent payout equal to a percentage of the value of the crop net of other expenses of the enterprise. In a share tenancy, the landowner and worker jointly decide what will be planted and how intensively the land will be cultivated.¹⁴⁷

There are obvious affinities between Cheung’s agricultural contracts and different types of retirement plan. In a retirement arrangement, the employees stand in the shoes of the landowner because they contribute capital (forgone wages) to the enterprise, while the employer/plan sponsor provides or arranges for provision of services involved in “cultivating” this capital. The employment model of agricultural contracting corresponds to a defined-contribution plan. The employees contribute capital to the enterprise while retaining a residual claim on the assets in their account and often residual rights of control (i.e., authority to decide investment allocations). The employer receives an (implicit) fixed claim for the expense incurred in providing the plan.¹⁴⁸ Jointly-sponsored

¹⁴⁴ See Steven N.S. Cheung, “Transaction Costs, Risk Aversion, and the Choice of Contractual Arrangements,” *Journal of Law and Economics*, vol.12 (April 1969), 23-42.

¹⁴⁵ *Id.* at 25-26.

¹⁴⁶ Steven N.S. Cheung, “Private Property Rights and Sharecropping,” *Journal of Political Economy*, vol. 76 (November-December 1968), 1107.

¹⁴⁷ Cheung, “Transaction Costs, Risk Aversion, and the Choice of Contractual Arrangements,” 26-27.

¹⁴⁸ This claim would take the form of a reduction in employees’ other compensation equal to the out-of-pocket cost the employer incurs for services purchased from third-party provider plus the cost of services the employer provides directly. Bernard Adell makes a similar point when he writes that an employer’s “administrative and entrepreneurial contributions to the management of pension funds, should be treated as part of employee compensation,” except that in a defined-contribution plan employees may be responsible

pension plans (JSPPs) are analogous to the share-tenancy model of agricultural contracting. Just as the landowner and worker in a share tenancy jointly decide what will be planted and how intensively the land will be cultivated, JSPPs involve “a form of joint governance that sees the plan being administered by a joint board of trustees that is at arm’s length from the employer.”¹⁴⁹ Similarly, the employer and employees jointly decide how residual liabilities or surplus in a JSPP will be allocated.¹⁵⁰ If the assets of a JSPP are not sufficient to meet its liability for fixed benefits, the PBA provides that the residual liability is to be allocated in accordance with the terms that have been bargained by the employer and employees rather than terms mandated by statute.¹⁵¹

The fixed-rent model of agricultural contracting resembles a DB plan. Like the landowner in the fixed-rent model, the employees contribute capital by surrendering wages, while the employer promises fixed benefit payments that parallel the fixed rents the farmworker/lessee pays the landowner. Just as the farmworker/lessee generally possesses residual rights of control over the farming enterprise, the employer that sponsors a DB plan generally possesses residual control rights over plan administration. In particular, employers either decide or hire the people who decide how plan assets will be invested.¹⁵² As a residual claimant, the worker/lessee in an agricultural leasing contract bears most of the risk of the enterprise. In like manner, an employer that sponsors a DB plan has a residual liability in case the figurative “crop” (i.e., the investment performance of plan assets) is not large enough to meet the plan’s obligations for fixed benefits. As discussed in section 4.1.4, the employer also has a residual claim to the surplus generated by the pension enterprise as long as the enterprise is ongoing.

This brief description of farming contracts and my tracing of their affinities with retirement plans illustrate that the parties to a cooperative undertaking may employ very different arrangements (e.g., employment, leasing, or share tenancy; DC, DB, or JSPP) to combine virtually identical sets of inputs (e.g., land and labor as factors of production and decisions about how these factors will be employed; money contributions, labor, and decisions about how money should be invested). The parties may bargain an agreement in which the provider of a particular input possesses a fixed claim or a residual claim or the parties share a residual claim. Similarly, the parties may create an arrangement in which the provider of a particular input possesses residual control rights or the parties share control. The deferred-wage argument cuts against this sort of organizational

for making the “entrepreneurial contributions.” Bernard Adell, “Pension Plan Surpluses and the Law: Finding a Path for Reform,” 238.

¹⁴⁹ Kaplan, *Pension Law*, 320. See also Seller, *Ontario Pension Law Handbook*, 12 (“In the case of jointly sponsored pension plans, employers and plan members will generally share responsibility for plan administration.”).

¹⁵⁰ Compare Cheung, “Transaction Costs, Risk Aversion, and the Choice of Contractual Arrangements,” 26-27 (“Share tenancy may . . . be regarded as a device for risk sharing (or risk dispersion); that is, the variance of the output yield is distributed among the contracting parties.”) with Gold, “Current Pension Issues and Trends,” 7 (“In both [multiemployer plans and JSPPs], employers and employees share the risk of underfunding and the benefit of surplus. This sharing reduces the scale of any underfunding that an employer must confront and therefore reduces the volatility of their pension exposure.”).

¹⁵¹ PBA § 75.1. See also Kaplan, *Pension Law*, 546.

¹⁵² See Kaplan, *Pension Law*, 318, 359, 421; Baldwin, “Financing Defined Benefit Pension Plans,” 14 (“It is the employer and not the plan members who hire and fire the professional help.”).

diversity because it overrides features of an enterprise that do not accord with what the deferred-wage theory regards as the “real” pension bargain. The theory appears to imply the employees who supply capital to the pension enterprise do not (and perhaps cannot) bargain for a fixed claim. If the same logic were applied to agricultural contracting, the implication would appear to be that the “real” contract gives the landowner (as the supplier of capital) a residual claim even when the lease agreement calls for a fixed rent. Readers can decide for themselves whether this is a reasonable result.

Norman Stein’s articulation of the deferred-wage theory in his article “Raiders of the Corporate Pension Plan” illustrates the point. Employers view DB plans as contractual arrangements in which employees forgo wages in return for a fixed pension benefit. According to this view, a distribution of surplus to employees is a windfall because it gives them more than they bargained for. Stein assesses the validity of the employer’s view by “testing” it in “three types of situations.”¹⁵³ In the first, an employer and a union expressly contract for both the contribution rate and benefit formula in a DB plan. In this case, Stein contends, “the employees should be treated as the absolute owners of all plan assets” because the agreement commits the employer to contribute at a “bargained-for rate.”¹⁵⁴ In the second situation, an employer and union “negotiate the size of benefits but not contribution rates.” “Presumably both unions and employers who negotiate a benefit engage in careful assessments of how much the employer will need to contribute to fund a given level of benefit,” Stein argues. “Thus, in substance, the employer and union are negotiating about what goes into the plan at least as much as what comes out.”¹⁵⁵ If the employer and union have agreed on “what goes into the plan” and a surplus develops because they overestimated the cost of the bargained benefit, the employees have overcontributed and, thus, have a stronger claim than the employer to the surplus. This “analysis can be extended even to a third situation, nonbargained plans,” Stein claims, “since all plans exist in a common economy and might be presumed to create similar types of benefit expectations in employees.”¹⁵⁶

In each of these examples, express contractual language suggests that employees bargained a fixed claim. In the first example, there is also express language that demonstrates that the employer and union bargained for a specific level of contributions, so there is a textual justification for regarding the employees as owners of a residual claim to surplus assets. In this case, as in some cases affecting surplus rights, the deferred-wage argument helps resolve an ambiguity in the plan documents.¹⁵⁷ In the other two cases, however, Stein invokes the ‘real’ pension bargain – an agreement “about what goes into the plan” – to justify an interpretation with no basis in the text. He interprets the pension bargain to mean what the parties implicitly bargained even though the contract says otherwise. Adell argues in similar fashion for enforcement of an “implicit” pension bargain: “As to whether it is pension benefits or pension costs that the

¹⁵³ Norman P. Stein, “Raiders of the Corporate Pension Plan: The Reversion of Excess Plan Assets to the Employer,” *American Journal of Tax Policy*, vol. 5 (1986), 153.

¹⁵⁴ *Id.*, 154.

¹⁵⁵ *Id.*

¹⁵⁶ *Id.*

¹⁵⁷ See, e.g., *Schmidt v. Air Products Canada Ltd.*, 115 D.L.R. (4th) at 659.

parties really bargain over, the more convincing view is that even if the particular parties bargain explicitly over benefit levels alone, they bargain implicitly over cost levels. . . . It follows that the pension plan contributions made by employers, and their administrative and entrepreneurial contributions to the management of pension funds, should be treated as part of employee compensation.”¹⁵⁸ Employees, he concludes, should have “primacy” with respect to surplus entitlements, even though their plan promises only fixed benefits.¹⁵⁹ Other commentators follow a similar line of reasoning and argue that lawmakers should pass statutory mandates for shared employer-employee control of single-employer DB plans, rather than leaving this issue to bargaining.¹⁶⁰

It should be emphasized that the foregoing discussion is not a criticism of the deferred-wage argument but an analysis of how proponents of this argument use it. The point of an argument – particularly, a legal or policy argument – is to win debates. If judicial decisions and administrative regulations count as evidence of the deferred-wage theory’s effectiveness, it has often proven persuasive. Some advocates of the deferred-wage argument also maintain, however, that public policy should respect the results of bargaining between employers and employees.¹⁶¹ This makes it all the more important to highlight the fact that the deferred-wage model sometimes serves to provide courts, agencies, or legislators with justifications for policies that supersede the express terms of pension plans. Moreover, the deferred-wage argument raises a nagging question. If the pension bargain implied by the deferred-wage argument is the “real” pension bargain, why would plan documents, trust documents, or a collective-bargaining agreement negotiated by an employer and union not reflect the “real” bargain?

8.2 Which are Deferred Wages: Pension Benefits or Pension Contributions?

Compensation provided through a retirement plan may be defined in terms of contributions, benefits, or both. A DC plan does not promise a specific payout. As a result, compensation provided through a DC plan must be stated in terms of the contributions that go into the plan. These contributions are allocated to individual accounts of the employees who participate in the plan. Vested employees own – that is, hold property rights to – the specific assets in their individual account. In contrast, in a pay-as-you-go DB plan, the employer promises fixed benefits but there are no contributions to a pension fund. Because there is no pension fund, there are no plan assets for employees to own. As a result, compensation provided through a pay-as-you-go DB plan must be stated in terms of the defined benefits that come out of the plan.¹⁶²

¹⁵⁸ Adell, “Pension Plan Surpluses and the Law,” 238 (underlining in original).

¹⁵⁹ *Id.*

¹⁶⁰ See, e.g., Gold, “Current Pension Issues and Trends,” 4; Kenneth V. Georgetti, “Workplace Pensions: current difficulties and going forward,” available at http://canadianlabour.ca/index.php/march_2005/189. For a detailed discussion in the U.S. context, see Robert Cook, “The Case for Joint Trusteeship of Pension Plans,” *WorkingUSA*, vol. 6 (Summer 2002), 26-55.

¹⁶¹ See, e.g., Steelworkers’ Submission in Response to Finance Canada’s Regulatory Framework for Federally Regulated Defined Benefit Pension Plans consultation (“The union does not believe that regulations that threaten the power of collective bargaining are a productive way to regulate the sponsor’s funding of obligations to its members.”).

¹⁶² The benefit promised by a DB plan may take the form of a notional defined contribution.

In contrast to employees in a DC plan, then, employees in an unfunded DB plan cannot acquire property rights to specific assets. They acquire a fixed claim against their employer for the benefits promised by the plan.

An advance-funded DB plan presents an ambiguous situation because there are both contributions to a pension fund and promises to pay fixed benefits. No one disputes that employees are entitled to the fixed claim entailed by the plan's benefit formula. The deferred-wage theory holds, however, that the fixed claims set the lower bound on the employees' entitlements. Because employer contributions are forgone wages that might have been paid in cash and because employees own their cash wages, the deferred-wage theory reasons that employees also own the amounts their employer contributes to the pension fund. Because the employees own pension contributions, they should own any surplus funds that are not necessary to pay the fixed benefits promised by the plan. But even if one concedes that the dollars withheld from employees' wages are the very dollars used to purchase the plan's investments, it does not necessarily follow that the employees own those investments. While it may be a *necessary* condition for employees to own the assets of a pension fund that the dollars withheld from their wages were used to purchase those assets, it is not a *sufficient* condition. A sequence in which employees agree to transfer their wages in return for contributions to a pension fund is perfectly consistent with an arrangement in which the employees are creditors rather than owners.

For example, in a purchase-money secured transaction, a lender transfers loan proceeds, which are property of the lender, to a borrower. Presumably the lender and borrower negotiate about the amount of the loan. The borrower then uses the money it received from the lender to purchase property that will serve as collateral for the loan. Just as an employer that sponsors a DB plan promises fixed payments to its employees, the borrower promises to make fixed payments to the lender. Obviously, the borrower hopes to use the collateral to generate a surplus (that is, revenues in excess of its payments to the lender) or it would not have borrowed the money in the first place. So notwithstanding that the lender once owned the very dollars the borrower used to purchase the collateral and notwithstanding that the borrower and lender bargained over the amount of funds the lender would transfer to the borrower, barring a default, the lender's interest in the collateral does not entitle it to receive more than the fixed payments promised by the borrower. More to the point, the lender is not entitled to the surplus the borrower hopes to earn through its use of the collateral.

To take a second example that is closer to home, when an individual purchases a fixed nonparticipating annuity from an insurance company, the individual generally pays the premium by transferring the individual's own money to the insurance company in return for the insurance company's promise to make a stream of payments defined in the annuity contract. As in the case of the purchase-money secured transaction, the insurance company would not sell the annuity if it did not believe it could use the premium proceeds to generate a surplus over and above the payments promised to the annuity purchaser (more accurately, the pool of annuity purchasers). The fact that the premium proceeds were once owned by the purchaser does not entitle the purchaser to anything more than the fixed payments the insurance company has promised. "[A]ny positive

experience [i.e. surplus] is passed eventually to the shareholders or, in the case of a mutual company, other policyholders.”¹⁶³

The examples of a purchase-money secured transaction and a purchase of an annuity illustrate that a sequence of events that is all but indistinguishable from the sequence hypothesized by the deferred-wage argument can render the provider of capital a creditor with no claim to any surplus created by its debtor’s use of the capital the creditor provided. Because virtually identical sequences of events (one party transfers its property to a counterparty in return for the counterparty’s promise of fixed payments) may give rise to very different legal relationships, the pattern of bargaining and transfers between the parties is ambiguous. When this is the case, the documents governing the relationship likely will provide better evidence of what the parties intended than will a general theory of bargaining about the matters (e.g., retirement benefits) involved in the arrangement.

8.3 The Deferred-Wage Argument Contradicts Itself

According to the deferred-wage model, an employer’s contributions to a pension fund are forgone wages that employees have surrendered in return for the employer’s promise of pension benefits. Again, Gillese’s summary states the basic claim very clearly: “The money put aside to fund the pension promise would have gone to the employees in the form of higher wages had it not been placed in trust to fund the promised pensions.”¹⁶⁴ As this formulation suggests, the deferred-wage model implies that there should be a rough equality among the wages employees surrender, the amount of the employer’s pension contribution, and the value of the pension benefit that employees expect to receive. Discussion and analysis by advocates of the deferred-wage theory suggest that they believe this to be the case.

For example, Stein describes pension bargaining in circumstances in which an employer and “union negotiat[e] the *size of benefits* but not *contribution rates*.” “Presumably,” he writes,

both unions and employers who negotiate a benefit engage in careful assessments of how much the employer will need to *contribute* to fund a *given level of benefit*. Thus, in substance, the employer and union are negotiating about *what goes into the plan* at least as much as they are negotiating over what will come out. And if the union and employer turn out to have been mistaken about *a benefit’s cost*, the employer’s claim to any resulting surplus hardly seems stronger than would a claim to cash wages actually paid to employees during the term of a collective bargaining agreement negotiated under a mistaken belief that inflation would continue apace during the agreement’s duration.¹⁶⁵

¹⁶³ Mark J. Warshawsky, “The Market for Individual Annuities and the Reform of Social Security,” *Benefits Quarterly*, vol. 13 (Third Quarter 1997), 71.

¹⁶⁴ Gillese, “Pension Plans and the Law of Trusts,” 237.

¹⁶⁵ Stein, “Raiders of the Corporate Pension Plan,” 154 (italics added).

In these passages, “contribution rates,” “how much the employer will contribute,” and “what goes into the plan” are synonymous and refer to an amount that is presumed to equal the estimated “cost” of the fixed pension benefit promised by the employer (“what will come out”).¹⁶⁶

Adell appears to have a similar understanding. He summarizes the employees’ view of pension funding as follows:

The employee response is that even if it is only the level of benefits that is agreed to in writing, what employers and employees actually bargain over, implicitly if not explicitly, is the *cost* of employer contributions to the plan. . . . When an employer agrees to fund a certain *level of pension benefits*, what it is really agreeing to do is to *divert from employees’ wages the amount which is thought at the time to be necessary to pay for that level of benefits*. Because the employees, *through foregone wages*, have *paid for the full amount of employer contributions*, they are entitled to whatever those contributions have produced.¹⁶⁷

In this passage, the dollar amount of “foregone wages” is presumed to equal the “the cost of employer contributions,” which in turn equals “the amount which is thought at the time to be necessary to pay for [a certain] level of benefits.” That is, wage deferrals equal pension contributions equal the cost of providing the fixed benefit promised by the plan. The equality among wage deferrals, pension contributions, and the cost of the fixed benefits promised by a plan is the basis for the claim that employees own the employer’s pension contributions and, therefore, own the assets in the pension fund.

A simple example reveals the implausibility of this account of the pension bargain. Assume the following facts:

- a. at T_1 an employee will go to work for an employer;
- b. at T_2 the employee will retire and receive a lump-sum payment of \$100 as retirement benefits;
- c. the employee agrees to forgo wages in the amount necessary to fund this retirement benefit;
- d. the employer promises to contribute the employee’s forgone wages to the pension fund, where they will be invested in risky securities that promise an expected return of 10%; and
- e. as owner of the pension fund, the employee is entitled to any surplus assets.

In light of the return expected on investments in the pension fund, the employer and employee should agree to a pension contribution of \$90.90 at T_1 . Although the employer and employee expect a return of 10%, the pension fund may be worth more or less than \$100 at T_2 because the assets are invested in risky securities. Table 9 presents

¹⁶⁶ Elsewhere, Stein speaks of “understand[ing] the equivalence of pension costs and cash wages in bargaining.” *Id.* 154 n. 145.

¹⁶⁷ Adell, “Pension Plan Surpluses and the Law,” 235 (italics added).

the employer's and the employee's expected payouts for a few possible values of the pension fund.

Table 9

| Value of Pension Fund at T ₂ | Payoff to Employee | Payoff to Employer |
|---|--------------------|--------------------|
| \$130 | \$130 | \$0 |
| \$120 | \$120 | \$0 |
| \$110 | \$110 | \$0 |
| \$100 | \$100 | \$0 |
| \$90 | \$100 | – \$10 |
| \$80 | \$100 | – \$20 |
| \$70 | \$100 | – \$30 |

As Table 9 shows, if the value of the pension fund is equal to or greater than \$100, the employee gets the entire proceeds of the fund.¹⁶⁸ If the pension fund is worth less than \$100, the employer must make up the shortfall. The employer's expected return from this arrangement is negative, which raises several issues. The *quid pro quo* principle makes it seem unlikely that the employer would ever agree to this bargain. To borrow a term from Selody, the deferred-wage model describes an arrangement that is not a "fair game" for the employer.¹⁶⁹ Also, if the employer bears the economic burden of the shortfall, then a basic premise of the deferred-wage theory (i.e., that pension contributions are deferred wages) appears to be false. It is not clear how the employee in the example can bear the burden of the shortfall, however, because the employee has retired. Moreover, even if one assumes that the plan is ongoing, the analysis in section 4.1.2 suggests that the employer bears the burden of adverse investment returns as well as other actuarial losses.

The employee's situation is much more favorable. If there is any chance that the pension fund will be worth more than \$100, the employee's expected payout is greater than \$100. Yet the agreement that the employee would forgo \$90.90 of wages was based on the premise that her retirement benefit would be \$100. In fact, the employee's \$90.90 bought her more than she bargained for. This highlights an internal contradiction in the deferred-wage theory as presented by Stein and Adell and summarized by Gillese. In their presentation, the deferred-wage theory assumes that the employer and employees calculate the wages employees will forgo based on the cost of the *fixed benefit* promised by the plan. In fact, the deferred-wage model gives employees more than this. They also get a residual claim.¹⁷⁰ Yet if the employees get a residual claim, then the parties should have taken this claim into account when they bargained about "what [went] into the

¹⁶⁸ For analysis of a similar legal issue, see Wittman, *Economic Foundations of Law and Organization*, 270-72.

¹⁶⁹ Selody, "Vulnerabilities in Defined-Benefit Pension Plans," 2 ("A fair game is one in which the expected net payoff to all participants is equal to or greater than zero. If this condition were not met, members would move to an employer with a fair plan, or the sponsor would close the plan.")

¹⁷⁰ This residual claim resembles a call option that allows employees to claim the surplus when the value of plan assets exceeds the plan's liabilities. See Blake, *Pension Finance*, 196-97.

plan.” This contradiction suggests that the deferred-wage theory may not be a useful model on which to base pension policy.

8.4 Do Employees Bear the Burden of Actuarial Gains and Losses?

As McGill and his co-authors observe, there is generally a trade-off between determinability of the inputs (i.e., contributions) and determinability of the outputs (i.e., benefits) of a pension plan. If benefits are defined with certainty, then inputs will be uncertain, and vice-versa. A defined-benefit plan, they write, “is characterized by *definitely determinable* benefits, by given assumptions as to years of service and level of compensation, and by *indeterminable* future costs.” In contrast, a DC plan provides certainty with respect to contributions “but the benefits are *unpredictable*.”¹⁷¹ This important difference between DB and DC plans is reflected in the fact that employer contribution obligations to DB plans are more volatile than employer contribution obligations to DC plans. For example, in the 1990s many employers were not required to make and did not make contributions to their DB plan. More recently, the contributions mandated by the statutory funding rules have been onerous, leading some employers to press for legislation that would lessen contribution volatility by extending the statutory period for amortizing solvency deficiencies.¹⁷²

If, as the deferred-wage theory holds, pension contributions represent amounts deducted from employees’ wages and if, as the theory holds, employees are paid on a “total compensation” basis, it stands to reason that there should be a strong inverse correlation between pension contributions and wages. As the Steelworkers put it, “Unionized workers know from experience that employers cost their required pension funding against compensation in general. Funds that go into our pensions are funds that do not go towards our wages or benefits. There is a fairly direct trade-off in practice.”¹⁷³ In the last decade, many employers have seen their contribution obligations go from \$0 to a very large number. If pension contributions are “cost[ed] . . . against compensation in general” and if the trade-off is “fairly direct,” then sharp increases in employer contributions of the sort that have occurred over the last few years should have produced a corresponding reduction in non-pension compensation.¹⁷⁴ The size of the swing in contributions should make the reduction in non-pension compensation fairly easy to see.

¹⁷¹ McGill, et al, *Fundamentals of Private Pensions*, 8th ed., 29 (italics in original).

¹⁷² See, e.g., Canadian Association of Counsel to Employers’ Submission in Response to Finance Canada’s Regulatory Framework for Federally Regulated Defined Benefit Pension Plans consultation.

¹⁷³ The Steelworkers’ Submission in Response to Finance Canada’s Regulatory Framework for Federally Regulated Defined Benefit Pension Plans consultation.

¹⁷⁴ Laurence Kotlikoff and David Wise follow a similar line of reasoning to raise an objection to the quit-benefit model of pensions. Under the quit-benefit model, employees are compensated on a total-compensation basis, with compensation in each period equal to the employee’s marginal product. An employee’s total compensation in any period equals her non-pension compensation plus the marginal accrual in her quit benefit (i.e., her vested benefit). Kotlikoff and Wise note that the value of an employee’s vested accrual may be dramatically larger in a period in which she vests in a previously accruing but unvested benefit. This is especially true if the employee vests in a subsidized early-retirement benefit. The quit-benefit model implies that an employee who vests in a very valuable benefit should have a corresponding decrease in her non-pension compensation. (If there were no such offset, the quit-benefit theory’s assumption that an employee’s total compensation equals her marginal product would not hold.)

In fact, it seems highly unlikely that such a trade-off exists. In its submission to Finance Canada, the CAW-Canada observes that in its “bargaining experience, the employer may absorb *the initial cost* when market conditions adversely affect the pension fund, but the employer will always pass that cost along in subsequent wages and benefit negotiations. And it is reasonable for the employer to absorb that initial cost. The employer has the financial assets to deal with fluctuations in the market; individual employees earning \$50,000 or less a year do not.”¹⁷⁵ The implication of the relationship described here is that an employer does not reduce non-pension compensation when its pension contributions spike upward but instead “absorb[s] the initial cost” by making up the difference between the amount withheld from employees’ wages and the amount of the pension contribution. Indeed, where employees are unionized, the collective-bargaining agreement likely prevents the employer from reducing the employees’ wages and other non-pension compensation. Yet if statutorily required pension contributions turn out to be higher than the employer and union expected and if the employer cannot reduce the employees’ non-pension compensation to offset higher pension contributions, whose money is used to make up the difference between the amount the employer and union budgeted for pension contributions and the amount the employer actually had to contribute? As the employer is forbidden to take it from the employees, the burden must fall on the stockholders. And if the stockholders bear this burden, can it be the case, as the deferred-wage theory claims, that all pension contributions are deferred wages?

One might respond to this analysis by claiming, as CAW-Canada does, that the employer will pass these “cost[s] along in subsequent wage and benefit negotiations.” But as I explained in section 4.1.2, this claim is implausible. In bargaining, a party gains leverage by threatening to withhold something. If the stockholders pay for the contributions that “initially absorb” the effects of adverse market conditions, they cannot threaten to withhold these contributions in the next round of collective bargaining. The money is spent. Moreover, even if it will be necessary for the employer to make additional special payments beyond the onset of the next round of collective bargaining, the employer cannot threaten to withhold special payments because the contributions are required by law. The only circumstance in which an employer will have leverage to force employees to pay for special payments is when the special payments result from a benefit increase that creates unfunded past-service liabilities. Where deficits are the result of poor investment returns and other actuarial losses, it seems implausible that a pension deficit gives the employer greater leverage in bargaining than it would otherwise possess.

In sum, when adverse market conditions and other actuarial losses push a pension plan into deficit, employers are obliged to make larger pension contributions. If pension contributions are, as the deferred-wage theory claims, forgone wages, then employees’ non-pension compensation should be reduced to offset the increase in pension

Kotlikoff and Wise found no evidence of such a pattern. See the discussion of their work in Alan Gustman, Olivia Mitchell, and Thomas Steinmeier, “The Role of Pensions in the Labor Market: A Survey of the Literature,” *Industrial and Labor Relations Review*, vol. 47 (April 1994), 427-28.

¹⁷⁵ CAW-Canada’s Submission in Response to Finance Canada’s Regulatory Framework for Federally Regulated Defined Benefit Pension Plans consultation (*italics added*).

contributions. It seems very unlikely that this is what happens. Rather, when contribution obligations exceed expectations, the employer likely makes up the difference between the contribution the employer and employees believed would be necessary and the contribution the employer actually makes. In this case, stockholders bear the burden of pension contributions, which entails that the deferred-wage theory is false.