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Who Captures the Rents from Unionization? Insights From Multiemployer Pension Plans

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ARTICLES

WHO CAPTURES THE RENTS FROM UNIONIZATION? INSIGHTS FROM MULTIEMPLOYER PENSION PLANS

D. BRUCE JOHNSEN*

ABSTRACT

From 1945 to 2010 the proportion of private-sector workers covered by collective bargaining agreements declined from 36% to a once unthinkable 6.9%. This decline raises the question of how well labor unions serve their rank and file. This study addresses the economics of labor unions in an attempt to determine who captures the rents from unionization. Among other things, it examines the generosity of multiemployer defined benefit pension plans for rank-and-file union members and the officer and staff plans for the union that administers them. For a given wage, it finds that union officers and staff enjoy pensions and related benefits that are lavish by comparison. Although this could be the outcome of efficient implicit contracting, given the high agency costs workers and employers face monitoring union administration, it is impossible to reject the hypothesis that union officers and staff are the primary beneficiaries of unionization in the multiemployer setting. Multiemployer plans now appear obsolete and should be replaced by 401(k) defined contribution plans despite resistance from union officials anxious to preserve their private benefits of control.

* Professor, George Mason University, School of Law. The author thanks an anonymous referee and participants in the Robert A. Levy Fellows Workshop in Law & Liberty at George Mason University School of Law for helpful comments, Henry Manne for helpful discussions, the Law & Economics Center at George Mason University School of Law for research support, and Ted Phlegar for sharing his pension database compiled from Department of Labor filings. Author takes full responsibility for any errors in charts or graphs.

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I. INTRODUCTION

Many state governments and even our federal government now face looming budget crises. At the state level, California, Indiana, Ohio, New Jersey, and Wisconsin, and no doubt other state governors and legislators are considering or have implemented restrictions on public-sector unions, including right-to-work legislation, elimination of—or restrictions—on collective bargaining, mandatory employee contributions to welfare and pension plans, and mandatory direct employee payment of union dues. The threat of reduced public-sector union power has been met with storms of protest from union lobbyists and their political allies, pitting organized labor against disorganized and rationally uninformed taxpayers.

Organized labor's current emphasis on preserving public-sector union power is likely a reaction to the near-steady, decades-long decline in private-sector unions. From 1945, the percentage of the private-sector

workforce unionized fell from 35.5% to a once unthinkable 6.9% in 2010.¹ One recent manifestation of waning support for private-sector unions was the repeated failure of the Employee Free Choice Act (“EFCA”) to pass a Democrat-controlled Congress.² This legislation would have eliminated longstanding employers’ rights under the National Labor Relations Act (“NLRA”)³ to demand a secret ballot election before the National Labor Relations Board (“NLRB”) can certify a union for exclusive representation. Instead, the EFCA would have mandated certification if over half an employer’s workers gave their signatures supporting the union—so-called “card check.”⁴ It would also have mandated that the employer submit to binding arbitration within 120 days of certification and strengthened enforcement against employer—but not union—unfair labor practices.

The decline of private-sector unions raises the question of how well they serve their rank and file. Arguably having once served an important purpose, it is plausible that they have become obsolete in light of developments in law, technology, and economic organization. One important development has been passage of, and subsequent amendments to, the Employee Retirement Income Security Act (“ERISA”),⁵ which increased the cost and reduced the benefit employers and workers derive from defined benefit pension plans.⁶ A second important development has been the rising popularity of defined contribution plans, especially employer-sponsored 401(k) plans. These legal and organizational developments are especially relevant to multiemployer pension plans—so-called Taft-Hartley plans (named after the federal act that authorizes them)⁷—which are normally used in the context of multiemployer

¹ See Table 3. *Union Affiliation of Employed Wage and Salary Workers by Occupation and Industry*, U.S. BUREAU OF LAB. STAT., <http://data.bls.gov/cgi-bin/print.pl/news.release/union2.t03.htm> (last visited Apr. 12, 2012); *Union Membership Data from the National Directory Series: Table A. Union Members in the United States, 1930-1980*, U.S. BUREAU OF LAB. STAT., <ftp://ftp.bls.gov/pub/special.requests/collbarg/unmem.txt> (last visited Apr. 12, 2012).

² See generally Employee Free Choice Act of 2009, H.R. 1409, 111th Cong. (2009). After the bill failed to pass the Senate in 2007, Congressional Democrats proposed it again in 2009 but it never came up for a vote. See Employee Free Choice Act of 2009, S. 560, 111th Cong. (2009).

³ 29 U.S.C. § 159(c) (2006).

⁴ The union and the employer are free through collective bargaining to voluntarily adopt “card check” as a basis for union certification.

⁵ Employee Retirement Income Security Act of 1974, Pub. L. No. 93-406, 88 Stat. 829 (codified as amended in scattered sections of 29 U.S.C.).

⁶ See Richard A. Ippolito, *A Study of the Regulatory Effect of the Employee Retirement Income Security Act*, 31 J.L. & ECON. 85, 87 (1988) (arguing the ERISA failed to effectively change the nature of the pension contract nor substantially reduce fraud potential, but rather effected transfers to a predictable set of politically influential beneficiaries).

⁷ Labor-Management Relations (Taft-Hartley) Act, Pub.L. No. 80-101, 61 Stat. 136

collective bargaining in industries such as construction, trucking, food and other services, and retail trades in which work is often project-based or seasonal. Workers in these industries value the opportunity to switch employers and no doubt benefit from pension portability within the bargaining unit.⁸

This study relies on economic theory and preliminary empirical evidence to determine how well private-sector unions serve their rank and file through multiemployer pension plans. The question it addresses is: *Who captures the rents from unionization?*⁹ In contrast to the market for corporate control, the market for union control in the multiemployer setting is weak and subject to structural impediments that limit the competitive forces union officials and staff face from potential rivals, including non-union shops. Evidence shows that union officers and staff enjoy pensions that are strikingly generous compared to the pensions rank-and-file workers receive in the multiemployer plans they administer. In a competitive labor market, this *could* be the result of efficient labor market contracting, but given the labor market distortions from heavy unionization the evidence raises the possibility that the pension generosity union officers and staff enjoy reflects rent capture.

The study proceeds as follows: Section II addresses the economics of unionization. Although it admits possible efficiencies from unionization, it posits that the primary function of labor unions is to administer a cartel of workers designed to capture labor market “rents”—a surplus wage bill in excess of worker opportunity cost. By restricting labor supply and coercing both workers and employers to accede, unionization distorts employment and wages. It also raises an agency problem. Where unionized rank-and-file workers face high costs monitoring their agents, as is especially true in the multiemployer setting, the likelihood and magnitude of rent capture by these agents increases. The literature identifying who captures the rents from unionization in the context of multiemployer bargaining has, until now, been limited and inconclusive.

Section III addresses the market for employer-provided retirement plans. It describes the basic legal and economic structure of traditional single-employer defined benefit plans, multiemployer defined benefit plans, and 401(K) defined contribution plans. It then provides an economic analysis of implicit pension contracting. The theory and evidence provided in this section suggests that multiemployer pension plans reflect what has been

(1947) (codified in scattered sections of 29 U.S.C.).

⁸ See Carolyn D. Gentile, “The Check is in the Mail” — Mastering the Maze of Employer Contributions to ERISA Plans, 72 MARQ. L. REV. 349, 350-51 n.9 (1989).

⁹ In the unionization setting, the economic rent at stake is the excess of marginal wage payments over the opportunity cost of the marginal unionized employee.

identified in the economics literature as a *low-quality* equilibrium for covered workers. In contrast to single-employer plans, including those covering union officers and staff, multiemployer plans have structural features that discourage efficient workplace productivity investments and limit the competitive forces union officials and staff face from potential rivals. What is more, evidence from Department of Labor filings shows that in at least one prominent service workers union—the Service Employees International Union (“SEIU”)—those covered by multiemployer pension plans receive pensions and related benefits that, for given current wage, fall well short of the benefits officers and staff enjoy. They fall further short in terms of nonpension benefits such as early retirement options, cost of living allowances (“COLAs”), death benefits, access to supplemental 401(k) plans, and so forth. What is more, union officers and staff enjoy pensions that are substantially more generous than what workers in single-employer plans in non-union firms have. The evidence makes it difficult to reject the hypothesis that union officers and staff in SEIU and other national and international unions capture a disproportionate share of the rents from unionization in the form of lavish pension benefits. Although employment relations are largely subject to market forces in the private sector, as the labor market becomes more insulated from competition—as in the multiemployer setting—the capture of rents by poorly monitored agents begins to prevail.

Section IV provides concluding observations. The administrative costs of multiemployer pension plans are substantial and have grown over time owing to ERISA’s funding mandates and other factors.¹⁰ Tax deferred 401(k) defined contribution plans often provide immediate vesting, are relatively low-cost to administer, provide employees with self-directed investment options across a range of publicly issued mutual funds, offer identical or superior tax deferral, and are fully portable. They now appear to be a superior way to provide retirement benefits for workers traditionally covered by multiemployer pension plans. With many multiemployer pension plans in a perpetual state of underfunding and pundits heralding this situation as the next major financial crisis,¹¹ conversion from

¹⁰ Ippolito, *supra* note 6, at 112 n.42. To be exact, Ippolito’s evidence shows that the administrative cost of defined benefit plans has increased most for smaller firms, which no doubt rely most heavily on multiemployer plans.

¹¹ *The Next Pension Crisis: Taft-Hartley Multiemployer Plans*, WORKPLACE PROF BLOG (Aug. 18, 2010), http://lawprofessors.typepad.com/laborprof_blog/2010/08/the-next-pension-crisis-taft-hartley-multiemployer-plans.html; *Required Reading on Multi-Employer Pension Plan Crisis*, THE TRUTH ABOUT PROJECT LAB. AGREEMENTS (Mar. 13, 2010, 10:02 AM), <http://thetruthaboutplas.com/2010/03/13/required-reading-on-multi-employer-pension-plan-crisis/>; F. Vincent Vernuccio, *Union Pensions in Crisis: The Hidden Danger to Workers, Employers, and U.S. Tax Payers*, LAB. WATCH (Cap. Res. Center, Washington, D.C.), Nov. 2009, at 1, available at <http://cei.org/sites/>

multiemployer defined benefit plans to 401(k) defined contribution plans would provide superior retirement benefits to the rank and file. Although the point is sure to be resisted by organized labor, I argue that multiemployer plans have become obsolete and should be replaced by 401(k) plans.

II. THE ECONOMICS OF LABOR UNIONIZATION

A. *The Cartel Model*

The traditional view among most economists for decades has been that labor unions are a form of labor market cartel,¹² albeit one exempt from the antitrust laws.¹³ By mobilizing otherwise dispersed and disorganized workers into a single bargaining unit, labor unions decrease the elasticity of supply of labor and become monopoly price searchers with labor-market power. Conditional on having effectively organized the entire workforce in an activity, the standard model predicts that the union will restrict the quantity of labor it supplies to employers below what would prevail under free competition, thereby raising the prevailing wage. Figure 1 shows the weekly demand for labor, D , and the marginal cost, MC , of calling workers out of alternative pursuits into the activity at hand.¹⁴ Absent an organized union, the prevailing wage would be W^* (including the value of pension and other benefits) and employment would be L^* per week. Gains from trade, the sum of consumer and producer surplus, are equal to the large triangle above the marginal cost curve and below the demand curve between zero and L^* on the horizontal axis. To reflect efficient resource allocation they are the maximum they could be among all possible choices of labor.

An organized union of identical workers acting in concert recognizes it has the pricing power to choose between various quantities of labor

default/files/Vincent%20Vernuccio%20-%20Union%20Pensions%20in%20Crisis.pdf.

¹² RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* 425-36 (8th ed. 2010); Daniel R. Fischel, *Labor Markets and Labor Law Compared with Capital Markets and Corporate Law*, 51 U. CHI. L. REV. 1061 (1984); Keith N. Hylton, *Efficiency and Labor Law*, 87 NW. U. L. REV. 471, 472 n.3 (1993) (arguing that labor unions function inefficiently as cartels to restrict labor supply and raise wages but noting that they may have some offsetting efficiencies).

¹³ See Morgan Reynolds, *A Critique of What Do Unions Do?*, 2 REV. AUSTRIAN ECON. 259 (1987) (book review). Most though not all concerns about unionization as an anticompetitive activity were long ago put to rest by a statutory exemption under Section 6 of the Clayton Act (1914). 15 U.S.C. § 17 (2006). Since that time, various court decisions have crafted a conceptually separate though narrow judicial exemption. See, e.g., *Connell Constr. Co. v. Plumbers & Steamfitters Local Union 100*, 421 U.S. 616, 621-24 (1975).

¹⁴ Roughly speaking, MC can also be viewed as the supply of labor.

supplied, with lower quantities bringing higher wages and vice-versa. As a first approximation, the well-known cartel model posits that the union will choose the quantity of labor to equalize the marginal wage bill, MR, with the marginal cost of labor, MC.¹⁵ The number of workers hired will be L^U and the prevailing wage will be W^U . As a group, union members earn monopoly rents (a surplus wage per week above the opportunity cost of the marginal worker) equal to the cross-hatched rectangle. This rent consists in part of a transfer from employers to union workers. The shaded area in Figure 1 identifies the traditional loss in allocative efficiency (lost gains from trade) from a restriction in labor supplied from L^* to L^U .¹⁶ Also known as the *deadweight loss* or *welfare triangle*, this area reflects unemployed or underemployed workers of $L^* - L^U$ whose productive value in the activity exceeds their value in alternative pursuits into which they are assumed to migrate.¹⁷

The cartel model is at least a partially accurate description of the labor market distortions from unionization.¹⁸ One colleague of mine recalls a magazine article showing a photo of a sign at a unionized auto plant door during the 1970s reading “one assembly-line position available starting tomorrow” and the photo from the next morning showing a crowd of at least hundreds of anxious applicants. In that setting, the prevailing wage was surely well above what would have prevailed under competitive conditions. There are sound theoretical reasons to doubt whether union workers can earn above-market wages over the long run because the pool of unemployed or underemployed workers and new entrants from other activities attracted by the high wages cannot magically be made to disappear and will inevitably put downward pressure on the demand for

¹⁵ In this setting, the “marginal” worker does not mean last-in-time but the worker whose services are just barely worth maintaining in the activity at the prevailing wage.

¹⁶ Posner correctly points out that in the long run some or all of the cartel rents will be dissipated in the competitive process to establish the cartel. Richard A. Posner, *The Social Costs of Monopoly and Regulation*, 83 J. POL. ECON. 807, 825 (1975).

¹⁷ This discussion assumes one weekly unit of labor is equal to 40 hours per worker. An alternative to unemployed workers is for the cartel to reduce the number of hours in the workweek, so that each worker cuts back proportionately, leaving no workers laid off. In effect, this is the result achieved by a mandated 40-hour workweek and, indirectly, by a mandatory premium overtime.

¹⁸ A hypothesis complementary to the union-as-cartel hypothesis is that unions target their organizing activities toward “rent-rich” firms or industries. One example is an industry that is highly concentrated and whose firms are therefore likely to enjoy product market power and monopoly rents, but there may be other examples such as firms whose capital is immobile or difficult-to-redeploy and therefore subject to opportunistic appropriation by the union. To the extent the union can successfully organize, it may be able to extract a share of firm rents through the threat of opportunistic strikes. See, e.g., Leonard W. Weiss, *Concentration and Labor Earnings*, 56 AM. ECON. REV. 96 (1966) (suggesting an alternative explanation, though one not necessarily mutually exclusive to the union-as-cartel hypothesis).

unionized labor.

At W^U many more workers will seek to provide their services than there are available jobs in the activity. In the short run, nonunionized firms that compete in the product market with unionized firms can hire workers at a wage beginning at W^0 , and as their capacity increases they will gradually expand employment and bid up nonunion wages. During this time a wage differential may persist between unionized workers and nonunionized workers. But even if the union can organize the entire industry of existing employers, in the long run it will face entry by new firms, substitute goods produced by nonunion labor, and foreign competition. The supply of labor outside the union is something the union must eventually take into consideration when choosing the quantity of labor to supply.¹⁹ Figure 2 depicts this equilibrium. Whichever combination of labor and wage the union chooses, it recognizes that nonunion workers will supply labor according to MC_{N3} in Panel B of Figure 2, leaving the labor union with residual demand for labor shown by D_{U2} in Panel A. It consists of whatever labor demand remains in excess of nonunion supply at any given wage. The residual demand is necessarily more elastic than D , so that a given wage increment will lead to a greater reduction in the quantity of union labor demanded than above. In searching for the rent maximizing wage, the union now perceives MR_{U2} as its marginal wage bill. To maximize union rents it will choose the quantity of labor, L^{U2} , where $MR_{U2} = MC_{U2}$, and the prevailing wage will be W^{U2} .²⁰ This is known as the *dominant firm solution* and illustrates a cartel's dominant but not absolute power to influence the market price.²¹ Notably, union and nonunion workers will earn identical wages, with L^{U2} union workers employed and L^{N2} nonunion workers employed. The monopoly rents captured by union workers will be smaller than in the no-entry case and equal to the cross-hatched rectangle in Figure 2. The higher the elasticity of supply of nonunion labor, the smaller these rents will be. The observed gradual decline over time in the share of the U.S. workforce unionized is consistent with a version of the dominant firm solution in which outside entry gradually erodes the union's market power as nonunion labor supply increases over time.

¹⁹ Absent legal restrictions, one response the union might consider is to pay a certain number of workers to permanently leave the industry.

²⁰ The marginal cost of union labor, MC_{U2} , is determined by horizontally subtracting the quantity of labor supplied at each wage, determined by MC_{N2} , from MC in Figure 3.

²¹ See George J. Stigler, *The Dominant Firm and the Inverted Umbrella*, 8 J.L. & ECON. 167, 167, 171 (1965) (applying the dominant firm theory to the facts of U.S. v. United States Steel Corporation). For an application of the dominant firm model to capture of cartel rents see also D. Bruce Johnsen, *Property Rights to Cartel Rent: The Socony-Vacuum Story*, 34 J.L. & ECON. 177, 192-94 (1991).

The weight of the evidence suggests that, for long periods, wages in the unionized sector of most industries have exceeded wages in the nonunion sector,²² although mounting evidence also suggests that heavier unionization across states also reduces living standards for all.²³ In light of the dominant firm solution, the question is how a union-nonunion wage differential can persist in the long run. One possible explanation commonly attributed to economist Armen Alchian is that it persists only because of the union's threat of force to compel outside workers to either join the cartel or leave the activity for alternative pursuits. A clear manifestation of the implicit use of force by labor unions under current law is that union certification is by majority rule, in which case the minority opposing the union must submit to membership in union shops and pay union dues and abide by the collective bargaining agreement in agency shops.²⁴ Others include the employers' duty to bargain in good faith, which in effect shifts the locus of bargaining power against the employer, the legal right of union organizers to trespass on employers' property, and mandatory participation by employers in government administered insurance. In government contracting, nonunion construction firms are often subject to union-only *project labor agreements* that may require them to make contributions to the multiemployer pension plan on behalf of nonunion workers even though those workers can collect benefits only after joining the union and meeting vesting requirements. Many never do. In each of these cases the union is backed by the legitimate power of the federal government under duly enacted statutes.²⁵ Yet there can be little

²² See, e.g., Helge Sanner, *Imperfect Goods and Labor Markets, and the Union Wage Gap*, 19 J. POPULATION ECON. 119, 119-20 (2006); Barry T. Hirsch & Edward J. Schumacher, *Match Bias in Wage Gap Estimates Due to Earnings Imputation*, 22 J. LAB. ECON. 689, 691 (2004); Bernt Bratsberg & James F. Ragan, Jr., *Changes in the Union Wage Premium by Industry*, 56 INDUS. & LAB. REL. REV. 65, 65 (2002); Micheal J. Boskin, *Unions and Relative Real Wages*, 62 AM. ECON. REV. 466, 466 (1972). See generally Peter D. Linneman & Michael L. Wachter, *The Economics of Federal Compensation*, 29 INDUS. REL. 58 (1990); Tage Bild et al., *Do Trade Unions Have a Future? The Case of Denmark*, 41 ACTA SOCIOLOGICA 195 (1998); John Pencavel & Catherine E. Hartsog, *A Reconsideration of the Effects of Unionism on Relative Wages and Employment in the United States, 1920-1980*, 2 J. LAB. ECON. 193 (1984).

²³ See Arthur B. Laffer & Stephen Moore, *Boeing and the Union Berlin Wall*, WALL ST. J., May 13, 2011, at A15 (citing scholarly research by Richard Vedder showing higher per capita income growth and wage growth in right-to-work states).

²⁴ The National Mediation Board decision of July 1, 2010, established a majority-of-votes-cast rule for certifying a union potentially allows less than a majority of workers to compel a majority to submit to the collective bargaining agreement. *NMB Representation Rulemaking*, NAT'L MEDIATION BD., <http://www.nmb.gov/representation/proposed-rep-rulmaking.html> (last visited Apr., 2012). See Linda Blanchly, *Unionization Vote Set for Delta Passenger Service Workers*, AIR TRANSPORT WORLD (Oct. 11, 2010), <http://atwonline.com/airline-finance-data/news/unionization-vote-set-delta-passenger-service-workers-1008>.

²⁵ See *supra* note 3; *infra* notes 57 and 58.

doubt that unions have resorted to extra-legal coercion (intimidation) from time to time.²⁶ “Card check” flirted with legally sanctioning coercion because it would have required workers to cast their votes in an open and notorious way subject to difficult-to-observe retribution for anti-union votes.

In the short run, the threat of force to unionize will reduce employment in the unionized sector relative to the nonunion sector, leading to an increase in the wage differential. Once nonunion employers and workers have had time to make adjustments, however, the threat acts like a tax in the nonunion sector. If the threat falls largely on workers, as in the case of card check, some nonunion workers will submit and join the union, while others will refuse. Some who refuse will leave the industry and some will stay. This increases the marginal cost of nonunion labor to employers. As shown in Panel B of Figure 3, nonunion workers facing continued intimidation by the union suffer a cost for which they must be compensated with a higher wage (all else being equal) if they are to continue working. This cost, equal to I , must be added to MC_{N3} to identify the supply of nonunion labor employers perceive. Nonunion workers now must be compensated both for the value of their outside employment opportunities and for the disutility of the ongoing intimidation. They will supply labor according to $MC_{N4} = MC_{N3} + I$. Panel A of Figure 3 shows that this effectively restricts the supply of nonunion labor and increases the residual demand, D_{U3} , of union labor, leading to an increase in employment, wages, and rents in the union sector. Nonunion employers will hire fewer workers but will have to pay a higher wage equal to W^{N3} to compensate them for bearing the threat of force, I . Nonunion workers’ net-of-threat wage falls to $W^{N3} - I$ and employment falls to L^{N3} . Consistent with the dominant firm solution, W^{N3} is identical to the union wage, and there is no observable wage differential even though nonunion workers suffer lower employment and a lower net-of-threat wage.²⁷ The shaded rectangle in Panel B shows the costs, in total, borne by nonunion workers in terms of the disutility from coercion. In part, this amount reflects a deadweight loss to society.

²⁶ See Reynolds, *supra* note 13, at 261.

²⁷ The same analysis applies to agency fees, which require nonunion workers in agency shops to pay a portion of the union’s collective bargaining costs. See LISA GUERIN & AMY DELPO, *THE MANAGER’S LEGAL HANDBOOK* 303-04 (4th ed. 2007); Margie Ransom McCloskey & Richard S. Rubin, *Union Security in the Public Sector: Types, Problems, Trends*, 6 J. OF COLLECTIVE NEGOTIATIONS PUB. SECTOR 303, 305 (1977). See generally MICHAEL MAUER, *THE UNION MEMBER’S COMPLETE GUIDE: EVERYTHING YOU WANT — AND NEED — TO KNOW ABOUT WORKING UNION* (2001) (answering basic questions about such things as the structure of the labor movement, how contracts are negotiated, the grievance process, core labor laws, the union’s role in the community, etc.).

For comparison purposes, imagine the union instead directs its efforts toward intimidating or threatening employers that resist unionization. In essence, union-only project labor agreements use the legal system to achieve this result. The effect is similar to a tax on nonunion employers. Knowing that for each worker hired they must pay an additional amount, I , into the multiemployer pension plan, they reduce their willingness to pay a cash wage to workers. Nonunion employers will adjust by reducing the number of workers they hire to L^{N4} and paying them a lower wage equal to $W^{N4} - I$. For each worker, the employer pays $W^{N4} - I$ and in addition suffers the cost per worker of I in the form of forced plan contributions by the union. In this case, the observed cash wage for nonunion labor is below the union wage. To the extent the union imposes threat costs on nonunion employers rather than workers it can maintain an apparent wage differential in the long run.²⁸ As with any tax, whether the threat of force is directed at workers or employers, the allocational and distributional effects are roughly identical and determined by the elasticities of demand for and supply of labor. Either way, employers hire L^{N4} units of nonunion labor and bear the same wage cost, and workers receive the same net wage.

In the related setting of union challenges to nonunion labor, authors Daralyn Drurie and Mark Lemly have this to say:

In response to their declining influence, building-trades unions are becoming more aggressive in their attempts to win project contracts. These attempts are targeted not only at increasing membership among workers but also at eliminating competing nonunion contractors. One strategy that is gaining in popularity is to oppose permit applications involving contractors who do not use union labor, usually on environmental or regulatory grounds. This opposition can block the project entirely or increase project costs for those job owners who refuse to use union labor.

This union strategy has been largely successful in the limited areas in which it has been tried. Union interference in the building permit process through actual or threatened litigation or regulatory intervention

²⁸ An even more current example of an arguably legitimate threat to the employer is the NLRB's decision that Boeing's plan to open a new Dreamliner plant in South Carolina, a right-to-work state, rather than in Washington state, a "forced unionism" state, constitutes an unfair labor practice because Boeing officials cited recurring costly strikes in Washington state as a factor in their decision. The NLRB decision, if allowed to stand, would effectively enjoin Boeing from operating the South Carolina plant. The NLRB premised its decision on the NLRA prohibition on employer retaliation against union workers, who have a statutory right to strike. See Laffer & Moore, *supra* note 23, at A15. See also Bruce Ramsey, *Boeing, Machinists' Union Must Strike a Deal*, SEATTLE TIMES (Aug. 4, 2009, 4:15 PM) http://seattletimes.nwsourc.com/html/opinion/2009598753_bruce05.html (recounting Boeing's decision to move production to South Carolina if Washington workers did not agree to a no-strike deal).

can force merit-shop contractors out of business or cause job owners to hire union contractors exclusively.²⁹

In practice, most union threats fall in part on employers and in part on workers. Surely the costs associated with the attenuation of employers' private property rights, such as the right of union organizers to trespass, fall on employers. The same can be said of employers' duty to bargain in good faith. Even if the threat is targeted at workers who, say, contemplate crossing a picket line, employers will make arrangements to somehow bear the burden or ameliorate worker disutility at their own cost if they can do so efficiently. During a strike the employer may, for example, hire bodyguards to protect workers willing to cross the picket line or post cameras to record violent activity. In most settings, the result should be that some of the threat-costs fall on employers and that this allows unions to maintain a persistent wage differential.³⁰

As discussed below, workers differ substantially in their quality, and there are substantial gains to be generated from explicitly sorting between them by way of monitoring or the use of implicit pension contracting. While labor unions actively seek to create and maintain a union-nonunion wage differential, within the bargaining unit they strenuously seek wage uniformity across similarly categorized workers, with seniority being the primary basis for any wage disparity between workers.³¹ This observation is consistent with the proposition that labor unions constitute a labor market cartel that seeks to reduce cartel enforcement costs. It is widely understood among economists, for example, that product uniformity (in this case labor) facilitates product market cartel enforcement. Where product quality differs, the prospect of secret price cutting increases the cost of enforcing the cartel. Wage enhancements paid to workers identified as high-quality must be at least partially offset by wage reductions paid to workers identified as low-quality. Employers and workers as a group benefit from a more parsimonious wage structure that leads workers to compete by increasing productivity. This should tend to increase the average wage, in part because marginal low-quality workers will seek alternative employment. From the union's standpoint, however, wage disparity increases cartel enforcement costs by explicitly accounting for quality differences. Rather than incur higher enforcement costs, the union's

²⁹ Daralyn J. Durie & Mark A. Lemley, *The Antitrust Liability of Labor Unions for Anticompetitive Litigation*, 80 CALIF. L. REV. 757, 757-58 (1992) (citations omitted).

³⁰ One possible explanation for the failure of "card check" legislation is weak union support because, with the costs falling on workers, it promises no differential effect on union-nonunion wages.

³¹ RICHARD A. IPPOLITO, PENSION PLANS AND EMPLOYEE PERFORMANCE: EVIDENCE, ANALYSIS, AND POLICY 131 (1997) (citing Richard B. Freeman, *Unionism and the Dispersion of Wages*, 34 INDUS. & LAB. REL. REV. 3, 3-4 (1980)).

interest is in wage uniformity, which comes at the expense of lower average wages than would otherwise prevail.³²

B. Agency Problems

The cartel model has substantial explanatory power for the economic role of labor unions, but the possibility remains that unions do things that are efficient as well.³³ Even a naked cartel will implement policies that increase producers' and consumers' joint wealth if the benefits it captures outweigh the costs—including transaction costs. So if inefficiencies arise from cartelization why do the parties fail to establish terms that reduce or eliminate the inefficiencies? Legislation and, ultimately politics, no doubt put some rents up for grabs.³⁴ But where the parties can identify one another and engage in Coasian bargaining,³⁵ economic experience suggests that they will seek to increase the gains from trade by eliminating inefficiencies, subject only to the constraint imposed by the cost of transacting. Some rents are inevitably dissipated in a race to capture, but the inexorable tendency should be contracts and other institutional arrangements that limit rent dissipation.³⁶

Many commentators, including some economists, have suggested that unions function efficiently to represent workers' interests against overreaching employers.³⁷ Although this may be a fair representation in idiosyncratic settings, it is by no means consistent with the weight of economic theory. If nonunion workers strongly desire grievance procedures, rules on workplace safety, or other collective goods the

³² Douglas L. Leslie, *Multiemployer Bargaining Rules*, 75 VA. L. REV. 241, 268-69 (1989). Possibly negating or overcoming the negative effect of wage uniformity on union wages is that unions target rent-rich firms and industries for unionization. This would occur, for example, where the union targets a firm that has invested heavily in building a high-quality workforce.

³³ POSNER, *supra* note 12; Hylton, *supra* note 12; Stewart J. Schwab, *Union Raids, Union Democracy, and the Market for Union Control*, 1992 U. ILL. L. REV. 367 (1992); Fischel, *supra* note 12, at 1071-72.

³⁴ JAMES M. BUCHANAN & GORDON TULLOCK, *THE CALCULUS OF CONSENT: LOGICAL FOUNDATIONS OF CONSTITUTIONAL DEMOCRACY* 3-5, 109-111 (1962) (arguing that political outcomes are driven by rent seeking); Gary S. Becker, *A Theory of Competition Among Pressure Groups for Political Influence*, 98 Q. J. ECON. 371, 371 (1983); Sam Peltzman, *Toward a More General Theory of Regulation*, 19 J.L. & ECON. 211, 211-13 (1976) (arguing that political competition balances competing interests to minimize rent dissipation).

³⁵ R.H. Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1, 1-2 (1960).

³⁶ See generally POSNER, *supra* note 12; DONALD L. MARTIN, *AN OWNERSHIP THEORY OF THE TRADE UNION* (1980); Fischel, *supra* note 12, at 1061-63; and Schwab, *supra* note 33, at 368.

³⁷ See for example, the seminal but heavily criticized treatise RICHARD B. FREEMAN & JAMES L. MEDOFF, *WHAT DO UNIONS DO?*, 3-4 (1984).

employer refuses to provide, their wage demands will be higher than otherwise. If the employer can provide these benefits at lower cost than the resulting reduction in its wage bill, it will do so out of self-interest.³⁸ This is an unremarkable proposition. It simply says that, like other markets, labor markets work—a conclusion widely supported in the empirical literature.³⁹ This is not to say labor markets work perfectly, or that there is no non-cartel explanation for what they do, only that any departure from the maximization of employers' and workers' joint wealth must be explained by the cost of transacting. It is entirely possible that unions serve at times as bargaining agents to reduce the transaction costs of establishing and enforcing explicit or implicit contractual terms to increase the parties' joint wealth.⁴⁰

For the purposes of this essay, a more important question remains unanswered: *How are the rents from unionization distributed?* Evidence presented below on relative pension generosity suggests they are not shared equally by union members. Answering this question requires an ownership theory of labor unions, which in part boils down to who controls the union. The literature on union control is embryonic,⁴¹ but a large amount of relevant, insightful work has been done in the context of corporate control. Both publicly-held corporations and unions are managed by agents hired to represent a dispersed and rationally uninformed collection of ostensible beneficial owners. In both settings the owners must incur substantial transaction costs to monitor and constrain their agents, so-called "agency

³⁸ Freeman and Medoff show that the union-nonunion wage differential was substantial for the period they studied. In explanation, they argue that in addition to a "monopoly face" unions also have a "voice face," which empowers union workers to influence workplace rules for the collective good. The implication is that the efficiency of worker voice raises wages. If labor markets are competitive and efficient, this conclusion is backwards. If voice is something workers value, they should be willing to work for lower wages when their voice is effectively heard, and competition should drive union wages down rather than up. *See id.* at 5-11.

³⁹ Workers engaged in risky occupations, for example, earn a clear wage premium to compensate for the added risk. *See* John Lott, Jr. & Richard L. Manning, *Have Changing Liability Rules Compensated Workers Twice for Occupational Hazards? Earnings and Cancer Risks*, 29 J. LEG. STUD. 99, 123-27 (2000).

⁴⁰ By way of example, Ippolito identifies the efficiency role of underfunded pension plans prior to ERISA. *See generally* Ippolito, *supra* note 6, at 112-116. He found that pension underfunding served as an implicit contract. The underlying bargain (driven by market forces but not necessarily by explicit negotiations) appears to have been that the employer would make specific investments in reliance on the union's promise of a given wage (or wage profile) as long as the union would honor that wage agreement. Underfunding acted as a performance bond to prevent the unions from striking for higher wages to expropriate the value of the employer's investments, perhaps at the risk of sending the employer into bankruptcy. Set in context, the underlying bargain was no doubt efficient in that, *ex ante*, it promised to benefit both parties.

⁴¹ For one serious counter-example, *see* MARTIN, *supra* note 36.

costs.” Corporate shareholders are said to capture the residual returns (profits) the corporation generates, but ordinarily it is the corporate managers who control decisions, including dividend payouts. Control over property is one incident of ownership, and it is therefore incorrect to think of shareholders as *the* owners. Instead, the incidents of ownership—the various sticks in the bundle of corporate property rights—are allocated to various parties. Within limits, incumbent managers have the power of corporate control and can to some extent use it to serve their own interests at shareholders’ expense. Various forces limit their ability to do so. Product market competition, competition in the managerial labor market, the threat of bankruptcy, and competition in the market for corporate control via tender offers and proxy contests all constrain corporate managers.⁴² Much of the structure of corporate law and market contracting, including executive compensation, ownership concentration, and merger law have been effectively explained by the joint gains from effectively limiting the scope of corporate managers’ actions.

The analogy between corporations and labor unions is helpful but far from airtight for various reasons. First, unlike corporate stock there is no market for transferable union memberships. Disgruntled corporate shareholders can sell their shares and walk away with their capital; that is, they can *exit*. Union rank and file cannot. The only way they can benefit from their position is to remain with the union and participate in its activities over their working life through their voting rights and whatever incidents of *voice* they may have. Once their relationship with the union ends, so does their ownership stake. Second, competition for control of union governance is severely limited. Although union raids—one union displacing another—are not unheard of,⁴³ they are historically rare and seem to have become even rarer over time with the widespread use of “no-raid” agreements between potential rivals.⁴⁴ And unlike corporate

⁴² See generally Henry G. Manne, *Mergers and the Market for Corporate Control*, 73 J. POL. ECON. 110, (1965) (arguing that hostile tender offers are a powerful constraint on corporate managers); Sanford J. Grossman & Oliver D. Hart, *The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration*, 94 J. POL. ECON. 691 (1986) (explaining that the threat of corporate bankruptcy is a powerful constraint on corporate managers).

⁴³ MARTIN, *supra*, note 36, at 95-97; See generally Fischel, *supra* note 12; Schwab, *supra* note 33.

⁴⁴ For a recent example of a no-raid agreement between the Service Employees International Union and the American Federation of State County and Municipal Employees Union, see Thomas B. Edsall, *Unions Forge a 'No-Raid' Agreement*, WASH. POST, Sept. 20, 2005, at D.03. See also *Affiliation Agreement, Coalition of University Employees-The International Brotherhood of Teamsters* at 6, May 18, 2010, available at <http://www.cueunion-action.org/pdf/CUE-IBTAffiliation%20Agreement.pdf>.

shareholders, union members may not assign their vote through proxy, which severely limits the assemblage of voice as a constraint on union officers and staff. As one famous playwright lamented, “[n]o king is as safe in office as a Trade Union Official.”⁴⁵

In the corporate setting, the notion that the parties will contract to reduce the agency problem has considerable explanatory power. In lieu of salary, corporate managers routinely accept stock options and other forms of contingent compensation that help align their interests with those of stockholders. In addition, through leverage and dividend declarations they are compelled by capital markets to constrain their discretionary use of free cash flows, to divest non-core operations, to submit to outside audits, and to resort to public scrutiny to raise capital.⁴⁶ The absence of such arrangements in the union setting suggests that union officers and staff are largely insulated from competitive market forces. The larger the union and the further removed are the officers and staff from the rank and file, the more difficult it is for the rank and file to monitor them and the less competition they face. Local union representatives may be fairly easily monitored, while the national officers and staff are much less so.

Donald Martin provides an insightful if ultimately inconclusive analysis of who owns the union.⁴⁷ The collective incidents of union ownership rights include a certified union’s exclusive right to bargain with the employer, which can be transferred to another union only by a majority vote of the rank and file, but in any event not for direct compensation.⁴⁸ This makes it unlikely an incumbent union will cede control to a more suitable rival. Unions are able to own property, which in essence is held in trust for the rank and file by union officers. Unions can also sue and be sued, and any judgment against a union is the responsibility of the union and not its members, whose liability is limited. Similar to corporate managers, union officers have a fiduciary duty to members, and any action against a union fiduciary on behalf of the union requires the equivalent of an internal demand for and denial of resolution before the dispute can be initiated in federal court.⁴⁹

Although few unions provide members with proprietary ownership rights that include, for example, the right to transfer membership, there is

⁴⁵ GEORGE BERNARD SHAW, *The Apple Cart: A Political Extravaganza*, in THE BODLEY HEAD BERNARD SHAW COLLECTED PLAYS WITH THEIR PREFACES VOLUME VI, at 247, 294 (1973).

⁴⁶ See Michael C. Jensen, *Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers* 76 AM. ECON. REV. 323, 323-24 (1986).

⁴⁷ MARTIN, *supra* note 36, at 31.

⁴⁸ See *id.* at 30-39, 96-97.

⁴⁹ Cf. *id.* at 38.

substantial variation across unions in the degree to which members have a “proprietary interest in the present value of union monopoly rents.”⁵⁰ The absence of transferable ownership prevents individual members from capitalizing the payoff from any long-lived investments in the union, and as a result they may be inclined to support departures from the decisions that would maximize the present value of cartel rents.⁵¹ One way this can occur is by admitting a larger membership than the cartel model would predict, putting downward pressure on wages. Another is by underpricing union memberships (the membership fee and ongoing dues)⁵² to allow discrimination in favor of applicants with desirable personal characteristics.⁵³ Depending on the cost of transacting on various dimensions, union members will trade off wages against other workplace benefits. The union’s ability to capture rents depends on the leeway open to the employer. In Martin’s words:

Any employment relationship, union or otherwise, is multidimensional. There is a wage rate, the worker’s productive abilities, the physical working conditions, the quality and number of complementary human and nonhuman resources, the personalities of the parties to the relationship, and so on. Almost all of these elements are amenable to adjustment at the margin. The more elements and the greater the extent to which the employer is free to adjust at the margin, the less valuable is the union’s “exclusive” bargaining right.⁵⁴

Unions with smaller memberships (a proxy for low monitoring costs), those in states lacking right-to-work laws, those having *no-raid* agreements with potential rivals, those whose employers have little or no market power in the labor market, and those that control employer hiring through a hiring

⁵⁰ *Id.* at 111-15.

⁵¹ Martin reports that some crafts unions, as well as Pacific Northwest longshore unions and lumber co-ops have come close to issuing individually transferable memberships. *E.g., id.* at 57. Note, also, that under the NLRA striking workers generally have a right to their jobs back once a collective bargaining agreement has been reached. 29 U.S.C. § 158(d) states:

Any employee who engages in a strike within any notice period specified in this subsection, or who engages in any strike within the appropriate period specified in subsection (g) of this section, shall lose his status as an employee of the employer engaged in the particular labor dispute, for the purposes of sections 158, 159, and 160 of this title, but such loss of status for such employee shall terminate if and when he is reemployed by such employer.

⁵² If incumbent union members have full proprietary rights, the cost of joining the union will approach the capitalized value of the union rents new entrants expect to capture in the form of premium wages and other benefits.

⁵³ In the past, according to Martin, discrimination occurred on the basis of race, sex, and family connections. MARTIN, *supra* note 36, at 36. Although race and sex discrimination is now prohibited, it must surely be true that unions discriminate in favor of applicants who signal their committed to union solidarity.

⁵⁴ *Id.* at 48.

hall have stronger proprietary rights. In times past and in other countries, closed shops also can be seen an indicator of strong proprietary rights.

Although Martin recognizes the problem posed where union management has leeway to exercise discretion, his analysis fails to fully account for the role of agency costs in union operations. At one extreme is a union in which the collective body has strong proprietary rights and faces low agency costs in monitoring and constraining its officers and staff. Compared to others, these unions will tend to maximize the present value of rents they can extract from the labor market. With strong proprietary rights but low agency costs, the rank and file will capture a substantial share of union rents. But even the most proprietary of such unions fall well short of providing the rank and file with transferable ownership rights. Predictably, workers will refrain from making certain long-lived workplace investments whose benefits are sufficiently distant because they are unable to capture the full capital value. This explains why mutually beneficial explicit or implicit contracting between the union and the employer to reduce the inefficiencies from unionization is limited; contracting and incentive-compatible organization involves capital investment.

Between the extremes are unions in which the collective body has weak proprietary rights but faces low agency costs and unions in which the collective body has strong proprietary rights but faces high agency costs. At the other extreme are unions in which the collective body holds weak proprietary rights and faces high agency costs in monitoring and constraining the officers and staff.

Where agency costs are high, the union officers and staff will capture a larger *share* of rents regardless of the strength of proprietary rights and larger *total* rents where proprietary rights are strong. In some cases the rank and file may be left only slightly better off than in the absence of a union. As Martin puts it, “[a]s long as some *critical* number of members are permitted to keep some *epsilon* of income above their *opportunity costs*, the leadership can maximize its wealth by appropriating the residual associated with a policy of collective rent maximization.”⁵⁵ I show below that this is an accurate characterization of multiemployer pension plans.

III. THE ECONOMICS OF IMPLICIT PENSION CONTRACTING

A. *Legal and Institutional Background*

1. *An Overview of Private-Sector Retirement Plans*

National labor market legislation began during the New Deal with the

⁵⁵ *Id.* at 28 (emphasis in original).

1935 passage of the NLRA, also known as the Wagner Act.⁵⁶ This legislation established the right of workers to organize and to act in concert for their mutual aid by providing a statutory labor exemption from the antitrust laws while imposing on employers a duty to engage in good-faith collective bargaining. It also established various unfair labor practices to be enforced by the NLRB and democratic procedures by which the NLRB certifies a union as the exclusive bargaining representative of a labor unit. In 1947 Congress passed the Taft-Hartley Act⁵⁷ over a presidential veto, amending the NLRA to prohibit perceived labor abuses such as jurisdictional strikes, wildcat strikes, solidarity or political strikes, secondary boycotts, secondary and mass picketing, closed shops,⁵⁸ and money donations by unions to federal political campaigns.⁵⁹ It also gave states the power to pass right-to-work laws that prohibit union shops⁶⁰ and prescribed the framework for multiemployer pension plans.

Private-sector employer-provided retirement plans have been around since at least the nineteenth century, but their use in the United States accelerated during and after World War II with the federal government's imposition of wartime wage and price controls. Unable to increase wages in the face of high labor demand during the war, employers began offering workers so-called "fringe benefits" in the form of welfare (health care) and pension (retirement savings) plans. IRS rulings that employer contributions to pension trust funds were exempt from corporate profits taxes and taxed as ordinary individual income only when distributed as retirement benefits gave strong impetus to all parties to take advantage of these plans.

In response to bankruptcy during the 1960s of several large manufacturers whose defined benefit pension funds were severely underfunded, Congress passed ERISA in 1974⁶¹ to establish minimum ten-year cliff vesting of actuarial benefits, to ensure increased funding of private-sector single-employer plans on a going-forward basis, and to

⁵⁶ National Labor Relations (Wagner) Act, Pub. L. No. 74-198, 49 Stat. 449 (1935) (codified as amended at 29 U.S.C. §§ 151-69).

⁵⁷ Pub. L. No. 80-101, 61 Stat. 136 (1947) (codified in scattered sections of 29 U.S.C.).

⁵⁸ A closed shop is one in which all covered workers must be union members on their date of hire and thereafter.

⁵⁹ See generally Mark Gruenberg, *Taft-Hartley Signed 60 Years Ago*, POLITICAL AFFAIRS (June 14, 2007) <http://www.politicalaffairs.net/taft-hartley-signed-60-years-ago/> (discussing the changes which the Taft-Hartley Act made to the NLRA).

⁶⁰ A union shop is one in which all covered workers must join the union within a certain period after their date of hire and retain membership thereafter.

⁶¹ Pub. L. No. 93-406, 88 Stat. 829 (codified as amended in scattered sections of 29 U.S.C.).

impose on plan sponsors a fiduciary duty to participants and the plan itself.⁶² The Act requires the plan to provide covered workers with plan summaries, and it mandates reporting to the Department of Labor through Form 5500 filings.⁶³ It limited to ten percent of plan assets the amount a plan can invest in the employer's stock. Title IV of ERISA created the Pension Benefit Guaranty Corporation ("PBGC") to provide insurance for participants in terminated underfunded single-employer plans and interim loans to underfunded multiemployer plans. ERISA also prescribes the procedures an employer must follow to terminate its plan.⁶⁴

Prior to ERISA's regulatory funding mandates there was no necessary reason an employer had to fund its pension liability by making pre-tax contributions to a retirement trust.⁶⁵ In fact, however, many employers voluntarily set up and contributed to pension trusts as a way to finance their pension promises, although they rarely fully funded them. One reason for making contributions is to demonstrate the credibility of the pension promise. Another is that contributions come out of pre-tax corporate income and accumulate based on investment performance free of corporate or personal income taxes. To the extent the firm underfunds the pension trust it must save the earnings to meet retirement liabilities outside the trust from current earnings, and these earnings are subject to a substantial corporate income tax.⁶⁶ Since tax benefits increase with funding levels, the question is why employers forgo the benefits of tax savings by underfunding in the absence of a regulatory mandate to do so. There must be some offsetting cost from full funding. Section IIB-2 addresses this issue.

Related benefits found in defined benefit plans include advantageous methods of calculating the final average wage, the absence of service caps, payment of a lump-sum distribution in lieu of an annuity, a joint surviving spouse option, cost-of-living allowances for retirees, early retirement

⁶² Most notorious was the bankruptcy and plant closing of the Studebaker Corporation, which left nearly 7000 workers with 15 percent or less of their vested pension benefits. James A. Wooten, "The Most Glorious Story of Failure in the Business": The Studebaker-Packard Corporation and the Origins of ERISA, 49 *Buff. L. Rev.* 683, 726-733 (2001) (describing the Studebaker bankruptcy as a focusing event for pension legislation). See also John W. Thompson, *Defined Benefit Plans at the Dawn of ERISA*, U.S. Bureau Of Lab. & Stat. (Mar. 30, 2005), <http://www.bls.gov/opub/cwc/print/cm20050325ar01p1.htm> (summarizing a BLS analysis of major provisions of a sample of defined benefit plans in private industry as they existed prior to ERISA).

⁶³ Pub. L. No. 93-406, tit. I, 88 Stat. 829, 829.

⁶⁴ See generally Ippolito, *supra* note 6, at 86.

⁶⁵ *Id.* at 112, 116.

⁶⁶ See generally IPPOLITO, *supra* note 31 (empirically investigating the economic effects of pension contracting).

benefits, disability benefits, pre-retirement death benefits, and access to supplemental 401(k) plans.

2. *Single-employer Defined Benefit Plans*

Single-employer defined benefit plans are the original form of employer-provided retirement plan—historically known simply as “pensions”—in which the employer promises its workers an annuity beginning on retirement, normally at age sixty-five.⁶⁷ Single-employer plans occur in both unionized and nonunionized firms. Where the employer’s labor force is unionized, the management bargaining unit is the employer. Labor law legislation notwithstanding, plan terms, the structure and generosity of the retirement annuity, and the structure, provision, and generosity of related benefits are the subject of explicit contracting between the union and employer where the workforce is unionized. Where the workforce is not unionized, they are the subject of employer policy guided by labor market competition. In single-employer plans, the pension is typically equal to a percentage generosity factor multiplied by years of service, all multiplied by the final average wage at retirement.⁶⁸ If s is the the generosity factor (normally around 1.5 to 2.0%), R = years of service (and age at retirement assuming the start date to be age zero), and W_R = the final average wage, the annuity value of the pension on retirement is roughly as follows:

$$A = sRW_R.$$

By way of example, if the generosity factor, s , is .015, years of service, R , is forty-five, and the final average wage is \$50,000, the retired worker receives an annuity from age sixty-five until death equal to \$33,750 per year. In practice, this amount would normally be paid out in monthly installments of \$2,812.50.

An important attribute of defined benefit plans is that workers bear none of the residual risk from the investment performance of their pension trust accounts. Instead, the employer bears the investment risk. If the account performs well, the amount of the employer’s earnings saved outside the trust that must be devoted to meeting the fixed pension promise declines. If it performs poorly, the employer must make up the difference from outside the trust.⁶⁹ Ordinarily, a worker who terminates employment with a

⁶⁷ For more information on single-employer defined benefit plans, see generally IPPOLITO, *supra* note 31.

⁶⁸ Final average wage can be determined in any number of ways. It might be the average of the last three or five years of service, or in some cases the average of the highest three years of wages.

⁶⁹ The employer also bears longevity risk resulting from retired workers under-living

plan sponsor or suffers a voluntary break in service loses all unvested retirement benefits. The employer is not required to pay vested pensions until the employee reaches retirement age. What is more, employers are free at any time to terminate defined benefit plans that meet regulatory full funding rules for vested benefits and other requirements. Because these funding mandates ensure only actuarial, and not real or “economic,” full funding, termination can impose a substantial capital loss on covered workers.⁷⁰

One loss from which the pension promise does not insulate workers in traditional single-employer plans is employer insolvency. Employers who terminate their plans with insufficient assets to fully fund their pension liabilities sometimes leave their workers with only a fraction of their expected retirement benefits. Pension insurance through the PBGC now partially guarantees retirement benefits. In single-employer plans the maximum guarantee is \$54,000 per worker.⁷¹

3. *Multiemployer Defined Benefit Plans*

Multiemployer pension plans are typically the result of collective bargaining between a local, national, or international labor union and an organized group of employers in a given industry. To reach agreement on wages, hours, working conditions, and terms of the multiemployer pension plan, the employers form a multiemployer bargaining association. One rationale for multiemployer bargaining is that it allows employers to represent their common interests while avoiding “whipsaw strikes” and other allegedly coercive union tactics.⁷² Another is that they allow workers flexibility to switch employers as circumstances warrant within the multiemployer association without suffering a break in service and loss of

or outliving their actuarial life expectancy implicitly accounted for in the pension generosity parameter.

⁷⁰ Ippolito, *supra* note 6, at 102-105. Recall that W_R is the wage the worker earns at or near retirement. Assuming wages grow over time, the wage a worker earns prior to retirement will be less than W_R , perhaps by a substantial amount. ERISA’s full funding mandates require the employer to fund the present value of retirement benefits based on the current wage rather than on W_R , and this is one source of the capital loss workers suffer from early termination. The incentive effects of this plan structure will be discussed in detail below, *infra* note 86 and accompanying text.

⁷¹ See PENSION BENEFIT GUAR. CORP., PENSION INSURANCE DATA BOOK 2009, at 15, 94 (2010), available at <http://www.pbpc.gov/docs/2009databook.pdf>.

⁷² See Anthony B. Sanders, *Multiemployer Bargaining and Monopoly: Labor-Management Collusion and a Partial Solution*, 113 W. VA. L. REV. 337, 345-46 (2011). A whipsaw strike occurs when a local union focuses its strike resources on a single industry employer at a time, with the expectation that once having been successful with one employer, the union will then strike another employer in the industry. One effect of whipsaw strikes is to encourage employers to bargain as a unit, leading to the formation of an multiemployer bargaining unit.

pension coverage.⁷³

A multiemployer bargaining association is a form of multilateral contract. By definition, multiemployer bargaining associations involve concerted action by competing employers, who enjoy both a statutory “labor” exemption from antitrust enforcement under the Clayton Act (1914) and a judicially defined labor exemption.⁷⁴ The Taft-Hartley Act establishes the statutory framework for multiemployer pension plans. This framework is described in a Bureau of Labor Statistics publication as follows:

A multiemployer plan must conform to section 302(c)(5) of the Taft-Hartley Act, which makes it illegal for employers to provide and union representatives to receive money or anything else of value. However, in the case of a multiemployer plan, a retirement trust fund is exempt from this section if: (1) Payments are held in trust; (2) the basis of payments is found in a written agreement; (3) labor and management have equal representation in administering the fund; (4) there is an annual audit; and (5) the fund is separate from other monies, and is used solely for providing pensions.⁷⁵

A board of trustees consisting of an equal number of members from bargaining unit employers and the union administers the plan. In contrast to the administration of single-employer plans, which are handled exclusively by the employer, multiemployer plans exhibit heavy union involvement and cohesion. As with all trustees, the members of the board have a fiduciary duty to act in the best interest of the plan and its beneficiaries, but this leaves plenty of leeway for union trustees to favor their own interests over employer or worker interests.⁷⁶

One feature of many multiemployer collective bargaining agreements is a most-favored nations clause assuring members of the association that new employers brought in mid-term during the collective bargaining agreement will not be given preferential treatment. Employers in an industry cannot be legally compelled to join a multiemployer bargaining unit, but, ostensibly to prevent free riding, employers that assent in advance are contractually bound to a majority-vote collective bargaining agreement

⁷³ Gentile, *supra* note 8, at 830 (indicating that even if the pension plan documents do not provide extended coverage ERISA prevents the trustees from ceasing to perform their benefit obligations).

⁷⁴ See, e.g., *Connell Constr. Co. v. Plumbers & Steamfitters Local Union 100*, 421 U.S. 616, 621-24 (1975) (stating that the basic sources of organized labor’s exemption from federal anti-trust laws are sections 6 and 22 of the Clayton Act as well as a non-statutory exemption from anti-trust sanctions recognized by the courts).

⁷⁵ Harriet Weinstein & William J. Wiatrowski, *Multiemployer Pensions Plans*, COMP. & WORKING CONDITIONS, Spring 1999, at 19, 21, available at <http://www.bls.gov/opub/cwc/archive/spring1999art4.pdf>.

⁷⁶ MARTIN, *supra* note 36, at 98-99.

with the union once bargaining begins.

For multiemployer plans the pension promise normally differs from single-employer plans. Multiemployer plans are seldom based on final average wage. Instead, they provide an annuity that is a constant function of R in no way dependent on the final average wage. The annuity value of the pension on retirement is

$$A = s'cR,$$

where s' is the *monthly* generosity factor (normally around three percent) and c is a constant dollar credit per year in service. If the dollar credit per year in service is \$1,000, the generosity parameter is .03, and the employee retires after forty-five years of service in the bargaining unit, then the monthly pension starting at age sixty-five would be \$1,350. In a competitive labor environment, pension annuities in multiemployer plans are a much smaller proportion of lifetime wages than in single employer plans. Even beyond that, however, by failing to tie pension values to the final average wage, multiemployer plans generally provide workers with modest retirement prospects compared to single-employer plans. In the absence of ad hoc adjustments to s' or c the pension annuity in multiemployer pension plans is subject to inflation erosion and lost real wage growth between the time workers earn pension credits and the time they retire because the annuity is independent of final average wage, which generally keeps up with inflation and real wage growth.⁷⁷

Although multiemployer plans are bargained-for contractual agreements between multiemployer bargaining unit employers and a local labor union, the agreements are heavily constrained by statutory and case law. In 1980, Congress specifically addressed the funding of multiemployer pension plans through passage of the Multiemployer Pension Plan Amendments Act.⁷⁸ The Act established guaranteed funding monitored by the PBGC, mandated multiemployer pension plan insurance premium payments to the

⁷⁷ It is common for multiemployer plans to establish reciprocity agreements with other plans also under the umbrella of a national union, with the application of the agreement having specific occupational and geographic scope. Administration of these reciprocity agreements can be costly, as they require account to be taken of transfers of workers' credit service between plans and often require actual transfers of funds or proration of benefits between participating plans. Where pension generosity, s' , differs between plans, the employer in the "temporary" plan is required to remit funds or provide credits equal to no more than the lesser of the pension contributions required by the least generous plan. This feature appears to be a form of most-favored-nations guarantee. See generally MAURICE E. McDONALD, *RECIPROCITY AMONG PRIVATE MULTIEMPLOYER PENSION PLANS* (1975).

⁷⁸ 29 U.S.C. §§ 1381-1453 (2006).

PBGC, established liability of employers for any unfunded pension obligations on termination, established five-year cliff vesting for pension increases that occur within five years before plan termination, and created joint-and-several liability for the employers remaining in a plan if a terminating employer is financially incapable of meeting its pension obligations.⁷⁹ Unlike single employer plans, in multiemployer plans the PBGC provides no insurance guarantee, only interim loans to insolvent plans up to \$19,000 per worker.⁸⁰

In 2006 Congress passed the Pension Protection Act (PPA)⁸¹ formalizing changes for multiemployer plans that had already appeared in the 2005 and 2006 budget acts.⁸² The PPA increased the minimum full funding level to eighty percent, increased the insurance premiums employers with underfunded plans must pay to the PBGC, enhanced plan disclosure to participants, raised the cap on the amount of company stock an employer can place in its own plan, and made it possible for employers to enroll workers automatically in their 401(k) defined contribution plans. The PPA required amendments to underfunded multiemployer plans to meet ERISA and IRS full funding rules.⁸³ It shortened from thirty to fifteen years the amortization of net liabilities (owing to past accumulated net liabilities, investment losses, or experience losses) required of underfunded plans to make catch-up contributions. It also established procedures for

⁷⁹ Any employer financially unable to meet its obligations leaves the remaining employers liable for its unfunded pension liability beyond any interim loan the PBGC might provide. This is known as “withdrawal liability.” See PENSION BENEFIT GUAR. CORP., *supra* note 71, at 6.

⁸⁰ Whereas the PBGC’s single-employer insurance program settles claims by taking over a plan’s assets and paying guaranteed benefits directly to the plan’s participants, the multiemployer program provides financial assistance to the insolvent plans themselves.

PBGC provides insolvent multiemployer plans with financial assistance sufficient to pay guaranteed benefits and administrative expenses. The plans retain the responsibility for paying benefits to retired plan participants and beneficiaries. PBGC does not pay benefits directly to participants of insolvent multiemployer plans. Should a plan recover financially, it is required to repay the financial assistance with interest. To date, only one multiemployer plan has repaid PBGC for the financial assistance it received.

Id. at 3. “[T]he benefit guarantee under the multiemployer program is based not on age but on years of covered service in the plan. A participant with 30 years of covered service, for example, is eligible for a maximum guaranteed benefit of \$1,072.50 a month, or \$12,870 per year, regardless of age.” *Id.* at 16.

⁸¹ Pension Protection Act of 2006. Pub. L. No. 109-280, 120 Stat. 780 (codified in scattered sections of 26 U.S.C. and 29 U.S.C.).

⁸² See OFFICE OF MGMT. & BUDGET, EXEC. OFFICE OF THE PRESIDENT, BUDGET OF THE UNITED STATES GOVERNMENT, FISCAL YEAR 2006, at 208-09(2005); OFFICE OF MGMT. & BUDGET, EXEC. OFFICE OF THE PRESIDENT, BUDGET OF THE UNITED STATES GOVERNMENT FOR FISCAL YEAR 2005, at 229-30 (2004).

⁸³ Pub. L. No. 109-208, §§ 201-04, 120 Stat. 780, 858-89 (2006) (codified in scattered sections of the U.S.C.).

underfunded plans to achieve five-year automatic amortization extensions and allowed them to receive funding waivers if, among other things, more than ten percent of the employers participating in the plan were unable to satisfy minimum funding requirements for the plan year without suffering financial hardship. The PPA also amended ERISA to liberalize cliff vesting at five years.⁸⁴

Beyond this, the PPA established a system for underfunded multiemployer pension plans to report the status of their plans. All multiemployer pension plans now fall into one of three color-coded categories. A plan's status is green if it is fully funded, yellow if it is "endangered" or "seriously endangered," and red if it is "critical," with status depending on the extent to which it is underfunded on both a current and ongoing basis.⁸⁵ Multiemployer plans that fall into the latter categories must establish funding improvement or rehabilitation schedules, limit their lump sum distributions, restrict benefit increases, subject other participating employers to surcharges for failure to implement a rehabilitation schedule, and provide specific disclosure of their funding status in Form 5500 filings.⁸⁶ Finally, and subject to certain requirements, the PPA allows participating employers with fewer than 500 employees in collectively bargained plans to establish "eligible combined" plans that include both defined benefit and defined contribution features, known as "DB(k) plans."⁸⁷

Two years after it passed the PPA, Congress passed the Worker Retiree and Employer Recovery Act ("WRERA")⁸⁸ in response to stock market declines that rendered the minimum funding provisions of the PPA excessively demanding.⁸⁹ WRERA allowed a multiemployer pension plan sponsor to temporarily "freeze" a plan's status for the first plan year beginning between October 1, 2008, and September 30, 2009. A plan that slipped from green zone status after having made the required WRERA election is allowed to defer implementation of its funding improvement or rehabilitation schedule for one year. A plan that slipped to critical red status after making the required WRERA election is allowed to defer implementation of its rehabilitation schedule for three years, and during

⁸⁴ 29 U.S.C. §1053(a)(2)(A)(ii) (2006). ERISA also sets up a phased system of minimum vesting.

⁸⁵ 29 U.S.C. § 1085 (2010 Supp.).

⁸⁶ 29 U.S.C. § 1085(e).

⁸⁷ 26 U.S.C. § 414(x) (2010 Supp.).

⁸⁸ Pub. L. No. 110-455, 122 Stat. 5036 (2008).

⁸⁹ See generally, JOINT COMMITTEE ON TAXATION, TECHNICAL EXPLANATION OF H.R. 7327, THE "WORKER, RETIREE, AND EMPLOYER RECOVERY ACT OF 2008," AS PASSED BY THE HOUSE ON DECEMBER 10, 2008 (2008) (providing detailed explanation of the legislation and its technical effects).

that period it is not required to limit lump sum distributions or subject contributing employers to underfunding surcharges.

4. *401(k) Defined Contribution Plans*

Workers in defined contribution plans bear investment risk but not employer insolvency risk. Rather than making a pension promise to workers in the form of a life annuity on retirement conditional on continued employer solvency, defined contribution plans simply make ongoing contributions to a trust on workers' behalf for the duration of his or her working life. Workers are free to self-direct their portfolio of securities investments within prescribed limits, and their retirement benefits generally vary with market rates of return. Because market rates of return tend to keep pace with inflation and wage growth over the long run, no indexing of retirement benefits to final average wage is necessary. Some employer-provided defined contribution plans such as TIAA-CREF and VALIC provide access to variable annuity life insurance contracts. Once benefits vest, defined contribution participants own their retirement account, which is at their discretion on retirement. If they want to invest their assets in a life annuity on retirement they are free to do so. Once vested (often immediately), defined contribution plans are fully portable.

In 1979 Congress amended the IRS Tax Code to create Section 401(k),⁹⁰ which, in addition to the employer contribution typical of defined contribution plans, allows workers to make voluntary pre-tax contributions, often with employer-matching contributions as a ratio of employee contributions up to some limit (currently \$17,000 for workers under fifty years of age) that are also tax deferred.⁹¹ Many employees take advantage of tax-deferred employer matching, but a substantial number do not. In essence, this permits the employer to offer a higher lifetime wage to those who select themselves for voluntary pre-tax contributions plus employer matching. In a later section I discuss the incentive this provides low-quality workers to quit at a higher rate than otherwise, leading to improvements in an employers' workforce efficiency.

Beginning in the 1980s, defined benefit plans declined as a percentage of the plan-covered workers. This was the result, in part, of regulatory changes that increased the administrative costs of smaller defined benefit plans and, in part, of the introduction and growth of 401(k) defined contribution plans. The greatest gains by defined contribution plans have

⁹⁰ 26 U.S.C. § 401(k) (2006).

⁹¹ See *401(k) Resource Guide – Plan Participants – Limitation on Elective Deferrals*, IRS, <http://www.irs.gov/retirement/participant/article/0,,id=151786,00.html> (last visited May 10, 2012).

been in small firms (those with fewer than 2,000 workers) and large, nonunionized manufacturing firms.⁹²

B. *The Economics of Implicit Pension Contracting*

1. *Single-employer Defined Benefit Plans*

In the last 30 years, labor economists have done a substantial amount of insightful work on the incentives employer-provided retirement plans provide. In contrast to early work that assumed these plans were simply savings vehicles designed to capture the advantages of tax deferral, the more recent work shows how the structure of retirement plans can enhance workplace productivity by providing the parties—both workers and employers—with efficient incentives. As a foundational point, in an undistorted competitive labor market with free entry and exit, the pension promise is not free to workers. The empirical economics literature on implicit pension contracting clearly shows that workers bear the burden of their retirement benefits by accepting lower cash wages during the term of their employment.⁹³ Workers earn a full wage at any given time that includes both their current cash wage and the present value of any credits they save toward their pension by foregoing some amount of current cash wage. Foregone wages cannot be directly observed and so must be estimated. Since pensions are not free, from the start of employment until death the capitalized value of future expected pension benefits must equal the capitalized value of foregone cash wages. Working backwards based on final wage and pension generosity, economists have been able to estimate the foregone cash wages (pension savings) necessary to make the capital accounts balance.⁹⁴

Foremost in the pension literature is the extensive work by Richard Ippolito. His work assumes employers and workers rationally maximize the discounted present value of future net income (possibly including any on-the-job benefits). This is equivalent to maximizing wealth.⁹⁵ As such, it is necessary to focus on capital values when assessing the parties' choices. This will often entail inter-temporal tradeoffs, with investments in workplace productivity being of primary concern.⁹⁶ In *Pension Plans and*

⁹² IPPOLITO, *supra* note 31, at 82.

⁹³ *See id.* at 10-17.

⁹⁴ *Id.* at 13; Richard A. Ippolito, *Efficiency with Costly Information: A Study of Mutual Fund Performance, 1965-1984*, 104 Q. J. ECON. 1, 18-20 (1989) [hereinafter *Efficiency with Costly Information*]; Richard A. Ippolito, *The Labor Contract and True Economic Pension Liabilities*, 75 AM. ECON. REV. 1031, 1032-33 (1985) [hereinafter *The Labor Contract*].

⁹⁵ *See generally* D. Bruce Johnsen, *Wealth is Value*, 15 J. LEGAL STUD. 263 (1986).

⁹⁶ In its simplest form, investment is simply the act of forgoing current consumption

Employee Performance: Evidence, Analysis, and Policy, (“*Pension Plans and Employee Performance*”) Ippolito hypothesizes that single-employer defined benefit plans reflect an implicit contract between the employer and workers.⁹⁷ Workers save for retirement by foregoing some measure of current cash wages in exchange for the promise of a pension annuity on retirement.⁹⁸ They expect to receive the capitalized value of pension savings (forgone cash wages) as retirement benefits, conditional on staying with the firm and retiring at the optimal age or range of ages. Among other things, single-employer defined benefit plans encourage high-quality workers—those having relatively low subjective discount rates—to join and stay with the firm until retirement. This ensures the parties can take full advantage of long-term workplace productivity investments, which allows the employer to pay workers an *indenture premium* sufficient to compensate them for their loss of job mobility.⁹⁹ Low-quality workers—who have relatively high subjective discount rates—are unwilling to forego current wages for distant pension benefits and will, instead, choose to work for firms that have no pension plan but pay higher cash wages, all else being equal. Since the employer cannot directly observe worker quality, merely having a defined benefit plan indexed to the final average wage, W_R , allows it to set up a system in which high-quality (long-tenure) workers self-select for employment and plan coverage based on private information about their own quality.¹⁰⁰

Even high-quality workers might have good reason to quit, which imposes costs on the employer. An obvious way to deter quitting is to impose vesting requirements. As Ippolito reports in *A Study of the Regulatory Effect of the Employee Retirement Income Security Act*, (“*The Regulatory Effect*”) prior to ERISA, nearly forty percent of all workers participated in pension plans in which benefits vested on retirement.¹⁰¹ The remaining sixty percent were subject to more liberal vesting requirements.¹⁰² Originally, ERISA mandated relatively liberal ten-year cliff vesting but has since moved to a five-year cliff vesting system.¹⁰³

Even assuming pension benefits vest immediately on the date of hire,

with the expectation of increasing future consumption by an amount sufficient to compensate for the delay.

⁹⁷ IPPOLITO, *supra* note 31.

⁹⁸ *Id.* at 10-29.

⁹⁹ *Id.* at 95-99. Workers with lower discount rates will exhibit lower absentee rates, higher investments in team production, greater willingness to train new workers, etc.

¹⁰⁰ *Id.* at 10-30.

¹⁰¹ Ippolito, *supra* note 6.

¹⁰² *Id.* at 86, 97.

¹⁰³ *Id.* at 86.

most single-employer defined benefit plans are set up to discourage workers from quitting prior to retirement. With some exceptions, ERISA mandates that employers fully fund all current *actuarial* pension liabilities but not all *economic* pension liabilities. Assume a worker begins employment at age zero, with retirement set at date $R = 45$. Let a denote years of service at any time between the worker's start date and retirement, with $a = R = 45$ corresponding to retirement. If the worker quits at any given time before retirement age he has a vested annuity collectable at R whose lump sum value on retirement is equal to

$$P = baW_a,$$

where W_a is his wage at time- a and b is a capitalized generosity parameter.¹⁰⁴ Because P will accrue only on retirement, at time- a it must be discounted to present value over $R - a$ time periods. Using discrete discounting, the present value of this lump sum at any time, a , is given by

$$P_{a^*} = baW_a \div (1 + i)^{R-a}.$$

This amount reflects the time- a present value of economic benefits the worker can expect to collect on retirement from quitting at time- a rather than at retirement age.

Comparing P to P_{a^*} reveals the effect of indexing retirement benefits to final average wage for a worker who stays with the firm until year-forty-five compared to one who quits early after, say, twenty-five years. This situation is depicted in Figure 4, where the horizontal axis measures time on the job, the right-side vertical axis in black measures the retirement-date value of the pension per year of credited service, and the left-side vertical axis in grey measures the time-25 present value of pension benefits to be received at time-45 by the early quitter. The curve bW_a indicates the value of the pension per year of credited service for any number of years from zero to forty-five. It increases at an increasing rate to reflect the effect of wage growth compounded at five percent.

Referring back to the numerical example from Section IIIA-2, the worker who retires after forty-five years with a final average wage of \$50,000 receives a pension per year of credited service equal to \$750.00

¹⁰⁴ Since annuity value never appears in Ippolito's formulation, it must be that capitalization of the annuity is imbedded in b . An unrealistic but easily understood way to capitalize s to arrive at b is to assume the worker lives forever on retirement, so that his or her pension annuity becomes a perpetuity. In this case b simply equals s/i . Ippolito states that using a capitalized generosity parameter is a simplification that leaves his results unaffected. *The Labor Contract*, *supra* note 94, at 1033 n.6.

(bW_{45}). Multiplied by forty-five years of service, the total yearly pension is $45 \times \$750.00 = \$33,750.00$ and is shown in Figure 4 by the light-shaded plus medium-shaded plus dark-shaded rectangles. The lump sum the early quitter can expect to collect in year forty-five after retiring in year twenty-five can be calculated using the formula for P , which is now equal to $25 \times .015 \times W_{25}$. Making the plausible assumption that wages grow at the nominal interest rate, i (assumed here to equal five percent), and working backwards from a time-45 wage of \$50,000, W_{25} must be \$18,850.¹⁰⁵ Plugging this wage into the formula for P yields a pension per year of credited service equal to $.015 \times \$18,850 = \282.75 . Multiplying by twenty-five years of service yields a total of \$7068.75, as shown by the shaded rectangle in Figure 4.

Because the worker must wait twenty years to collect this amount, its time-25 present value requires that it be discounted at $i = .05$ for twenty years to arrive at P_a . The curve $bW_{25} \div (1 + .05)^{20}$ shows the present value of \$282.75 for each year prior to time-45. It reflects the same effect of compounding as curve bW_a between years zero and twenty, but in this case we must work backward from time-45 to time-25. Based on discrete discounting, as of time-25 the worker values the pension at \$106.60 per year of credited service. Multiplying by twenty-five years yields a total of \$2,664.92, shown by the dark-shade rectangle in Figure 4.¹⁰⁶ This amount roughly meets the actuarial full funding requirement imposed by ERISA because contributions are sufficient to cover all current (the time- a present value of) liabilities evaluated at the current wage, based on actuarial assumptions about the appropriate discount rate and other factors.

The worker who stays with the firm until retirement faces an entirely different result on reaching his or her twenty-fifth year. Given the assumption that wages are likely to increase at the nominal interest rate, i , the economic benefit the worker accrues up to time- a , conditional on continuing to work until retirement age, is given by

$$P_a = baW_R \div (1 + i)^{R-a}.$$

This amount is simply identical to P (the undiscounted time- a annuity from above), however, because W_a is assumed to grow at the rate $i =$ five percent between time- a and time- R . The worker who stays on the job enjoys pension credits at the growing wage not only for future service but for past service as well. For the first twenty-five years of service the worker will receive a retirement-date pension per year of credited service

¹⁰⁵ The discount factor is .377. $\$50,000 \times .377 = \$18,850$.

¹⁰⁶ Again, the discount factor is .377. $\$7,068.75 \times .377 = \$2,382.16$.

equal to \$750.00 ($bW_R = .015 \times \$50,000$). Multiplying by twenty-five years yields \$18,750.00, shown by the medium-shades plus dark-shaded rectangles in Figure 4. Those who quit early forgo the advantage of a retirement-date pension whose accumulated credits are indexed between time-25 and time-45 to the actual wage. The time-25 difference in the present value of retirement benefits, $P_a - P_{a^*}$, is the capital loss the worker suffers from being terminated or quitting before retirement age. At plausible discount rates it can be substantial, in this case \$7,068.75 - \$2,382.16 = \$4,686.59. Note that economic full funding at time-25 requires the employer to place \$7068.75 in trust to cover future pension liabilities for workers expected to remain on the job until retirement age.

In *Pension Plans and Employee Performance*, Ippolito refers to $P_a (= P)$ as a high-quality or *stay* pension and P_{a^*} as a low-quality or *quit* pension.¹⁰⁷ To see why, it helps to recall that workers must pay for their pension benefits through forgone wages. If workers believe the employer is likely to terminate them or the plan in its entirety after vesting but before retirement, they will forgo wages of no more than necessary to fund a quit pension. That is, at any given time they will have contributed no more to their pension account in forgone wages than the present value of the retirement-date benefits they can walk away with if they are terminated or quit. If, on the other hand, workers believe the employer will fulfill its pension promise and they have no intention of quitting, they will forgo larger wages early on to fund a stay pension because this allows them to fully capture the benefits of tax deferral and a share of the productivity advantages of long tenure. A quit pension does not. Note that workers will not bind themselves to the firm for free. The employer must pay them an indenture premium consisting of a higher lifetime wage.

Empirically, the implicit contract theory predicts that if workers do not trust their employer to fulfill its promise they will invest only in quit pensions and their pension contributions will be back-end loaded; they will deposit forgone wages into their pension account at a low rate early-on and at an increasing rate as they approach retirement. If they trust the employer, however, they will invest in a stay pension and contribute more in the early on. Their pension contributions should then be level over their working life with the firm and roughly equal to b , the pension generosity parameter. What is more, if they trust their employer and invest in a stay pension the capital loss they stand to incur if they are terminated or quit will be substantial, while if they invest only in a quit pension they suffer no capital loss if they voluntarily quit. The implicit contract theory assumes workers trust their employer and predicts that quit rates in firms covered by

¹⁰⁷ IPPOLITO, *supra*, note 31, at 15, 21.

traditional single-employer defined benefit pensions will be substantially lower than in firms with no pension coverage. If workers invest only in quit pensions, however, there should be no observable difference in quit rates across workers in firms with and without pension coverage.¹⁰⁸ The evidence clearly demonstrates that workers in firms covered by single-employer defined benefit plans contribute over their working life at a constant rate and that quit rates are substantially lower than in similar firms that have no pension plan.¹⁰⁹ The evidence strongly fails to reject the implicit contract theory and suggests that workers in single-employer plans rationally invest in stay pensions.¹¹⁰

Many plans offer the option of early retirement, in essence specifying an age range over which workers can choose to retire without having to bear a late retirement penalty. During this period, often ages fifty-five to sixty-five, the plan adjusts pension benefits in an economically fair way that leaves the worker's wealth unaffected. This adjustment must take into account the worker's longer expected retirement annuity through a reduction in pension generosity as a function of final average wage or a recalculation of final average wage.

2. *The Regulatory Effects of ERISA*

When asked to explain the underlying purpose of major legislation such as ERISA, an economist's first job is to ask what market failure the legislation might have been designed to correct. Absent a plausible market failure, it may be that the legislation is motivated by interest group rent seeking that requires a public choice or political economy explanation. In *The Regulatory Effect*, Ippolito uses the model of implicit pension contracting to assess whether ERISA had the effect of correcting a market failure.¹¹¹ He proposes the following hypotheses: First, as suggested by

¹⁰⁸ *Id.* at 23.

¹⁰⁹ *Id.* at 16.

¹¹⁰ Another prediction of the implicit contract theory of pensions is that they are likely to discourage workers from staying with the firm too long. Past some point workers' physical and mental capacities diminish and they are more prone to absenteeism. These costs must be borne in part by co-workers and the firm. Most defined benefit plans address the problem of workers who might stay on the job inefficiently long by capping benefits in some way. The lump sum pension formula might be specified with a maximum value of R , in which case pension benefits are frozen beginning at R . Past R , say, 45 years, an additional year of service will add nothing to the lump sum value of the retirement annuity. The worker not only loses the additional year-of-service in the benefit equation but, assuming his decision to continue working past age 65 in no way affects his life expectancy (the duration of his annuity), he also loses one year of retirement benefits. The implicit wage tax from working past R can be as much as 30 percent of the yearly wage and can be seen as the penalty for late retirement. *Id.* at 12.

¹¹¹ Ippolito, *supra* note 6.

press accounts and public rhetoric leading to its passage, ERISA might have been a response to employers' opportunistic termination of loyal workers. Prior to ERISA, what would have prevented an employer from negotiating a low wage in exchange for a generous pension promise and then defrauding workers by firing them before retirement or altogether terminating the pension plan somewhere down the road? In this hypothetical, pre-ERISA myopic workers fail to recognize the employer-fraud problem and invest in stay pensions, only to lose the benefits down the road on early termination. The full funding mandates Congress built into ERISA might have been a method of ensuring that workers received their expected pension benefits going forward.

Second, pre-ERISA workers may have been fully informed, recognized the employer-opportunism problem, and reacted to protect themselves by investing only in quit pensions, inefficiently foregoing the full benefits of tax-deferred savings and the incentive for productivity investments. This hypothetical represents a low-quality equilibrium that regulation could conceivably repair by ensuring the enforcement of any implicit pension promise. ERISA's full funding mandates did this, the story goes, by ensuring that employers had more to gain by honoring the implicit contract than by engaging in opportunistic termination. If so, it would have encouraged workers to efficiently invest in stay pensions and to take full advantage of tax-deferral and the productivity gains from long tenure.¹¹²

In *The Regulatory Effect*, Ippolito finds no empirical support for the hypothesis that ERISA had the effect of correcting either of these hypothetical market failures.¹¹³ Following the first hypothetical, if workers were uninformed and subject to employer fraud, and ERISA effectively prohibited fraud by mandating full funding, then the effect of ERISA should have been a reduction in cash wages and employment in pension-intensive industries.¹¹⁴ This situation is depicted in Figure 5. Employers' weekly demand for labor is shown by D , while $MC_{CASH} + B$ shows workers' willingness to supply labor for cash wages assuming they believe the employer will fulfill the pension promise, equal in value to B . MC_{CASH} shows their willingness to supply labor based on the observable cash wage. By hypothesis, secretly knowing they would likely renege on the pension promise, employers would have paid W^1 and used L^1 units of labor per week, where MC_{CASH} intersects D , because labor is less costly than workers believe. With the passage of ERISA, employers would have had to pay the full wage as promised according to $MC_{CASH} + B$, and would have cut back

¹¹² *Id.* at 87-92.

¹¹³ *Id.*

¹¹⁴ *Id.* at 92-98.

on their use of labor from L^1 to L^2 . At the same time, cash wages would have declined from W^1 to W^2 owing to the reduction in employment from L^1 to L^2 , with the full wage being $W^2 + B$. The data clearly shows, however, that employment remained steady following ERISA and, if anything, real wages drifted upward.¹¹⁵ Pre-ERISA, moreover, employers intending to engage in pension fraud would have been observed engaging in involuntary termination of unvested workers. The data in no way suggest this occurred. Nor did ERISA appear to materially increase the rate of defined benefit plan terminations—which might be expected because it surely increased the cost of using defined benefit plans—or the use of defined contribution plans.

Following the second hypothetical, if workers were informed pre-ERISA they would have foreseen employer fraud and invested only in quit pensions. We should then expect to have seen back-end loaded pension savings rates and quit rates similar to those in non-pension firms. The evidence squarely contradicts the hypothesis that the labor market was in a low-quality equilibrium. What is more, the effects of the passage of ERISA are inconsistent with a low-quality equilibrium. If ERISA made pension promises enforceable that were otherwise unenforceable, it should have led to a dramatic rise in defined benefit plans to allow employers and workers to capture the efficiencies of tax deferral and productivity gains from long tenure. It did not.¹¹⁶

It might appear that ERISA's vesting requirements reduced the potential for employer abuse of unvested workers by imposing maximum ten-year cliff vesting and mandatory full funding rules. The problem is that ERISA mandated *actuarial* full funding, not economic full funding. Recall that the difference between actuarial and economic full funding results from wage growth, to which single-employer years of service credits are indexed. Assuming a nominal interest rate (and wage growth) of five percent, a worker terminated at age $a = 25$ must wait until age $R = 45$ to collect benefits and loses roughly sixty-two percent of his or her pension. ERISA's mandate of actuarial rather than economic full funding did little to protect workers from abusive terminations. By allowing employers to terminate pension plans at any time as long as all actuarial obligations are fully funded, workers' pensions could fall far short of what they expect from a stay pension. In many cases before and after ERISA, employers funded their pension plans well in excess of that necessary to meet actuarial obligations. Had ERISA been designed to prevent abusive terminations, it would have mandated that any funding in excess of actual obligations

¹¹⁵ *Id.* at 94.

¹¹⁶ *Id.* at 92-97.

would not revert to the employer on termination and that employers must provide full economic funding of expected benefits going forward. It did neither. As Ippolito reports in *The Regulatory Effect*, “[i]n 1965 . . . terminations imposed a capital loss on workers equal to approximately 20 percent of expected benefits; in 1970, 40 percent was lost; in 1980, 50 percent.”¹¹⁷

If, as the evidence indicates, ERISA did not have the effect of correcting labor market failures, exactly what did it do? In *The Regulatory Effect*, Ippolito finds the political economy story compelling.¹¹⁸ He argues that ERISA’s primary purpose was to affect rent transfers to politically powerful subgroups within the labor market, namely labor unions. The primary beneficiaries of PBGC insurance have been workers in underfunded single-employer plans whose employers faced high probabilities of insolvency.¹¹⁹ These workers, he found, were heavily concentrated in unionized firms. In his words, “virtually all systematic underfunding in private pension plans in the United States is attributable to underfunded plans covering unionized participants.” Through 1986, “almost 95 percent of [PBGC] monies have been claimed by union participants.”¹²⁰

The interesting question is why underfunding would be heaviest in unionized firms with single-employer plans. The answer relies on the implicit contract theory. The mirror image of employers’ opportunistic termination of their pension promises is opportunism by a well-organized union. Assume a pension plan is fully funded owing to a bargain between the parties of a specific wage and pension promise. What prevents the union from unexpectedly increasing its wage demands by threat of strike after the terms of the implicit pension contract are set, even if it imposes substantial bankruptcy risk on the employer? If the employer later becomes insolvent, union workers could get the benefit over the short term of premium wages and still collect their full pension benefits. At the margin, employer underfunding of full pension obligations serves to bond the union against such opportunistic conduct. The benefit of the underfunding bond must have offset the forgone benefits of greater tax deferral. With passage of ERISA and the provision of PBGC pension insurance, the bond disappeared and opportunistic wage demands by unionized workers in dying firms followed, with underfunded pension liabilities indemnified by U.S. taxpayers at-large. According to the

¹¹⁷ Ippolito, *supra* note 6, at 103.

¹¹⁸ *Id.*

¹¹⁹ *Id.* at 116-19.

¹²⁰ *Id.*

Congressional record, Ippolito reports in *The Regulatory Effect* that through their public statements and lobbying efforts the unionized “beneficiaries of the insurance identified themselves beforehand and played key roles in enacting the insurance title of ERISA.”¹²¹

Traditional, single-employer defined benefit pension plans, it seems, are not what they appear to be, namely mere retirement savings or tax deferral vehicles. Instead, they are efficient contracting devices designed to align worker and employer interests in enhancing workplace productivity. Nor is labor regulation what it seems. Rather than being a labor market protection measure, for example, ERISA’s main function was to transfer rents from taxpayers at-large to a concentrated and politically organized group of unionized workers.

3. *Defined Contribution Plans*

Defined contribution plans existed prior to ERISA’s passage but were popular primarily in smaller firms, no doubt owing to their lower administrative costs. In the mid-1980s their popularity began to increase markedly.¹²² In 1979, at least eighty percent of workers covered by an employer-sponsored retirement plan were members of defined benefit plans.¹²³ By 1996 participation was down to fifty percent.¹²⁴ One explanation is a 1987 change to the IRS Tax Code imposed by the Omnibus Budget Reconciliation Act (“OBRA”),¹²⁵ which placed additional restrictions on the extent to which employers offering defined benefit plans could fund their expected pension liabilities. Under ERISA, employers could fund one hundred percent of “ongoing liabilities,” which is identical under plausible assumptions to the notion of economic full funding. The OBRA imposed the additional restriction that funding is limited to 150% of actuarial liabilities.¹²⁶ To the extent the OBRA limit is binding, which it is likely to be as a workforce matures and actuarial and economic full funding converge, it restricts the advantages defined benefit plans offer in terms of tax deferral. No such restriction exists for defined contribution plans.

In *The Regulatory Effect*, Ippolito shows that the trend toward defined contribution plans was underway well before the passage of OBRA.¹²⁷ One

¹²¹ *Id.* at 120.

¹²² IPPOLITO, *supra* note 31, at 88.

¹²³ *Id.* at 79 (citing U.S. Department of Labor, *Pension Plan Bulletin*, No. 5 (1996), Table E5).

¹²⁴ *Id.* at 79.

¹²⁵ Omnibus Budget Reconciliation Act of 1987, Pub. L. No. 100-203, §§ 9301-9303, 101 Stat. 1330, 1330-43 (1987) (prior subsequent amendments).

¹²⁶ IPPOLITO, *supra* note 31, at 160.

¹²⁷ Ippolito, *supra* note 6.

plausible explanation with which the data are consistent is increasing administrative costs of defined benefit plans relative to defined contribution plans. The evidence shows that the market share of defined benefit plans declined most in the nonunion and small firm sectors for which the cost of administration per participant were likely to be greatest. Most of this change occurred not as a result of given employers switching from defined benefit to defined contribution plans but as a result of expansion in the share of workers in firms offering defined contribution plans.¹²⁸

An additional and compelling explanation for the rise of defined contribution plans was passage by Congress in 1979 of Section 401(k) of the IRS Tax Code.¹²⁹ Section 401(k) plans are a form of defined contribution plan, but they also allow voluntary employee contributions beyond the unconditional employer contribution, as well as conditional employer matching of employee contributions up to some limit. Like defined benefit plans, 401(k) plans are more than mere tax deferred retirement savings vehicles. They also have a positive effect on workplace productivity by selecting in favor of high-quality workers. In *The Regulatory Effect* Ippolito shows that a worker's choice to decline voluntary matching contributions is very likely associated with the worker having a high internal discount rate.¹³⁰ These are low-quality workers. All else being equal they are more likely to quit, which imposes costs on the employer and fellow workers, and once they do quit they are more likely to cash out their retirement account and bear the ten percent tax penalty rather than rolling the account into an IRA.¹³¹ Having a higher internal discount rate, the lump sum available to an extremely low-quality worker on quitting eventually becomes irresistible. Unlike defined benefit plans, which tend to screen out low-quality workers up front because retirement benefits are necessarily back-end-loaded, 401(k) plans weed them out after they are hired. Employer matching allows the employer to pay a higher wage to workers who voluntarily identify themselves as low discounters, i.e., high-quality workers.¹³²

The alternative to a system of worker self-selection is for the employer to engage in careful monitoring to identify worker quality up-front or after-hire. To the extent 401(k) defined contribution plans allow worker self-selection, the employer therefore saves on monitoring costs. In *The*

¹²⁸ *Id.* at 80-89.

¹²⁹ Revenue Act of 1978, 26 U.S.C. § 401(k) (2006).

¹³⁰ Ippolito, *supra* note 6.

¹³¹ IPPOLITO, *supra* note 31, at 120.

¹³² *Id.* at 129-139.

Regulatory Effect, Ippolito tests this hypothesis by assessing the likelihood those workers will be offered matching across different size firms and firms with different union/nonunion status.¹³³ Larger firms are likely to face higher monitoring costs than smaller firms and are therefore more likely to rely on a system of self-selection such as 401(k) matching than on monitoring. Unions, he notes, almost invariably push to reduce wage disparity and are therefore likely to oppose 401(k) matching programs.¹³⁴ Based on data from the Current Population Survey of 1988¹³⁵ he finds that large firms are thirteen percent more likely to offer 401(k) matching, and that firms with unionized workers are dramatically less likely to do so.¹³⁶ Accordingly, he fails to reject the hypothesis that 401(k) matching is a substitute for direct employer monitoring of worker quality. What is more, he finds a striking rise in wages with tenure in the presence of 401(k) matching. This is consistent with the hypothesis that wages rise within a cohort as the concentration of low discounters—high-quality employees—grows and workforce quality improves. These low-discounters bear the investment cost of self-selection early in their tenure and receive the benefit later in the form of higher wages.¹³⁷

C. *The Economics of Multiemployer Bargaining and Pension Plans*

1. *The Theory*

By allowing rival firms to coordinate horizontally, multi-employer bargaining increases participating employers' labor market power. With both the union and the employer bargaining unit having market power, the result is bilateral monopoly, for which the distribution of rents between employers and the union is economically indeterminate. It is widely recognized that in some settings unions prefer negotiating with a multiemployer bargaining unit to bargaining with the same employers separately, and in a large number of cases employers apparently prefer it as well.¹³⁸ One reasonable inference from this observation is that the transaction costs of separate collective bargaining negotiations outweigh any loss the union experiences from employers' added labor market power after taking into account any benefits the union might generate from

¹³³ Ippolito, *supra* note 6.

¹³⁴ IPPOLITO, *supra* note 31, at 131 (citing Richard B. Freeman, *Unionism and the Dispersion of Wages*, 34 INDUS. & LAB. REL. REV. 3, 3-24 (1980)).

¹³⁵ *Id.* at 131.

¹³⁶ *Id.* at 129-139.

¹³⁷ *Id.*

¹³⁸ See DAVID P. TWOMEY, LABOR AND EMPLOYMENT LAW: TEXT AND CASES 94 (Jack W. Calhoun, et al. eds., 14th ed. 2010); Douglas L. Leslie, *Multiemployer Bargaining Rules*, 75 VA. L. REV. 241, 268-69 (1989).

coordinating employers. Another is that there are transaction cost savings in the ongoing administration of collective bargaining agreements.

Transaction costs aside, the parties have several reasons to prefer multiemployer bargaining. First, participating employers may gain a measure of *product* market power and monopoly rents from the arrangement. Not only does the collective bargaining process require rival employers to meet and share information periodically, but administration of the multiemployer pension plan requires employers to engage in ongoing information sharing. Both facilitate tacit employer collusion. What is more, the joint and several liability employers face for pension trust obligations likely reduces their competitive zeal in both labor and product markets. The union may be able to extract some of the product-market rents from facilitating employers' tacit collusion under cover of labor's antitrust exemption. Second, especially for smaller defined benefit plans, per unit administration costs fall as the number of covered workers increases.¹³⁹ Third, multiemployer bargaining allows the union to expand the scope of wage uniformity within the local or regional industry. It is true that a multiemployer bargaining unit with a multiemployer pension plan gives workers the benefit of mobility within the industry, but with wages and other benefits uniform employers have neither the ability nor the incentive to compete for higher quality workers. The result appears to be a "no poach" policy among participating employers. Finally, because participating employers benefit from cooperating with the union, they have less to gain by monitoring union officials on behalf of workers compared to the single-employer setting. This situation is worsened by the collective action problem they face. Each employer will tend to rely on the others to do the monitoring because the benefits from monitoring accrue in common to all employers in the bargaining unit. Owing to high agency costs, union officers and staff will have more leeway than otherwise to capture the rents from unionization.

Union preference for multiemployer bargaining is no doubt further influenced by agency costs. An artifact of worker mobility within the bargaining unit is high agency costs in monitoring and constraining union officers and staff. This is because workers who move between employers have more difficulty establishing informative and effective relationships with co-workers and local representatives. Agency costs may also influence union preference for multiemployer pension plans. Even though administration costs decline with plan size, 401(k) defined contributions plans are far less costly to administer than defined benefit plans, and they

¹³⁹ Olivia S. Mitchell & Emily S. Andrews, *Scale Economies in Private Multi-Employer Pension Systems*, 34 *INDUS. & LAB. REL. REV.* 522, 526 (1981).

also have the benefit of allowing worker mobility.¹⁴⁰ Yet labor unions distinctly prefer pension plans, which yield private benefits of control for members of the union administration. As Martin points out:

If union managers administer union trust funds, they may and often do determine the interim uses of these funds and/or the financial institutions in which they will be kept. This is, literally, a valuable responsibility, one that can be made to increase the welfare of [union] managers either directly through pecuniary kickbacks from financial intermediaries or through favors, information, introductions to influential people, and other nonpecuniary rent diversions. But even if moral fortitude in managers is so great that such temptations are usually resisted, the salaries of officers—like the salaries of managers of large corporations—normally are positively correlated with the size of the union's assets, including trust funds, which they administer.¹⁴¹

A second reason unions prefer defined benefit plans to 401(k) plans may be that the former maintain wage uniformity across worker categories. Recall that in a 401(k) plan, employer matching is often conditional on the worker making a contribution. The high discounters often forgo the employer match, which allows the employer to pay low discounters a higher wage commensurate with their higher quality. This runs contrary to labor unions' revealed preference for wage uniformity, but absent unusual circumstances wage disparity is clearly in the best interest of the overall workforce.¹⁴² What is more, in 401(k) plans low-quality workers quit more frequently to gain the opportunity to liquidate their pension plans (even at a substantial tax penalty) and their departure gradually increases the productivity and average wage of the remaining workers.¹⁴³

¹⁴⁰ Administrative cost savings from 401(k) plans do not simply reflect a transfer of costs to workers in the form of management fees—at least not where contributions are invested in open-end mutual funds. Because these funds stand ready to issue and redeem shares at net asset value, competition between investors to capture fund returns ensures that investors can expect only normal returns, regardless of the level of management fees. Given two funds whose managers have identical stock picking skill, the fund with lower management fees will simply have larger assets under management to ensure identical expected returns for investors. Owing to competition between investors to capture open-end fund managers' stock picking returns, the fees the fund charges are irrelevant to investor returns. See D. Bruce Johnsen, *Myths About Mutual Fund Fees: Economic Insights on Jones v. Harris*, 35 J. CORP. L. 561, 590-95 (2010).

¹⁴¹ MARTIN, *supra* note 36, at 98.

¹⁴² It is possible that some amount of sorting by employers to identify worker quality is inefficient and that the union preference for wage uniformity reduces the inefficiency. The circumstances under which this effect might be substantial are narrow and unlikely to prevail in labor markets. See Yoram Barzel, *Some Fallacies in the Interpretation of Information Costs*, 20 J.L. & ECON. 291, 297-98, 298 n.16 (1977) (discussing inefficiencies associated with wasteful use of information where that knowledge neither affects resource allocation nor increases social product).

¹⁴³ IPPOLITO, *supra* note 31, at 135-37.

An important question is whether multiemployer pension plans reflect a high- or low-quality equilibrium. Recall that high-quality equilibrium is one in which workers face a capital loss from quitting or early termination. In the traditional single-employer setting, retirement benefits are indexed to the final average wage and the capital loss from early termination consists of lost wage increases the worker would have enjoyed between the termination date, a , and the expected retirement date, R . On their face, multiemployer pension plans depart from a high-quality equilibrium because pension benefits are a constant fraction of years of service rather than being indexed to the final average wage. Rather than being *stay* pensions they are *quit* pensions. This appears to be a necessary artifact of worker mobility across employers within the bargaining unit, as there is no way to coordinate a pension indexed to final average wage across multiple employers. To see this, refer back to Figure 4. Imagine a worker who stays with Employer 1 for the first twenty-five years of service and then switches to Employer 2, both of which follow the same pension formula. For his first twenty-five years of credited service he has accrued the right to collect \$282.75 per year on retirement. If he joins Employer 2 and his wage continues to grow as otherwise, on retirement Employer 2 will owe him \$750 per year for twenty years of credited service. In Figure 4 he has a right to collect a pension equal to rectangle A plus rectangle B, but he has no right to rectangle C, which is equal to \$750 - \$282.75 times twenty-five. Moreover, there is no way to set up a contract using the traditional single-employer pension formula that will provide him with rectangle C because neither employer will consent to making this payment. Surely Employer 2 will refuse to pay it because it is already obligated to pay \$750 per year of credited service, and Employer 1 will refuse to pay it because it is based, in part, on productivity improvements enjoyed by Employer 2. Responsibility for paying the worker rectangle C on retirement is simply non-contractible. That is exactly the point of a stay pension formula; it is designed to discourage quitting specifically by indexing the pension to the final average (and presumably growing) wage and thereby imposing a capital loss on workers from early termination.

The truth may be that multiemployer pension plans occur specifically in those industries in which there are few productivity gains from workers' long tenure with a single employer, so that implicit pension contracting of the sort found in the single-employer setting is unnecessary. Yet economic theory suggests that unionized workers may be poorly served by multiemployer bargaining and pension plans. Agency costs appear high specifically because of worker mobility. The same or greater worker mobility can be achieved at lower administrative cost with 401(k) plans, and it may also be that these plans can be used to enhance workplace productivity within the bargaining unit by self-selecting in favor of high-

quality workers. Union officers and staff have strenuously resisted adopting 401(k) plans as a replacement for multiemployer plans, even though their own plans often include a supplemental 401(k) option. All this suggests that in the multiemployer setting union officers and staff are only loosely accountable to the rank and file and are likely the primary recipients of the rents from unionization. A final question is whether there is evidence to support this inference.

2. *Cross Sectional Comparison of Pension Generosity*

This section addresses the distribution of union rents between union rank and file and union officers and staff in the multiemployer setting. Based on Form 5500, Collective Bargaining Agreements, and other filings with the U.S. Department of Labor, I rely on an informative compilation that calculates the monthly pension that would be paid to seven hypothetical union workers from each of two prominent unions.¹⁴⁴ For given current wage, it compares this pension to the pension they would enjoy if they were, instead, enrolled in the same plan their local or national officers and staff enjoy but earn the same current wage. The hypothetical workers are assumed to have retired at the end of 2008 and to be members of either the SEIU or the United Food and Commercial Workers (“UFCW”) union, both prominent unions in the multiemployer setting. Based on the same filings, this section discusses related nonpension benefits such as COLAs, early retirement options, death benefits, and so forth. It also compares the funding status of SEIU and UFCW worker plans to union officer and staff plans. Finally, it examines the generosity of non-union single-employer pensions.

Rank-and-file workers in multiemployer plans appear to receive quit pensions, while officers and staff appear to receive stay pensions, as in most single-employer plans. If stay pensions for union officers and staff are driven by competitive forces, it would be unsurprising that rank-and-file workers’ pensions fall somewhat short. Yet, though less than systematic, the evidence is striking in terms of the disparity it reveals between rank-and-file pension generosity and officer and staff pension generosity, especially for the SEIU. The driving empirical thrust of the analysis is to determine what, if any, inferences can be drawn about the distribution of union rents from evidence of relative pension generosity. The lack of competitive forces facing union officers and staff, the high agency costs of monitoring them, and the striking disparity of pension

¹⁴⁴ Author has based his analysis in the following sections upon data collected by Ted Phlegar from various U.S. Department of Labor filings. This database is on file with the author and *American University Business Law Review*.

generosity in their favor makes it difficult to reject the hypothesis that in the multiemployer setting they capture most of the rents from unionization.

a. *Service Employees International Union*

The SEIU is one of the largest labor unions in the world. Representing over 2.1 million workers in health care, property services, and public employment, as of 2010 it administered twenty-five private-sector multiemployer pension plans for over 150 local affiliates in the United States, Canada, and Puerto Rico.¹⁴⁵ As shown in Table III, the only single-employer plans it administers are the *SEIU Affiliates' Officers and Employees Pension Fund* and the *Pension Plan for Employees of SEIU* for local and national officers and staff. SEIU was one of the primary promoters in Congress of the Employee Free Choice Act, and is on record arguing that the Act would be the “ticket to the middle class” for the average American worker.¹⁴⁶

This analysis calculates pension benefits for seven hypothetical workers assumed to have worked a full career of forty-five years as SEIU members and retired at age sixty-five. It looks at what they would receive as a monthly pension retiring in 2008 based on the collective bargaining agreement negotiated for them by the SEIU or the relevant SEIU local. The analysis then calculates their monthly pension if, having the exact same earnings and time in service, they enjoyed the same pension as SEIU officers and staff.¹⁴⁷ It also examines what they would receive in pension benefits if they were age fifty with thirty years of service and could take advantage of the unreduced, unpenalized early retirement option available to SEIU officers and staff but unavailable to the rank and file.¹⁴⁸ The exposition begins by showing two hypothetical workers of the seven for which analyses were conducted. Full results are summarized in Table I. The comparison reveals that the hypothetical workers' pensions fall far

¹⁴⁵ See *Fast Facts*, SERVICE EMP. INT'L UNION, <http://www.seiu.org/our-union/> (last visited Apr. 14, 2012); Table III, database compiled by Ted Phlegar (on file with *American University Business Law Review*).

¹⁴⁶ See Massachusetts AFL-CIO, *FYI: John McCain Opposes the Employee Free Choice Act*, SEIU LOCAL 615, http://seiu615.wtf.localsonline.org/politics/FYI_John_McCain_Opposes_the_Employee_Free_Choice_Act.aspx (last visited Apr. 14, 2012) (reporting that John McCain is against the Employee Free Choice Act and that SEIU Local 615 is for the Act).

¹⁴⁷ Note in discussion of ancillary benefits that union officers and staff are not required to pay dues.

¹⁴⁸ These calculations use the Collective Bargaining Agreement's minimum contracted wage for the position examined. It is reasonable to presume that in actuality a worker who retires after a 45-year career would earn a higher wage than the minimum. If actual wages were used, the resulting annual earnings would be higher and the pension differences would be greater than what is contained herein.

short of those enjoyed by SEIU officers and staff.

Pension premiums for officers and staff as a percent of member pensions range from a low of eighty-five percent to a high of four hundred percent. Not only do SEIU rank and file fall short in their pensions, but they also fall short in whether they qualify for early retirement, in what happens if they are injured and permanently disabled, in cost-of-living allowances, in what happens to their family if they pass away or are killed before they reach retirement age, and in their access to supplemental 401(k) coverage. By way of example, a disabled SEIU officer or staff member receives the full pension benefit they have earned to date without reduction for early retirement, and they continue to accrue pension credit for each year on disability with an automatic seven percent annual increase in their final average wage. Rank-and-file plans normally subject disabled workers to early retirement reductions and freeze accrual of service credits at the date of disability. What is more, the surviving spouse of SEIU rank-and-file worker who dies before retirement must wait until the worker's earliest retirement date to receive any benefits, which are subject to early retirement reductions. The surviving spouse of a union officer or staff member covered by an SEIU plan receives an immediate death benefit equal to two years' worth of the decedent's accrued benefit regardless of his or her age at death, with these benefits extending until the youngest child's 18th birthday where applicable.

Hypothetical Worker 1: Cleaning Foreperson, Downtown Los Angeles

Under the prevailing SEIU local collective bargaining agreement,¹⁴⁹ the Cleaning Foreperson's employer would have made an agreed \$0.35 per hour contribution to the *SEIU National Industry Pension Fund* on his or her behalf.¹⁵⁰ Given a standard work year of 2,080 hours, this amounts to an annual contribution of \$728.00. According to the bargaining agreement, the worker retiring in 2008 is entitled to a monthly benefit of 3.0% of all employer contributions from 1963 through 2004 plus 2.7% of all employer contributions from 2005 through 2008.¹⁵¹ His monthly pension is as follows:

¹⁴⁹ Labor Relations Agreement: Maintenance Contractors Agreement May 1, 2003 through April 30, 2008, SEIU Local 1877, AFL-CIO, CLC-"Employer", May 1, 2003, available at <http://www.dol.gov/olms/regs/compliance/cba/pdf/cbrp1127.pdf>.

¹⁵⁰ *Id.* at 75-76.

¹⁵¹ Recall from above the *annuity* formula $A = s'cR$. Denote the monthly pension, M^m , as equal to $A/12$ and the monthly generosity factor, s^o , as equal to $s'/12$. The worker receives a *monthly* pension of $M^m = s^ocR$, where c is the dollar credit per year of service and R is the number of years of service. In this case, s^o differs between years zero and 42 and years 43-45 owing to an ad hoc downward adjustment in the bargaining agreement.

$$\begin{aligned} & \$728.00 \times 3\% \times 42 \text{ years} = \$917.28 \\ & + \$728.00 \times 2.7\% \times 3 \text{ years} = \$58.97 \end{aligned}$$

$$\text{Total monthly pension} = \$976.25$$

According to *SEIU's National Industry Pension Fund's* annual Form 5500 filing,¹⁵² this amount remains fixed. There is no COLA. It does not matter what wage the worker earns on retirement or how much the wage has grown; his pension is tied to the fixed contribution rate. What is more, the worker must retire at age sixty-five for a full pension.¹⁵³ According to plan documents, if he retires at age fifty-five he would suffer a sixty percent reduction in his pension (roughly a six percent penalty for each year under age sixty-five).¹⁵⁴

What would this Cleaning Foreperson earn if he was in either the *SEIU Affiliates' Officers and Employees Pension Fund* or the *Pension Plan for Employees of SEIU*? Unlike the pension plan for the rank and file, the plan for SEIU officers and staff bases the monthly pension on final average wage. As the worker's wage increases, so does his pension. If wages increase at roughly the nominal interest rate, following Ippolito in *The Regulatory Effect*, SEIU officers and staff enjoy inflation protection and real wage growth between the date on which their service credits accrue and the date on which they retire, unlike the rank and file.¹⁵⁵ The yearly generosity factor for SEIU officers and staff is 2.5% of final average wage during the highest three earning years, which are normally the last three years before retirement. The generosity factor times final average wage times years of service determines the yearly pension, which is divided by twelve to determine the monthly pension. A Cleaning Foreperson's minimum wage rate in the downtown Los Angeles area on May 1, 2003, was \$9.65 per hour.¹⁵⁶ Determination of his final wage in 2008 and his final average wage as of 2008 requires adjustment based on the following wage increases as found in the collective bargaining agreement.¹⁵⁷

¹⁵² Ted Phlegar, personal database (on file with *American University Business Law Review*).

¹⁵³ *Id.*

¹⁵⁴ *Id.*

¹⁵⁵ Ippolito, *supra* note 6.

¹⁵⁶ Labor Relations Agreement: Maintenance Contractors Agreement May 1, 2003 through April 30, 2008, SEIU Local 1877, AFL-CIO, CLC-"Employer", *supra* note 149, at 73.

¹⁵⁷ Labor Relations Agreement: Maintenance Contractors Agreement May 1, 2003 through April 30, 2008, SEIU Local 1877, AFL-CIO, CLC-"Employer", *supra* note 149, at 74.

Year	Jan 1 st Hourly Wage	May 1 st Increase	Annual Earnings
2005	\$9.90	\$0.20	\$20,592.00
2006	\$10.10	\$0.25	\$21,008.00
2007	\$10.35	\$0.40	\$22,360.00
2008	\$10.75		
Final Average Wage			\$21,320.00

Using this final average wage, the Cleaning Foreperson's monthly pension calculated under either SEIU officers and staff plan for those retiring at age 65 would be $.025 \times \$21,320.00 \times 45 \div 12 = \1998.75 . This reflects a premium of 105% above what the worker earns as a rank-and-file member. It also equal to 112.5% of the final average wage, itself. If the worker was to take advantage of the early retirement available to officers and staff, the monthly pension would be $.025 \times \$21,320 \times 30 \div 12 = \1332.50 . Owing to COLA coverage for officers and staff, following retirement the Cleaning Foreperson's pension would grow by 1.5% per year if he were an officer or staff member of an SEIU local and by three percent per year if he were an officer or staff member of SEIU International.

Hypothetical Worker 2: Surgical Support Specialist, Abbott Northwestern Hospital, Minneapolis

The collective bargaining agreement between the SEIU Local 113 and Abbott Northwestern Hospital of Minneapolis covers parking cashiers, dietary aids, housekeepers, parking attendants, couriers, yard persons, nursing assistants, transport aides, materials handlers, equipment processors, operating room instrument processors, drivers, surgical support specialists, anesthesia aides, cooks, warehouse workers, maintenance personnel and other hospital personnel.¹⁵⁸ It treats all covered workers identically. It requires the employer to make contributions to the *Twin City Hospital Workers Pension Fund* of \$0.35, \$0.40, and \$0.47 per hour per worker for each of the three years of the contract.¹⁵⁹ The *Twin City Hospitals Pension Plan for Licensed Practical Nurses* provides workers with a pension beginning at age sixty-five.¹⁶⁰ Rather than being a

¹⁵⁸ Labor Relations Agreement: Collective Bargaining Agreement, Abbot Nw. Hospital et al.-SEIU 113, Mar. 1, 2003, available at <http://www.dol.gov/olms/regs/compliance/cba/pdf/cbrp0840.pdf>.

¹⁵⁹ *Id.* at 25.

¹⁶⁰ Ted Phlegar, personal database (on file with *American University Business Law Review*).

percentage of contributions, however, the monthly pension amount is a flat \$26 per year of credited service.

$$\frac{\$26 \times 45 \text{ years of service}}{\text{Total Monthly Pension}} = \$ 1,170.00$$

If this surgical support specialist were an employee of the SEIU, his monthly pension would be 2.5% of his final average wage times years of service divided by twelve. The final average wage would be as follows based on wage increases reported in the local's Form 5500.¹⁶¹

Contract Year	Wage Rate	Annual Earnings
March 1, 2003 - March 1, 2004	\$15.74	\$32,739.20
March 1, 2004 - March 1, 2005	\$16.69	\$34,715.20
March 1, 2005 - March 2006	\$17.36	\$36,108.80
Final Average Wage		\$34,521.07

Using this final average wage, the Surgical Support Specialist's monthly pension calculated under either SEIU officers and staff plan for those retiring at age 65 would be $.025 \times \$34,521.07 \times 45 \div 12 = \$3,236.35$. This reflects a premium of 177% above what the worker earns as a rank-and-file member, and, again, is equal to 12.5% of the final average wage. If the worker was to take advantage of early retirement at age fifty the monthly pension would be $.025 \times \$34,521 \times 30 \div 12 = \2157.57 , well in excess of his rank-and-file pension for retirement at age sixty-five. Owing to COLA coverage, following retirement the Surgical Support Specialist's pension would grow by 1.5% per year if he were an officer or staff member of an SEIU local and by 3% per year if he were an officer or staff member of SEIU International.

b. United Food and Commercial Workers Union

Like the SEIU, the UFCW international union is one of the largest labor unions in the world. Although it is also one of the youngest unions, it represents over 1.3 million workers in the retail supermarket, drugstore, and department store, meat packing and food processing, and manufacturing industries in the United States, Canada, and Puerto Rico.¹⁶² As shown in Table IV, it administers fifty-four multiemployer plans as well

¹⁶¹ *Id.*

¹⁶² *About Us*, UNITED FOOD AND COMMERCIAL WORKERS INT'L UNION, <http://www.ufcw.org/> (last visited Feb. 23, 2012).

as its own plan for UFCW officers and staff, the *United Food and Commercial Workers International Union Pension Plan for Employees*.

This analysis calculates pension benefits for seven hypothetical workers assumed to have worked a full career of forty-five years as UFCW members and retired at age sixty-five. It looks at what they would have received as a monthly pension based on the pension plan identified in the collective bargaining agreement negotiated for them by the UFCW or the relevant UFCW local. The analysis then calculates what the workers would have received as a monthly pension if, having the exact same earnings and time in service, they enjoyed the same pension as UFCW officers and staff.¹⁶³

The comparison reveals that the hypothetical workers receive pensions that fall well short of those enjoyed by UFCW officers and staff. Pension premiums for officers and staff as a percent of member pensions range from 35% to 180%. Not only do UFCW rank and file fall short in their pensions, but they also fall short in how they qualify for early retirement, in what happens if they get injured and permanently disabled, in cost-of-living allowances, in what happens to their family if they die or are killed before they reach retirement age, and in their access to supplemental 401(k) coverage. The exposition begins by showing two hypothetical workers of the seven for which analyses were conducted. Full results are summarized in Table II.

Hypothetical Worker 3: Cashier-Clerk, Grocery Store, Cleveland, Ohio

Under the collective bargaining agreement, the cashier-clerk is a participant in the *United Food & Commercial Workers Union Local 880 Retail Food Employers Joint Pension Fund*.¹⁶⁴ This plan provides a normal retirement at age sixty-five equal to the worker's years of credited service multiplied by the accrual rate. For full time workers, the accrual rate is \$45 for service earned before May 1, 2006, and \$35 for service earned thereafter.¹⁶⁵ The hypothetical worker's monthly pension is determined as follows:

$$\begin{aligned} 43.333 \text{ years credited service} \times \$45 &= \$1949.99 \\ \underline{1.667 \text{ years credited service} \times \$35} &= \underline{\$58.35} \\ \text{Total Benefit} &= \$2008.34 \end{aligned}$$

¹⁶³ Union officers and staff are not required to pay dues.

¹⁶⁴ Labor Relations Agreement, Cleveland Food Industry Comm. (Clerks)-United Food & Commercial Workers Union Local 880 September 9, 2002 through September 11, 2005, Sept. 9, 2002, available at <http://www.dol.gov/olms/regs/compliance/cba/pdf/cbrp0481.pdf>.

¹⁶⁵ *Id.* at 37.

Under the collective bargaining agreement, the *lowest* regular hourly rate for a Cashier-Clerk who was hired before September 11, 1984, is \$14.925.¹⁶⁶ The contract provides that the worker would annually receive an hourly wage increase of \$0.30 on or about September 11th. For the purposes of these calculations, this annual increase pattern has been used through the retirement date of the hypothetical worker on January 1, 2008. Based on the lowest wage, the final average wage under the *UFCW-IU Pension Plan for Employees* would be as follows:

Jan. 2004 - Jan. 2005	$(1447 \text{ hours} \times \$15.225) + (633 \text{ hours} \times \$15.525)$	= \$31,857.90
Jan. 2005 - Jan. 2006	$(1447 \text{ hours} \times \$15.525) + (633 \text{ hours} \times \$15.825)$	= \$32,481.90
Jan. 2006 - Jan. 2007	$(1447 \text{ hours} \times \$15.825) + (633 \text{ hours} \times \$16.125)$	= \$33,105.90
Jan. 2007 - Jan. 2008	$(1447 \text{ hours} \times \$16.125) + (633 \text{ hours} \times \$16.425)$	= \$33,729.90
Final Average Wage		\$32,793.90

The *United Food & Commercial Workers International Union Pension Plan for Employees (UFCW-IU)* calculates pension amounts based on the final average wage of the highest four years of earnings, factored against the years of pension credits earned by the participant.¹⁶⁷ The plan provides for a minimum salary of \$9,600 for the pension calculation. The monthly benefit is the sum of 2.5% of the final average wage for each year of service before January 1, 2003, up to a maximum of twenty credits, plus, two percent for each of the next thirty years of service thereafter, plus one percent for each of the next fifteen years of service.

If the hypothetical Cashier-Clerk retiring in 2008 had been an employee of the *UFCW-IU* rather than a dues-paying rank-and-file member, his monthly pension would have been equal to his final average wage times 2.5 percent \times 20 years of service, plus his final average wage \times 2.0 percent times 25 years of service, all divided by 12 months = \$2,732.83. This reflects a 36.1 percent premium over what he would receive as a rank-and-file member and is equal to one hundred percent of the final average. In addition, retirees participating in the *UFCW-IU* plan receive a COLA equal to \$60 dollars for every one percent increase in the consumer price index up to a maximum of \$300 per year. Under the Local 880 retirement plan

¹⁶⁶ *Id.* at 22. These calculations use the Collective Bargaining Agreement's minimum contracted wage for the position examined. It is reasonable to presume that in actuality a worker who retires after a 45-year career would earn a higher wage than the minimum. If actual wages were used, the resulting annual earnings would be higher and the pension differences would be greater than what is contained herein.

¹⁶⁷ Ted Phlegar, personal database (on file with *American University Business Law Review*).

he or she receives no COLA; absent ad hoc adjustments, the pension is fixed for life and subject to inflation erosion.

Hypothetical Worker 4: Head Cashier, Acme Markets, Burlington, New Jersey

The Head Cashier is a member of the UFCW Local 1360's five-year collective bargaining agreement with Acme Markets, Inc., which covers approximately 3,000 unionized grocery workers in New Jersey who participate in the *United Food and Commercial Workers and Participating Food Industry Employers Tri-State Pension Fund*.¹⁶⁸ The plan provides a normal retirement at age sixty-five equal to the worker's years of credited service multiplied by the accrual rate.¹⁶⁹ For full time workers, the accrual rate is \$30 for service earned before January 1, 1994, and \$50 for service earned thereafter. Under this plan the head cashier will receive a monthly benefit calculated as follows:¹⁷⁰

Time Period	Service Years	Multiplier	Amount
Date of Hire to 12/31/1984	22	\$30	\$660
1/1/1985 to 12/31/1993	9	\$30	\$270
1/1/1994 to 12/31/2007	14	\$50	\$700
Total Monthly Pension			\$1,630

To calculate his benefit under the *UFCW-IU Pension Plan for Employees*,¹⁷¹ his final average salary must be determined. Using the wage rates from the collective bargaining agreement on file with the Department of Labor, his final average salary would be as follows:

Time Period	Total Hourly Wage	Period Earnings
01/01/04 - 04/24/04	\$18.15	\$11,791.04
04/25/04 - 07/23/05	\$18.50	\$47,968.22
07/25/05 - 10/21/06	\$18.85	\$48,875.73

¹⁶⁸ Labor Relations Agreement: Acme Mkt. Inc.-United Food and Commercial Workers Union Local 136 April 25, 2004 through April 25, 2009, April 25, 2004, available at <http://www.dol.gov/olms/regs/compliance/cba/pdf/cbrp0007.pdf>.

¹⁶⁹ Ted Phlegar, personal database (on file with *American University Business Law Review*).

¹⁷⁰ Labor Relations Agreement: Acme Mkt. Inc.-United Food and Commercial Workers Union Local 136 April 25, 2004 through April 25, 2009, *supra* note 168, at 30.

¹⁷¹ Ted Phlegar, personal database (on file with *American University Business Law Review*).

10/22/06 - 12/31/07	\$19.25	\$47,828.60
Final Average Salary		\$39,115.90

If this worker was an employee of the *UFCW-IU* rather than a dues paying rank-and-file member, his monthly pension would have been equal to the final average wage times 2.5% times twenty years of service plus the final average wage of \$39,115.90 times two percent times twenty-five years of service, all divided by twelve months, which equals \$3,259.66. This reflects a one hundred percent premium over what he would receive as a rank-and-file member of UFCW Local 360 and, again, is equal to one hundred percent of the final average wage. Retirees participating in the *UFCW-IU* plan receive a COLA equal to \$60 dollars for every one percent increase in the consumer price index up to a maximum of \$300 per year, but members of Local 360 receive no COLA; their pensions are fixed by contract for life absent ad hoc adjustments. Owing to inflation, the gap between the pensions they receive as union members and the pension union officers and staff receive increases as the years go by.

c. Funding Status

An examination of the funding ratios of SEIU plans shows that the union and staff plans are generally better funded than rank-and-file plans. Table III shows the most recently available funding status of the twenty-five SEIU private-sector plans. All are multiemployer plans. It also shows the funding status of the two plans SEIU uses to cover its officers and staff. Plans are ranked by their funding ratio. Plan funding ratios range from 33.4% for the *Building Service 32BJ Pension Fund* to 77.9% for the *Ohio Meatpackers, Meat Cutters and Butcher Workmen Pension Plan*, with the average asset-weighted ratio being 57.3%.¹⁷² Of the twenty-five plans, the *SEIU Plan for Employees of SEIU* representing 1189 active and retired members is the ninth highest-ranked plan at 63.6%.¹⁷³ More striking, the *SEIU Affiliates Officers and Employees Pension Plan* representing 8146 active and retired members is the second highest-ranked plan at 71.6%.¹⁷⁴ In addition, the *Pension Plan for Employees of the SEIU* has the highest average assets per member at \$120,578. This probably reflects relatively sound funding because the ratio of active members to retirees appears similar to that of most other plans. The "critical" Plan Status Code of this

¹⁷² See Table III, database compiled by Ted Phlegar (on file with *American University Business Law Review*).

¹⁷³ Ted Phlegar, personal database (on file with *American University Business Law Review*).

¹⁷⁴ Ted Phlegar, personal database (on file with *American University Business Law Review*).

plan is consistent with the latter inference. The *SEIU Affiliates Offices and Employees Pension Plan* has lower average assets per member at \$68,832, but its Plan Status Code is “not endangered.”

The most recently available data as of 2007 shows that the *UFCW-IU Pension Plan for Employees* had a funding ratio of 72.5%, placing it well above the asset-weighted mean of 54.3% for the full sample of fifty-four UFCW multiemployer plans and, ranked fifth, also well above the median.¹⁷⁵ As with the SEIU plans for officers and staff, the UFCW’s plan shows relatively high assets per capita at \$147,718 and commensurately low default risk. Not only do SEIU and UFCW officers and staff enjoy pension benefits that far exceed those their rank and file enjoy, but all else being equal the plan default risk they face based on funding ratio is above the mean and in most cases well above the mean.

IV. POLICY ANALYSIS AND CONCLUDING REMARKS

As striking as the pension disparity between multiemployer workers and union officers and staff appears on its face, it is economically possible that some or all of the disparity can be attributed to efficiencies from implicit pension contracting. Union officers and staff appear to collect a stay pension, while the rank and file collect a quit pension—not surprisingly given the benefit they enjoy in terms of mobility within the multiemployer association. There may be few or no efficiencies to be gained with rank-and-file workers in the multiemployer setting as the result of stay pensions, and it may also be that such efficiencies are strong for union officers and staff. If so, the observed pension disparity is less remarkable than it appears on its face. The question is whether stay pensions for union officers and staff are an economically necessary outcome of a competitive labor market for their services or, instead, an emolument that results from the agency costs workers and employers face in monitoring them and holding them to account for their full compensation.

Evidence from non-union, single-employer defined benefit pensions is instructive. Being free from structural labor market impediments, wages and benefits in these markets can be presumed competitive. A casual look at pensions in this setting suggests that they are substantially less generous than those enjoyed by union officers and staff in the multiemployer setting. The *Bristol Myers Squibb Company Retirement Income Plan*, for example, provides an annual pension equal to two percent of final average compensation times years of credited service, not to exceed forty years, but subject to a reduction of 1/70th of primary social security benefits times

¹⁷⁵ See Table IV, database compiled by Ted Phlegar (on file with *American University Business Law Review*).

years of credited service, also not to exceed forty years.¹⁷⁶ The *Pfizer Retirement Annuity Plan* provides an annual pension of 1.4% times years of credited service, not to exceed thirty-five years.¹⁷⁷ The *Sysco Corporation Retirement Plan* provides an annual pension of 1.5% of final compensation times years of credited service.¹⁷⁸ The excess of union officer and staff pensions over these competitively determined pensions is a plausible first approximation of the rents union officers and staff capture in the multiemployer setting.

Being only loosely accountable to the rank and file, union officers and staff are poorly constrained in their ability to capture the cartel rents from unionization. As in other settings in which poorly monitored agents trade off current wages and future pension benefits free from the discipline of market forces,¹⁷⁹ there is a tendency for union managers in multiemployer bargaining units to capitulate toward policies—such as excessively generous pensions—that generate immediate benefits but distant costs. A union compensation committee or upper manager setting compensation policy might, for example, be inclined to pay future pension benefits whose present value is two dollars to achieve a one dollar reduction in current wage increases, especially if current wages are already generous by any market metric. Lacking “ownership” of the capitalized value of union rents, as well as having a limited time horizon, union officers will be inclined (like all human beings loosely constrained) to take care for today and worry about tomorrow at a later time.

A thorough and systematic econometric analysis of relative pension generosity in the multiemployer setting lies beyond the scope of this essay but is well worth undertaking as a follow-up study. Among other things, such a study would have to empirically adjust for various factors and identify the source of productivity gains from long tenure for union officers and staff. Since they are no doubt selected up front based on revealed ideological loyalty to the union, it would seem redundant, or at least only weakly efficient, to use a high-powered stay pension to impose on them a large capital loss from early termination. For the time being, it is impossible to reject the hypothesis that union officers and staff capture a

¹⁷⁶ Bristol Myers Squibb Co., Schedule 14A Information (Form DEF 14A) (Mar. 24, 2008); Bristol-Myers Squibb Co. Retirement Income Plan, EIN 22-0790350, Summary of Plan Provisions (Form 5500) (2009).

¹⁷⁷ Pfizer Inc., Retirement Annuity Plan (Form 10K405-Ex-10(ii)) (Mar. 26, 1998); Bristol-Myers Squibb Co. Retirement Income Plan, *supra* note 176.

¹⁷⁸ Sysco Corp., Proxy Statement (Form DEF 14A) (Oct. 8, 2009).

¹⁷⁹ The obvious case in point is state politicians whose tenure is limited. Allowing them to negotiate pension and welfare benefits with state employees is subject to extreme moral hazard because few politicians can expect to be in office when the tax increases necessary to fund the promises come due.

disproportionate share of the rents from unionization in the multiemployer setting owing to the high agency costs employers and the rank and file face in monitoring them.

All this underscores what may be a looming crisis in pension funding. Many multiemployer plans are now in critical funding status. With ERISA having mandated funding ratios much greater than would be efficient absent regulation, and with PBGCs guarantees as at least a partial backstop, the possibility is real that multiemployer unions will push too far in their wage and benefit demands and throw employers wholesale into bankruptcy. Serious attention should be given to reforming the current Taft-Hartley system of multiemployer plans, especially the joint-and-several employer liability provisions that discourage fiscally sound funding and lock employers into what may be a multi-lateral game of chicken. The one benefit these plans had going at their inception was worker mobility across employers in seasonal and project-based industries. The central benefit of mobility is at odds with a high-quality equilibrium, the main attribute of which is a low quit rate.

The rise of 401(k) defined contribution plans undercuts the rationale for continuing multiemployer plans. 401(k) plans now exhibit superior tax deferral and lower-cost administration than multiemployer plans. Not only do 401(k) plans allow full worker mobility by making their retirement accounts self-directed and fully portable, but even in the multiemployer setting they could be used to provide superior efficiencies by encouraging worker self-selection toward higher quality within the bargaining association. The benefits of higher quality spill over to advancing workplace cohorts in the form of higher productivity and wage growth. The main impediment to union members taking advantage of 401(k) benefits now appears to be their union officers and staff, which strenuously disfavor 401(k) plans for the rank and file (while favoring to accept supplemental 401(k)s for their own plans),¹⁸⁰ among other reasons because they foster wage disparities and require the union to relinquish control over plan trust administration. In passing the PPA, Congress made provision for the transition from defined benefit to defined contribution plans in the form of DB(k) plans, along with measures to ensure worker access to 401(k) defined contribution plans. All things considered in this essay, Congress, the private sector, employers, and unions should move in this direction with all due haste.

¹⁸⁰ SERVICE EMP. INT'L UNION, <http://www.seiu.org/> (last visited Apr. 12, 2012).

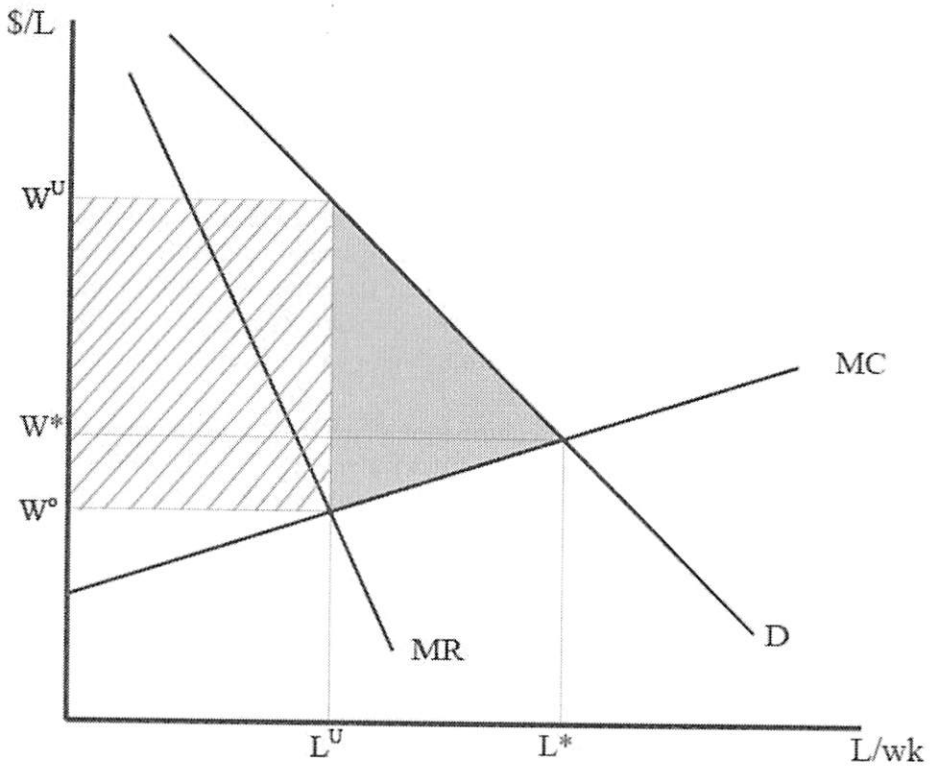


Figure 1
A Labor Market Cartel

Source: Developed by author.

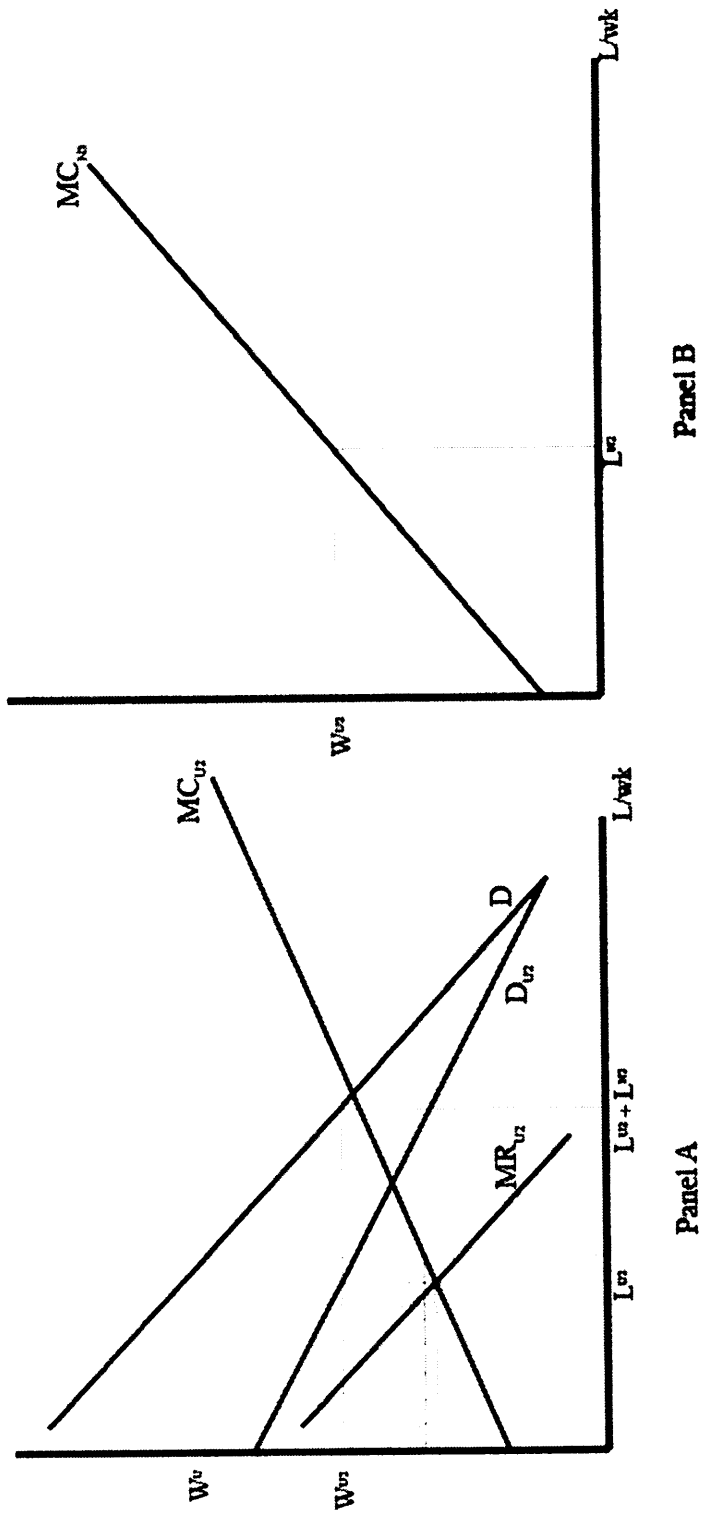


Figure 2
Dominant Firm Solution

Source: Developed by author.

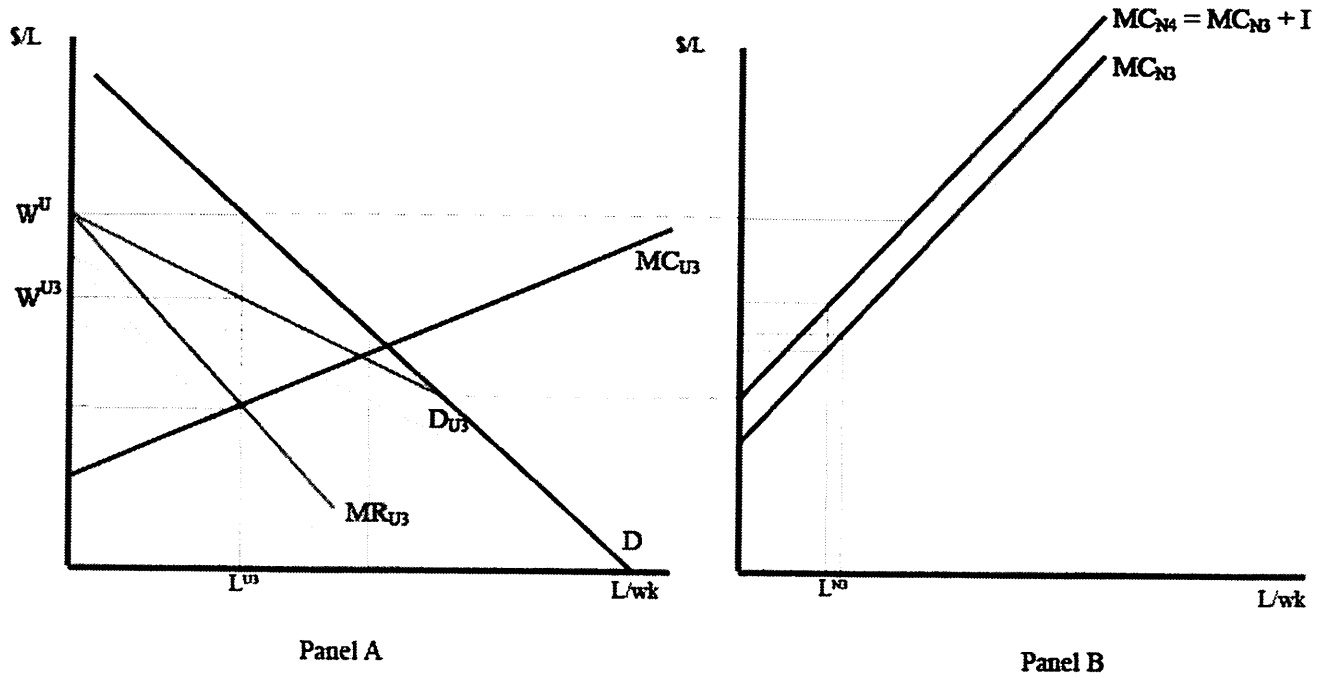
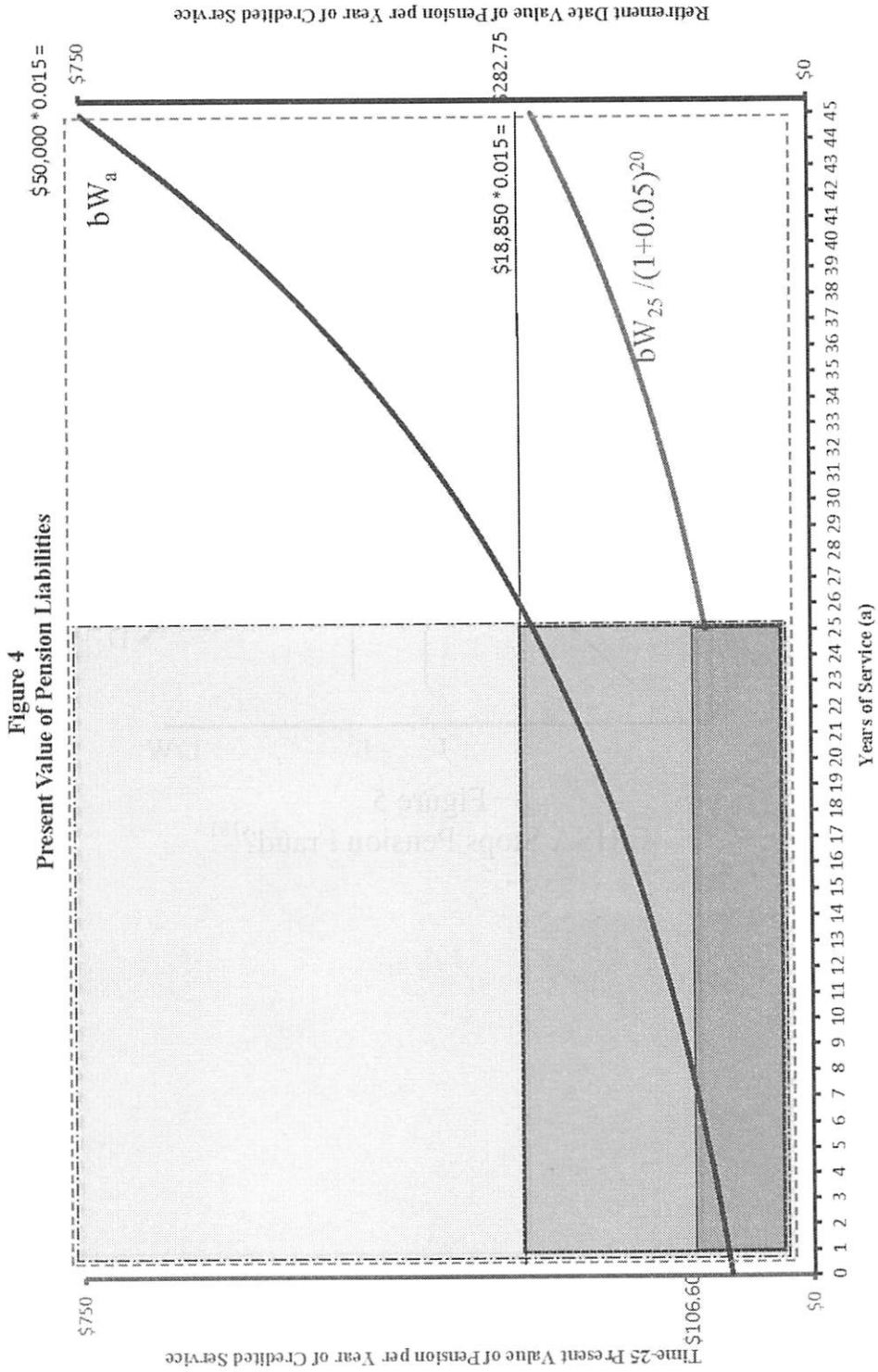


Figure 3
Effect of Union Threat on the Wage
Differential

Source: Developed by author.



Source: Developed by author.

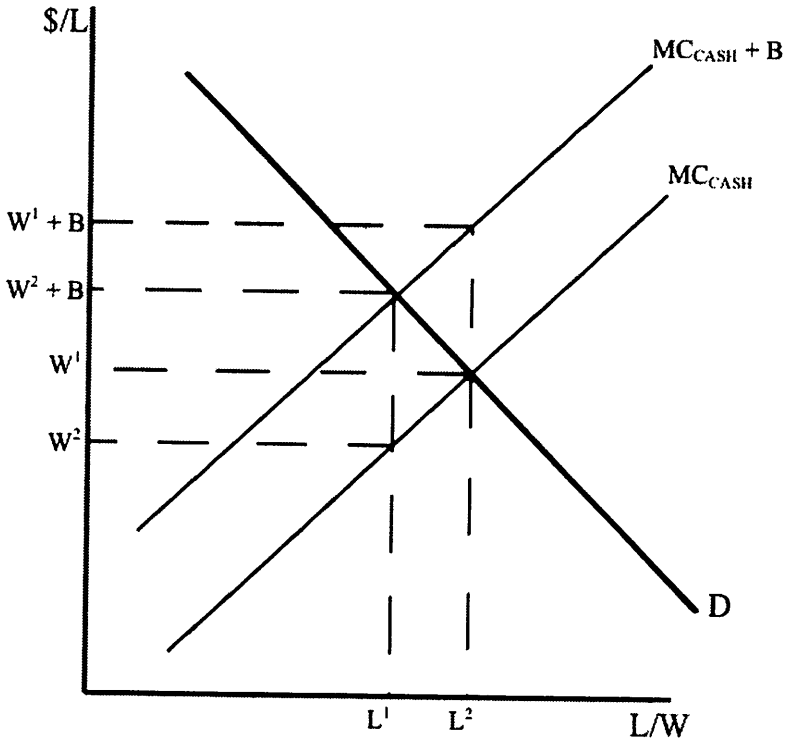


Figure 5
ERISA Stops Pension Fraud?¹⁸¹

¹⁸¹ RICHARD A. IPPOLITO, PENSION PLANS AND EMPLOYEE PERFORMANCE EVIDENCE, ANALYSIS, AND POLICY (1997).

Summary of Hypothetical	Member Monthly Pension Retiring at Age 65	SEIU Officer/Staff with Same Wage, Retiring at Age 65	SEIU Officer/Staff Premium	SEIU Officer/Staff with Same Wage, Retiring at Age 50
Worker 1: Cleaning Foreman, Los Angeles, CA	\$976.25	\$1,998.75	104.7%	\$1,332.50
Worker 2: Surgical Specialist, Abbot Northwestern Hospital, Minneapolis, MN	\$1,170.00	\$3,236.35	176%	\$2,157.57
Worker 3: Janitor, Southern California	\$418.29	\$1,422.50	240%	\$948.33
Worker 4: Janitor, Bellevue, WA	\$1,140.00	\$2,106.00	85%	\$1,404.00
Worker 5: Building Service Industry Worker, Boston, MA	\$1,215.00	\$2,382.28	96%	\$1,588.19
Worker 6: Mechanical Maintenance, Louis County, MO	\$337.50	\$1,711.88	400%	\$1,141.25
Worker 7: Handyperson, New York, NY	\$1000 or \$1,250	\$4,053.50	300 or 220%	\$2,702.33

Assumptions:

- The worker was born on January 1, 1943, began work on January 1, 1963 at age 20 and retired after 45 years on January 1, 2008 at age 65.
- For the early retirement option, the worker was born on January 1, 1958, started work on January 1, 1978 and retired after 30 years on January 1, 2008 at age 50.
- The worker is single or is married, but has rejected the Joint and Survivor Option.
- The worker has consistently worked a 40 hour week throughout

his entire career.

Notes:

- Comparison figures used the applicable minimum wage rate in the respective collective bargaining agreements. Actual wages would produce a larger gap.
- Both Age 65 columns use the same earnings and years of service. The only variable is how the plan for workers calculates pensions versus how the SEIU staff and officers plans calculate pensions.
- The SEIU staff and officers' plans permit an unreduced, unpenalized early retirement at age 50 if the staff member has 30 years of service.
- The worker must wait until age 65 to retire without penalty, regardless of how many years of service the worker has. Worker plans normally permit retirement at age 55, but the worker suffers a penalty reduction of approximately 55% to 60% of benefits.

Summary of Hypothetical	Worker's Pension Under Members Plan	Pension if Calculated Under UFCW-IU Staff Plan	UFCW Officer/Staff Premium
Worker 1: Beef Cutter, Chicago, IL	\$1,481.00	\$2,260.84	35%
Worker 2: Baker, Supermarket, Middlesex, NJ	\$2,025.00	\$3,011.67	60%
Worker 3: Seafood Worker, Shoprite Market, NJ	\$1,600.00	\$4,471.28	180%
Worker 4: Cashier-Clerk, Grocery Store, Cleveland, OH	\$2,008.34	\$2,732.83	36.1%
Worker 5: Meat Department Head, Erie, PA	\$2,183.92	\$3,282.36	50%
Worker 6: Maintenance Specialist, Delta Pride Catfish Plan, Indianola, MS	\$1,864.75	\$2,789.47	49.6%
Worker 7: Head Cashier, Acme Markets, Burlington, NJ	\$1,630.00	\$3,259.66	100%

Assumptions:

- The worker was born on January 1, 1943, began work on January 1, 1963, at age 20, and retired after 45 years on January 1, 2008, at age 65.
- The worker is either single or is married and has rejected the Joint and Survivor Option.
- The worker has consistently worked a 40 hour week throughout his or her entire career.

Notes:

- Column two uses the minimum wage rate from the applicable collective bargaining agreement. If actual wages are higher than the minimum used in this calculation, the final average wage would produce a larger gap in pension benefits than shown.
- Each of the first two columns use the same earnings and years of service. The only difference is how the benefit is calculated under the worker's actual pension plan and how it would be calculated under the *UFCW International Union Pension Plan for Employees*.
- The *UFCW-IU Pension Plan for Employees* permits a participant to retire at age 60 with a full, unreduced pension, while most UFCW worker plans require a worker to reach age 62 or 65 for a normal, unreduced retirement. Column three

calculates what the worker's pension would be if he or she retired under the UFCW-IU staff plan at age 60, thereby tipping the calculations in favor of find a smaller officer/staff premium.

- UFCW worker plans typically penalize early retirement by reducing the lifetime monthly benefit amount by 2% to 6% per year below normal retirement age.
- The *UFCW-IU Pension Plan for Employees* provides an annual cost of living adjustment for retirees which provides an increase in their benefit amount of up to \$300 each year. The UFCW workers' plans generally do not have any cost of living adjustment for their retirees.

TABLE III: SEIU National and Local "Taft Hartley" Pension Funds										
Fund Name	Year	Active	Total	Actuarial Assets	Current Liabilities	Ratio	Assets per Capita	MB2C Reported Current Assets / Current Liabilities	MB4B Monitoring Ratio: Actuarial Assets / Accrued Liability	MB4a Plan Status Code *
1199SEIU GREATER NEW YORK PENSION FUND	2010	19,203	34,516	\$470,707,489	\$1,159,111,515	40.6%	\$13,637	33.84%	62.1%	C
1199SEIU HEALTH CARE EMPLOYEES PENSION FUND	2010	117,083	230,361	\$8,673,691,083	\$13,448,477,437	64.5%	\$37,653	49.61%	100.4%	C
1199SEIU HOME CARE EMPLOYEES PENSION FUND	2010	44,918	77,944	\$264,526,733	\$383,605,624	69.0%	\$3,394	57.46%	103.3%	N
32BJ/BROADWAY LEAGUE PENSION FUND	2010	656	1,870	\$44,968,289	\$63,030,618	71.3%	\$24,047	59.45%	109.1%	N
BUILDING SERVICE 32BJ PENSION FUND	2009	45,220	89,914	\$1,422,600,588	\$4,258,310,648	33.4%	\$15,822	27.85%	52.6%	C
BUILDING SERVICE PENSION PLAN	2009	2,162	4,554	\$34,882,208	\$62,658,627	55.7%	\$7,660	46.39%	81.4%	C
CONTRACT CLEANERS SERVICE EMPLOYEES PENSION PLAN	2010	2,418	4,610	\$12,771,585	\$20,895,914	61.1%	\$2,770	54.99%	88.0%	N
LOCAL NO. 1 PENSION TRUST FUND	2009	3,858	7,911	\$97,862,837	\$161,717,970	60.5%	\$12,370	52.42%	93.4%	N
LOCAL 25 SEIU AND PARTICIPATING EMPLOYERS' PENSION TRUST	2009	11,759	21,884	\$284,052,163	\$471,567,078	60.2%	\$12,980	51.21%	92.2%	N
MASSACHUSETTS SERVICE EMPLOYEES PENSION FUND	2010	11,988	12,852	\$71,760,246	\$127,891,371	56.1%	\$5,584	47.99%	90.8%	N
NEW ENGLAND HEALTH CARE EMPLOYEES PENSION PLAN	2010	9,858	16,690	\$454,386,105	\$669,903,646	67.8%	\$27,225	54.29%	96.4%	N
<i>PENSION PLAN FOR EMPLOYEES OF THE SERVICE EMPLOYEE INTL UNION</i>	2010	654	1,189	<i>\$143,367,124</i>	<i>\$225,426,644</i>	<i>63.6%</i>	<i>\$120,578</i>	<i>54.75%</i>	<i>106.2%</i>	C
SEIU NATIONAL INDUSTRY PENSION FUND	2010	53,213	100,646	\$1,088,710,158	\$1,949,238,410	55.9%	\$10,817	48.36%	82.9%	C
<i>SEIU AFFILIATES OFFICERS AND EMPLOYEES PENSION PLAN</i>	2010	3,579	8,146	<i>\$560,707,482</i>	<i>\$783,419,622</i>	<i>71.6%</i>	<i>\$68,832</i>	<i>61.24%</i>	<i>109.3%</i>	N
SEIU LOCAL 32BJ, CONNECTICUT DISTRICT PENSION FUND	2010	2,067	3,116	\$37,196,310	\$56,078,714	66.3%	\$11,937	54.28%	98.3%	C
SEIU LOCAL 32BJ, DISTRICT 36 BMCA PENSION PLAN	Plan merged out into another fund.									
SEIU LOCAL 32BJ, DISTRICT 36 BUILDING OPERATORS PENSION TRUST FUND	2010	2,707	6,790	\$55,304,628	\$134,539,448	41.1%	\$8,145	34.26%	69.1%	E
SERVICE EMPLOYEES 32BJ NORTH PENSION FUND	2010	6,397	12,506	\$256,050,959	\$450,691,302	56.8%	\$20,474	47.34%	84.2%	C
SERVICE EMPLOYEES INT'L UNION LOCAL 1 CLEVELAND PENSION PLAN	2010	709	1,816	\$9,496,864	\$17,902,023	53.0%	\$5,230	44.21%	72.3%	E

TABLE III: SEIU National and Local "Taft Hartley" Pension Funds										
Fund Name	Year	Active	Total	Actuarial Assets	Current Liabilities	Ratio	Assets per Capita	MB2C Reported Current Assets / Current Liabilities	MB4B Monitoring Ratio: Actuarial Assets / Accrued Liability	MB4a Plan Status Code *
SERVICE EMPLOYEES INTERNATIONAL UNION PENSION TRUST FOR THE SERVICE INDUSTRY GROUP OF SACRAMENTO DEFINED BENEFIT PENSION PLAN	2009	103	296	\$2,504,431	\$3,830,511	65.4%	\$8,461	55.51%	87.5%	N
SERVICE EMPLOYEES PENSION FD OF UPSTATE NEW YORK	2010	4,821	8,209	\$114,036,298	\$199,204,889	57.2%	\$13,892	44.04%	83.7%	C
TWIN CITY HOSPITALS PENSION PLAN FOR LICENSED PRACTICAL NURSES	2010	469	1,458	\$21,413,332	\$34,685,504	61.7%	\$14,687	51.45%	88.4%	N
32BJ SCHOOL WORKERS PENSION FUND	2009	5,851	12,775	\$260,137,720	\$476,141,385	54.6%	\$20,363	45.53%	76.5%	S
OHIO MEATPACKERS, MEAT CUTTERS AND BUTCHER WORKMEN PENSION PLAN	2010	805	2,871	\$80,063,742	\$102,736,968	77.9%	\$27,887	64.94%	112.7%	N
SEIU LOCAL NO. 4 PENSION FUND	2010	10,464	13,262	\$27,400,672	\$43,533,796	62.9%	\$2,066	56.05%	94.3%	N
TOTALS		360,962	676,186	\$14,488,599,046	\$25,304,599,664	57.3%	\$21,427			
* Actuarial Codes: N - Not Endangered or Critical; E - Endangered; C - Critical										
**Source: Ted Phlegar, personal database compiled from various Department of Labor filings (on file with American University Business Law Review).										

TABLE IV: UFCW PENSION FUNDS FINANCIAL HEALTH - Overall										
Fund Name	Year	Active	Total	Actuarial Assets	Current Liabilities	Ratio	Assets per Capita	MB2c Reported CA/CL	MB4B Monitoring Ratio AA/AL*	MB4a Plan Status Code**
UNITED FOOD AND COMMERCIAL UNION PENSION PLAN FOR EMPLOYEES	2007	2,635	6,515	\$962,383,609	\$1,328,212,688	72.50%	\$147,718	N/A	N/A	N/A
ALASKA UNITED FOOD & COMMERCIAL WORKERS PENSION FUND	2010	3,088	6,662	\$214,842,830	\$355,945,143	60.4%	\$32,249	46.43%	92.1%	C
BD. OF TRUSTEES OF UNTD. FOOD AND COMMERCIAL	2010	67,607	153,622	\$2,151,078,902	\$3,784,670,879	56.8%	\$14,002	47.73%	90.7%	C
CENTRAL OHIO UFCW UNIONS AND RETAIL EMPLOYERS PENSION PLAN	2010	1,736	5,374	\$49,164,024	\$92,906,612	52.9%	\$9,148	44.10%	81.9%	N
DENVER AREA MEAT CUTTERS AND EMPLOYERS PENSION PLAN	2010	17,796	22,953	\$259,268,748	\$449,108,152	57.7%	\$11,296	46.63%	83.8%	C
DESERT STATES EMPLOYERS & UFCW UNION PENSION PLAN	2010	18,225	37,507	\$620,205,322	\$1,314,389,139	47.2%	\$16,536	39.32%	77.3%	E
FELRA AND UFCW PENSION PLAN	2010	23,500	51,765	\$934,120,886	\$2,441,756,624	38.3%	\$18,045	29.43%	57.1%	C
INDIANA UFCW UNIONS AND RETAIL FOOD EMPLOYERS PENSION PLAN	2010	4,529	11,322	\$263,809,190	\$425,839,347	62.0%	\$23,301	47.65%	88.3%	C
INTERMOUNTAIN RETAIL STORE EMPLOYEES PENSION PLAN	2009	7,902	15,185	\$169,166,124	\$275,995,792	61.3%	\$11,140	51.08%	91.9%	C
LOCAL 1245 LABOR-MANAGEMENT PENSION FUND	2010	1,910	5,717	\$87,090,212	\$170,123,524	51.2%	\$15,234	43.09%	78.3%	C
LOCAL 305 CIO PENSION FUND	2010	626	1,510	\$16,941,351	\$43,142,029	39.3%	\$11,219	34.55%	51.4%	C
LOCAL 338 RETIREMENT FUND	2010	11,977	17,613	\$447,767,931	\$825,008,821	54.3%	\$25,423	47.91%	89.3%	E
MINNEAPOLIS RETAIL MEAT CUTTERS AND FOOD HANDLERS PENSION PLAN	2010	10,014	17,454	\$405,959,673	\$935,628,447	43.4%	\$23,259	37.73%	72.2%	E
NO. MN-WI AREA RETAIL CLERKS PENSION FUND	2010	1,762	4,793	\$97,676,927	\$176,832,472	55.2%	\$20,379	45.74%	82.4%	C
NORTHERN CALIFORNIA PHARMACISTS, CLERKS AND DRUG EMPLOYERS PENSION PLAN	2010	4,703	9,391	\$151,755,304	\$185,455,166	81.8%	\$16,160	68.16%	113.7%	N
NORTHWEST OHIO UFCW UNION AND EMPLOYERS JOINT PENSION FUND	2010	1,976	6,409	\$119,163,256	\$201,830,364	59.0%	\$18,593	48.50%	93.5%	C
OHIO MEATPACKERS, MEAT CUTTERS AND BUTCHER WORKMEN PENSION PLAN	2010	805	2,871	\$80,063,742	\$102,736,968	77.9%	\$27,887	64.94%	112.7%	N
OREGON RETAIL EMPLOYEES PENSION PLAN	2010	15,350	37,707	\$839,650,423	\$1,259,181,392	66.7%	\$22,268	55.57%	93.9%	C

TABLE IV: UFCW PENSION FUNDS FINANCIAL HEALTH - Overall										
Fund Name	Year	Active	Total	Actuarial Assets	Current Liabilities	Ratio	Assets per Capita	MB2c Reported CA/CL	MB4B Monitoring Ratio AA/AL	MB4a Plan Status Code ^a
PENSION PLAN OF LOCAL 464A	2010	7,148	16,592	\$482,027,495	\$658,984,520	73.1%	\$29,052	73.14%	108.8%	N
Termination due to mass withdrawal in 2010.										
RETAIL FOOD EMPLOYERS & UFCW LOCAL 711 PENSION TRUST FUND	2010	8,218	17,648	\$285,428,513	\$615,319,751	46.4%	\$16,173	38.72%	75.0%	C
RETAIL, WHOLESALE & DEPARTMENT STORE INTL UNION & INDUSTRY PENSION FUND	2010	8,300	26,919	\$431,096,297	\$732,764,259	58.8%	\$16,015	48.37%	90.0%	N
ROCKY MOUNTAIN UFCW UNIONS AND EMPLOYERS PENSION PLAN	2010	20,992	38,568	\$825,822,319	\$1,522,813,964	54.2%	\$21,412	45.19%	80.8%	C
SO CA UFCW UNIONS & FOOD EMPLOYERS JOINT PENSION TRUST FUND	2010	69,093	168,671	\$4,274,479,928	\$9,244,708,252	46.2%	\$25,342	41.42%	71.3%	C
SOUTHERN CALIFORNIA UNITED FOOD AND COMMERCIAL WORKERS UNIONS AND DRUG EMPLOYERS PENSION FUND	2010	13,344	24,475	\$566,879,695	\$741,972,245	76.4%	\$23,162	74.90%	114.4%	N
U.F.C.W. DISTRICT UNION LOCAL TWO AND EMPLOYERS PENSION FUND	2010	1158	7795	\$171,162,246	\$286,271,182	59.8%	\$21,958	49.80%	84.2%	C
UFCW - NORTHERN CALIFORNIA EMPLOYERS JOINT PENSION	2010	54,285	127,038	\$3,979,429,228	\$7,844,617,896	50.7%	\$31,325	39.02%	76.0%	C
UFCW L1262 & EMPLOYERS PENSION FUND	2010	18,813	32,316	\$534,650,460	\$1,184,384,712	45.1%	\$16,544	39.72%	71.7%	C
UFCW LOCAL 1500 PENSION PLAN	2010	21710	37473	\$317,550,517	\$687,222,342	46.2%	\$8,474	42.90%	69.0%	E
UFCW LOCAL 174 COMMERCIAL PENSION FUND	2010	214	1749	\$20,857,344	\$33,023,679	63.2%	\$11,925	69.32%	93.3%	C
UFCW LOCAL 1776 & PARTICIPATING EMPLOYERS PENSION FUND	2010	2,592	4,473	\$34,234,823	\$55,355,254	61.8%	\$7,654	48.84%	91.8%	C
UFCW LOCAL 23 & GIANT EAGLE PENSION FUND	2010	3,348	7,123	\$65,707,017	\$125,261,311	52.5%	\$9,225	41.85%	82.0%	S
UFCW LOCAL 23 AND EMPLOYERS PENSION FUND	2010	390	10,116	\$40,510,899	\$95,277,072	42.5%	\$4,005	37.13%	65.3%	C
UFCW LOCAL ONE PENSION FUND	2010	9,398	22,710	\$325,214,187	\$771,233,178	42.2%	\$14,320	32.44%	71.9%	C
UFCW REGIONAL PENSION PLAN WAKEFERN	2009	2,741	4,830	\$38,841,194	\$98,981,625	39.2%	\$8,042	32.70%	74.8%	C
UFCW UNION & PARTICIPATING FOOD INDUSTRY EMPLOYERS TRI-STATE PENSION PLAN	2010	11,282	31,532	\$381,277,407	\$1,068,383,414	35.7%	\$12,092	28.81%	57.5%	C
UFCW UNION LOCAL 152 RETAIL MEAT PENSION PLAN	2009	5,720	14,509	\$251,155,336	\$696,197,031	36.1%	\$17,310	30.06%	55.8%	C

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Fund Name	Year	Active	Total	Actuarial Assets	Current Liabilities	Ratio	Assets per Capita	MB2c Reported CA/CL	MB4B Monitoring Ratio AA/AL	MB4a Plan Status Code*
UFCW UNION LOCAL 880 - MERCANTILE PENSION FUND	2009	893	3,342	\$41,494,934	\$80,766,381	51.4%	\$12,416	42.81%	71.4%	E
UFCW UNION LOCAL 880 - RETAIL FOOD EMPLOYERS JOINT PENSION FUND	2009	7,061	16,320	\$326,377,664	\$628,230,981	52.0%	\$19,999	43.66%	76.1%	C
UFCW UNION LOCAL 919 & CONTRIBUTING EMPLOYERS FOOD PENSION FUND	2010	5,756	11,012	\$243,331,594	\$351,575,606	69.2%	\$22,097	54.87%	110.0%	N
UFCW UNION LOCAL NO.655, FOOD EMPLOYERS JOINT PENSION PLAN	2010	7,352	14,763	\$524,422,858	\$747,294,035	70.2%	\$35,523	58.50%	103.0%	C
UFCW UNIONS AND FOOD EMPLOYERS PENSION PLAN OF CENTRAL OHIO	2010	15,209	27,567	\$500,488,134	\$986,755,862	50.7%	\$18,155	42.27%	74.9%	C
UFCW UNIONS AND PARTICIPATING EMPLOYERS PENSION FUND	2010	8,348	14,508	\$105,886,608	\$229,779,966	46.1%	\$7,298	36.29%	77.2%	C
UNITED FOOD & COMMERCIAL WORKERS INTL UNION - INDUSTRY PENSION FUND	2009	96,290	222,296	\$4,972,271,937	\$6,964,809,606	71.4%	\$22,368	59.74%	109.1%	N
UNITED FOOD & COMMERCIAL WORKERS UNION - EMPLOYER PENSION FUND	2009	4,632	14,035	\$212,715,709	\$474,247,875	44.9%	\$15,156	37.37%	67.3%	C
UNITED FOOD AND COMMERCIAL WORKERS LOCAL 1546 PENSION PLAN	2009	5,210	11,208	\$152,795,919	\$274,112,974	55.7%	\$13,633	42.87%	77.5%	C
UNITED FOOD AND COMMERCIAL WORKERS UNIONS & EMPLOYERS MIDWEST PENSION PLAN	2009	12,834	44,199	\$1,322,159,175	\$2,345,205,840	56.4%	\$29,914	43.37%	89.4%	C
UNITED FOOD AND COMMERCIAL WORKERS UNIONS AND EMPLOYERS PENSION PLAN	2009	3,781	18,333	\$402,712,432	\$744,238,808	54.1%	\$21,967	45.09%	85.9%	C
UFCW LOCAL UNIONS & EMPLOYERS PENSION PLAN OF THE SOUTHWESTERN OHIO AREA	Plan info unavailable for 2009. Plan may have terminated or merged out.									
PENSION PLAN- AMALGAMATED MEAT CUTTERS & RETAIL FOOD STORE	Plan terminated by mass withdrawal									
UFCW UNION LOCAL 919 & CONTRIBUTING EMPLOYERS NON-FOOD PENSION FUND	Plan terminated by mass withdrawal and plan continues as a frozen plan.									
UFCW LOCAL 50 PENSION FUND	Plan terminated due to mass withdrawal									

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Fund Name	Year	Active	Total	Actuarial Assets	Current Liabilities	Ratio	Assets per Capita	MB2c Reported CA/CL	MB4B Monitoring Ratio AA/AL	MB4a Plan Status Code*
UFCW LOCAL 174 PENSION FUND	Plan terminated by 2007 mass withdrawal									
UFCW LOCAL 174 RETAIL PENSION FUND	Plan terminated by 2007 mass withdrawal									
UFCW PENSION FUND OF NORTHEASTERN PENNSYLVANIA	Plan terminated by 2009 mass withdrawal									
TOTALS		619,618	1,399,975	\$28,738,706,714	\$53,330,340,492	53.9%	\$20,528			
* Actuarial Codes: N - Not Endangered or Critical; E - Endangered; C - Critical										
** Source: Ted Phlegar, personal database compiled from various Department of Labor filings (on file with American University Business Law Review).										