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The Emergence of Hybrid Pensions and Their Implications for Retirement Income Security in the 21st Century

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1. Introduction

The conversion of large-company pension plans from traditional defined benefit (DB) plans to hybrid plans has been the focus of considerable debate during the past two years. During this time, we have examined various aspects of the hybrid pension phenomenon in a series of papers (Brown et al. 2000; Clark and Munzenmaier 2001; Clark and Schieber 2000; Clark, Haley, and Schieber 2001; and Clark and Schieber 2002a,b). Our purpose has been to investigate the reasons firms convert their pension plans, illustrate the impact of plan changes on expected pension benefits, and identify the winners and losers when pensions are converted from traditional DB plans.

In addition, we have analyzed some of the more controversial issues raised in the shift to hybrid plans, particularly those involving workers who face modified benefits under their new plans and the lack of further benefit accruals, known as the *wear-away* problem.

In this paper, we summarize the results from our earlier papers and analyze the potential impact of plan conversions on retirement income security in the 21st century. The second section provides a brief discussion of the history and reasons for the shift to hybrid plans and the third section examines the underlying reasons for plan conversions. The fourth section evaluates the short- and long-term impact of the shift to hybrid plans on workers, and the fifth discusses the importance of communications in the transition. The sixth section assesses the need for further legislation to regulate the shift to hybrid pensions while the final section discusses the future of retirement income security within the context of the hybrid pension controversy.

2. Background

Hybrid pension plans are known by a variety of names, including cash balance plans, cash value plans, and pension equity plans; however, most can be sorted into two general types. The first type of plan, referred to here as a *cash balance plan*, defines a worker's "notional account" based on an annual contribution rate for each year of work plus an accumulating interest on the sum of annual contributions. The second type of hybrid pension, referred to here as a *pension equity plan* (PEP), defines the benefit as a percentage of final average earnings for each year of service under the plan. Both types of plans specify and communicate the benefit in lump-sum terms payable at termination, rather than as an annuity payable at retirement, which is typical for DB plans.[1]

The first hybrid pension, a cash balance plan, was created by BankAmerica in 1985. Initially only a few companies copied this new form of pension. During the latter half of the 1990s, the pace of conversion to hybrid plans began to accelerate. By May 1999, a survey by *Pensions and Investments* reported that at least 325 plan sponsors had adopted a hybrid plan (Williamson, 1999). Extending this list by tracking reports of plan conversions in the media and annual reports, we estimate that around 500 firms have established hybrid pension plans to date. Our impression is that the shift to hybrid plans slowed considerably during 2000 in response to adverse press accounts, suggestions by policymakers that hybrid plans should be subject to new regulations, and Congressional hearings on the legality of these plan conversions. Despite these current concerns, it seems there are many companies that still intend to adopt a hybrid plan in the future.

To a large extent, employers shifting to hybrid pensions are offering workers a retirement plan that contains a mix of features from both DB and defined contribution (DC) plans. Table 1 illustrates the primary features of DB and DC plans and compares them to the provisions of hybrid plans. The

[1] Since hybrid plans are legally DB plans, they must offer an annuity option. Thus, the retiree can accept the lump sum specified in the retirement account or select the annuity equivalent of this amount.

characteristics of these plans are meant to provide the relative advantages of each of the separate approaches to plan design in a single plan.

The contribution and participation features of the hybrid plans tend to be much more like traditional DB plans than like the overwhelming majority of DC plans that now depend on employees' decisions on participation and contribution rates. Penalties for workers who terminate employment under a plan prior to retirement are largely eliminated in hybrid plans, making them more akin to DC plans. The accumulation of accounts and provision of lump-sum benefits at termination facilitate communication and portability like 401(k) and other DC plans.

The new plans alleviate some but not all of the financial market risks borne by the worker in self-directed DC plans. Account balances are credited with an annual rate of return equal to some specific rate such as the T-bill rate, thus reducing the investment risk a typical DC participant faces. Sponsors do retain the investment risk with hybrid plans but typically guarantee an investment return to workers such that expected return on plan assets should cover the cost of these risks. Workers do retain some residual investment risk in that the benchmark rates used for return crediting of accounts can change over time, although they should be much less volatile than rates in many segments of the financial markets.[2] Participants also face the risk that plan sponsors might change the benchmark rates over time.

Hybrid plans are more age-neutral in their retirement incentives than are traditional DB plans and, to date, few plans, if any, have early retirement incentives. It would be possible to structure a hybrid plan to include the same sorts of incentives that most traditional pensions currently include, although the actual occurrence of such incentives in hybrid plans is extremely rare. Hybrid plans, which are DB plans under law, must offer an annuity as a benefit option but almost all also offer lump-sum benefits. Anecdotal evidence suggests that the overwhelming majority of workers take lump-sum benefits when offered the choice under these plans.

[2] Some plans have recently begun to offer participants in cash balance plans returns keyed to a range of portfolio investment options which would create the same investment risks as exist in DC plans where asset investment is self directed.

3. Why Plan Conversions Are Occurring

The level and composition of labor compensation are the products of worker preferences and the desire of firms to attract and retain quality workers. Changes in the labor market and other economic conditions can alter the equilibrium level of compensation and the characteristics of employee benefits. Employer attitudes, worker preferences, and some new economic realities underlie the trend toward hybrid plans.

3.1 Employer Attitudes and the Decision to Offer a Retirement Plan

Labor market conditions in 2001 are very different from those 10–20 years ago. A decade of economic expansion and a slowly growing labor force have dramatically altered the human resource policies of many companies. Instead of encouraging older workers to leave so they can be replaced by lower-cost younger workers, employers are now scrambling to retain senior employees because hiring young workers has become very difficult and reducing employment levels is generally not an option. The composition of the labor force also has changed, and employers must seek to accommodate the preferences of a more diverse set of employees.

Low unemployment rates and relatively small numbers of workers entering the labor force have forced many companies to rethink their retirement policies. Many managers have indicated their frustration with pension plans that encourage productive workers to retire in their 50s when they are still needed by the company. These policies are especially unpleasant if the "retiree" goes to work for a competitor.

Removing these incentives means changing the retirement subsidies in traditional DB plans or converting these plans to a hybrid structure or a DC form. Hybrid plans and DC plans typically do not have early retirement subsidies. Two earlier papers (Clark and Schieber, 2002a, b) compare the effects of plan conversions with the effects of eliminating early retirement subsidies in traditional DB plans. These studies show that plan sponsors wishing to retain a traditional plan but eliminate its early retirement subsidy would reduce retirement benefits for many employees by more than the amount associated with the adoption of a hybrid plan. Our research indicates that converting retirement plans is an attempt by employers to reduce early retirement incentives in a way that helps them retain more of their productive senior employees.

Changes in labor demand and in the composition of the labor force also have led many companies to consider changes in compensation. Plan conversions are often accompanied by changes in retiree health plans or changes in contribution rates to supplemental retirement accounts.[3] Other companies have reduced the cost of their pension plans and restructured their overall compensation in an effort to be more competitive in certain labor markets.[4]

Managers regularly complain that DB plans are difficult to explain to employees and, as a result, workers do not give employers sufficient credit for the cost of these traditional plans (Clark and Munzenmaier 2001; Brown et al. 2000). The difference between the retirement benefits a worker receives if he or she remains with the company until retirement age and the benefit that same worker gets if he or she terminates employment now is particularly difficult for many employees to understand.

The theory of compensating wage differentials states that employers can reduce cash wages as they increase contributions to other forms of compensation. The ability to offset pension contributions with lower wages depends on workers' valuing the contribution at the same level as the cost to the employer. If employees place a lower value on employer contributions to DB plans than to DC plans, they will not value total compensation as highly when covered under the former type of plan, even if the true value of the two plans is equal. Employer contributions to DC pension plans are easier to explain, and workers can immediately see that these monies are deposited into their own accounts.

Funding and other financial concerns also influence the decision to shift from traditional DB plans to hybrid plans. In general, benefit accruals for participants in hybrid plans will be smoother and more predictable throughout their careers than accruals in traditional plans. This may make employer funding of hybrid plans more stable for the plan sponsors. Some analysts have asserted

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[3] Brown et al. (2000) and Clark and Schieber (2002a) discuss the results of a Watson Wyatt Worldwide survey that indicates how many firms have made changes to a range of retirement programs at the time of the conversion to a hybrid plan. This suggests that an evaluation of the impact of plan conversions on workers should include all the changes in retirement plans.

[4] In its controversial plan conversion, IBM claimed to be reducing pension costs but enhancing other forms of compensation such as stock options. The stated rationale was to appeal to young, mobile technical employees. IBM's competition for these workers includes firms that do not offer traditional defined benefit plans (Clark and Munzenmaier 2001).

that firms use plan conversions as a cover for reductions in overall pension costs. Brown et al. (2000) and Clark and Schieber (2002a) illustrate the diverse impacts of plan conversions on total pension costs. Their findings indicate that some companies have lower costs after the plan conversions while others actually increase retirement expenditures and many continue to have essentially the same retirement costs. The evidence indicates that there is no single pattern of cost reduction when companies shift to hybrid plans.

Some also claim the dominant reason companies are shifting to hybrid plans is because the traditional plan is overfunded. However, Clark, Haley, and Schieber (2001) revealed that the distribution of funding status for traditional plans that were converted to hybrid plans was very similar to the distribution of funding status for plans that were not converted.

3.2 Worker Preferences for Retirement Plans

The basic characteristics of traditional DB plans, DC plans, and hybrid plans are shown in Table 1. Limited evidence indicates that workers prefer some of the key characteristics that hybrid plans share with DC plans. Foremost of these is the provision of individual accounts in which the value does not depend on the worker staying with the firm. Survey data from Clark and Munzenmaier (2001) and Third Millennium (1999) reveal that employees prefer to have their pensions in individual accounts. Workers understand the meaning of their own individual account balance but have more difficulty assessing the value of future benefits under a traditional DB plan.

An important feature of retirement plans with individual accounts is that the account balance is immediately available to the worker if he or she leaves the firm at any age. In other words, the current value of the pension is the same whether the worker remains with the firm or quits. In contrast, traditional DB plans provide far greater benefits to individuals who remain with the firm until at least the age of early retirement. This portability feature of hybrid plans and DC plans has become more important to the increasingly diverse labor force. Young workers in today's labor force are less likely to believe that they will work for the same firm for 30 or 40 years. They expect to change jobs several times and, as a result, are more likely to demand retirement plans that have portable benefits.

4. Winners and Losers in Plan Conversions

Any change in the composition of compensation or the method of paying workers will affect individual employees differentially. For example, the shift toward individual incentive pay instead of time-based pay will tend to provide greater income to more productive workers and lesser income to less productive individuals. Adding childcare as a benefit instead of increasing wages will tend to benefit younger women more than older men. Similarly, the conversion of pension plans from traditional DB plans to DC plans or hybrid plans will have differential effects on the retirement benefits of workers with alternative career patterns.

Traditional DB plans provide greater benefits to individuals who remain with the company until retirement and relatively low benefits to workers who remain with the same employer for only a few years.

Figure 1 illustrates a basic accrual pattern for a representative worker. The present value of benefits increases rapidly as the worker approaches and reaches the age of early retirement. In contrast, DC and hybrid plans provide a more uniform benefit accrual over a worker's career. Thus, it is readily apparent that a plan conversion will have different effects on future workers hired at young ages who do not anticipate long careers with the company, compared with older employees who have already been working for the firm for many years.

In earlier papers (Clark and Schieber 2002a,b; Brown et al. 2000; and Clark and Munzenmaier, 2001), we have examined actual plan conversions to determine the distribution of winners and losers associated with plan conversions. The evidence is clear. First, most workers hired in the future will accumulate greater lifetime pension benefits if they are covered by hybrid or DC plans. Second, most employees currently on the payroll will also gain from the plan conversion; however, a significant number of older employees with many years of service will receive considerably less than they had anticipated after the plan conversion. Third, recognizing the potential adverse affect on their senior workers, many companies have provided special transitional benefits to these workers to reduce or eliminate the adverse impact of the plan conversion.

4.1 Characteristics of Winners and Losers in Plan Conversions

Let's consider the case of two hypothetical workers using data from 77 plan conversions[5] (see Table 2). The first example is a worker who is hired at age 30 for $25,000 per year. The benefits that would be provided to this person conditional on leaving the firm at age 40 and at age 60 are derived under the new hybrid plan in each of the 77 conversion cases and compared to the benefits that would have been provided by the prior plan.

The overwhelming majority of plan conversions will provide increased benefits for young new hires that remain with the firm for 10 years and then terminate. Only one hybrid plan out of the 77 in our sample would reduce benefits for workers with these characteristics relative to the benefits in the prior plan. However, if this newly employed worker remained with the firm until age 60, most of the hybrid plans would pay a reduced benefit relative to the prior plan. Only 22% of the hybrid plans would match or increase the benefit for this worker at age 60 relative to the prior plan.

These results are representative of our general findings: Newly hired workers who leave before reaching retirement age will accumulate greater benefits under the new hybrid plans, compared with the traditional DB plans they replaced. Since most workers do not remain with the same firm until retirement, the greater benefits accumulated early in one's tenure under a hybrid plan are seen by many workers as an advantage over a traditional plan.

The second example shown in Table 2 is for a worker who is age 50 and earning $50,000 per year at the point of conversion to the new plan. In this case, we assume the worker already has 20 years of service under the prior plan. The entries in the table indicate the relative value of benefits under the new plan at the time of conversion and 10 years later when the employee has 30 years of service and is age 60.

For individuals planning to quickly leave the firm, the story is similar to that shown for new hires. In 94% of the conversions, the worker would be as well or better off with the hybrid plan as under the one it replaced if the worker

[5] Clark and Schieber (2002b) provide a detailed description of these plan conversions and how the comparisons were calculated.

terminates employment shortly after the transition to the new plan. However, if this worker decided to remain with the firm until age 60, he or she would be worse off under the new plan in 55% of the new hybrid plans.

Once again, this result is fairly typical for senior employees. Even at advanced ages, the vast majority of workers who leave prior to retirement eligibility will receive increased benefits because of the conversion to a hybrid plan. But under the majority of plans, those who expect to remain with the firm until retirement eligibility would receive smaller benefits with the introduction of the hybrid plan at each specific age, at least up to normal retirement age, than they would have received under the prior traditional plan.

4.2 Ending Early Retirement Subsidies

Potential losses for both the newly hired workers and currently employed workers are primarily due to the early retirement subsidies embedded in the traditional DB plans (Clark and Schieber 2002a,b). Table 3 shows the effects of the shift to hybrid plans for three hypothetical workers and the proportion of plans that reduced benefits for these workers, compared with maintaining the traditional plan but eliminating the early retirement subsidy.

In every case reflected in the table, the majority of the hybrid plans reduced benefits by less than the amount of the reduction that would have occurred if they had simply eliminated their early retirement subsidies. For any of the cases where the worker is assumed to retire at age 55, less than one-fifth of the plans would reduce benefits by more than the elimination of the early retirement subsidies. For workers retiring at ages 55, 39–64% of the plans would actually enhance benefits, relative to the old plan, even though they had eliminated the subsidies related to early retirement.

Although the benefit reductions occurring in the shift to hybrid plans are not purely about eliminating early retirement subsidies, this analysis indicates that plan conversions are *largely* about eliminating these plan provisions. To the extent that benefit reductions are greater than the previous subsidies for early retirement, benefit changes represent a general reduction in retirement benefits.

4.3 Importance of Transitional Benefits

Recognizing the potential adverse effect on current workers, most firms have provided some type of transitional benefits to certain older workers who are close to the early retirement age. In our sample, 88% of the plans either provided greater benefits to older workers or allowed them to remain in the old pension plan in order to reduce the decline in anticipated retirement benefits. The importance of these transitional benefits is shown in Table 4. Including the value of the transition benefits for senior workers sharply reduced the proportion of older workers who receive lower benefits under the new plans. Companies offering significant transition benefits typically completed the plan conversion process with little worker reaction, whereas many of those offering smaller transition benefits or none at all faced worker outrage and drew adverse public scrutiny.

While the shift to hybrid plans has taken on an adverse aura in some circles, it has not been the negative story it has been made out to be for many, if not the vast majority, of workers. From workers' perspectives, the key factors driving their assessment of the conversion to hybrid plans are:

- The relative generosity of the hybrid plan, compared with that of their prior plan.
- The value placed on having a portable benefit specified in a lump sum.
- The worker's anticipated remaining tenure with the firm.

The assessment of plans relative to these factors tend to vary with the individual's age, years of service, and mobility plans.

4.4 Wear Away of Benefits

Another concern about the transition to hybrid plans arises when a worker is shifted to a hybrid plan with an opening balance that remains frozen for some years. There are essentially two situations under which this phenomenon arises. The first situation arises where employers significantly curtail the generosity of their pension plan in the adoption of the hybrid plan. In conversions to PEP plans, initial balances in the new plan are often set by treating workers as though they had been covered under it for the full duration of their employment with the plan sponsor. If the new formula results in benefits that are less than the accrued benefits under the prior plan, a worker with substantial service under the prior plan may work for some period without accruing added benefits.

In conversions to cash balance plans, initial balances are typically set on the basis of workers' age and years of service under the prior plan at the point of conversion. If the plan sponsor uses a higher interest rate in calculating the value of initial benefits in the new plan than in determining the present value of the accrued benefit of the prior plan, initial benefits in the new plan will be less than accrued benefits in the prior plan. In this circumstance, participants would have to work for some period of time for the lump-sum benefit under the new plan to catch up with the benefit already accrued under the old one.

The second wear-away situation arises if the plan sponsor does not provide a benefit in the new plan that was offered in the prior one. Such a situation is depicted in Figure 2. In this case, the worker in question has already reached early retirement age under the prior plan and receives an initial credit under the new plan equal to the value A, which is his accrued benefit under the old formula.

Assume that, under the new plan, the initial benefit is reflected at level B in the figure. In the case of a conversion to a PEP plan, this situation could arise because the formula results in a benefit accrual pattern shown by the solid line in the figure. The new plan eliminates the early retirement subsidy and simply provides a lower accrual at age 56. In the case of a conversion to a cash balance plan, this situation could arise because the benefit value in the new plan is the lump-sum value of the accrued benefit. ERISA does not require that plan sponsors "vest" the value of early retirement subsidies in cases where retirees take their benefits in the form of a lump sum.

The credited value of the benefit under the new plan, at point B, for the worker in Figure 2 would be less than his accrued benefit earned under the prior plan. While the worker's accrued benefit cannot be reduced under ERISA, it can be frozen. The wear away in this situation arises because plan sponsors in some plan conversions have frozen benefits for these types of workers until the benefit in the new plan catches up with the accrued benefit under the old plan.

Table 5 shows the percentage of cases in which some period of wear away resulted from the transition to hybrid plans for selected workers. We looked at workers ages 54 and 50 who had 10, 15, and 25 years of service at transition to the new plan. We also examined workers in each age and service category at two pay levels—$50,000 and $80,000—at the point of transition to the new plans. For each of the prototypical workers, we calculated benefits at transition and in subsequent years until each worker reached age 65.

A year was considered a wear-away year if the balance at the end of the year in the new plan did not exceed the accrued benefit payable under the old plan. The accrued benefit under the old plan would be the benefit accrued by a worker at the time of transition, adjusted for early retirement subsidies earned after the transition. If the prior plan had an early retirement subsidy that took effect at age 55, the plan sponsor could not simply eliminate the early retirement benefits for workers who were not yet 55 when the transition to the new plan took place. A 54-year-old worker would have had a share of the prior plan's early retirement subsidy protected if he or she remained with the plan sponsor until age 55. The protected value would have been the present value of the early retirement subsidy that had been earned by the worker at the point of transition to the new plan.

We examined workers age 54 because, in most traditional DB plans, such workers were right on the cusp of early retirement eligibility. For many workers in this situation, the wear-away phenomenon arises because eligible workers are credited with the subsidy in setting up the new plan, but have not earned this value of benefits before they are credited with additional benefits. Workers age 50 are included to illustrate the extent to which workers further away from early retirement eligibility were affected by the phenomenon. Clearly, the wear-away phenomenon has been more prevalent for workers right at the brink of early retirement than for workers a few years away from such eligibility.

In most cases, the duration of wear away is less than five years. For the older workers in the examples, this is a situation where the early retirement subsidy was granted to the worker at transition, but the value of the subsidy was eroded over time. In a plan that states benefit values in terms of an accumulated amount, the erosion of the subsidy becomes very apparent because the value of the account remains constant. Under the prior plans, the early retirement subsidy also would have eroded with years of additional service, although at different rates in most cases. Under the old plan, however, the erosion of the subsidy would not have been so explicit because the benefit is typically described in annuity terms rather than as an accumulated balance.

There are a small number of plans with very extended periods of wear away for the workers considered here. For the most part, the plans with more than six years of wear away were adopted more than a decade ago. In a couple of cases, the protracted period of wear away amounted to the equivalent of the freezing of the old plan. Most of the cases with protracted wear away were plans in which costs were reduced significantly during the shift from a traditional to hybrid plan. In a couple of these cases, the mechanism that created the extended wear-away phenomenon was the use of a high interest rate in setting the initial balance in cash balance plans. This phenomenon has largely been eliminated since the passage of the General Agreement for Tariffs and Trade in 1994.

In economic terms, the wear away that occurs in the shift to hybrid plans is no different from the gradual erosion of early retirement subsidies in traditional DB plans. Consider a plan that provides a worker an actuarially subsidized benefit at age 62, where the value of the subsidy is equivalent to 1.5 years of pay. In most plans, the subsidy provided at the age of early retirement eligibility is eliminated by the time the worker reaches age 65. That is a form of wear away that exists in traditional plans. If a worker is eligible for a subsidy worth 1.5 years of pay at age 62 but the subsidy is eliminated at age 65, the wear away can be assessed in terms of both its duration and its rate. In this example, the wear-away period in the traditional plan would be three years and the rate of wear away, stated as a percentage of the worker's annual earnings, would be 50% per year.

In the case of traditional plans, we found that 38% of them had some wear away for long-service workers who continued employment between the ages of 55 and 60. We found that 78% of them had early retirement subsidy wear away for continued employment between the ages of 60 and 62. Finally we found that 96% of them had wear away for workers still employed between the ages of 62 and 65. The prevalence of wear away in traditional plans is much higher than in plans converting to hybrid forms. The duration of wear away in the transition to some hybrid plans may be as long as that incurred in traditional plans. Referring back to Table 5, it is clear that most hybrid plans have relatively short periods of wear when it occurs (Clark and Schieber 2002b).

The final way we considered the wear away in the shift to hybrid plans was to estimate its potential cumulative magnitude and compare that to the potential cumulative magnitude of wear away in the traditional plans that were replaced.

In the case of the transition to hybrid plans, we calculated the extent of the wear-away phenomenon for a worker age 54, with 25 years of service at the time the new plan is adopted. We calculated the potential cumulative wear away by first calculating the marginal accrual in benefits in each year under the new plan relative to the grandfathered benefit under the prior plan and then summing this difference over all years.

As noted previously, in most cases, total potential cumulative wear away associated with the transition to a hybrid plan will be at its maximum for a worker on the very cusp of early retirement eligibility with long service. We calculated the potential cumulative wear away for the worker covered under the traditional plan as the excess in the present value of the benefit taken at age 55 under the plan, compared with the present value of the benefit fully reduced from the normal retirement age. The magnitude of wear away in these plans is reported in terms of annual pay at the point of measurement.

The results in Table 6 show the cumulative potential exposure to wear away for workers right at early retirement under our 77 traditional plans and the hybrid plans replacing them. Workers would only incur the full brunt of this sort of wear away if they worked all the way through the early retirement period over which benefits were subsidized in the old plans. The timing and incidence would vary somewhat from plan to plan depending on the particular characteristics of the original and replacement plans.

In nearly half the cases, employers structured the new plans to make the wear away issue moot. In the remaining plans, the cumulative wear away that workers faced was generally not as great as it was in the prior plans being replaced. On virtually every dimension that we considered the wear-away phenomenon, we did not find it any more extreme in the conversion to hybrid plans than it was in the plans that were being replaced.

We conclude that the biggest difference in the phenomena in the two types of plans is the transparency with which workers perceive the phenomena in the two types of plans. In the one case, wear away is readily apparent because the effect of added service on earned benefits is so clear, whereas in the other case workers do not seemingly appreciate its implications.

5. Importance of Communication in Conversion Process

Communication with employees is critical to a smooth transition from a traditional DB plan to a hybrid plan. Plan sponsors need to explain why changes are being made to the retirement plan and provide detailed information to employees on how these changes will affect them. The communication of this information should be an integral component of the plan conversion process from the very beginning.

Before adopting a hybrid plan, or any modifications to a retirement program, virtually all plan sponsors undertake a review of their existing plan and typically consider a range of amendments that might be made to the program. The people who are going to be responsible for communicating any plan changes should be involved in this part of the reform project for two reasons. First, the human resources (HR)staff needs to understand the underlying reasons for the plan conversion. In addition, HR can provide valuable input concerning worker attitudes as the project team evaluates the plan changes. Second, the benefits specialists can use the insights gained from the planning process to help develop a communications strategy that will explain the new plan to rank-and-file workers and facilitate their acceptance of it.

In addition to providing general information on why plan changes are being enacted, the firm also needs to assist workers in understanding how the plan changes will affect them, specifically regarding their expected retirement benefits. Probably the most effective way of helping workers understand the implications of the plan conversion is to develop computer software that illustrates retirement benefits under alternative career patterns. Workers should be able to determine their benefits under the old and new plans if they expect to leave the company in the near future, remain a number of additional years but leave before the early retirement age, or remain with the firm until retirement.

We think the best way to communicate this information is to provide workers with modeling tools for calculating future retirement benefits. These programs would enable workers to estimate their own benefits under the old and new plans at the time of transition and at alternative future points in their careers of their own choosing. The software should allow a worker to choose alternative wage growth paths and termination dates.

The cost of high-quality communications should be included in the determination of the full cost of plan conversions. Throughout our research on plan conversions, managers and plan sponsors have often indicated that if they were able to repeat the plan conversion process, they would attempt to provide better and more detailed communications to their employees to reduce confusion, concern, and criticism associated with the plan change. Why not do it right the first time and provide high-quality information to workers so that they can accurately assess the impact of the plan conversion on their retirement benefits?

6. Policy Questions on Restricting Plan Conversions

As a result of the public outcry over the nature of several specific cases where employers shifted from a traditional DB plan to a hybrid plan, a number of bills were introduced in the 106th Congress to restrict what employers can do in such conversions. For example, Representatives Bernie Sanders (I-VT) and Maurice Hinchey (D-NY) introduced a bill in the House and Senator Paul Wellstone (D-MN) introduced companion legislation in the Senate along these lines during 2000. Their bills—H.R. 2902 and S. 1640—would require that retirement plans that are amended with a significant reduction in future accruals allow participants to choose between the old plan formula and the new one. Plans failing to offer such a choice for existing members at the time of conversion would be subject to a special excise tax of 50% on any excess pension assets remaining in the plan after the conversion. The bills would also prohibit wear-away periods after conversion to a hybrid plan.

Other legislation would not be as restrictive in terms of limiting employers' abilities to reduce benefits without offering all active workers a choice of plans, but would require greater disclosure of the implications of the shift to the new plan. For example, Senator Patrick Moynihan (D-NY) and Representative Jerry Weller (R-IL) would require that plan sponsors provide special participant notices when considering amendments to their plans that significantly reduce benefit accruals. These notices would go to each plan participant and would describe the amendment being considered and its effective date. They would include information comparing the accrued benefit and its present value with the projected accrued benefit and projected present value three years, five years, and ten years after the conversion and at normal retirement age. These policy proposals raise several fundamental questions.

6.1 Should Regulations Be Adopted to Limit Adverse Plan Changes?

Until now, pension regulation has largely been aimed at making sure that workers' benefits are provided in accordance to stated terms in the plans, that they are not provided to special classes of workers on a discriminatory basis, that they are secured as they are earned, and that they are limited in terms of the tax preferences accorded them.

Stipulating rules that would require future accruals of pensions in accordance with past formulas for certain workers would be a significant expansion of the current regulatory framework. If pension reductions are being adopted *ceteris paribus* and workers do not understand the implications of the changes, we can see the rationale for full disclosure by plan sponsors. Beyond that, however, pensions are only one element of the compensation package; implementing rules affecting future accruals of this one element of that package for the minority of employers offering a DB plan would seem to create the potential for significant unintended consequences.

Modifying a plan, especially adopting modifications that include significant benefit accrual reductions, is fairly disruptive to worker morale in most cases, unless there are offsetting adjustments elsewhere in the compensation package. If there are offsetting adjustments to other elements of compensation when pension plans are amended, policies that would restrict pension reductions would curtail employers' abilities to restructure their compensation programs as their competitive situations might dictate.[6]

It is not clear why policymakers would want to require that employers pay their workers pension compensation instead of some other form of compensation if that is what would attract and retain the workers needed to make the sponsoring enterprise succeed.

Given the potential reaction of workers who experience severe benefit reductions in pension amendments without any offsetting changes elsewhere in the compensation package, we believe most employers undertaking such plan changes must be in relatively dire straits. Therefore, it is unlikely that any legislative remedy can immunize workers in this situation from benefit reductions. If employers are precluded from cutting back benefits or even workers' pay when in dire financial circumstances, they will be left at the margin with no other recourse than going out of business. If that occurs, workers' benefits will be reduced at least as much and maybe more than they would be under ongoing business operations with a cost-reducing modification to the pension plan.

To the extent that employers convert their plans as a mechanism for eliminating early retirement subsidies, some people who were expecting to get

[6] Many plan sponsors have adopted changes in supplemental pension plans, retiree health insurance, and stock option plans in conjunction with conversion to a hybrid pension plan.

those subsidies are likely to be aggrieved. And aggrieved people have a natural attraction and attractiveness to policymakers and reporters. At some juncture, however, policymakers will to have to stand back from these anecdotal cases of people who have lost early retirement subsidies and decide what they want our retirement system to achieve in the future. A federal retirement policy that is increasing retirement age under the first tier of our retirement system, Social Security, but hamstringing employers who are attempting to align with the national system's goals is a schizophrenic policy that will serve neither the government nor workers in the long term.

Probably the most fundamental issue that would arise if legislators were to implement some sort of anti-cutback rules on future accruals for people covered under a plan would be related to the basis on which employers sponsored retirement plans in the first place. While lawmakers have established many rules regarding the operation of retirement plans when employers offer them, the act of offering a plan has been voluntary up until now. It would raise basic equity questions if some employers were now mandated to continue a plan or could not reduce future benefit accruals simply because they had performed the good deed of offering a plan in the past. The employers that had not performed a similar good deed of offering a plan in the past would presumably continue to be exempt from having to offer a plan in the future under anti-cutback regulations. Policies that punish those who have done good deeds but exempt those that have avoided doing them seem patently unfair.

6.2 Should Employers Be Required to Offer a Choice of Plans to Existing Workers?

Requiring employers to offer some or all of their workers potentially affected by a plan change the choice of going into the new plan or staying in the old is simply a subset of the prior consideration of whether sponsors should be allowed to introduce benefit reductions. Once again, it would seem that policymakers would be well guided to consider what is happening in pension plan conversions in a broader context, rather than maintaining a singular focus on the change in benefit accruals for selected individuals under the plan. Plan sponsors operate in a highly competitive environment when it comes to staffing their operations and that situation is likely to persist well into the future.

During the latter part of the 1990s and also during 2000, one could walk into shopping malls in virtually any large city in America and see "Help Wanted" signs in business establishments. While this was particularly true in the service sector, the demand for labor in all sectors was at one of its all-time highs. The seasonally adjusted unemployment rate in the United States was only 4.2% in January 2001, up from an average of 4.0% in 2000. The unemployment rate continued to climb higher during the remainder of 2001 as economic growth began to come to a halt and turn negative. The downturn that seemed to be coming on from slowing economic momentum was exacerbated by the tragic event of September 11, 2001. But economic downturns in the United States tend to be relatively short in duration. The average length of the nine recessions between the end of World War II and the one that began in 2001 was 11 months. The longest one lasted only 16 months. Given this history, it is likely that the economy will be growing again by the end of 2002. Once the economy recovers from the recession that began during 2001, it is likely that labor markets will once again tighten.

Current projections suggest that the labor force will continue to grow over the coming decade, but the average growth rate this decade is expected to be only about 75% of the average over the 1990s. If productivity does not continue to increase at rates realized from 1995 through 2000, we will face a slowdown in the historical rate of improvement in standards of living unless we can entice more people to enter or stay in the labor force (Lofgren, Nyce, and Schieber 2001).

In very tight labor market conditions, employers have to do everything they can to attract and retain workers. We believe that such conditions in the late 1990s resulted in a move toward hybrid plans on the part of some employers for at least two reasons. One is the re-engineering of plans to make them more attractive to younger workers. DC plans are much more attractive to younger workers and a hybrid plan fits the bill for an employer who is having trouble finding and retaining younger workers.

At older ages, however, DB plans are more attractive. In most cases, workers do not contribute to these plans, so all are included no matter what their financial situation might be. DB plans tend to pay a regular monthly benefit, something people close to retirement worry about as they anticipate the need to pay monthly bills once they no longer are drawing a regular paycheck.

Hybrid plans maintain the annuity characteristics of a pension plan for older workers who want to take advantage of it. The evidence that we have gathered from employers suggests that enhanced employee appreciation is the dominant reason that employers are converting to hybrid plans.

The second reason that employers have shifted toward hybrid plans has to do with eliminating incentives that encourage highly productive workers in their 50s to retire. A plan that provides a highly subsidized retirement benefit at age 55 and then eliminates that subsidy progressively between ages 55 and 60 or 60 and 65 conveys a very definite message to workers. The analysis presented earlier indicates that most employers have specifically reduced early retirement incentives in the shift to hybrid plans as a means of retaining workers.

While the popular press maintains that hybrid plans have been adopted almost solely as a cost-cutting measure, the story is much more complicated. Moreover, those employers who did adopt the plans for cost control reasons by and large admitted doing so when asked about motivation. In short, the move to hybrid plans truly seems to be market driven. Employers are making the switch to remain competitive in an ever-changing world.

Employers who once competed in a market where the retirement vehicles were primarily traditional DB plans are now competing in a market characterized by many new and different retirement vehicles. Stock options, employee stock ownership plans, and 401(k) plans with a high degree of choice have all become wildly popular. Employers must be able to convert traditional plans to something competitive or risk losing the war for talent.

From an employee perspective in the short term, it may seem logical that workers should be given a choice of staying in the old plan or joining the new hybrid plan. If a plan sponsor finds it strategically necessary to change its retirement package for competitive reasons, however, giving all workers covered under the prior plan the choice of staying in that plan means locking in the old strategy for a greatly extended time. The new benefit strategy will not take full effect for 35 or more years as younger workers work out the remainder of their careers under the old plan.

It seems inconceivable that anyone today would argue that we should have locked employers 35 or 40 years ago into the way they paid workers back then. Congress would be best served to think about this issue in the same context in which it deals with its own programs. When Congress reformed Social Security back in 1977 and 1983, it did not give every worker who had been covered under the prior law the choice of staying under the old rules or joining the new. When it reformed the rules for providing federal assistance for state welfare programs for families with dependent children a couple of years ago, it did not give existing recipients the choice to remain in their existing programs.

Choice in any of these situations would make change more acceptable to those under the old plan, but it is simply not practical when the plan itself is not serving the interests of the sponsor in the first place.

6.3 Should Wear Away Be Prohibited?

Some workers caught in plan modifications may realize extended periods where they do not accrue additional benefits beyond the balance in their pension at the point of conversion to the hybrid plan. As we noted previously, wear away arises under two conditions:

- When a relatively high interest rate is used in setting initial balances in cash balance plans at the point of conversion
- When the hybrid plan eliminates early retirement subsidies for workers who are close enough to eligibility that such benefits have substantial accrued value.

Our analysis suggests that the wear away created by the transition to hybrid plans is not generally of longer duration or greater magnitude than the wear away of these subsidies that already existed in the plans being replaced. The timing of the wear away may be different in the transition to the new plans than it would have been in the prior ones. But the biggest difference between wear away in traditional plans and in the transition to hybrid plans is the relative transparency to workers affected.

In a traditional plan, in which annual benefits continue to increase even though the present value of lifetime benefits is declining, workers simply do not perceive the loss of value they are incurring. The wear away in the transition to hybrid plans is obvious because the benefit is expressed in an account balance. As a result, a period of frozen benefits is apparent and the lack of further benefit accumulations seems unfair.

If wear away in the transition to hybrid plans is worthy of legislative remedy, the legal treatment of early retirement subsidies in general must be reassessed. Such a review would undoubtedly cover other retirement policies, general labor market policies, and macroeconomic issues that go well beyond the scope of concerns raised by a relatively few conversions to hybrid plans.

7. The Future of Retirement Income Security in the 21st Century

The evolution of the retirement system in the United States during the 20th century benefited from a number of phenomena that will not prevail during the current century. The relatively low cost of Social Security during the first 40 years of its operations was related to the way the program was phased in, covering most workers immediately but only gradually covering retirees. The program continued to be relatively inexpensive during the last 30 years of the century because of the beneficial effects the baby boom generation had on dependency ratios (Schieber and Shoven 1999). One of those phenomena has completely played out now and the other will begin to do so within the coming decade.

The relatively good deal that Social Security was in the early days of the program almost certainly enticed employers into structuring a total retirement package for workers that was more generous than if the long-term cost of Social Security had been recognized from the outset (Schieber, n.d.). Since the establishment of Social Security, employers have generally structured their own retirement plans so that the combination of retirement benefits, plus some personal savings, would allow people to maintain their working standard of living during retirement. Early on at least, Social Security benefits were highly subsidized and, thus, the total package of benefits that employers could offer workers was less expensive than the long-term cost would prove to be. As a result, many employers offered a total retirement package that is now proving to be more expensive than they can support.

The irrational exuberance prevailing in some circles that productivity growth stimulated by the new economy will bail us out of the financing shortfalls in Social Security will likely go the same direction as the NASDAQ stock index did during 2000. Policy analysts counting on productivity growth to save Social Security fail to realize that higher productivity increases annual earnings, which in turn ultimately increases Social Security benefits. This process simply delays the long-term financing problems of the system but does not solve them. The change in productivity assumptions used to value Social Security's long-term costs in the 2000 Trustees Report resulted in the projected year that the program will have a negative annual cash flow from 2014 to 2015. In subsequent years, the projected underfunding, expenditures exceeding revenue, of the system actually increases with the higher productivity assumptions (Trustees Report, 2000).

In addition, the Social Security actuaries have still failed to take into account the expected improvements in life expectancy that many demographers believe they should be recognizing. Two official technical panels reviewing assumptions and methods have recommended their inclusion as well. If the assumptions more closely reflected the longevity improvements expected by other demographers or even another branch of the government, the U.S. Census Bureau, Social Security's long-term financial outlook would be much worse than it looks now in the official estimates.

All serious students of the program agree that Social Security law must be changed because the program is inadequately funded to provide the benefits stipulated under current rules. It is not clear how the program might be modified at this time, but a safe bet is that some reduction in benefits relative to those provided under current law is likely. The nature of such changes will be important in determining how various members of our society fare. Across-the-board cuts will have much larger relative effects on the retirement security of people solely dependent on Social Security for retirement income than on those covered by pensions or those who have significant personal savings. Structured benefit reductions that are more heavily targeted toward higher-income workers would have a more even effect on retirement security across the earnings spectrum. Whichever approach is taken, workers who participate in pension plans are going to be left with a bigger private obligation if they wish to match the benefits that are being provided to current retirees benefiting from both Social Security and employer-sponsored benefits.

The need to modify Social Security will be driven by the fundamental laws of the arithmetic underlying the program's financing and the demographic evolution of our population. Federal lawmakers can ignore the accruing obligations the program faces and use cash flow surpluses to delay for another 10–15 years the ultimate adjustments that must be made to the program. Because Social Security is largely financed on a pay-as-you go basis, the massive cash flow requirements to finance the baby boomers' benefits are being deferred. In reality, we are deceiving ourselves with the idea that today we are running large government surpluses. This misperception occurs because we are ignoring the obligations that are accumulating for future generations of workers in our federal entitlement programs.

Employers sponsoring their own retiree health benefit and pension plans face the same demographics as Social Security; however, they are subject to very different pressures when it comes to financing these benefits and accounting for them on financial statements.

In the case of retiree health benefits, three forces beyond demographics are buffeting employer plans. The first is the far more restricted ability to fund retiree health obligations on a tax-effective basis as they accrue. The net result is that most employers are running the plans on a pay-as-you-go basis that makes the security of the benefits highly risky. Most employers have little control over the evolving markets they serve or the business cycles in which they must operate. As a result, they cannot guarantee that they will be able to deliver benefits promised today that have to be financed from productivity in the unknown distant future.

The second force threatening retiree health plans is the requirement that employers sponsoring such benefits have to account for them on their income and balance sheet financial statements. This would not be a problem if the benefits were funded as they were earned, because the sponsors could accumulate assets that match the liabilities. But since they cannot be funded, sponsors have to establish book reserves on their balance sheets that are often perceived as a threat to the underlying value of owners' assets in enterprises sponsoring retiree health benefits.

The third force threatening retiree health benefits is the abnormal rate of cost inflation in the health sector of our economy. The cost of programs financed on a pay-as-you-go basis through a levy on workers' output is the product of two ratios multiplied by each other. The first of these is the dependency ratio, the ratio of beneficiaries to workers. Of course, the aging of the population means that this ratio will be increasing. The second is the ratio of average benefits for those receiving them relative to the average wages of those financing them.

Figure 4 shows the second of these ratios for Medicare since its inception. Medicare should be a good indicator of how retiree health costs have risen, generally, because the share of total retiree health costs covered by Medicare has been relatively constant over the years. With the exception of three very brief respites, per capita health costs under Medicare have been rising far more rapidly than wages over the past 30–35 years. The decline in the ratio for the last year in which there are complete data (1997) reflects the stabilization of health costs over the past couple of years; however, there are new indications that health costs are rising again.

We believe that the combination of increasing elderly dependency, the inability to fund retiree health benefits, the need to recognize the financial responsibility of providing them, and the extra inflationary pressures on these benefits will lead to increasing curtailment of retiree health benefits.

Through a variety of premium caps and other limitations placed on plans, many of these programs are already scheduled to atrophy greatly in the coming years. To the extent that employers are going to offer a retiree health benefit in the future, they most likely will offer workers some sort of vehicle to accumulate capital during their working lives so they can pay for their own health insurance during their retirement years.

The current system is simply not economically viable. Some employers that have committed to these benefits in the past, especially those with relatively small personnel costs as a percentage of total operating costs, may stand by them. But most simply will not be able to do so.

The private employer-sponsored segment of the retirement system that provides cash benefits is the most robust of the whole system by some measures. ERISA requires that employers fund their pension obligations under a set of rules specified in law and regulations; therefore, these benefit liabilities have far more assets backing them than any other benefit obligations in the system. But the actual pattern of funding the plan that sponsors are allowed to follow often results in a pattern of rising pension contributions relative to workers' wages as an employer's working populations age. In addition, the combination of the funding rules promulgated under federal tax law and the accounting rules promulgated under the FASB result in pension liability and expense patterns that some business owners and managers find unacceptable.

The combination of these factors makes managers, and the pension costs and funding obligations that they face, more immediately sensitive to changing demographics than are federal policymakers who make the laws governing Social Security. The demographic composition of society that we will face 20 or 30 years from now is already imposing its costs on employers' pension plans that are being funded. Plan sponsors are already being hit by the cash flow requirements to meet the costs of a population that will be considerably older in the future than it is today.

In some respects, employer pensions are the canaries in the mines of our retirement system. If they cannot survive in the environment they face, it is a serious indication that other elements of the system may be in jeopardy from that environment as well.

There has been a well-documented decline in the number of traditional private pension plans in the United States. Despite steady growth in the labor force, from 1980 to 1985, the number of workers participating in DB pension plans declined at a rate of 0.7% per year. From 1985 to 1990, the number of workers in these plans shrank at a rate of 1.9% per year. From 1990 to 1995, the rate of decline was 2.2% per year. While more workers are covered today under 401(k) plans, the core pension system has deteriorated in lockstep with successive rounds of pension legislation (Clark, Mulvey, and Schieber 2002). Workers participating in hybrid pension plans technically are still in DB plans, but from the workers' perspective they are DC plans. The move to hybrid plans is simply a reflection of the trend toward DC arrangements. If policymakers are concerned about the U.S. retirement system, they need to note that the canaries are dying. Heaping a new set of rules and requirements on pension plan sponsors is not the way to restore a sustainable environment for the provision of retirement security in this country.

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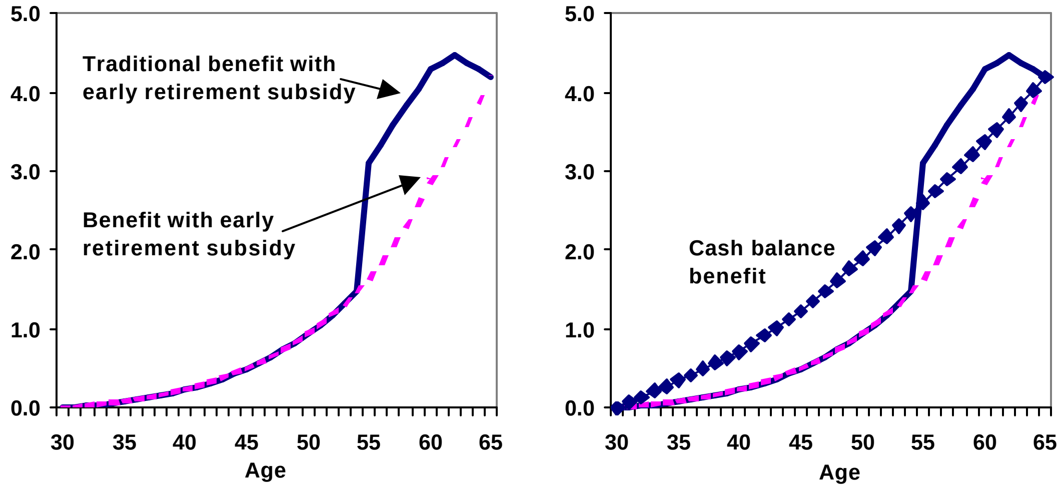
Table 1
Features of Alternative Employer-Sponsored Retirement Plans

Plan feature	Defined benefit (DB) plan	Defined contribution (DC) plan	Hybrid plan	Hybrid plan tendency
Employer contributes	Virtually always	Sometimes	Virtually always	DB
Employee contributes	Very rarely	Virtually always	Very rarely	DB
Participation	Automatic	Employee choice	Automatic	DB
Contribution level	Automatic	Employee choice	Automatic	DB
PBGC Insurance	Yes but capped	Not needed	Yes but capped	DB
Early departure penalty	Yes	No	No	DC
Benefits easily portable	No	Yes	Yes	DC
Annual communication	Benefit at end of career	Current balance	Current balance	DC
Retirement incentives	Occur at specific ages	Neutral	Most are neutral	DC
Accrual of benefits	Loaded to career end	Level over career	Level or back loaded	Mixed
Financial market risks	Employer bears	Employee bears	Shared	Mixed
Longevity insurance	Typically yes	Typically no	Not often taken	Mixed

Figure 1
Value of Accrued Pension Benefit as a Multiple of Annual Wage*



* Calculated at various ages for a new hire at age 30 with a starting wage of $40,000 per year.
Source: Data provided by Watson Wyatt Worldwide.

Table 2
Benefits under Hybrid Plans Relative to Benefits under Prior Traditional DB Plans for Selected Workers

Hybrid plan benefit as a percentage of prior plan's benefit	New hire age 30 at transition		Worker age 50 with 20 years service at transition	
	At age 40 Percent of plans	At age 60 Percent of plans	At age 50 Percent of plans	At age 60 Percent of plans
25–49%	0.0%	10.4%	0.0%	7.8%
50–74	1.3	41.6	1.3	23.4
75–99	0.0	26.0	5.2	23.4
100 exactly	2.6	5.2	20.8	24.7
100–124	3.9	9.1	20.8	18.2
125–149	5.2	6.5	19.5	2.6
150–199	23.4	1.3	16.9	0.0
200–299	41.6	0.0	14.3	0.0
300–399	15.6	0.0	1.3	0.0
400 or more	6.5	0.0	0.0	0.0
Minimum	68.5	25.4	68.4	37.4
Maximum	816.7	150.0	301.1	144.3
Mean	250.0	77.9	144.0	86.6
Standard deviation	126.3	28.3	50.9	23.0

Source: Data provided by Watson Wyatt Worldwide.

Table 3
Benefit Reductions Attributable to the Elimination of Early Retirement Subsidies in the Shift from Traditional Pensions to Hybrid Plans

	Percent of plans		
	At age 55	At age 60	At age 62
New hire at age 30 at a beginning salary of $40,000			
Benefit cut exceeds subsidy	15.6%	41.6%	49.4%
Benefit cut less than subsidy	42.9	27.3	22.1
Benefit maintained or increased	41.6	31.2	28.6
Worker at age 40 with 10 years of service earning $50,000 at transition to new plan			
Benefit cut exceeds subsidy	15.6	39.0	48.1
Benefit cut less than subsidy	45.5	28.6	19.5
Benefit maintained or increased	39.0	32.5	32.5
Worker at age 50 with 20 years of service earning $60,000 at transition to new plan			
Benefit cut exceeds subsidy	13.0	27.3	37.7
Benefit cut less than subsidy	23.4	27.3	20.8
Benefit maintained or increased	63.6	45.5	41.6

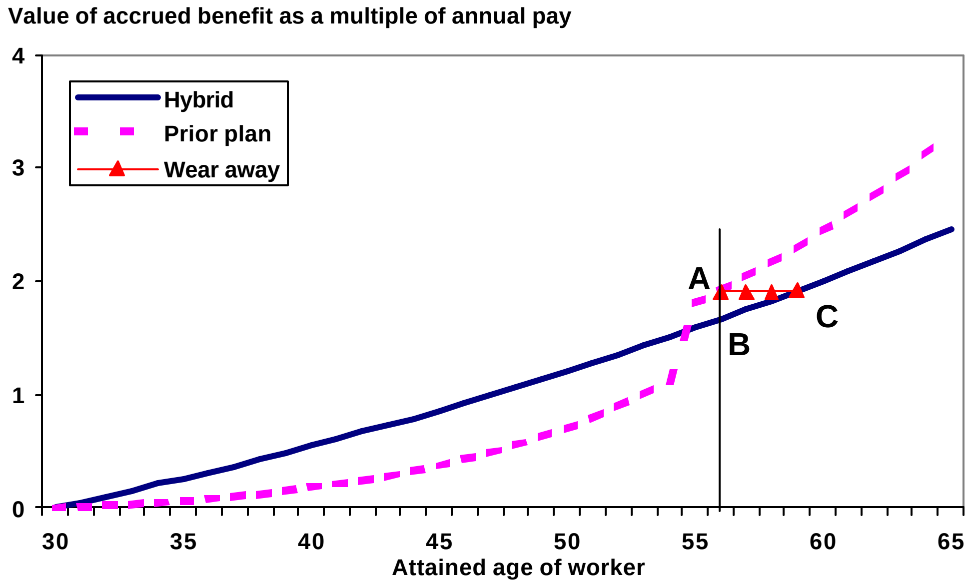
Source: Data provided by Watson Wyatt Worldwide.

Table 4
Benefits under Hybrid Plans Relative to Prior Plans for Workers Age 50 with 25 Years of Service and $60,000 Salary at Conversion

Hybrid and transition benefit as percentage of prior plan benefit	Percentage of plans					
	At age 55		At age 60		At age 65	
	Hybrid benefit only	Including transition	Hybrid benefit only	Including transition	Hybrid benefit only	Including transition
Less than 50%	18.2%	3.9%	20.8%	6.5%	15.6%	6.5%
50 to 74.9	31.2	14.3	33.7	19.5	35.1	19.5
75 to 99.9	28.6	15.6	27.3	24.7	23.4	23.4
100 to 124.9	15.6	51.9	13.0	41.6	16.9	39.0
125 to 149.9	5.2	11.7	5.2	7.8	7.8	9.1
150 or more	1.3	2.6	0.0	0.0	1.3	2.6

Note: Benefit changes include marginal improvements in DC plans.
Source: Data provided by Watson Wyatt Worldwide.

Figure 2
Potential Benefit Accruals as a Multiple of Annual Wage for a Worker Age 56 with 31 Years of Service at Conversion under Alternative Plans



Source: Watson Wyatt Worldwide.

Table 5
Percentage of Plans with Wear Away for Selected Workers

Duration of wear-away phenomenon	Annual pay level			
	$80,000	$50,000	$80,000	$50,000
	Age 54 at transition		**Age 50 at transition**	
25 years of service				
None	49.3 %	49.3 %	83.1 %	85.7 %
1 to 3 years	23.4	24.7	6.5	5.2
4 years	15.6	14.3	2.6	3.9
5 to 9 years	9.1	9.1	3.9	2.6
10 years or more	2.6	2.6	3.9	2.6
15 years of service				
None	58.4	58.4	87.0	87.0
1 to 3 years	23.4	26.0	7.8	7.8
4 years	7.8	5.2	0.0	1.3
5 to 9 years	9.1	9.1	2.6	2.6
10 years or more	1.3	1.3	2.6	1.3
10 years of service				
None	57.1	56.1	87.0	88.3
1 to 3 years	31.2	32.5	7.8	6.5
4 years	5.2	5.2	2.6	1.3
5 to 9 years	5.2	3.9	1.3	1.3
10 years or more	1.3	2.6	1.3	2.6

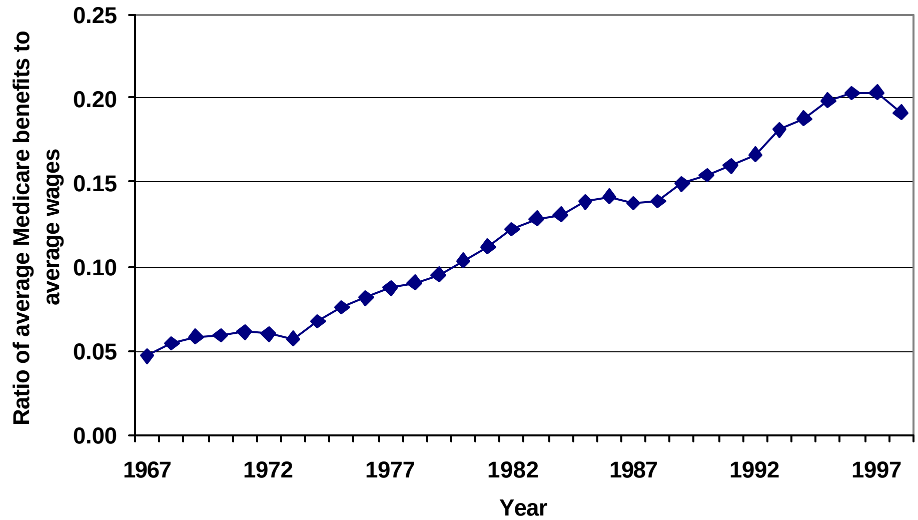
Source: Data provided by Watson Wyatt Worldwide.

Table 6
Potential Wear Away for a Worker Age 54 with 25 Years Service in the Transition to a Hybrid Plan, Compared with a Comparable Worker in the Prior Plan

Potential cumulative wear away as a percentage of pay at base age	Potential cumulative wear away in transition to hybrid plan at age 54 (percent of plans)	Potential cumulative wear away in traditional plan at age 55 (percent of plans)
0%	49.3 %	14.3 %
0.1–24.9	14.3	3.9
25.0–49.9	6.5	27.2
50.0–74.9	7.8	16.9
75.9–99.9	6.5	14.3
100.0–124.9	1.3	7.8
125.0–149.9	3.9	6.5
150.0–174.9	2.6	1.3
175.9–199.9	2.6	2.6
200.0–399.9	3.9	5.2
400 or more	1.3	0.0

Source: Data provided by Watson Wyatt Worldwide.

Figure 4
Ratio of Average Per Capita Medicare Benefits to
Average Per Capita Wages in the United States for Selected Years



Sources: Social Security Administration, *Annual Statistical Supplement,* various years and the *2000 Trustees Report*.