Innovations & Trends in Pension Plan Coverage, Pension Type, and Plan Design

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Abstract

In this paper, we outline recent trends in employer pension plan structure in the United States, focusing on plan coverage, plan type and pension plan design. We then identify the key factors that we believe will shape company-sponsored pension design in the future, drawing conclusions from a review of recent research and practice. Finally, we offer a cautious prognosis about the future of pension plan coverage, plan type and plan design, focusing on the role of labor force aging, as well as anticipated developments in the business environment and anticipated changes in public policy.

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Introduction

Business and labor market developments over the last two decades, and the expectation of continued changes, offer new challenges to the form and structure of employer-sponsored pension plans. Worklives are becoming more varied and shorter, spanning multiple employers and careers, and reaching retirement at an earlier age than ever before. Business conditions have also undergone tremendous change during the last decade, as witnessed by the decline of traditional large manufacturers (e.g. steel, auto, electronics and heavy equipment) and the transition to smaller firms in an information and service-based economy, changes in business ownership and corporate restructuring, the escalation of international competition, changes in corporate and individual taxation, and a decline in unionization.

In this paper, we outline recent trends in employer pension plan structure in the United States, focusing on plan coverage, plan type and pension plan design. We then identify the key factors that we believe will shape company-sponsored pension design in the future, drawing conclusions from reviewing recent research and practice. Finally, we offer a cautious prognosis about the future of pension plan coverage and design, focusing on the role of labor force aging, as well as anticipated developments in the business environment and anticipated changes in public policy.

Recent Trends in Pension Plan Coverage, Type and Design

Pension Plans Have Many Functions

Pensions have many economic and other functions responding to employee needs and plan sponsor objectives. Perhaps, the most important reason employees want pensions is to

help them save for retirement, thus reducing old-age economic insecurity. A companion role of pensions is to provide annuities, since outliving one's savings is for many a major source of economic insecurity in the last third of life. Many pensions, particularly defined benefit plans, offer insurance against extended longevity by promising an annuity payment from retirement to death. Employer-sponsored pensions cost less than individually-purchased retirement annuities, in part, because there is no adverse selection by the purchaser.

In addition, workers want pensions because dollars saved in a pension plan generate more retirement benefits by virtue of economies of scale and risk pooling. Larger investment pools can be shown to save substantially on administrative costs and investment expenses when they are compared to individually-purchased annuities.

Another central reason that people seek to save for retirement using pensions rests in U.S. tax law. In the United States, employees are permitted to pay lower current taxes when a portion of employee compensation is deposited in a pension plan, rather than being paid in cash. The opportunity to save on a pre-tax basis has been shown to be a tax-effective form of compensation, particularly for people in higher marginal tax brackets. (For evidence on each of these points, see Gustman and Mitchell, forthcoming 1992, and Gustman, Mitchell and Steinmeier, forthcoming 1992.)

Unions have also played an important role in shaping the pension environment, by bargaining for and influencing plan type, benefit levels and plan design. Negotiated plans were preeminently defined benefit plans, typically with relatively generous benefit levels and multiple options for early retirement. Historically, these plans also set the standard for nonunion companies, but this pattern has diminished as the unionized fraction of the workforce declined over the last decade. (Unique features of union plans are discussed in Gustman, Mitchell and Steinmeier, forthcoming 1992.)

Employers institute pension plans for a variety of reasons, but their overall goal is generally thought to be to design compensation patterns consistent with their human resource policy. Human resource policies, in turn, are driven by company business strategy. Some organizations, particularly larger ones, tend to emphasize selection, retention and motivation of the "right" employees as central to their business success. This perspective is seen in recent efforts to implement "total quality management" efforts in the U.S., and implies

long-term worker/company attachments as well as pension plan design which favors this practice.

Consistent with this notion is the view that pensions are frequently offered to attract and keep valuable workers. In part, this is achieved by pension plan features which encourage effort and discourage worker mobility. For example, vesting rules tend to discourage workers from changing jobs before gaining a legal right to a pension benefit, which is frequently attained after five years of service. Benefit accrual formulas, particularly in defined benefit plans, can reduce turnover and increase effort, by offering, in effect, higher compensation to those employees who stay longer and whose pay rises with seniority.

Another aspect of pensions which employers find useful is that they are perceived as attracting and retaining certain kinds of workers over others. Thus, some businesses find it essential to attract workers who will remain with the firm for a long period of time. This can be important when, for instance, the workforce has a great deal of firm-specific training and knowledge which is not easily duplicated. Because pensions are a form of deferred compensation, only those workers who intend to remain at the company will tend to be attracted to pension-covered jobs. Thus, the pension itself tends to be a recruitment and retention tool for workers with desired characteristics. In still other cases, pensions which reward workers based on company profitability generate the incentives for covered employees to more closely align their work effort with company objectives, as in the case of profit sharing and stock ownership plans. (See Gustman, Mitchell and Steinmeier, forthcoming 1992; and Ippolito, 1992).

Employers have also found pension plans to be helpful in other contexts, particularly with regard to regulating retirement flows. When productivity begins to plateau, or when technological change renders skills obsolete, a company's pension offerings can provide the opportunity for career employees to leave the company with dignity and with adequate income security. In some cases, companies have also used pensions, particularly early retirement windows, to minimize involuntary terminations when faced with the need for corporate restructuring and downsizing. (More discussion on these points appears in Gustman et al, forthcoming 1992; Luzadis and Mitchell, 1991; and Lazear, 1983.) The pension plan can, therefore, be designed to make retirement appealing by making retirement

benefits more generous overall, and by making early retirement benefits generous as compared to pension payments for delayed retirement.

Differentiating Defined Benefit and Defined Contribution Plans

The two major types of pension plans in the United States are defined benefit (DB) plans, and defined contribution (DC) plans. In the former case, the employer generally specifies a formula for benefits defined as income and payable at retirement, whereas in the latter case, the employer typically states a formula for plan contributions (often as a fraction of pay) during an employee's working lifetime. DB plans are the predominant form of employer-provided pension plan in the U.S., covering about 63 percent of employees of medium and large employers and 20 percent of employees of small employers (those with under 100 employees), and 93 percent of government employees as is shown in Tables 1 and 2.

DB plans are usually structured to achieve multiple outcomes (see Table 4):

- They meet employee needs for retirement income (often assumed to be the maintenance of preretirement living standards).
- They are associated with reducing worker turnover, encouraging career employment and employee loyalty, thereby protecting the employer's investment in human capital.
- They help career employees leave the labor force with dignity at a retirement age which fits the employer's human resource policy.
- They support other human resources needs, including workforce downsizing.
- They meet competitive practices and conform to the general practices in the community.

DC plans have some of the same features, but many different ones as well. In a DC plan, the employer generally specifies contributions into the pension plan rather than formula defined benefits, and the funds thus accumulated are invested until the worker reaches retirement age. In a DB plan, the obligation is fixed by the benefit defined and the application of minimum funding rules, but in a DC plan, the contribution can be defined or

discretionary. Table 4 compares features of these plans. DC plans currently cover 48 percent of employees of medium and large employers and 31 percent of employees of small employers, as well as 9 percent of employees of public employers. Some of these employees are also covered by DB plans. Because DC plans are subject to the same tax-qualification rules as the DB plans, many of the same retirement savings goals can be met with these plans. In addition, DC plans can meet other corporate goals including:

- They encourage employees to save pre-tax for their own retirement, including perhaps savings to meet the need for medical care after retirement.
- Increasing worker motivation and giving workers a "stake" in the company, particularly when contributions depend on company profitability, or when pension assets are invested in company stock.
- Helping the company finance itself in an effective manner.
- Providing lump sum cashouts to workers who leave the firm before reaching retirement age.

Employees also seem to understand and appreciate DC plans more than DB plans, which may explain their recent growth. This may be because plan sponsors offer periodic statements of account balances in DC plans, whereas this concept is not applicable in the DB case, where statements are usually less frequent, and generally show accrued and projected retirement income rather than a lump sum account balance. (A few DB plans are designed for lump sum payouts, however.) In addition, DC account balances are often portable from one job to the next, whereas a DB annuity payment beginning at age 55 or later seems remote to young workers. Nevertheless, this apparent better understanding of DC plans is probably somewhat illusory since employees cannot readily translate DC plan balances into retirement income. In addition, DC portability does not ensure retirement security since the pension balances are often spent rather than saved (Rappaport, Discussion of Biggs Paper, forthcoming 1992.)

Evaluating the efficacy and usefulness of the two plan types requires one to recognize that over the long run, a dollar invested in a DB plan often produces more investment income than in a DC plan. This is because DB plan sponsors typically use a balanced

portfolio to maximize investment returns consistent with their risk profiles, but in DC plans where employees have investment choices, they frequently invest in fixed income securities. Thus "401(k) plan participants described themselves as conservative investors who prefer to direct their own investments toward insurance and bank contracts... and said they were more inclined to choose low-risk/low return investments" (EBRI, 1992.) The different investment mix can easily result in a 1 to 3 percent lower average return for a typical DC plans as compared to a typical DB plan. Data on reported returns of DB and DC plans for the five-year period ending in 1989 confirms that the DB plan investments outperformed those of DC plans (See Table 5). These trends will probably continue because the fraction of DC plans permitting individual direction in investment options has probably increased, while in DB plans more aggressively managed portfolios became more popular over time.

Of course, DC plans are quite varied in form, and differ among themselves with regard to whether and what investment choices are available. Some plans offer only investments in company stock, whereas others offer a choice between different investment portfolios. When a DC plan is wholly invested in company stock, as in the case of an employee stock ownership (ESOP) plan, there is substantially higher investment risk in the DC plan, and a higher expected average investment return. Nevertheless, stock ownership plans have grown over time, covering 11 million employees as of 1989 (see Table 6).

Another difference between DB and DC plans which has gotten increasing attention in recent years, is the fact that DB plans typically provide monthly income, whereas DC plans typically pay lump sums. If early lump sum payments are spent rather than saved, this brings into question the tax-favored status of such plans. Those concerned about retirement security have proposed outlawing these lump sum cashouts, or favor higher penalties if cashouts are not transferred to another retirement savings plan; on the other hand, the availability of lump sum cashouts can make it easier for companies to downsize if tax law remains relatively favorable toward pension lump sums.

Typical Pension Plan Structures by Type of Employer

Pension plan features differ greatly across employer size and type of plan sponsor. In order to illustrate the rich variety of benefit practices currently in effect, it is useful to review

and compare data on pension plans covering employees of large and small private-sector firms, multi-employer groups, not-for-profit organizations and public sector employee groups.

Medium and Large-sized Employer Plans

Data for pension plans offered by private establishments with 100 or more employees were last collected in a 1989 Employee Benefit Survey conducted by the U.S. Department of Labor (USDOL, 1990). This evidence (see Table 1) shows that nearly all medium and large employers sponsored pension plans: 81% of employees were covered by retirement plans, with 63% covered by DB plans and 48% by DC plans (some employees have both). Most DB plans also structured formulas to replace generous percentages of earnings: three-quarters based benefits primarily on earnings, especially earnings during the final years of employment with the plan sponsor so as to protect benefits against inflation (prior to retirement). Average replacement rates in the DB plans were about 1% for each year of service. Therefore, a typical worker with 20 years of service at retirement might expect a benefit worth 20 percent of final average earnings, while the 30-year of service retiree would anticipate a replacement rate closer to 30 percent (USDOL 1989, T.85). Determining whether these benefits meet income adequacy standards must take into account Social Security and personal funds, and the extent to which benefits are indexed after inflation. Medium and large employers have, for many years, offered a measure of inflation protection for retirement inasmuch as 41 percent of their employees had retiree health coverage prior to age 65, and 36 percent had retiree health coverage post-65 in 1989. On the other hand, inflation protection after retirement is not complete, and appears to have declined in the last decade which suggests that inflation remains a challenge to pension retirement income adequacy (Allen, Clark and McDermed, 1991; Gustman and Steinmeier, 1987.)

In the very largest companies, a typical pension program included a first-tier non-contributory DB plan with a second tier which was often a matched savings plan of the DC variety. In the past, most larger employers also tended to offer retiree health insurance along with the pension, but the future is uncertain as health care costs continue to rise. Some employers offered profit sharing for salaried workers, and a DB plan for hourly employees. Relatively few employers adopted stock ownership plans as primary retirement

vehicles though many use them to supplement basic retirement programs. Medium-sized employers were more likely to use DC plans frequently with a cash (lump-sum) retirement benefit. Here, too, retiree health benefit plans were less prevalent.

Small Employer Plans

Pension data for private establishments with fewer than 100 employees were last collected in a 1990 Employee Benefit Survey (USDOL, 1990). A review of coverage and benefit patterns indicates that small employers are much less likely than large employers to offer retirement benefits, and where plans are offered, they tend to be DC plans (see Table 1). Thus, 42 percent of employees in small companies were covered by retirement plans based on the last published survey data, including 20 percent with DB plans and 41 percent having DC plans (some employees have both). These employers were also less likely to offer retiree health insurance coverage: only 13 percent of these employees have retiree health coverage. While data on benefit levels for small employers have not yet been published, they are probably lower than those reported above for medium and large employers. This conclusion is suggested by other studies which have found that small companies offer lower compensation levels in general (Brown and Medoff, 1989).

Multi-employer Plans

Multi-employer pension plans incorporate workers from a number of different employers, and are commonly found in the unionized trucking, construction, and retail trade sectors. In the past, they were used to provide private retirement benefits to workers employed in a trade who frequently worked for different employers over relatively short periods. Most multi-employer plans permit workers to carry their coverage with them from one job to the next, so long as they remain in covered employment (usually in the same occupation or industry, as a member of the same union). For historical reasons, these pensions face different economic constraints and regulatory obligations than those affecting single employer plans (Luzadis and Mitchell, 1991; Mitchell and Andrews 1981).

These plans have not grown much over time -- there are only about three thousand plans currently in existence (see Table 3), and multi-employer plans constitute less than one-

half of one percent of total private plans (see Table 3). They are likely to shrink in the future because of the continued fall in private sector union membership, and projected declines in industries which traditionally used multi-employer plans. In addition, many employers have grown concerned about the financial solvency of these DB pensions with continued increases in negotiated flat-dollar benefit levels; many plans are underfunded and employers joining the plans face potentially high withdrawal liabilities. While these issues are beyond the scope of the present paper which focuses primarily on single employer plans, policymakers concerned with retirement security must also consider multi-employer plan issues (USGAO, 1992).

Pension Plans in Not-For-Profit Firms

Not-for-profit organizations are a diverse group including membership associations, charities, universities, religious orders, and health care providers. Their diversity also implies pension plans with divergent structures and aims. Thus, for instance, universities often offer faculty a DC plan frequently funded by individual annuity contracts under the teachers' portable nationwide plan. In contrast, the human resource concerns of health care providers and larger membership associations resemble those of for-profit employers, and their pension plans are more similar to those of their for-profit counterparts. Larger not-for-profit employers offer pension benefit plans that are similar in structure to those of private employers, except that their DC pensions are subject to substantially different regulations. Religious orders can set up plans under the Church Plan rules which are considerably different from general qualified plan rules. Smaller not-for-profits rely heavily on tax-sheltered annuities under special sections of the tax code. Relatively few not-for-profits offer retiree health.

Pension Plans in the Public Sector

Human resource concerns of public sector employers frequently differ from those in the private sector, partly because of civil service requirements and because more workers are unionized in governmental entities. Also, pension regulation which covers private sector

plans does not typically govern plans of federal, state and local workers so that benefit plans have some special characteristics not found in the private sector.

Data on public sector plans is drawn from a 1987 Benefits Survey on full-time state and local government employees in groups with 50 or more participants (USDOL, 1987). Table 2 shows that pension coverage was more common than among private sector workers, with 98 percent of state and local employees having a retirement plan, including 93 percent covered by a DB plan and 9 percent by a DC plan (some employees had both). Of course, many public sector workers were traditionally excluded from Social Security so higher coverage rates are not directly comparable with private sector figures. Public sector plans also tend to offer generous retirement income: they facilitate earlier retirement, they tend to offer postretirement indexation of benefits, and 48% of all covered public sector workers have retiree health coverage (USDOL, 1987). Typical replacement rates for regular retirees (excluding Social Security benefits) amounted to about 35 percent of final pay for a worker with 20 years of service, and more than 50 percent for a retiree with 30 years of service (USDOL, 1987). Public sector plans are much more likely to require employee contributions than private sector plans.

Many problems and issues face governmental plans, including the fact that many plans are quite underfunded (Mitchell and Smith, forthcoming 1992). Unfortunately, data on public plans are much more difficult to obtain than in the private sector because public plans are not required to conform to common reporting and disclosure requirements. While our focus in this paper is primarily on private sector pension concerns, additional work is needed to explore public sector pension issues. Specifically, it will be important to ascertain whether public sector employees' retirement needs differ greatly from those in the private sector; whether public employers' objectives, resources and constraints differ greatly from those in the private sector; and whether pensions play a different economic role in the public and private sector.

Recent Trends in the Mix of Defined Benefit and Defined Contribution Plans

There has been much written about the apparent decline in private sector DB pension

coverage in recent years, and a concomitant increase in DC plan coverage (Society of Actuaries, 1990). These trends are illustrated in Table 3 which shows the number of DB and DC plans over time, and the number of determination letter applications for new plans as well as for plan terminations. The figures confirm that there was an increase in DC plans relative to the number of DB plans: DB plans decreased from 32 percent of the total plan universe in 1975, to 27 percent in 1987.

The leading explanation for this trend is that the industrial composition of employment changed over the last fifteen to twenty years in ways which favored a shift to DC pensions. Sectors which traditionally favored DB plans (e.g. durable manufacturing, unionized companies) contracted, while the service and finance sectors grew -- and the latter have traditionally had DC plans. There are also mixed signals in the data, however. Only about half of the overall movement toward DC plans has been linked to these national employment shifts, and the shift was concentrated among smaller businesses (with between 100 and 1,000 participants), but there was no similar trend among very large companies (with 1,000 employees or more). (See PBGC, 1990; Clark and McDermed, 1990; Gustman and Steinmeier, 1987).

A companion explanation for the downward drift in DB coverage is that DB plans became increasingly expensive to administer over the last decade, especially compared to DC alternatives. Note, however, that for many larger plans, this higher administrative cost has been more than offset by reduced contributions due to favorable investment returns. Numerous legislative and accounting changes during the 1980s increased the relative complexity of managing DB plans, as compared to DC plans. Indeed, one study reported that DB pension plan administrative costs almost tripled for small plans (15 participants) between 1981 and 1991, while small employers' costs for DC 401(k) plans were far lower. (See Hay-Huggins, 1990; Clark and McDermed, 1990).

Whether this administrative cost advantage of DC plans will persist in the future is open to question. Several recent regulations and litigation may challenge the current perception that DC plans are less costly to administer. For instance, troubles in the insurance and financial industries highlighted responsibilities of plan sponsors to carefully select and then monitor investment managers. Another issue is that a host of increasingly

complex and stringent nondiscrimination tests must be applied to plans permitting employee contributions and/or employer matching funds which make DC plans more costly than in the past. (This has been a primary area of focus in discussions about pension simplification.) Reforms are also being proposed to clarify the status of a worker's DC pension plan status in personal bankruptcy. This legislation will probably prevent an increase in the cost of administering such plans as courts today are increasingly looking to DC pension plan assets in bankruptcy. Last, but not least, regulations from the U.S. Department of Labor are promoting more employee choice with regard to investments, increasing the complexity of plan management and communication to employees.

On the other hand, insurance companies, banks and other financial intermediaries continue to offer packaged "pension products" for smaller employers which are typically DC plans. These products enable a small employer to use the package without requiring custom design or much management. A decade ago, "off the shelf" DB plan products were also sold, and are now a rarity because of the regulatory complexity of operating DB pension plans.

Innovations in Defined Benefit Pension Plan Design

During the last decade, two factors strongly influenced the structure and design of DB pension plans: regulation regarding specific plan features, and regulation regarding plan termination. In both cases, Congress has enacted legislation, which with the implementing regulations, will result in major change from past practice. As of early 1992, many of these changes have not yet been fully implemented. For instance, major changes in pension law were contained in the Tax Reform Act of 1986 (TRA), most of which became effective in 1989. Interpretations of the TRA along with additional regulations were not, however, issued in final form until September, 1991, when a 600-page package of "Final Regulations" was issued, effective for 1992 plan years. Subsequently, in February 1992, the U.S. Treasury agreed to delay the effective date of many regulations until 1993 plan years; and for the tax exempt sector and governmental plans, the effective date is now plan years beginning in 1995. During the interim, TRA remained in effect, and employers were required to meet a standard of good faith compliance. Therefore, much regulatory policy is still undergoing change, and many plans are awaiting revisions. The uncertainty wrought by this continuous

change is certainly depressing new plan formation and plan updating and may be hastening plan termination.

Despite the state of flux in which pension regulation finds itself, a few common themes are likely to be persistent. Throughout much of the 1980's, Congress became progressively more interested in limiting access to tax-qualified pension savings, unless the plans could be shown to balance benefits to higher-paid employees with relatively generous benefits to lower-paid employees. For instance, TRA requirement restricted annual compensation for qualified plan purposes to $200,000. The maximum benefit limits permitted under Section 415 of the Internal Revenue Code were reduced three times during the 1980s. TRA also limited the extent to which employers can coordinate pension payments and workers' Social Security benefits. These new limits on so-called Social Security integration required major changes in some very large plans, while at the same time, significantly complicating plan administration for those seeking maximum integration. As a result of eliminating or reducing integration, pension benefits rise for the lower paid, and/or are reduced for higher-paid employees. While equalization of benefits could increase retirement income security for the lower-paid employees, it did limit employers' ability to reward higher-paid employees with tax-qualified pension benefits, and in some cases, it resulted in an overall decrease in benefit amounts.

Pension plan sponsors have sought innovative approaches to these restrictions. One has been to establish "non-qualified" pension plans for key executives. Here, highly compensated employees who cannot be fully covered in a company's qualified plans because of legal restrictions, are offered a pension plan whose contributions are subject to tax (just as cash compensation would be) once there is constructive receipt. In other cases, a non-qualified plan may be offered to an executive hired in mid-career; here the plan grants, in effect, additional service. Unfortunately, no nationally representative data are available on the incidence and structure of these plans.

The increasing complexity of nondiscrimination regulations has also produced ever-more complicated pension plan administration problems, and makes it challenging for employees to understand their plans. Many plans have multiple layers of benefit formula with different formulas applying to different years of service. Plan sponsors have called for

simplification of pension regulation which is a popular political slogan, but has yet to be translated into legislation that Congress can agree on. Plan sponsors have criticized many of these simplification proposals as not having gone far enough.

A different solution for some employers has been to terminate their DB pensions. This phenomenon increased rapidly over the last decade: for instance, Table 3 indicates that the number of DB termination applications increased from 4,000 in 1975 to 16,000 in 1989. At the same time, applications for new plans plummeted. Nevertheless, the termination trend cannot be blamed on regulation alone since many of these coincided with leveraged buy-outs. In one study, for instance, 20 percent of the DB plans that had been sponsored by bought-out companies were terminated after the LBO (USGAO, 1991). Most plans terminated after LBOs were replaced, and most active participants were provided replacement DB plans, suggesting that at least some of these terminations were primarily financial transactions to remove surplus from the plans (Ippolito, 1989.)

In assessing the potential for future terminations of DB plans, it must be kept in mind that legislation has made this step increasingly difficult and expensive over time. In addition, taxation of pension plan reversions has increased, so that using pension surpluses to help finance takeovers will probably decline in importance in the future (Ippolito, 1989.) Finally, many small and medium employers already terminated their DB plans during the 1980's so this is largely a closed issue. To the extent that terminations are seen, they will be more likely to coincide with company bankruptcy, or changes in direction for overall benefit management purposes, rather than to play a key role in company buyouts as seen during the 1980's.

In addition to plan termination and regulation, several other important developments emerged over the last decade in the DB arena. An interesting one for human resource analysts has been employers' increasing awareness of pensions as a human resources policy tool, where DB pension offerings have been structured to help corporations downsize their labor force. Sometimes, the traditional DB formula has included liberal early retirement offerings, and at other times, early retirement window arrangements are offered that provide for additional retirement benefits for people retiring within a specified time. Early window plans have become widespread among larger firms, as indicated by a recent report by

Charles D. Spencer and Associates (1990) on early retirement incentives. This study showed that 15 percent of 273 large employers queried had offered early retirement incentive programs in 1989, and 24 percent had offered windows in 1986. Few, if any, employers offered incentives annually, but many offered multiple incentives. Early retirement window plans are attractive because they concentrate retirements during a shorter time period than otherwise would be obtainable (Luzadis and Mitchell, 1991; Lumsdaine, Stock and Wise, 1990).

Along with early-out plans has come growing awareness that the retirement benefit package also includes medical benefits, and plan sponsors are increasingly facing the need to link medical and pension programs in designing coherent retirement offerings. On the other hand, retiree health insurance costs are rising in tandem with active worker health insurance costs, forcing careful management of total compensation, including tradeoffs between health and pension offerings. Thus far, only anecdotal instances of this tradeoff can be cited, but it is possible that retiree health insurance cost pressures may force more employers to revisit the entire cost, structure, and contents of their retirement package offerings in the next few years.

Another development in the DB arena is a trend toward new pension "designs", including cash balance or account based pension plans. While these are fundamentally DB plans which specify benefits as an account, they permit employers flexibility in converting to a different type of benefit formula without undergoing plan termination. In such a plan, benefits are defined according to a contribution formula, yet minimum benefit payouts (in the form of life annuities) can be offered as in a traditional DB plan. The plan sponsor has the option of later changing benefits and/or offering early retirement windows (Lumsdaine, Stock and Wise, 1990.)

Administratively, these plans require actuarial valuations and they are covered by PBGC insurance (which may be seen as an advantage or disadvantage depending on one's viewpoint). Thus far, relatively few employers offer them -- 2 percent of the 1989 DB participants in medium and large employers had account based plans, and 1 percent of the 1990 DB participants in small plans (DOL, 1989 and DOL, 1990). On the other hand, the plans' legal status has recently been clarified: regulations issued at the end of 1991 clearly