Living with Defined Contribution Pensions

Remaking Responsibility for Retirement

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Chapter 13
The Future of the Defined Contribution Revolution

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This volume explains why and how the U.S. employer-based retirement system underwent a structural revolution in the last twenty years. Most analysts recognize that the environment changed from one dominated by defined benefit plans to one that today is more evenly balanced between defined benefit and defined contribution plans. The shift toward greater balance has occurred in several different ways. In some cases, new companies starting up a pension for the first time chose the DC mode to begin with, valuing its flexibility, relatively low cost, and employee appeal. In other cases, employers previously sponsoring DB plans terminated them and substituted DC plans in their place. In still other cases, companies continued to sponsor existing DB plans, but also added a DC plan as a supplement to the basic pension. In the latter case, some employers curtailed the generosity of their defined benefit plan as they added the DC plan, while others offered a defined contribution plan in lieu of enhancements to the existing defined benefit plan.

Supporting these recent trends toward the DC environment are other indicators suggesting that this pension plan type will grow more popular in the future. Around the world, we have seen increasing reliance on DC arrangements as the preferred mechanism to provide for workers' retirement security. Chile led the way in the early 1980s with the creation of a defined contribution system financed solely by employee contributions, designed to replace their old national social security system. More recently, Australia has mandated a system that has certain similarities with that in Chile, except that it is primarily funded by employer contributions (Schieber and Shoven 1996). Mexico, Argentina, and Peru have taken a similar path toward a national DC pension system, though each with individual country variants. Sweden is in the process of modifying its social security program from a pay-as-you-go defined benefit plan to a pay-as-you-go defined contribution plan. In the latter case, workers will accumulate a notional account balance over their working careers based on contributions made to the system based on their covered wages although there will not be an actual accumulation of financial assets behind the balances. The notional accounts will be credited with interest during workers' careers at the rate of growth in average wages in the economy. At retirement, the account balance will be converted to an annuity based on the life expectancy of a worker's birth cohort and the worker's own actual retirement age. Even in the United States, there is a growing debate over whether public policymakers should seriously consider reforming the nation's social security program to include some defined contribution components.

While the shifting of national retirement systems from traditional DB pensions to DC arrangements may be having the most significant impact on national retirement systems, there are also signs that employers in every country are moving more toward DC arrangements to the extent that they sponsor retirement plans for their workers.

Recently several large U.S. employers that traditionally sponsored DB pensions have amended their pensions to create a DC promise inside the structure of a DB funding arrangement. These so-called "cash balance" plans attribute contributions to notional accounts held in workers' names. These accounts accrue interest at some rate specified in the plan. In many cases, the employee perceives he or she has a plan with DC characteristics, but the sponsor can still fund the plan in the same fashion that a traditional defined benefit plan is funded. Along the same lines, so-called "pension equity" plans define their benefits on an accumulating percentage of final salary and the number of years a worker has been a participant in the plan. Once again, workers covered by these plans perceive they are participating in a DC plan although it is funded like a traditional DB pension.

These patterns represent a partial DB to DC conversion, but there is also early evidence suggesting that some large firms are beginning to consider making the wholesale shift to DC plans. Growing concerns over an aging workforce and the funding structure of defined benefit plans are making some plan sponsors wary of the potential future obligations they might face with their traditional pensions. In addition, even for large employers, administrative costs for DB plans are higher than those for defined contribution plans. Finally, many employers have found that the perceived value of DC plans is greater than that of a DB plan of comparable cost. Like many other phenomena that businesses have experienced in recent years, if a few large employers shift completely away from their defined benefit plans to offer only DC plans, it is likely that many others will follow suit.

The Changing Nature of Defined Contribution Plans

Along with the fact that more workers are covered by DC plans, the pension plans themselves are undergoing structural change. Such reconfigurations are partly explained by the growing importance of 401(k) plans, accompanied by employees' perception that the money in their DC plan is truly "their own money." This perception is largely attributable to the growing dependence of employers on voluntary contributory plans, as described in Chapter 1 of this volume. In simple terms, workers making their own contributions to a plan tend to think of the money they contribute as theirs, and this is not surprising since it *is* their own money.

Another factor leading to plan redesign is plan sponsors' desire to minimize their risks relative to potential losses in plan values because of adverse investment experience. In the United States, Section 404(c) of ERISA provides for fiduciary relief for plan sponsors when they allow plan participants to direct the investment of their own plan assets. If participants are permitted to direct their own DC investment accounts, plan fiduciaries are not held legally liable for losses resulting from participants' exercise of control over their own assets. In order to achieve this relief from the fiduciary requirements, however, participants must be able to "exercise independent control" of their assets. This means that participants must be able to move their assets between a number of investment options sufficient to let them affect the returns on their assets and to manage their portfolio risk through asset diversification. In terms of specific investment options, the plan must offer at least three alternatives, not including the sponsor's own securities. If only three options are offered, each must have materially different risk and return characteristics from the others. Participants must be provided sufficient information to make informed investment decisions among the various investment options available to them. Finally, participants must be able to move their assets between the investment options in the plan frequently enough that they can respond to expected market volatility.

As DC plans grow more widespread, employers have increasingly allowed and in some cases required workers to direct their own pension portfolio asset allocation decisions. This tendency flows in part from participants' perception that 401(k) assets are "owned," and arises partly because plan sponsors seek to shift investment risk so as to avoid potential liability. Table 1 shows that, between 1978 and 1994, the fraction of companies that permitted workers to direct the investment of their own DC plan contributions rose from 16 to 94 percent, and those that permitted

TABLE 1 Characteristics of Defined Contribution Plans, 1978 and 1994

Plan characteristic	*1978*	*1994*
Average account balance in 1994 dollars	$30,061	$59,200
Companies permitting voluntary participant contributions	46%	70%
Companies permitting participant direction of the assets in the plan		
Employees' own contributions	16%	94%
Employers' contributions	10%	74%
Number of plan investment alternatives		
One fund	51%	12%
Two funds	28%	7%
Three funds	13%	9%
Four funds	4%	15%
Five or more funds	4%	58%

Source: Data supplied to authors by Profit Sharing Council of America.

workers to direct the investment of company contributions rose from 10 to 74 percent. Nearly three-quarters of the participants in DC plans today have the opportunity to invest their retirement savings in a diversified portfolio of investment choices, including four or more funds.

Changes in the Pension Arena Not Universally Hailed

Greater reliance on DC pension plans arouses concern in some observers, including long-time pension critic Karen Ferguson, who decries the shift to a DC system dependent on voluntary employee contributions as "do it yourself" pensions. Among the problems cited with the shift to 401(k) and similar plans is that employers may contribute less to DC plans than they do to traditional DB plans, making them a "cheap treat" for the plan sponsors. Second, it is argued that the money contributed to a DC plan may be more susceptible to preretirement distribution and consumption, as compared to the money benefit accrued under a DB. A third issue is that the investment of the assets in self-directed accounts is often more conservative than the investment of assets in professionally managed DB plans. A fourth concern is that moderate- and lower-wage workers may tend not to participate in a DC plan because they often cannot afford to save regularly. Fifth, the advantages of the tax incentives and the matching contributions that are accorded these plans are largely directed at higher-wage workers eligible to participate in them. Finally, benefits tend to be paid in lump sums rather than through the annuity form provided by traditional DB plans (Ferguson and Blackwell 1995).

Although the criticisms of the shift to a retirement system that is more dependent on voluntary participation by workers are often discounted by those preferring DC plans over DB pensions, even strong advocates of DC plans acknowledge these views deserve consideration. Indeed, much public criticism concerning the shift from DB to DC plans conveys a sense of angst on the part of professionals who have spent their careers working on the design or administration of retirement plans, and in the public policy arena that governs them. Their comments should be taken seriously.

Nevertheless, no matter how fondly pension specialists might think on the "old days" when DB plans paid annuities to long-service workers, forward-looking managers must recognize that the world of the next century will be inevitably different from times gone by. It will be a world where workers do not spend lifetime careers with single employers. To the extent that the trends are apparent, they suggest that pension designers and pension experts must expect to place even greater reliance on defined contribution plans, and less on defined benefit plans. Not only are "entitlements" likely to be downsized, but ultimately the responsibility for retirement income security will increasingly rest on workers' shoulders.

Understanding the New Reality

Having concluded that employers are moving toward DC plans and curtailing their defined benefit promises, this presents pension policymakers with a powerful new challenge. Specifically, the question arises: how can pensions be adapted to the new perspective emphasizing individual responsibility for retirement saving, while at the same time providing retirement security across the income spectrum? In our view, it is probably most productive to respond to this challenge by working to make DC plans more effective than they have been in the past, rather than looking backward to the old DB environment.

Several of the studies in this volume support the practical experience of plan administrators and advisors who work with savings programs on a daily basis. At the firm level, we have come to understand that appropriate savings and investment behavior by workers will not be achieved until the cultural environment is in place to support it. There are some notable success stories, in both large and small firms. At Exxon, for example, a successful saving culture is based in part on the proposition that everyone from the truck driver to the CEO is offered the same benefit plans. Exxon has a 95 percent voluntary participation rate in its DC pension plan, partly because rank-and-file workers see the senior executives in the firm participating in the plan and thereby perceive that it is in their own interest to do so as well. General Electric boasts almost universal participation in its pension fund, which requires a posttax contribution as a condition for participation. High participation rates are reported even among production employees in these firms, partly because union stewards and senior workers make it a point to personally encourage young workers to participate in the plans.

It is perhaps inevitable that some people will never save as long as the act is voluntary. In part, these people are the high discounters that Ippolito has described above. In other cases, however, people who do not save are unable to do so, perhaps because they are barely ahead of the sheriff seeking child support or face foreclosure on an overdue mortgage. While it is reasonable to expect that some workers may not be able to save during portions of their careers, for most workers saving should be a habit that is developed within their cultural environment. It is here that society needs to do more in creating an environment that encourages appropriate behavior.

In our view, part of the explanation for low saving rates in the United States today is that the population is deeply enmeshed in a culture that encourages consumption rather than saving. For better or worse, most workers receive information about the world through television, radio, and print media—and communication networks are inevitably financed by companies selling consumer services or products. For consumers a little short on cash to meet these stimulated consumption appetites, credit is freely available to support living beyond current means (at least for a while). Nowhere are adults (as well as children) taught the importance of saving to cover anticipated retirement needs.

Related to this problem is a well-founded concern about workers taking preretirement distributions from DC plans, often spent rather than saved (Schultz 1993). In some regards, this pattern might also be attributable to the same myopia or high discounting behavior that results in many workers not even participating in pensions in the first place. In this book we have shown that an effective communications program encourages participation in voluntary contributory plans, and may also discourage premature consumption of retirement savings. Clearly this is an important issue for DC plan sponsors, but it is not limited to this plan type: increasingly, defined benefit plans are permitting lump sum cash-outs as well, with similar results.

From a worker's perspective, however, the comparison between DB and DC plans looks somewhat different than to the employer. Consider the case of the employee who changes jobs at age 30, after 10 years of employment. Under the DC approach, this worker can take his or her lump sum and either roll it into an alternative retirement saving vehicle or consume some or all of it prior to retiring. If it is consumed, then its value as retirement saving is lost.[1] It must be recognized, however, that the same worker covered under a DB plan would have also received very little. This is particularly troublesome when the DB plan provides no benefits until the worker reaches the normal retirement age under the plan. In both cases, the worker changing jobs would lose considerable pension value.

Concerns regarding workers being too conservative in their investment of self-directed retirement assets can, in our view, be thought of as two separate issues. One problem is that workers appear to many to be excessively risk averse, and will probably end up with inadequate retirement income as a result of conservative investment behavior. The second, and related, concern is that sponsors of plans must contribute more to meet a specific retirement income target when employees are controlling the investment of plan assets, than when the designated professional asset manager controls the investments. Fortunately, research shows that there is something that can be done to resolve the inconsistency between disposition and behavior, in that financial education might go a long way toward making workers more informed about investment options and the consequences of investment behavior. Both Bernheim's analysis and that of Clark and Schieber (this volume) focus on how pension information influences participation in voluntary contributory plans. In previous work (Goodfellow and Schieber 1997) it was found that older workers were quite conservative in their pension holdings, allocating around 60 percent of their assets in fixed income funds, whereas people in their twenties invested only about 40 percent of their savings plan accumulations in fixed income funds. Though the fraction in fixed income assets in all cases might be higher than professional investment advisors would suggest, it is not far off, and the inverse correlation with age is exactly what most advisors would suggest. One result of older workers investing more conservatively than younger workers, however, is that it creates a bias toward overall plan assets being conservatively invested. The natural distribution of assets in these plans along with the more conservative investment behavior of older workers partially accounts for the generally conservative structure of self-directed plan assets (Goodfellow and Schieber 1997).

It seems likely that communicating about pension investments can only induce workers to think more carefully about retirement plan savings patterns. And employers have incentives to provide this education, since if they do not it is likely that conservative investment patterns will yield too little retirement security. Of course in a DC plan, the ultimate benefit level is not the sponsor's responsibility as it is in a DB situation; sponsors do not directly assume pension investment risk.

Some have argued that moderate- and lower-waged workers cannot afford to take advantage of the financial incentives available to them in voluntary contributory saving plans, but this ignores the fact that many workers with similar wage levels do participate in these plans. Partly, workers' failure to participate in these plans is the result of the fact that it is not popular to extol the virtue of thrift. Nevertheless this behavioral characteristic does not mean that we should abandon employer-sponsored voluntary contributory retirement savings plans; indeed, such plans are often workers' only means of saving for retirement. And it is far from obvious that a return to a DB environment (were it possible) would offer much in the way of retiree benefits for those at the bottom of the wage distribution. Employers can only pay workers their worth. The cost of providing a worker a pension is a compensation cost directly associated with hiring and retaining that worker; it is only different in form from cash wages. This means that implementing a DB plan would likely result in a reduction in consumable compensation while that worker is covered under the plan. In that regard, having a DC or a DB plan reduces cash pay in exactly the same way.

One as yet understudied issue raised by DC plans is that most such plans pay retirees in the form of lump sums rather than in the form of annuities, of the type that DB plans traditionally offered. Some analysts consider this a problem because people cannot predict their life expectancy with any precision. If a retiree taking the lump sum benefit payout were to live longer than expected, he or she would quite possibly live so long as to deplete retirement savings. This is particularly a problem in the family context, as noted by Rappaport (1996).

To deal with the problem of outliving one's accumulated retirement savings, individuals can and sometimes do purchase annuities on their own. Nevertheless, private annuity markets appear to suffer from adverse selection, such that these annuities are quite costly to purchase. For example Paul Wenz (1996) has suggested that there are cost savings achievable by purchasing annuities under a group pension plan rather than as an individual, savings amounting to additional income of 2 to 6 percent per year (see Table 2). These savings result when a plan requires all participants to take an income-paying annuity with life contingencies; otherwise there would be adverse selection of annuities by participants expecting to live longer than average, reducing the amount of annuity income available to retirees. The problem is that when pensions permit lump sum cashouts to some retirees, the loss of risk pooling is a cost imposed on all retirees. As a result, most retirees tend to shy away from this market, exacerbating the problem.

One possible answer to this market problem is to have workers purchase variable annuities in their retirement plans, a practice described by Hammond (this volume). It also must be acknowledged, of course, that DB plans are increasingly offering lump sum cashouts as well, and consul-

TABLE 2 Illustration of Monthly Annuity Income Using Individual Versus Group Mortality Rates

	Age			
	55	*60*	*65*	*70*
Life annuity				
Using indiv. mortality	$594	$635	$693	$778
Using group mortality	+3%	+4%	+5%	+6%
Life annuity w/installment refund				
Using indiv. mortality	$583	$618	$665	$730
Using group mortality	+3%	+3%	+4%	+5%
50% survivorship annuity w/installment refund*				
Using indiv. mortality	$563	$593	$634	$693
Using group mortality	+2%	+3%	+4%	+5%

Source: Wenz (1996).
Note: The figures assume a $100,000 deposit and a 6 percent interest rate. All coannuitants are assumed to be three years younger than the annuitant. Individual rates based on Individual Mortality Table (Table "a" weighted 50% male, 50% female); Group rates based on GAM83 projected mortality table (also weighted 50/50). No expenses assumed.

tants report that in these instances, the overwhelming majority of participants take the lump sum form of benefit. This may be because employers offering DB plan annuities are offering them on terms more favorable than those that are offered anywhere in the commercial annuity markets. A subsidized lump sum may be financially sensible due to the fact that mandatory government insurance premiums need not be paid after retirees' benefit obligations are retired, a result that lump sum cashouts accomplish. If this as yet anecdotal evidence proves to be generally true, the demand for annuities may be significantly lower in the future than now.

Given the potential implications of this shift toward lump sum payouts in defined benefit plans, it is important that we better understand the underlying dynamics of this shift and how workers are reacting to it. First, we need to understand better the reasons employers are offering this form of benefit payment to retirees. Second, we need to understand why retirees are taking the lump sum benefits when so many retirement policy analysts believe that it would be in their best interest to accept annuities instead. Perhaps many people take lump sum payments in lieu of annuities because they underestimate life contingencies and the relative value of alternative benefit forms. If true, this is another case where more education and communication might prove to be the vital ingredient to assure the success of our new age retirement system. For certain, the annuitization issue will be of increasing policy importance as the baby boomers approach retirement. In any event, it is no longer an issue confined to the "DB versus DC" debate.

Conclusion

In recent years, much of the discussion about the evolution of the U.S. retirement system has focused on the relative merits of defined benefit and defined contribution systems. The debate has its international counterparts, since the United States is not unique in its push for DC pension plans. Indeed, in the 1980s a handful of countries including Chile implemented DC-type retirement savings programs, plans widely touted as new models for retirement accumulation vehicles. The decade of the 1990s saw defined contribution pensions legislated nationally in Argentina, Bolivia, Mexico, Peru, and Uruguay, and currently several Eastern European nations are fashioning their own versions of DC pension reforms. This trend has been encouraged by the World Bank (1994) and other financial institutions, on the argument that privately managed DC pension plans can play a key role in national growth and development.

During this debate, employers in the United States and abroad have increasingly grown to depend on DC plans, and on modifications of existing DB plans so they take on attributes of DC plans. For all practical purposes, the fact of worldwide increasing dependence on DC plans has eclipsed an older debate over which is the "best" form of plan. While some lament the passage of an era, the old defined benefit plan is one that many workers and employers no longer support given the exigencies of modern labor and capital markets. Indeed, the task before us now is to figure out how to maximize the probability that evolving pension plan structures assure the retirement income security of current and future generations of workers.

Note

1. It is possible that the accumulation could be used to finance education or a home that might accumulate in value over time, in which case the value would not be lost. While such expenditures might be technically counted as consumption, they are in fact a means of preserving the capital that had been accumulated in the plan.

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