Revisiting Contributory Defined Benefit Plans:

An Old Idea Whose Time Has Come (Again?)

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Throughout the history of employee retirement plans, changing market conditions have prompted employers to periodically rethink their retirement benefit plans. The earliest pension programs in the United States were noncontributory, defined benefit (DB) plans funded exclusively by employers. Then the Great Depression and the enactment of Social Security swung benefits in a contributory direction for several decades. A shift back toward noncontributory plans started during World War II, but with the advent of 401(k) plans, beginning in 1981, once again the momentum turned toward greater employee cost sharing and the defined contribution (DC) model. Today, thinking has begun to shift again, back to the idea that employees need the guarantee of a DB plan—but that they should still play a contributory role in the accrual of their retirement assets. This article traces the logic of these changes and proposes an updated version of the old contributory DB plans as an antidote to the insecurity of DC plans.

Two devastating market collapses within one decade have damaged a great many pension plans. Employees participating in defined contribution (DC) plans have seen their retirement assets deteriorate. Defined benefit (DB) plans have come under funding pressure, forcing employers to think hard about whether they can afford to continue providing the benefit for their workers. Retirement plan sponsors need to control costs, and employees are hungry for some security. What kind of retirement plan can serve both interests?

One model that might fit the bill is an old one: the contributory DB plan, which adds the element of employee contributions to defined benefits. If the contributory DB concept sounds unfamiliar, it's probably because it grew to predominance and then fell out of favor long before most of today's employees entered the workforce.

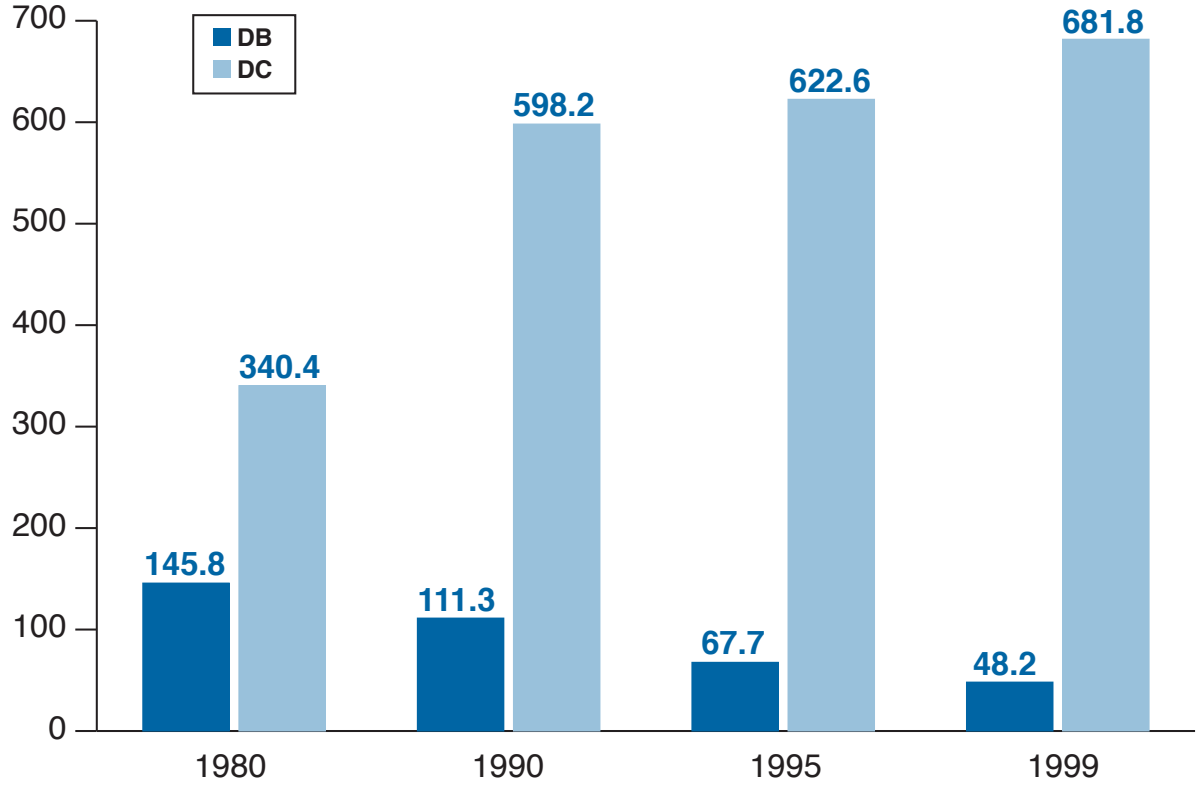
Historically, dramatic changes in market conditions have prompted shifts in employee benefit plans. Some of the conditions that led to the adoption of contributory DB programs have returned in our time, and in order to understand why the model may be useful now, it's necessary to understand something about its past.

WHERE WE'VE BEEN

American Express established the first private

FIGURE

NUMBER OF SINGLE EMPLOYER DB PLANS (THOUSANDS)



- 100,000 fewer DB plans by 1999
- 87% of these due to plan termination of plans with <100 participants

pension plan in the United States in 1875, and during the next 55 years, a total of 397 private sector plans came into being. Among the major companies to introduce them were Standard Oil (1903), AT&T (1906), U.S. Steel (1911), General Electric (1912), Goodyear (1915), Bethlehem Steel (1923), American Can (1924) and Eastman Kodak (1929). The goal of the programs was to help promote a stable, career-oriented workforce within each company.

More than three-fourths of these earliest pension programs, covering 96% of participants, were noncontributory, DB plans funded entirely by employers. Two factors encouraged the noncontributory DB approach. First, the competition for labor was intense as American industry boomed; employers felt they had to offer retirement plans, and they couldn't ask employees to pay for them. Second, the government provided a favorable regulatory environment that offered tax deductions for employer contributions as well as investment earnings that were exempt from taxation.

Changing Models

During the Great Depression, the new economic realities impelled companies to change their approach. The Depression throttled profits, and tight credit markets made it hard to obtain cash—conditions that are familiar today. Employers responded by cutting expenses in every way practical. In addition, the Social Security Act of 1935 brought the federal government into the retirement benefits market. Social Security introduced the principle of cost sharing between employer and employee, thereby opening the door for employers to adopt the concept for private pension plans as well. The result was contributory DB plans containing the DB feature of the original programs, but with employee contributions built in as a cost-sharing measure.

The shift back toward noncontributory DB plans began already during the 1940s, as World War II brought on an acute labor shortage as well as a gov-

ernmentally mandated wage freeze. Again facing stiff competition for workers, companies reassumed the full responsibility for paying the costs of pension plans as another way of compensation. The employer-paid DB again became the standard and remained so throughout the next three decades. By 1969, only 20% of the participants in company-sponsored DB retirement plans were required to contribute to them.[1] At the height of this trend in the late 1980s, 96% of medium- and large-scale DB plans were non-contributory.[2]

Where We Are

With the advent of 401(k) plans in 1981, the momentum turned in another direction. The result was the now-familiar landscape of greater employee cost sharing and the dominance of the DC retirement model, driven by employers' desire to contain their costs and facilitated by the robust bull market of the 1980s-1990s.

DB plans have not disappeared; in fact, the majority of large corporate employers still offer them. However, as the figure shows, the number of single employer DB plans dropped between 1980 and 1999 from 145,800 to 48,200, a change of 67%, while the number of DC plans doubled. And the number of DB plans has continued to fall during the decade since 1999.

If we look at contributory DB plans, the numbers are even more stark. By 2008, the number of DB plans in the United States dropped to about 28,000, and of those, only about 4% are contributory DB plans.[3] The contributory DB plan would appear to be an endangered species.

Elsewhere in the World

In a number of developed countries outside the United States, DB plans have maintained their dominance and contributory plans represent some portion of them. In Switzerland, for example, DB plans are mandatory, and the majority of them are contributory plans. In Canada, 78% of participants are covered by DB plans, and 50% of those are contributory. Contributory DBs are also common in Belgium and the Netherlands, and the United Kingdom also has some programs with participant contributions. On the other hand, contributory plans are uncommon in Japan, where employer-paid DBs dominate the retirement benefits market.

All of that notwithstanding, the desire on the part of employers to cut costs seems to have sparked a global trend away from defined benefits and toward defined contributions, despite the fact that regulatory environments outside the United States tend to complicate the shift from DB to DC. Recent tax law changes in Japan, as well as recent legislation in the United Kingdom and the Netherlands permitting DC plans for new employees, may suggest the beginnings of a shift. Already, DC plans are common in Australia, New Zealand, Hong Kong, Singapore, Malaysia and Eastern Europe. Thus, the global situation is a very mixed picture, but trending toward DC.

Benefit plans need to change when conditions in the economy—and especially the labor market—change, and that was true in the period following World War II. It may be true again today, but in a different direction. ◄

RECONSIDERING CONTRIBUTORY DB PLANS

Americans might ask: Why resurrect a type of plan from the past? Wasn't there a good reason why so many companies abandoned the contributory DB model that grew up in the 1930s?

The reason the contributory idea yielded to the older, non-cost-sharing model was that the labor market changed dramatically. Benefit plans need to change when conditions in the economy—and especially the labor market—change, and that was true in the period following World War II. It may be true again today, but in a different direction.

Why Now?

The U.S. economy today shows some important similarities to the 1930s, when the first wave of contributory DB programs began:

- Credit markets are tight, and it is difficult to obtain cash.
- Profits are generally low or negative.
- Companies need to cut expenses, which may include the cost of retirement benefit programs.

At the same time, employee attitudes show a readiness to accept what the contributory DB model has

TABLE I

COMPARISON OF PLAN DESIGNS: 25-YEAR-OLD (COMPENSATION = $40,000)

	DB Employer	DB Contributory	DC Only
Average Contribution Rates			
Employee	0.00%	2.00%	2.00%
Average Employer	3.31%	1.31%	3.67%
Contributions			
Employee	$0	$55,000	$55,000
Employer	$111,000	$56,000	$102,000
Value of Benefit at Retirement			
Employee	$0	$120,000	$111,000
Employer	$315,000	$195,000	$204,000

- DB plan is 1% career average.
- Assumptions:
  - —Salary increase 3.00%
  - —Investment earnings 4.00%
  - —Employee contribution interest 3.45%
  - —Generational mortality
  - —T-3 turnover
  - —Value of benefit utilizes the August 2009 lump-sum rates.

TABLE II

COMPARISON OF PLAN DESIGNS: 40-YEAR-OLD (COMPENSATION = $70,000)

	DB Employer	DB Contributory	DC Only
Average Contribution Rates			
Employee	0.00%	2.00%	2.00%
Average Employer	4.59%	2.59%	5.40%
Contributions			
Employee	$0	$45,000	$45,000
Employer	$113,000	$68,000	$123,000
Value of Benefit at Retirement			
Employee	$0	$79,000	$70,000
Employer	$259,000	$180,000	$189,000

- DB plan is 1% career average.
- Assumptions:
  - —Salary increase 3.00%
  - —Investment earnings 4.00%
  - —Employee contribution interest 3.45%
  - —Generational mortality
  - —T-3 turnover
  - —Value of benefit utilizes the August 2009 lump-sum rates.

TABLE III

COMPARISON OF PLAN DESIGNS: 50-YEAR-OLD (COMPENSATION = $100,000)

	DB Employer	DB Contributory	DC Only
Average Contribution Rates			
Employee	0.00%	2.00%	2.00%
Average Employer	6.02%	5.63%	6.90%
Contributions			
Employee	$0	$31,000	$31,000
Employer	$97,000	$66,000	$108,000
Value of Benefit at Retirement			
Employee	$0	$46,000	$40,000
Employer	$178,000	$132,000	$138,000

- DB plan is 1% career average.
- Assumptions:
  - —Salary increase 3.00%
  - —Investment earnings 4.00%
  - —Employee contribution interest 3.45%
  - —Generational mortality
  - —T-3 turnover
  - —Value of benefit utilizes the August 2009 lump-sum rates.

to offer. Because of the widespread DC programs, cost sharing is now well-established. A recent survey by Watson Wyatt indicates that many employees are willing to pay a higher amount in return for a guaranteed retirement benefit. Such a trend would seem to parallel that in health care benefits, where more and more employers are controlling costs by shifting a portion of them onto their employees—and the employees are getting used to it. As the workplace culture continues to change in the direction of cost sharing, adding employee contributions to DB plans makes sense.

It certainly makes sense as a possible alternative to dropping benefits. As retirement benefit costs have risen, the tendency among some employers—especially smaller companies—has been to reduce or eliminate them. This obviously hurts employees and may, in the longer run, make companies less competitive in the labor market. Cost sharing might provide an alternative solution that is acceptable to both sides.

Plan Design and Cost Savings

The primary difference between a contributory DB plan and a noncontributory DB plan is that employees share in the cost of the plan in the former, but not in the latter; therefore, an employer can offer the exact same plan benefits at a lower cost under a contributory plan format. Although there is a chance that the mandated rate of return on participant contributions could exceed the actual plan investment return, resulting in a loss to the plan, the risk of this occurring over the long term is remote.

Tables I-III present a simplified example of how a contributory DB plan might compare with a noncontributory (employer-paid) plan and a DC plan in terms of employer/employee cost sharing. The example focuses on three hypothetical employees: one begins working for the company at the age of 25, the second at the age of 40 and the third at the age of 50, each with a salary consistent with the employee's age. The plan aims at providing a benefit of 1% of the employee's career average salary, targeted at the retirement age of 62.

Note the following in each case:

- The employee rate will always be 0% in the case of a traditional, employer-paid DB plan. For the contributory DB and DC plans, we are assuming an employee contribution of 2% of earnings, and the employer pays the rest.
- The employer contribution rate under the DC-only scenario is the percent needed to match the DB plan benefit.
- The total value of the plan benefit is the sum of employee and employer-provided benefit figures.
- It is assumed that the employee will average a 3% annual salary increase, the DC plan invest-

ments will earn an average of 4% annually and the DB plan employee-contribution interest will average 3.45% (the current mandated Internal Revenue Service (IRS) rate for contributory plans as of this writing).

In Table I, for the 25-year-old employee, a DB plan would cost the employer 3.31% of the employee's salary throughout his or her career, or about $111,000. This results in a benefit worth about $315,000 at retirement. For a comparable benefit value, the DC plan (right-hand column) would cost the employer $102,000 and the employee would contribute $55,000. The contributory DB plan (middle column) would cost the employer $56,000 and the employee $55,000. With the contributory DB plan, the employer saves $55,000 compared with the DB employer plan.

Some employers may worry that the costs of a contributory DB plan might weaken the competitiveness of their business. In this light, however, it is useful to note that in 2009, Switzerland, where contributory DB plans predominate, was ranked by the World Economic Forum as the most competitive economy in the business world.[4] ◀

Tables II and III show that, for older employees, the employer costs are lower under a contributory DB plan even compared with a DC-only plan. For the 40-year-old, the employer saves $55,000 ($68,000 compared to $123,000); and for the 50-year-old, the savings is $42,000 ($66,000 compared to $108,000).

The savings noted above assume the DB plan earns returns comparable to those available under a liability-driven investment strategy (aligning the plan's asset allocation with the plan's liabilities). Using such an investment strategy will help to stabilize the funded status from year to year. If the plan sponsor instead employs an investment strategy that seeks returns over stability, the actual costs could be somewhat lower than those shown, albeit with potentially much more variability in the plan's funded status. Thus, a large company seeking to cut costs in its retirement benefits could realize considerable savings over time by switching to a contributory DB plan, while at the same time preserving the level of retirement benefits for employees.

Pros and Cons

In summary, the advantages of the contributory DB include:

- A safety net retirement with a lifetime income guarantee for employees
- Cost shared between employer and employees (as illustrated above)
- Lower funding and net periodic pension costs compared with noncontributory DB plans
- Increased value for employees.

Against these positive factors, plan sponsors must weigh the potential downsides:

- Cash-funding requirements for a contributory DB plan can be volatile, owing to the need to meet the guaranteed benefits even when investment market conditions are unfavorable.
- The financial reporting requirements can result in higher administrative costs due to additional record keeping and the need to pay contributions plus interest.
- It can sometimes be difficult to satisfy nondiscrimination laws, particularly if there is low participation.
- Unlike with DC plans, employee contributions to the plan are made after taxes and are, therefore, not tax-deferred.

Because employee contributions are made after taxes, the accounting can be complicated. The amount ultimately paid out in benefits must be parsed between the employee-provided benefit and employer-provided benefit so that it is taxed appropriately.

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THE DB(k) COMBINED PLAN: A STEP IN THE RIGHT DIRECTION?

According to the terms of Section 414(x) of the 2006 Pension Protection Act (PPA), a new plan option was to become available for DB programs beginning January 1, 2010 for organizations with 500 or fewer employees. This option, which combines a 401(k) with a DB plan, is essentially two plans rolled into one: an employer-paid DB and a DC plan with employee and employer contributions. The assets will

be held in one trust, but employers will have to file only one set of documents with the government and undergo only one audit—an improvement over the previous situation, in which businesses that offer employees both a DB and a 401(k) plan have had to file documents and undergo audits for both programs.

The DB(k) provides a small guaranteed income stream with the asset growth potential of a 401(k). On the DB side, the new program allows for either a final average pay design or one that utilizes the account balance approach seen in cash balance plans. The final average pay type of design requires that a plan provide a minimum benefit of 1% of the employee's final average pay (over a maximum of five years) times years of service (maximum 20). The account balance plan design mandates a minimum pay credit of 2% of compensation for those participants under the age of 30, increasing in ten-year bands to a required 8% of compensation for participants over the age of 50. On the DC side, an automatic enrollment feature sweeps 4% of the employee's pretax salary into 401(k) savings (with an opt-out provision for individual employees). Employers are required to match at least 50% of employee contributions (maximum 2% of pay).[5]

One of the most important factors causing small companies to abandon DB plans during recent years has been the administrative costs. The DB(k) program gives small businesses incentives for offering a defined benefit while keeping administrative costs down. Employers providing the DB(k) are also exempt from top-heavy requirements, those rules that are meant to ensure that a company's retirement plans are not unfairly skewed toward the highest paid workers.

The main difference between a DB(k) and a contributory DB plan is that a contributory DB plan is just a defined benefit plan, with retirement benefits based entirely on a predetermined formula. In contrast, the benefits from a DB(k) plan come out of the two components of the plan: a predefined formula amount plus an amount based on the accrual of 401(k) assets.

As of this writing, there are still some questions to be answered with respect to the final DB(k) regulations. These have to do with rules for converting existing plans, whether there are any restrictions and how to determine DC investment allocation.

And finally, it remains to be seen whether the DB(k) program will eventually extend to organizations with more than 500 employees. In the meantime, large companies would be well-advised to take a look at the contributory DB model.

CONCLUSION

Following the bumpy ride of the investment markets since 2000, employees who have seen their DC assets tumble want some security, and they are willing to pay for it. Employers that have offered DB plans but need to cut their costs should consider the contributory DB model. The concept worked before, and, with care to design programs that fit both employer and employee needs, it may just be time to bring it back. ◀

Endnotes

1. "Private Pension Plans, 1960 to 1969—An Overview," *Monthly Labor Review*, July 1970, p. 40.
2. "Employee Benefits in Medium and Large Firms, 1989," *Bulletin 2363* (Bureau of Labor Statistics, June 1990), p. 124.
3. 2008 Pension Benefit Guaranty Corporation (PBGC) Annual Report, p. 9.
4. World Economic Forum, *The Global Competitiveness Report 2009-2010*, online at www.weforum.org/en/initiatives/gcp/Global%20Competitiveness%20Report/index.htm.
5. IRS Notice 2009-71.

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