Still a Better Bang for the Buck
An Update on the Economic Efficiencies of Defined Benefit Pensions
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Still a Better Bang for the Buck

Over the past three decades, private employers have shifted away from defined benefit (DB) pensions that provide employees with a steady retirement income stream, towards defined contribution (DC) retirement accounts—such as 401(k) plans—in which individual workers manage their own investments. Since the 2008 financial crisis, public employers have faced pressures to make a similar change.

However, DB plans are inherently more cost-efficient than DC plans. A seminal NIRS study released in 2008, entitled “A Better Bang for the Buck,” found that a typical large DB pension plan provides a given level of retirement benefit at about half the cost of a DC plan. In this updated comparison of DB and DC plan costs, we take into account key developments in the retirement benefits landscape with regard to fees, investment strategies, and annuities, while building an “apples to apples” comparison through a uniform set of demographic and economic assumptions. Highlights include the following:

1. **A typical DB plan provides equivalent retirement benefits at about half the cost of a DC plan, and 29 percent lower cost than an “ideal” DC plan modeled with generous assumptions.**
   - A DB plan, modeled with the typical fees and asset allocation of a large public plan, has a 48 percent cost advantage compared to a typical individually directed DC plan.
   - The DB pension costs 29 percent less than an “ideal” DC plan that features the same low fees and no individual investor deficiencies.
   - Annuiting DC account balances does not erase the DB pension cost advantage. Annuities offered by private insurance companies would only modestly decrease DC funding requirements at historical average interest rates, and would increase costs at 2014 interest rates.

2. **DB plans have three structural cost advantages compared to DC plans: longevity risk pooling, the ability to maintain a well-diversified portfolio over a long investment horizon, and low fees and professional management.**
   - **Longevity risk pooling.** In order to provide lifelong income to each and every retiree, DB plans only have to fund benefits to last to average life expectancy. In a DC plan, an individual must accumulate extra funds in order to self-insure against the possibility of living longer than average. They can also buy a life annuity from an insurance company, but this comes at a cost.
   - **Asset allocation.** DB pensions are able to maintain portfolio diversification—specifically, stay invested in equities—over time, while DC participants must shift to lower-risk, lower-return investments as they age. Thus over a lifetime, DB pensions earn higher gross investment returns than do DC accounts.
   - **Low fees and professional management.** Due to economies of scale, DB plans feature low investment and administrative expenses as well as management of investments by professionals. An “ideal” DC plan can theoretically achieve the same fees and investment returns, for a given asset allocation, by removing individual choice. When we use more realistic assumptions—industry average fees and a modest “behavioral drag” on investment returns resulting from well-documented tendencies in individual investor behavior—we find that the DB plan has a large advantage in net investment returns.

3. **Given the cost efficiencies inherent to DB plans, employers and policymakers should continue to carefully evaluate claims that “DC plans will save money.”**
   - For a given level of retirement income, a typical individually directed DC plan costs 91 percent more—almost twice as much—as a typical DB plan.
   - Consequently, shifting from a DB plan to a DC plan and maintaining the same contribution rate will generate significant cuts in retirement income. The consequences could be dramatic for employees, employers, and taxpayers.