



National Conference on Public  
Employee Retirement Systems

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## How Did the Shift from Defined Benefit Pensions to Defined Contribution Plans in the Private Sector Impact Retirement Savings?

A recent study by the Center for Retirement Research at Boston College notes, “We are going to have to change our story!” Using national income and product accounts data from the US Bureau of Economic Analysis, the study found that over the past 30 years retirement savings have not declined as a result of the shift from defined benefit (DB) to defined contribution (DC) plans.<sup>1</sup> To many of us in the pension research field, this seems counterintuitive. On closer look, the Boston College study measures savings in terms of the percentage of salary going into DB and DC plans. We believe that it is likely that the percentage of salary going into retirement savings may have remained relatively steady over the past 30 years, but the per participant benefit in DB plans is likely to be much higher than that in DC plans. To explore this further, we have used the US Department of Labor (DOL) historical data to examine the impact of the shift from DB to DC plans on retirement savings.

In a nutshell, our analysis shows that the historic shift from DB to DC plans in the private sector has reduced retirement savings by 50 percent during 1975–2012.<sup>2</sup> For example, during this period, the combined DB and DC savings was about \$6.9 trillion. If everyone remained in the DB plan, that is, if there were no massive shift to DC plans, the retirement savings would have been \$13.9 trillion.

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<sup>1</sup> Center for Retirement Research at Boston College, “How Has Shift to Defined Contribution Plans Affected Savings?,” September 2015, Number 15–16.

<sup>2</sup> US Department of Labor, “Employee Benefits Security Administration, Private Pension Plan Bulletin Historical Tables and Graphs,” December 2014.

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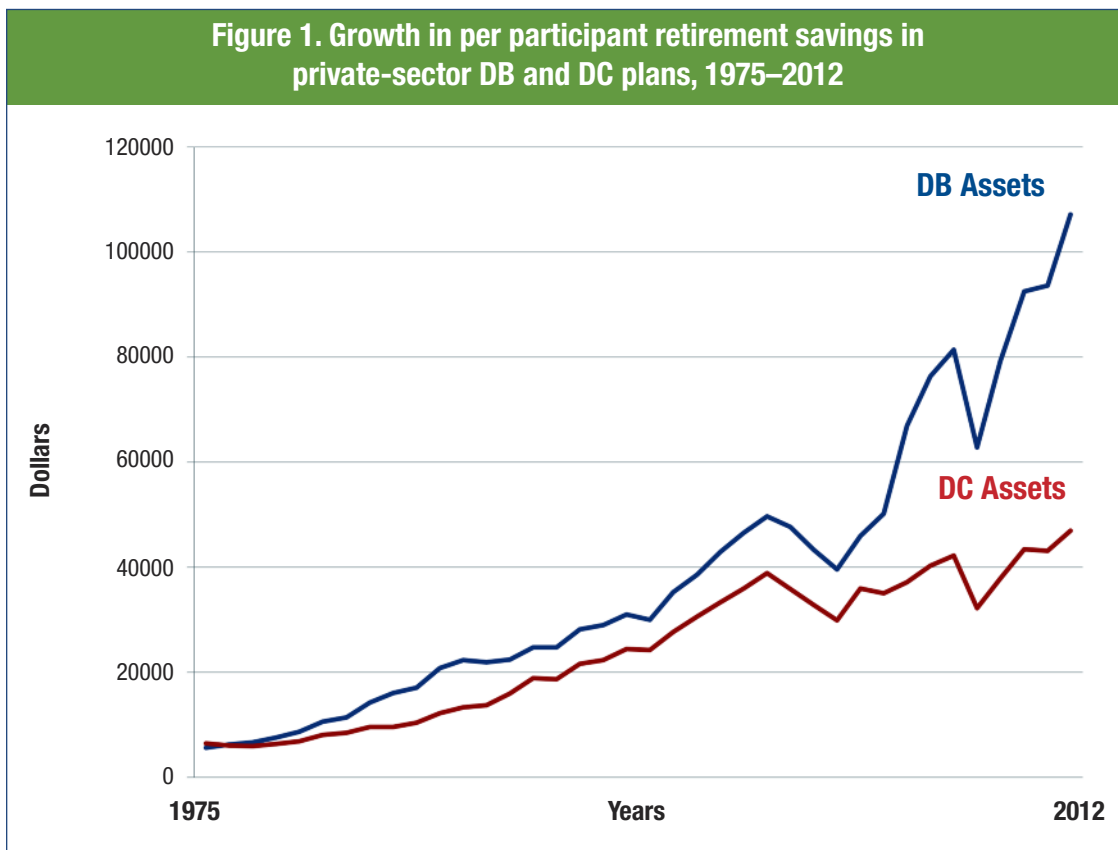
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## Data and Methodology

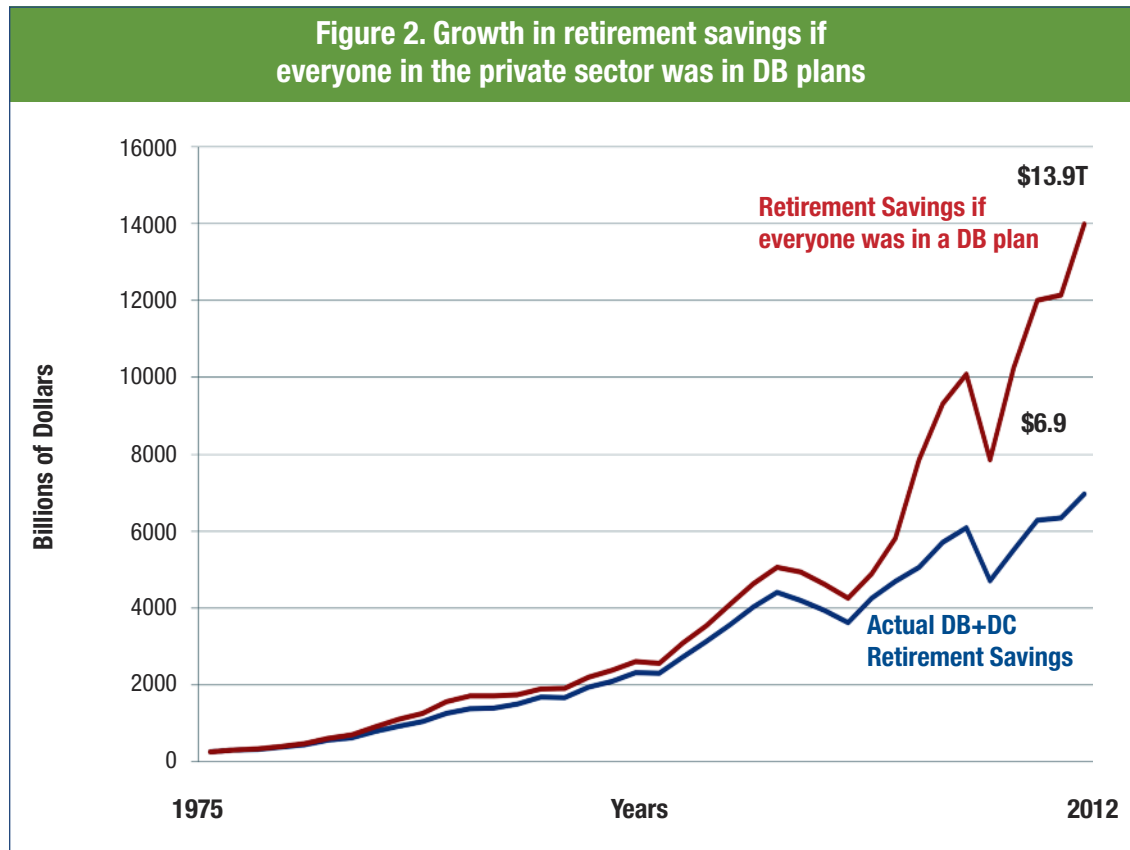
The DOL recently published historical data on private pensions that, among other variables, captures annual data on the number of participants and assets in DB and DC plans during 1975–2012. We have calculated assets per participants in DB and DC plans. We then assumed that there was no shift to DC plans, and all participants were in a DB plan. What will the amount of assets be? To calculate this, we multiplied the asset accumulation per participants by total (DB+DC) number of participants. We then compared the total DB+DC assets as they exist now with those if everyone was in a DB plan.

## Results

The results are shown in Figures 1 and 2. Figure 1 shows per participant growth in assets in DB and DC plans from 1975 to 2012. It depicts a clear pattern that DB assets have grown faster than DC assets have.



While the assets/savings in DB and DC plans in 1975 were almost the same, in 2012, per participant savings in DB plans was about \$107,000, compared with the per participant savings of \$47,000.



In Figure 2, we assume that there is no shift to DC plans and everyone was in a DB plan. We estimate the total annual savings during 1975–2012. These savings are then compared with the current level of total (DB+DC) savings/assets.

The results in Figure 2 show that the shift to DC plans has cut retirement savings in half. It is \$6.9 trillion, whereas it could have been \$13.9 trillion if there had been no shift to DC plans.

### Closing Remark

Perhaps the percentage of contributions into DB and DC plans has remained stable during the past 30 years, as the Boston College study finds. However, retirement savings have been cut in half as a result of the massive shift to DC plans in the private sector. The shift to DC plans places all the risk on individuals, and they will have less money during their retirement years. On top of that, as our earlier analysis shows,<sup>3</sup> the shift to DC plans exacerbates income inequality. Rising income inequality in turn puts a drag on the economy. In the end everyone suffers, not just those who have DB plans.

<sup>3</sup> See [http://www.ncpers.org/files/NCPERS%20Income%20Inequality%20Paper\\_Web\(1\).pdf](http://www.ncpers.org/files/NCPERS%20Income%20Inequality%20Paper_Web(1).pdf)



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