

Title:

**Participation in and Contributions to Defined Contribution Retirement Plans in a  
Time of Crisis, 2006-2008**

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## **RE: Extended Abstract**

Pension income provides a major pillar of retirement income contributing to the economic well-being of the elderly. In the future, pension income will mainly come from defined contribution (DC) pension plans using investment accounts rather than the traditional (DB) defined benefit plan (Clark, Munnell, and Orszag, 2005; O’Rand and Shuey, 2007). DC pensions, it is argued, can provide adequate retirement income if people contribute to them over an entire work life and maintain contributions through varying economic conditions. Unfortunately, the retirement accounts of near retirees and the middle aged are usually quite low, unable to replace more than a year of earnings for many (GAO 2010).

In the recession beginning in December 2007, three economic mainstays dropped: employment, housing values, and stock market values. The economic downturn thus has important implications for the retirement assets of current workers. In this paper, we investigate whether there was a change in workers’ DC participation rates and contribution amounts between 2006 and 2008, the period reflecting the beginning of the height of the downturn.

We draw longitudinal administrative data from Social Security W-2 tax records that contain information about respondents’ tax-deferred contributions to DC plans matched to wave 7 of the 2004 Survey of Income and Program Participation (SIPP). Our analysis focuses on the impact of workers’ earnings levels and changes in their earnings between 2006 and 2008 on the likelihood of an increase or decrease in DC contributions and the amount of contributions over the same period. We find that about 17 percent of DC contributors in 2006 did not contribute in 2008. Among contributors in 2006, over a third substantially decreased their DC contributions in 2008 compared with 2006 by more than 10 percent in real dollars, about a third maintained stable contributions, and about a third increased their contributions. As might be expected, earnings levels in 2006 and earnings changes between 2006 and 2008 are consistently the most important predictors of DC contribution changes between 2006 and 2008 and the amount of contributions in 2008. The 7 percent of contributors in 2006 with no earnings in 2008 did not contribute in 2008. Compared to workers with stable earnings, workers with earnings losses

between 2006 and 2008 were much more likely to have decreased their contributions by more than 10 percent. Workers with earnings gains were more likely to increase their contributions compared to stable earners. DC contributions in 2008 were lower among workers with decreased earnings and among those in the bottom half of 2006 earnings distribution. The implication is that a substantial minority of DC contributors did not maintain the DC contributions through economic hard times that are necessary for economic well-being in retirement.

To evaluate the impact of the recession economy on DC contributions, we compare the contribution changes between 2006 and 2008 to those before the recession between 2004 and 2006, for the same individuals. Contrary to expectations, we find no substantive difference for the pattern of change between the 2006 to 2008 and the 2004 to 2006 periods in the levels of participation and contribution levels. We conclude that the observed changes in 2008 were not unique to the recession impact, but cannot conclude that the current recession did not affect DC pension contributions until we assess DC pension data in 2009 (not yet available). It may be that adjustments to the recession mainly occurred in 2009. Bureau of Labor Statistics data “indicate a record-low of job openings, hires, and separations in 2009, as well as a record-high number of layoffs and discharges” (deWolf and Klemmer, 2010). The monthly pattern of these BLS data show major employment changes occurred in late 2008 and in 2009. In addition, although the stock market decreased throughout 2008, it decreased “mostly since early September” (MacKenzie 2008). The stock market continued downward until March 2009, when it began a recovery (Soto 2009). We plan to extend our analysis to 2009 contributions when W-2 records in 2009 become available.

Our results with longitudinal comparisons of individual workers differ from existing analyses suggesting inertia in contributions during the 2008 downturn. While we found a substantial minority of workers decreased contributions, EBRI and ICI researchers (Holden and VanDerhei 2009) found persistence and inertia in DC contributions in the EBRI-ICI database of plan sponsor accounts. However, they compared aggregate contributions in 2006, 2007, and 2008. If we aggregate our data, we also find stability in DC contributions from 2006 through

2008, in contrast to the changes in DC contributions that we uncover with our longitudinal analysis of individual workers across time.

It is difficult to interpret the basis of change. Contributions to DC pensions are usually payroll deductions. Using SIPP respondent reports, we will explore whether the individual contribution changes in 2006-2008 reflect individuals contributing a percentage of salary or contributing a fixed dollar amount. Previous analysis has shown that just over half of DC pension participants among full-time workers in 2006 reported an actual dollar amount as their DC contribution deduction (Iams and Dushi 2010, p.58). Without inflation adjustments, these contributions would decrease in real value over time. Research also shows that the pension behavior of most workers reflects inertia (Madrian 2005), and consequently, we would expect a reduction without adjustments by many workers. In contrast, almost half of full-time workers in 2006 reported DC contributions as a percentage of earnings in 2006 SIPP data, which would maintain value if earnings keep up with inflation. Under a percentage contribution plan, the real value would decrease with earnings losses. Because the survey data were available only in 2006, we cannot establish that payroll deductions continued through 2008 as a dollar amount or as a percent of earnings.

Further research is merited on the impact of the Great Recession on DC contributions. We will be able to better assess the impact when the W-2 tax records for 2009 become available in 2011. We may be able to assess changes with the 2008 SIPP panel data on pension plan coverage in summer 2009, which recently became available. Comparisons between the 2004 panel's pension survey data and the 2008 panel's survey data may suggest plan changes such as matching contributions implemented by employers. With these 2008 panel data, we may be able to track job changes and hours of employment in Fall 2008 and in 2009 as well as identify the type of contribution (amount vs. percent of salary) for reported contributors in 2009.

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