Introduction

An adequate retirement income can be defined as one that enables an older household to take care of its own needs in retirement. Workers who retire without adequate sources of income may face a range of unattractive choices. Continuing to work may be the first alternative, but if that is not an option due to bad health, lack of appropriate job opportunities or other factors, retirees may become dependent on family or even public assistance programs to meet financial needs.

Most Americans prefer to be able to meet their own needs after they stop working, so the question of how employees achieve retirement income adequacy is a pressing one, not just for individuals’ well-being, but for public policy as well. It is probably not surprising that job-based retirement plans make a difference, but the particular importance of traditional pensions, so-called defined benefit (DB) pensions, in ensuring retirement readiness may be under-appreciated. DB pensions really do make a difference for working Americans in achieving an adequate standard of living in retirement as a reward for decades of hard work.

This brief reviews the evidence on the role DB pensions play in ensuring that older Americans have the resources they need to be self-sufficient in retirement.

It examines recent trends in pension coverage and discusses the effect these trends have had on the state of retirement readiness among American workers. Finally, it points in the direction of areas worthy of exploration for policymakers seeking to address specific retirement security goals.

People with pensions are less likely to be at risk in retirement

The desire to remain independent in old age is virtually universal.

The notion that retirees should have the means to be self-sufficient in retirement was a bedrock value on which our nation’s decades-long commitment to Social Security was built. While it is well-recognized that Social Security is highly effective at lifting retirees and their families out of poverty, it is also true that this safety net was not designed to enable retirees to maintain their pre-retirement living standards on its own.

Employment-based retirement plans are the key way that middle class workers remain part of the middle class after they stop working. Indeed for retirees with incomes between $16,000 and $44,000 per year, income from employment-based retirement plans represents the most significant source of income, after Social Security (Table 1).

The Social Security statistics do not distinguish between income provided by a DB pension and that deriving from defined contribution (DC) retirement savings plans, such as 401(k)s and IRAs. But there is reason to believe that DB pensions, distinct from DC plans, play an especially important role in supporting retirement income adequacy.
Table 1  Sources of Income Among Households Aged 65 and Older, 2004

<table>
<thead>
<tr>
<th>Household Income</th>
<th>1&lt;sup&gt;st&lt;/sup&gt; quintile</th>
<th>2&lt;sup&gt;nd&lt;/sup&gt; quintile</th>
<th>3&lt;sup&gt;rd&lt;/sup&gt; quintile</th>
<th>4&lt;sup&gt;th&lt;/sup&gt; quintile</th>
<th>5&lt;sup&gt;th&lt;/sup&gt; quintile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to $10,399</td>
<td>82.9%</td>
<td>83.8%</td>
<td>67.2%</td>
<td>48.5%</td>
<td>19.2%</td>
</tr>
<tr>
<td>$10,400 to $16,363</td>
<td>3.2%</td>
<td>6.6%</td>
<td>16.0%</td>
<td>24.7%</td>
<td>20.9%</td>
</tr>
<tr>
<td>$16,364 to $25,587</td>
<td>1.2%</td>
<td>2.8%</td>
<td>7.1%</td>
<td>15.7%</td>
<td>40.1%</td>
</tr>
<tr>
<td>$25,588 to $44,129</td>
<td>2.3%</td>
<td>3.8%</td>
<td>6.0%</td>
<td>8.4%</td>
<td>17.8%</td>
</tr>
<tr>
<td>$44,130 and up</td>
<td>8.4%</td>
<td>1.6%</td>
<td>0.9%</td>
<td>0.2%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Other</td>
<td>2.0%</td>
<td>1.5%</td>
<td>2.7%</td>
<td>2.6%</td>
<td>1.9%</td>
</tr>
<tr>
<td>All income sources</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Social Security Administration, 2006

Studies of retirement preparedness typically begin by examining the financial resources that will be available to households when they retire. Such resources may include DB pension benefits, Social Security benefits, and savings accumulated in DC plans and elsewhere. Some studies take an even broader measure, including earnings from work by “retired” individuals, the value of welfare benefits, and the value of home equity, as assets that can be tapped to generate income in retirement.

To gauge retirement readiness, researchers compare the aggregate level of such resources for individual households to some standard. Some researchers rely on a relative standard, like the proportion of pre-retirement income that can be replaced in retirement (replacement rates). An “adequate” replacement rate is typically defined as one that allows a retired household to enjoy roughly the same standard of living as it did before retirement. This standard of adequacy might be deemed to fall anywhere from 65% to 85% of pre-retirement income. Other researchers have used an absolute standard, like the poverty threshold. Obviously, this approach encompasses a narrower definition of “needs” in retirement. Using either standard, DB pensions appear to play a special role in ensuring retirement preparedness.

Researchers at Boston College find that those with DB pensions are much more likely to maintain their pre-retirement living standard and thus are less likely to be at risk of inadequate retirement income than those who rely on DC plans or who have no retirement plan to rely on. (Munnell et al 2007 and 2008) Predictably, those with both a DB pension and a DC plan are the least likely to be at risk of having income that falls short. The study labels “at risk” households that are projected to fall more than 10% short of achieving a target replacement rate designed to maintain pre-retirement living standards.

For households approaching retirement today, about one in three are at risk of falling short. But among those with a DB pension plan, just 15% are “at risk” and just 12% of those that can count on both a DB pension and a DC plan are “at risk.” Fully half of households approaching retirement that do not have any type of retirement plan are deemed “at risk.” The risk-reducing effects of DB pension plans are consistent across age groups – from the Early Baby Boomers through Generation X (Table 2).

1 A replacement rate less than 100% may adequately allow a household to maintain its pre-retirement standard of living, because some expenses decline in retirement (e.g. payroll taxes, commuting costs and other job-related expenses, and the cost of saving for retirement).
Likewise, a 2007 Federal Reserve study finds that DB pension plans are highly effective at ensuring that retirees have sufficient resources to support themselves. (Love et al 2007) This study uses an absolute standard of retirement income adequacy (i.e. the poverty line or “near-poverty,” defined as 1.5 times the poverty line). It finds that fully 96% of households that can count on receiving DB pension benefits will have sufficient income to exceed the poverty line. 83% of DB pension recipients will have income in excess of 1.5 times the poverty line. Households that rely on DC plans face higher risks of hardship than those with DB pensions. 10% of DC plan households will have income below the poverty line and 26% will be either poor or near-poor, with income below 1.5 times the poverty line.

Considering that only four in ten households in the Federal Reserve study have DB pensions, whereas about half have DC plans, the stronger poverty-reducing impact of DB pension plans may be surprising. However, it is less surprising when one takes into account the fact that the median wealth held in a DB pension plan is about two times larger than the median holdings in DC plans and IRAs. This indicates that DB pension plans tend to be better at ensuring employees are able to accumulate adequate resources for retirement.

### Features of DB pensions enhance retirement income adequacy

What is it about DB pensions that makes them so effective at ensuring retirement income adequacy, as compared with DC plans? Certainly, DB plans share common features with DC plans. For instance, they both are employment-based plans that make preparing for retirement easier than if employees had to tackle the job completely on their own. Both DB pensions and DC plans benefit from tax incentives designed to encourage retirement preparedness. Both types of plans are governed by laws designed to protect employees and their benefits. But there are certain features that are distinctive to DB pensions that seem to make a significant impact on retirement readiness.

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2 It is well recognized that the official “poverty line” is a problematic and somewhat arbitrary standard. The “poverty line” is based on a measurement developed in 1964 that fails to accurately account for dramatic changes since that time in the costs of health care, housing, and other items. For this reason, researchers will often use a threshold of 1.5 times the poverty line as a better measure of income adequacy. This is supported by research in the field of gerontology which indicates that elder households may need income of 1.5 to 3.0 times the poverty line in order to meet even the most basic needs. (Russell Bruce and Conahan 2006)

3 Although DB pensions typically pay a regular income for life, researchers typically translate this expected stream of income into a stock of wealth to make the benefit comparable to retirement savings accounts, such as 401(k) plans. In essence, researchers calculate the amount of savings today that would, together with interest, pay the same regular income stream in the future.
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DB pensions provide broad-based coverage. In other words, if an employee meets the eligibility requirements of the plan, she is automatically included in the plan and will earn benefits without having to actively make any decisions. By contrast, DC plans often require an employee to enroll, make decisions about how much to save, and direct their own investments.

Research tells us that despite employees’ best efforts, workers generally fail to save enough, make poor asset allocation and investment decisions, and are reluctant to purchase annuities with the retirement wealth they do manage to accumulate – even when doing so could enhance their well-being. (Benartzi and Thaler 2007; Mitchell and Utkus 2004; Munnell and Sunden 2004) Simply put, research suggests that the average worker is not cut out for a “do-it-yourself” retirement plan.

Recent changes in DC plan regulations under the Pension Protection Act of 2006 have made employers more willing to set up “default” participation and investment rules in their DC plans, whereby even if the employee makes no affirmative decisions, he will be automatically enrolled in the plan and his savings will be directed to a default investment. The hope is, this will improve the outcomes for participants in DC plans, but it is far too soon to reach any conclusions and in light of the poor state of Americans’ retirement readiness, the stakes are high.

DB pensions provide professional asset management. Because assets in DB pension plans are pooled together and managed by professionals, it should not be surprising that DB pension plans tend to achieve better investment returns than individuals. According to one estimate, the gap is huge - over an eight-year period, DB pension plans outperformed DC plans by an average of 1.8% per year. The impact of such under-performance over a career is staggering. At the end of 25 years, the effect of a 1.8% difference in annual return translates to a reduction in the size of an individual’s savings by 34%. (Flynn and Lum 2007) Expressing this in dollar terms, a 34% reduction would shrink a $150,000 nest egg to a much smaller $99,000.4

DB pensions provide a lifetime income. A predictable income that cannot be outlived is an essential element of retirement security. Private sector DB pensions are required by the Employee Retirement Income Security Act (ERISA) to offer annuity benefits – that is a series of monthly payments that last a lifetime – as the standard form of payment. DB pension plans offered by federal, state and local governments also pay annuity benefits, even though they are not required by ERISA to do so.

The availability of an annuity benefit means that retirees with income from a DB pension have an easier time budgeting for their regular expenses, because the size of their pension check does not fluctuate with interest rates or the stock market. As will be discussed in greater detail, older Americans appear to be having a difficult time spending down their retirement savings in DC plans in an optimal way. This indicates that the predictable, monthly, lifetime benefit provided by DB pensions has great value that may be underappreciated. Indeed, retirees tend to be happier and report greater levels of satisfaction when they have a predictable, guaranteed source of retirement income like a DB pension or annuity, on top of Social Security. (Panis 2004; Sondergeld et al 2002; Metlife 2002)

DB pensions provide secure money for retirement. Just as important as what DB pensions do is what they do not do. Generally, the inability of individuals to tap funds in their DB pensions (either via a withdrawal or loan) means that money set aside for retirement is more likely to actually be used for its intended purpose. This is an important distinction from 401(k) plans, 87.5% of which permit participants to borrow from their retirement accounts. (PSCA 2007) Likewise, individuals can withdraw assets from 401(k) plans and IRAs before retirement age. According to one conservative estimate, some 10% of retirement wealth is lost because of this “leakage” of money from DC plans. (Englehart 1999)

With $150,000 in a DC plan at retirement at age 65, an individual could purchase an annuity that would pay about $865 per month, every month, for life, with protections for a surviving spouse. A $99,000 nest egg would provide an income of only about $570 per month.
**DB pensions provide special protections for spouses.** Beyond the basic requirement to offer a lifetime stream of income, ERISA goes a step further in providing special protections for spouses of married beneficiaries. The law requires that the standard benefit form for married participants is an annuity that continues paying a benefit to a spouse, even after the death of the employee/retiree. The right to receive benefits in this form can be waived, but only by the spouse. Federal, state and local government DB pension plans typically provide similar spousal benefits. Considering their longer life expectancy, spousal protections are especially important to women’s economic security in retirement. (Shaw and Hill 2001)

**Recent trends in DB pension coverage raise concern**

In recent years, many employers in the private sector have shifted away from offering DB pensions in favor of DC plans. Evidence indicates that this shift has not only been one of form, but one of substance as well. Specifically, the shift has involved a reduction in the amount of money being set aside for retirement, leading to a reduction in retirement wealth for the typical worker.

Ghilarducci and Wei (2006) find that the shift from DB pensions to DC plans was associated with a reduction in employer spending on retirement plans. Specifically, they find that a 10% increase in the use of DC plans reduces employer retirement plan costs per worker by 1.7-3.5%. This suggests firms have used DC plans to reduce retirement plan expenditures, meaning fewer dollars being directed by employers into retirement plans.

Unfortunately, it does not appear that employees are digging deeper into their household budgets to save more in response to employers’ reduced contributions to retirement plans. Instead, the shift from DB pensions to DC plans appears to be having a negative effect on the typical household’s retirement readiness.

Sorokina et al (2008) find that retirement wealth for households approaching retirement actually fell between 1992 and 2004, a period that saw DB pension coverage drop and the proportion of the workforce covered by DC plans surge. In 1992, about three-fourths of those with a retirement plan at work were covered by a DB pension plan, or a combination of a DB pension plan and a supplemental DC plan. By 2004, this proportion had fallen to 57%.

The authors find that the shift from DB pensions to DC plans was accompanied by a significant reduction in total retirement wealth. Although the average household’s DC wealth grew from about $35,000 in 1992 to about $48,000 in 2004, DB pension wealth for the average household declined from over $92,000 in 1992 to just over $65,000 in 2004. Thus, total retirement wealth declined from about $127,000 to roughly $113,800 – an 11% drop.

**Many Americans will fall short in retirement without DB pensions**

Plenty of evidence suggests that recent trends in DB pension coverage will leave large numbers of American families under-prepared for retirement, with insufficient resources to meet their needs.

The afore-mentioned Boston College studies find that between 44% and 61% of households are at risk of being unable to maintain their living standards in retirement, even if they work to age 65, plan to consume all their financial assets, and take out reverse mortgages to “monetize” their housing wealth. (Munnell et al 2007 and 2008)

The Federal Reserve study cited earlier finds that 12% of Americans currently aged 51 and older will fall below the poverty line, and that another 9% will be “near poor” even after accounting for receipt of public assistance, wages from work, and the consumption of all wealth (including housing wealth) over one’s expected lifetime. (Love et al 2007) That two in five elder households will struggle financially, even after taking into account the receipt of public assistance, is certainly cause for concern.

The findings of these two studies are even more alarming in light of the fact that most households do not or cannot effectively “monetize” their housing wealth. Despite the increasing awareness and availability of reverse mortgages that could allow older
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Americans to convert their home equity into cash that can be spent to meet retirement income needs, high fees and other obstacles have limited this option. (Sinai and Souleles 2007) This suggests these studies may be underestimating the degree of retirement income inadequacy.

Nor do households seem to be having an easy time drawing down savings that have accumulated in DC plans. The Boston College and Federal Reserve studies assume that households “annuitize” – convert into lifetime streams of income – their financial wealth, but in practice this tends not to happen. Although employers that offer DC plans could provide annuity payout options, they rarely do. (Perun 2007)

Rather, households appear to be trying, not always successfully, to draw down their retirement savings on their own. A recent study by the Employee Benefit Research Institute found that large numbers households seem to be drawing down these funds too quickly, raising the risk that they will deplete their savings before they die. (Copeland 2007) And at the other extreme, there is evidence that retirees may be holding on to DC plan assets too tightly. (Copeland 2007; Love et al 2007) While drawing down assets “too slowly” may be less of a public policy concern than spending them too fast, it does mean that some retirees’ standard of living is lower than it could (or should) be. This phenomenon could be due to a lack of knowledge about how to draw down assets in an optimal way, or to psychological factors, whereby retirees, fearful of depleting their savings, deprive themselves of things they want or need. Either way, retirees’ difficulties in making the leap from saving for retirement to spending in retirement have real consequences for their living standards.

Restoring Retirement Readiness

The evidence is clear – DB pensions provide, as a practical matter, the best path to retirement readiness for ordinary Americans. The shift away from DB pensions in recent years has coincided with a decline in retirement wealth for the typical household, reducing retirement readiness and increasing the risk of hardship in old age. This means fewer working families will have a good chance of maintaining a middle-class living standard in retirement.

Thus, rebuilding the promise of retirement security will mean protecting, strengthening, and expanding DB pension coverage for American workers. In the short- to medium-term, policy makers should focus on ways to shore up existing DB pension plans. This will require a fine balance between making sure that employers have the right incentives to maintain their DB pension plans, but also contribute enough to the plans so that employees do not have to worry about the security of their promised benefits.

Two initial steps seem necessary to achieve this balance. First, the rules governing the funding of private sector DB pension plans should be re-examined. In addition, models of DB pension plan design that insulate employer contributions from shocks, that reduce the possibility of large swings in annual contributions, and that secure employees’ retirement benefits deserve a second look. Such designs include, but are not limited to multiemployer DB pension plans in the private sector and multiple employer public sector pension plans.

In the longer term, identifying channels through which new plans can be established or existing plans can be expanded will be necessary. Some of the initial lessons from recent experience in the U.S. and abroad point the direction towards some promising policies. Common to all of these approaches are the pooling of funds across employers, industries and occupations and the role of the government in serving as an incubator for new, well-functioning, secure pensions.

Future research and policy analysis from the National Institute on Retirement Security will explore these themes and others in greater depth. A key goal of our work is to inform the public policy debate around issues of retirement security in the U.S. In light of some of the trends described herein, there is much at stake. The ability of millions of ordinary Americans to sustain their middle-class standards of living into their retirement years is one we as a nation cannot afford to ignore.
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References


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About the Author

Beth Almeida is the Executive Director of the National Institute on Retirement Security. Before joining NIRS, she served as assistant director for strategic resources and as senior economist with the International Association of Machinists and Aerospace Workers (IAM) where she was instrumental in transitioning some 40,000 airline employees out of terminating or freezing pensions into the IAM’s multi-employer defined benefit pension plan. Earlier in her career, Ms. Almeida led research initiatives at academic centers in Germany, France, and her home state of Massachusetts. She has authored numerous economic and pension publications and is a frequent speaker at academic and industry conferences, both in the US and abroad. Beth earned a bachelor’s degree in international business from Lehigh University and a master’s degree in economics from the University of Massachusetts Amherst.

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National Institute on Retirement Security is a non-profit research institute established to contribute to informed policy making by fostering a deep understanding of the value of retirement security to employees, employers, and the economy as a whole. NIRS works to fulfill this mission through research, education, and outreach programs that are national in scope.