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# HOUSEHOLDS 'AT RISK': A CLOSER LOOK AT THE BOTTOM THIRD

BY ALICIA H. MUNNELL, FRANCESCA GOLUB-SASS, PAMELA PERUN, AND ANTHONY WEBB\*

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## Introduction

The Center's National Retirement Risk Index (NRRI) provides a measure of the percentage of households that will be unable to maintain their standard of living in retirement. Issued in June 2006 with numbers based on the 2004 Federal Reserve's *Survey of Consumer Finances*, the Index shows that 43 percent of the population will be 'at risk.'<sup>1</sup> 'At risk' means different things, however, for households in different parts of the income distribution. For those in the top third, 'at risk' may require cutting back on some of the normal amenities enjoyed before retirement, but for those in the bottom third 'at risk' may mean foregoing essentials. This *brief* takes a closer look at the NRRI for the bottom third of the population.

The *brief* focuses on three issues. The first is the relative change in the NRRI for the bottom third as opposed to the upper two-thirds over the period 1983-2004. Although the percent 'at risk' remains consistently higher for the bottom third, the situation for those at the low end of the income scale deteriorated less over the period than it did for the top two-thirds of households. The reason is that two of the main drivers — the shift from defined benefit to defined

contribution plans and the decline in real interest rates — were less relevant for those at the low end of the income scale. The second issue pertains to the outlook for the bottom third going forward. Because the bottom third of households relies almost entirely on Social Security in retirement, the continued increase in the Normal Retirement Age (NRA) will raise the percentage 'at risk.' The final section explores the implication of the increase in the percentage of households in the bottom third 'at risk' for poverty among the elderly in the future.

## The NRRI: A Recap

To quantify the effects of the changing retirement landscape, the National Retirement Risk Index provides a measure of the percent of working-age American households who are 'at risk' of being financially unprepared for retirement today and in coming decades. The 2004 Index calculates for each household in the 2004 *Survey of Consumer Finances* a replacement rate — projected retirement income as

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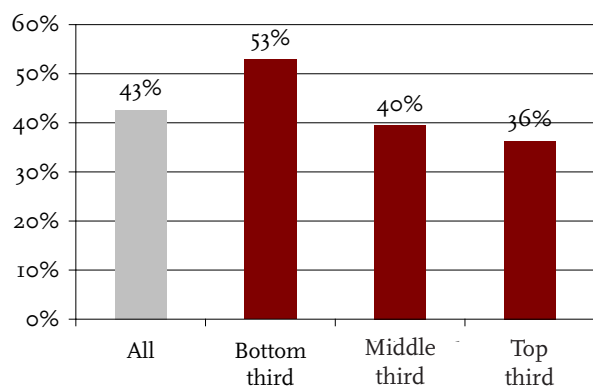
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a percent of pre-retirement earnings — and compares that replacement rate with a benchmark that it defined as adequate. Those who fail to come within 10 percent of the benchmark are defined as ‘at risk,’ and the Index reports the percent of the households ‘at risk.’

The results as presented in the original release show that overall 43 percent of households sampled in 2004 will not be able to maintain their standard of living in retirement. As shown in Figure 1, data by income group reveal that for the bottom third of households the situation is even more serious, with 53 percent of households ‘at risk.’

The following sections explore how the picture for the bottom third has changed over time and the outlook for the future.

FIGURE 1. PERCENT OF HOUSEHOLDS ‘AT RISK,’ BY INCOME GROUP, 2004

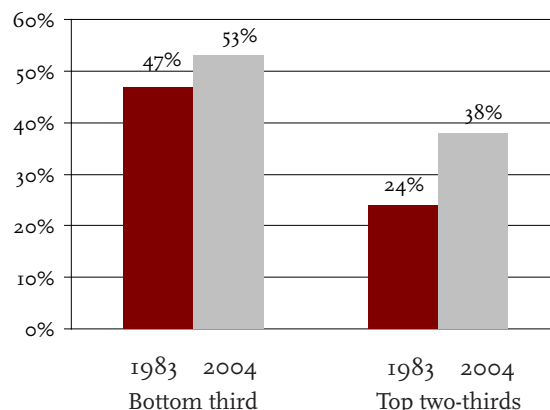


Source: Center for Retirement Research at Boston College (2006).

## The Relative Position of the Bottom Third: 1983-2004

As shown in Figure 2, households in the bottom third of the income distribution have consistently had a higher percentage of households ‘at risk,’ but the deterioration over the period 1983-2004 has been less severe at the bottom than for the upper two-thirds. In 1983, 47 percent of poorer households were ‘at risk’ compared to 24 percent for the upper two-thirds;

FIGURE 2. PERCENT OF HOUSEHOLDS ‘AT RISK,’ BY INCOME GROUP, 1983 AND 2004



Source: Authors’ calculations based on Center for Retirement Research at Boston College (2006).

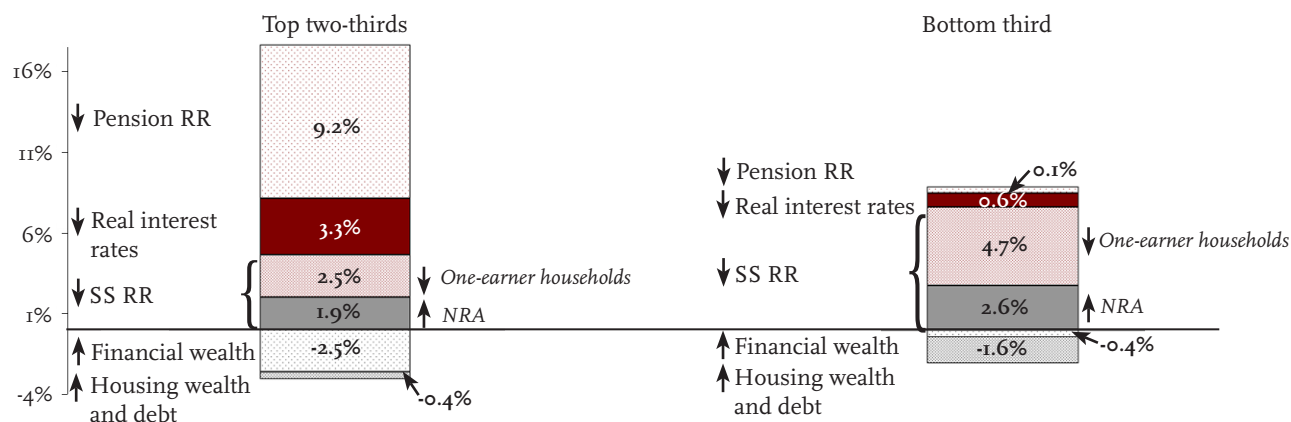
by 2004 these numbers had increased to 53 percent and 38 percent, respectively. The increase for poorer households was only 6 percentage points compared to 14 percentage points for the rest of the population.

The Center’s recent update of the NRRI showed that three factors drove the increase in the Index over the 20-year period. These included 1) a reduction in Social Security replacement rates due to the increase in the NRA from 65 to 67 and the decrease in one-earner couples; 2) a reduction in replacement rates from employer-sponsored pensions due to the shift from defined benefit to defined contribution plans; and 3) a reduction in annuity income due to a decline in real interest rates. These negative effects were slightly offset by the ability to tap more of housing wealth through a reverse mortgage and by an increase in financial assets.

But the bottom third differs from the remainder of the population in two important ways — they receive only a trivial amount of retirement income from pension plans and they own few financial assets. As a result, these households were relatively unaffected by the tectonic shifts in the pension landscape and the decline in interest rates (for the asset holdings of households by terciles, see Appendix Table A1).

The shift from defined benefit to defined contribution plans dramatically increased the percentage of ‘at risk’ households for the top two-thirds of the population (see Figure 3). This outcome was not inevitable.

FIGURE 3. INCREASE IN PERCENTAGE 'AT RISK' FROM 1983 TO 2004 BY CONTRIBUTING COMPONENT



Source: Authors' calculations based on Center for Retirement Research at Boston College (2006).

In theory, workers could do equally well under either arrangement. But 401(k) plans shift all the risk and responsibility for retirement saving from employers to individuals, and individuals make mistakes at every step along the way. More than one-fifth of those eligible to participate choose not to do so. Over half fail to diversify their investments. Many over-invest in company stock. Almost no participants re-balance their portfolios as they age or in response to market returns. Most importantly, many cash out when they change jobs. As a result, in 2004 the median 401(k)/IRA balance for a head of household approaching retirement was only \$60,000.<sup>2</sup> At current annuity rates, an inflation-indexed annuity would produce only \$250 per month.

Much to their detriment, only a fraction of households in the bottom third of the income distribution ever pick up any pension coverage over their work life, and, even when they do, their benefits are low. As shown in Figure 4, pensions account for only 4 percent of the non-earned income of households age 65 and over, compared to 18 percent and 35 percent for the second and third tercile respectively. As a result, the shift from defined benefit plans to 401(k) plans had very little effect on the percent of low income households at risk.

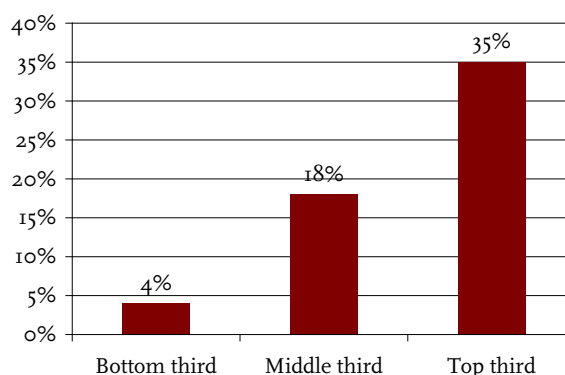
Similarly, the bottom third of households held very little in financial assets outside of pension plans. As shown in Figure 5, the ratio of wealth to income for the bottom third was 0.2, compared to 1.3 for the middle third and 2.0 for the top third. This lack of financial assets outside of pensions, combined with

miniscule 401(k) holdings, meant that low-income households were relatively unaffected by the decline in real interest rates over the 1983-2004 period.

In contrast, the bottom third shared the drop in Social Security replacement rates — due to the decline in one-earner couples and the increase in the NRA — experienced by the rest of the population.

The shift in family composition from one-earner to two-earner households is a little noticed contributor to the decline in Social Security replacement rates.<sup>3</sup> Social Security awards a non-working spouse a benefit equal to 50 percent of the worker's benefit.

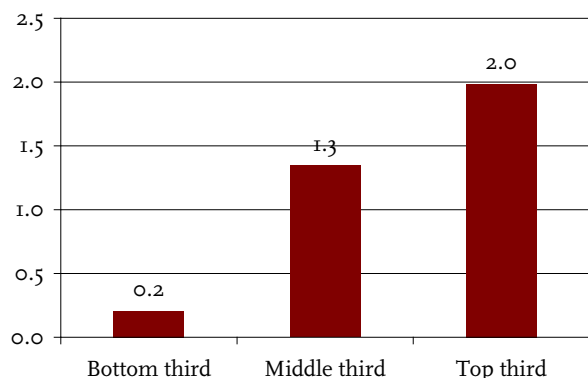
FIGURE 4. PENSION BENEFITS AS A PERCENT OF INCOME FOR HOUSEHOLDS AGE 65+, 2004



Note: Income does not include earnings.

Source: Authors' calculations based on U.S. Bureau of the Census (2004).

FIGURE 5. FINANCIAL WEALTH-TO-INCOME RATIO AT AGE 62, 2004

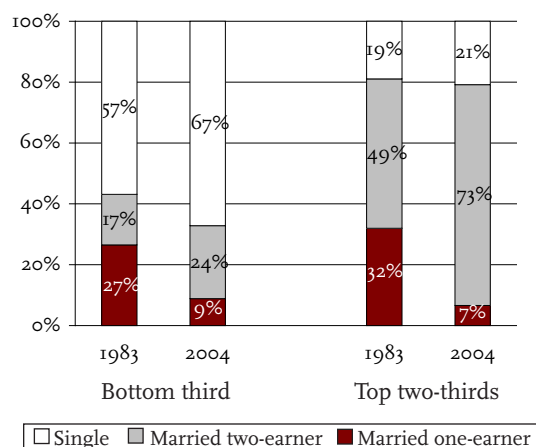


Source: Authors' calculations based on Center for Retirement Research at Boston College (2006).

As women go to work, they increase the family's pre-retirement earnings but do not increase the couple's Social Security benefits until they earn more than 50 percent of their husband's earnings. Thus, one-earner couples tend to have much higher replacement rates than their two-earner counterparts.

As Figure 6 shows, one-earner couples as a percent of bottom-third households declined from 27 percent in 1983 to 9 percent in 2004. This decline was only slightly less than that experienced by the

FIGURE 6. HOUSEHOLD COMPOSITION, BY INCOME GROUP, 1983 AND 2004



Source: Authors' calculations based on U.S. Board of Governors of the Federal Reserve System (1985 and 2006).

upper two-thirds (32 percent to 7 percent). Thus, the shift in family composition led to a decrease in Social Security replacement rates and an increase in the percentage of 'at risk' households across all income groups.

The other factor contributing to the decline in Social Security replacement rates is the rise in Social Security's NRA from 65 to 67. Since the Index (conservatively) assumes that households retire at 65 in the future, early retirement relative to the NRA results in a growing actuarial reduction in Social Security benefits.

The bottom line is that both the bottom third and top two-thirds saw their situation deteriorate between 1983 and 2004. The situation worsened less for low-income households than for the top two-thirds of the population. But the percentage of low-income households 'at risk' is very high at 53 percent. The next section looks at how the outlook is projected to change for the bottom third going forward.

TABLE 1. PERCENT OF HOUSEHOLDS 'AT RISK' AT AGE 65 BY BIRTH COHORT AND INCOME GROUP

Income group	All	Early Boomers	Late Boomers	Generation Xers
		1946-1954	1955-1964	1965-1972
All	43%	35%	44%	49%
Top third	36	33	35	42
Middle third	40	28	44	46
Bottom third	53	45	54	60

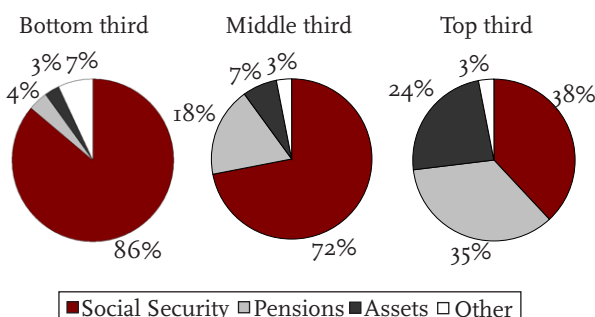
Source: Center for Retirement Research at Boston College (2006).

## The Outlook for the Bottom Third

In addition to constructing an overall index, the NRRI presents data on the percentage of households 'at risk' by cohort. As shown in Table 1, the 53 percent 'at risk' for the bottom third is the average over three cohorts. In fact, the percent 'at risk' is projected to be 45 percent for the Early Boomers, 54 percent for the Late Boomers, and 60 percent for Generation Xers.

The primary reason for the continuous increase in those 'at risk' in the bottom third is that this portion of the population is almost entirely dependent on Social Security (see Figure 7), and the higher NRA

FIGURE 7. SOCIAL SECURITY BENEFITS AS A PERCENT OF NON-EARNED INCOME FOR HOUSEHOLDS AGE 65+, 2004

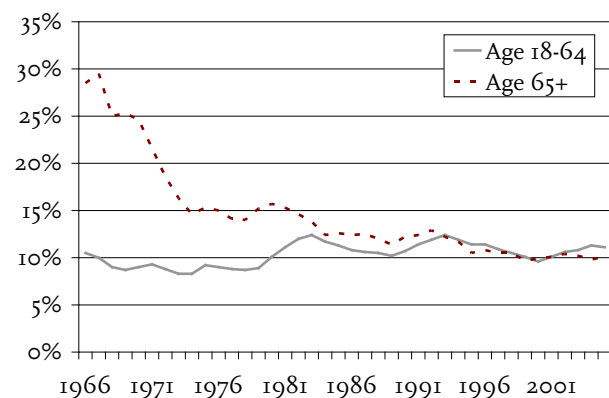


Source: Authors' calculations based on U.S. Bureau of the Census (2004).

will apply to an increasing portion of the population, substantially reducing their replacement rates. With their primary source of support declining relative to pre-retirement earnings, the bottom-third of households will become increasingly vulnerable.

Moreover, it is important to remember that the NRR1 is a conservative estimate. It assumes that people retire at age 65, whereas today men have an average retirement age of 63 and women 62; it requires households to come only within 10 percentage points of the target — not actually hit it; and it assumes that households annuitize all their financial wealth, including the proceeds from a reverse mortgage on their home. Changing these conservative assumptions would show a much higher percentage of households 'at risk.'

FIGURE 8. PERCENT OF PEOPLE BELOW THE POVERTY LINE BY AGE GROUP, 1966-2005



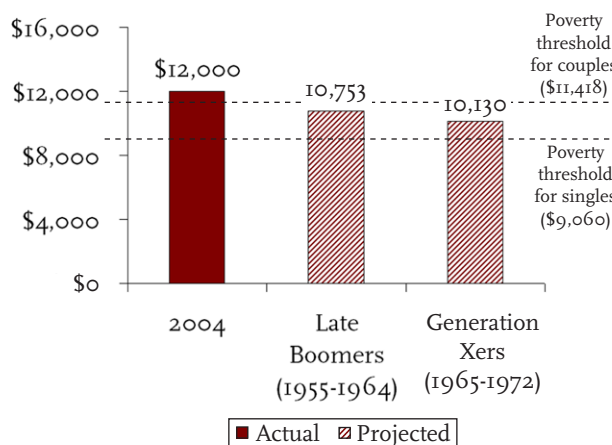
Source: U.S. Bureau of the Census (2006).

## Implications for Poverty among the Elderly

The increasing percentage of low-income households 'at risk' of being unable to maintain their pre-retirement standard of living once they stop working suggests that much of the improvement in the poverty rate among the elderly may be reversed. As shown in Figure 8, poverty among those 65 and over declined dramatically in the wake of the expansion of Social Security benefits, so that today the poverty rate among the elderly is virtually the same as that for the non-elderly population.

But today is in some sense the "golden age" of retirement income. Today's retirees are claiming Social Security benefits before the extension in the retirement age to 66 and then 67, which is equivalent to an

FIGURE 9. ACTUAL AND PROJECTED MEDIAN INCOME OF HOUSEHOLDS AGE 65+ IN THE BOTTOM THIRD (2004 DOLLARS)



Sources: Authors' calculations based on Center for Retirement Research at Boston College (2006) and U.S. Bureau of the Census (2005).

across-the-board cut in benefits. And today, many of those entering retirement have enjoyed a huge run-up in their house values. And to the extent they are covered by an employer-sponsored pension, it tends to be a defined benefit plan, rather than modest balances in a 401(k).

Figure 9 demonstrates what may lie ahead for households in the bottom of the income distribution. Today, income as reported in the 2004 *Survey of Consumer Finances* for households 65 and over is \$12,000

— slightly above the poverty threshold for couples. Applying the replacement rates projected for Late Boomers and Generation Xers shows that the median for the bottom third of households will fall between the poverty thresholds for couples and for single individuals. Therefore, without some change in our retirement income system, the percent of households 65 and over in poverty is likely to increase.

## Conclusion

The National Retirement Risk Index summarizes in a single number changes to the retirement landscape. While a single number serves a useful purpose, it is important to remember that ‘at risk’ means different things for those at different places in the income distribution. The bottom third of households are clearly the most vulnerable. While their situation has not worsened disproportionately over the last 20 years, a very high percent are ‘at risk.’ Given their low incomes, an increase in the proportion ‘at risk’ will almost certainly lead to a future increase in the poverty rate of those 65 and over.

## Endnotes

- 1 A recent update of the Index found a very slight increase in the 'at risk' percentage — from 43 to 44 percent of households (Munnell, et al. 2007).
- 2 Munnell and Sundén (2006).
- 3 One-earner households, as defined here, are those households in which the non-working spouse has less than 40 quarters of covered earnings for Social Security purposes.

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# APPENDIX

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## Appendix

TABLE A1. WEALTH HOLDINGS OF A TYPICAL HOUSEHOLD PRIOR TO RETIREMENT, BY THIRD, 2004

Source of wealth	Percent of total		
	Bottom third	Middle third	Top third
Primary house	8.4	18.4	19.7
Business assets	2.5	0.9	3.6
Financial assets	1.0	8.5	12.5
Defined contribution	1.8	10.0	11.2
Defined benefit	9.3	19.3	19.2
Social Security	72.6	39.5	27.1
Other nonfinancial assets	4.4	3.4	6.7
Total	100.0	100.0	100.0
Addendum: Total financial assets	175,757	652,800	1,292,885

Note: The “typical household prior to retirement” refers to the mean of the middle 10 percent of the sample of households headed by an individual aged 55-64.

Source: Authors’ calculations based on U.S. Board of Governors of the Federal Reserve System (2006).

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## About the Center

The Center for Retirement Research at Boston College was established in 1998 through a grant from the Social Security Administration. The Center's mission is to produce first-class research and forge a strong link between the academic community and decision makers in the public and private sectors around an issue of critical importance to the nation's future.

To achieve this mission, the Center sponsors a wide variety of research projects, transmits new findings to a broad audience, trains new scholars, and broadens access to valuable data sources. Since its inception, the Center has established a reputation as an authoritative source of information on all major aspects of the retirement income debate.

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