NATIONAL ENDOWMENT FOR FINANCIAL EDUCATION

INCOME SHOCKS AND LIFE EVENTS:

Why Retirement Savings Fall Short

ABOUT THIS EXECUTIVE SUMMARY

This summary presents key findings from Untangling the Determinants of Retirement Savings Balances *by Teresa Ghilarducci, Ph.D., The New School for Social Research and the Schwartz Center for Economic Policy Analysis. Anthony Webb, Ph.D., Bridget Fisher, Siavesh Radppour and Joelle Saad-Lessler, Ph.D. also contributed to the report.*

Related papers and reports, available at www.nefe.org, were prepared to determine how life events impact retirement savings and how these impacts differ by race, gender and income categories.

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NO ONE IS SAFE:
America's Real Retirement Savings Crisis

Americans have been made to feel like failures when it comes to retirement savings. They have been told that their savings shortfalls are their fault. If only they would save more, make better financial decisions, and anticipate future life events, they would be able to approach their golden years without worry. But few actually make it to age 65 with adequate — let alone healthy — nest eggs.

This new NEFE-funded research shows that it is typical for a person to experience significant setbacks in their retirement savings throughout their lifetime — so common, that 96 percent of Americans experience four or more income shocks by the time they reach age 70.

Job loss, sickness, divorce: these are the kinds of life and economic events that derail even the most disciplined of savers. People want to believe "it won't happen to me." The truth is that almost no one is safe from these shocks, and low-income individuals are disproportionately affected. With limited means to finance these shocks, they withdraw from their 401(k)s — if they are fortunate enough to have access to employer-provided retirement plans at all.

LIQUID SAVINGS: The Unspoken Role of Defined Contribution Accounts

Retirement savings are particularly vulnerable when households face income shocks. Tapping relatively liquid 401(k) and individual retirement accounts makes sense — even with the associated taxes and penalties — when no other choices exist.

So, although retirement plans are established for long-term savings, in many households they are treated as liquid savings to self-insure during times of hardship. Repeated withdrawals, as well as periods of time when workers stop contributing to their accounts, lead to severely underfunded balances when workers are ready to retire. In fact, 401(k) participants at all income levels are accumulating about a third of the amount needed to maintain living standards in retirement.

401(k)s serve more than one role for many households. The 401(k) is used for two main purposes: to save for retirement, and to self-insure against income shocks prior to retirement. Retirement plans often are treated as liquid savings during times of hardship.

The researchers studied retirement account leakage during times of financial shock using a modified sample.[1] Not only are low-income households more likely than moderate- and upper-income households to experience economic shocks such as job loss or the onset of poor health, but workers in low-income households also are more likely to withdraw from their retirement account after such an episode. In fact, economic shocks explain at least 32 percent of withdrawals by workers in low-income households, and possibly considerably more. Although some households may tap retirement funds as a result of shortsightedness, many cash out due to financial necessity.

And while the amounts cashed out often are small, the long-run effects are substantial because individuals lose the opportunity to earn investment returns on the amount withdrawn.

[1] To examine withdrawals on retirement plans, researchers focused on cash-outs made by individuals ages 25-58 over a two-year period (2008-2009).

Measuring the Impact of Life Events on Retirement Savings

Most retirement savings research isolates just one determinant — such as a change in health status — and measures the impact of that change on retirement savings, holding all other factors constant. This approach assumes that changes happen one at a time, and ignores the fact that life events that affect retirement savings — unemployment, divorce, income disruptions — cluster together.

However, this study takes into account the reality that while sometimes unpredictable, changes in peoples' lives do not occur independently, and that the magnitude of the impact on retirement savings depends on gender, race and socioeconomic status. By evaluating each factor's relative impact on defined contribution retirement savings accumulations for different age and income groups, it becomes more clear who is at risk of not having enough retirement savings, and why.

ABOUT THE STUDY

The researchers linked data from the Survey of Income and Program Participation (SIPP) with individual earnings records from the Social Security Administration (SSA) and the Internal Revenue Service (IRS). The SIPP contains information on retirement savings, education, demographic characteristics, marital history, fertility history, health status, and government transfer payment beneficiary history. The SSA and IRS data allow researchers to track lifetime earnings and variability and also to study actual records of contributions to retirement plans. Taken together, these data provide a rare opportunity to investigate individual differences in retirement savings accumulations while controlling for differences in employment and earnings history, marital status and fertility, demographic characteristics, health status and disability history, and more.

Sorting Participants By Age and Income

Researchers followed a sample of men over their working lives to measure the impact of mostly unpredictable life events and other determining factors affecting retirement savings.

Age breakdowns help generalize typical lifecycle-related events (such as first marriage, birth of children, death of spouse); and the cumulative effects of living and working longer on asset accumulation and number of income shocks. Analysis by age categories is as follows:

- Ages 25-34
- Ages 35-54
- Ages 55-61
- Ages 62-70

Because the impact of work and life events depend heavily on the cushion one might have in wealth and income, the sample also is analyzed by their position in the income distribution:

- Workers in the top 10 percent of income distribution
- Workers in the middle 40 percent of income distribution
- Workers in the bottom 50 percent of income distribution

The top 10 percent owns more than three times the amount of assets as the middle group, and the middle group has three times the assets as the bottom group.

The Prevalence of Income Shocks

Two types of income disruptions were examined in actual earnings data from Social Security records: one in which workers lost their income for a whole year, and another in which earnings dipped more than 10 percent for a whole year.

Income shocks are pervasive among men in the labor force.

- 61 percent of workers ages 25-70 experienced at least one episode in which they lost their earnings for a whole year.
- 25 percent of workers age 66-70 have experienced at least four episodes in which they lost income for an entire year.

Lower-income male workers are more likely than higher-income male workers to experience large drops in earnings, indicating that poorer workers, in addition to having less income, are exposed to more negative shocks to their earnings stream.

- 55 percent of men at the top 10 percent of income have never experienced an unemployment spell lasting at least one year, but only 18 percent of workers in the bottom 50 percent are as fortunate.
- 4 percent of workers at the top 10 percent of income have four or more such experiences; 18 percent in the bottom 50 percent do.

Earnings volatility, defined as an episode in which earnings drop more than 10 percent from one year to the next, also is common.

- By the time men reach age 66-70, 96 percent had experienced at least four such episodes.

The likelihood of volatile earnings is higher for the lowest-income workers.

- 87 percent of men in the bottom 50 percent of income experienced at least four 10 percent drops in earnings, compared to 69 percent of men in the top 10 percent of income.

Men Have Many Episodes of Shocks to Their Income Over Their Lifetime

Earnings record data	25-34	35-54	55-61	62-65	66-70	25-70
Had an unemployment spell lasting at least 1 year (lost all earnings)						
Never	60%	44%	25%	13%	7%	39%
Once	26%	27%	27%	25%	26%	27%
Twice	10%	15%	20%	23%	23%	16%
Three times	3%	8%	13%	17%	18%	9%
Four or more times	1%	6%	14%	22%	25%	9%
Lost 10% or more of earnings (includes job changes and unemployment spells of any duration)						
Never	5%	2%	1%	0%	0%	2%
Once	11%	4%	1%	1%	1%	4%
Twice	18%	7%	2%	1%	1%	7%
Three times	18%	9%	5%	3%	3%	9%
Four or more times	48%	78%	92%	95%	96%	77%

Men at All Income Levels Have Many Episodes of Shocks to Their Income

Earnings record data	Bottom 50% ($0 - $26,531)	Middle 40% ($26,532 - $80,039)	Top 10% ($80,040 +)
Had an unemployment spell lasting at least 1 year (lost all earnings)			
Never	18%	47%	55%
Once	27%	26%	26%
Twice	22%	14%	11%
Three times	15%	7%	4%
Four or more times	18%	6%	4%
Lost 10% or more of earnings (includes job changes and unemployment spells of any duration)			
Never	1%	3%	3%
Once	2%	5%	6%
Twice	4%	9%	10%
Three times	6%	10%	12%
Four or more times	87%	74%	69%

What Factors Affect Retirement Savings — and For Whom?

Researchers identified which factors were related to increased or decreased retirement savings, and identified specific dollar amounts by which each factor affected account balances.

Factors related to higher savings include:
- Having a college degree
- Participating in defined benefit and/or defined contribution retirement plans at work
- Good health
- Being married
- U.S. citizenship

Factors related to lower savings include:
- Poor health and disability
- Income shocks
- Being nonwhite
- Being divorced
- Belonging to a union (which may signal greater likelihood of having a traditional defined benefit pension)

Data from the Social Security Administration and the IRS allowed the researchers to pinpoint specific dollar amounts by which each factor — through the lens of both age and income level — affects actual retirement savings.

EARNINGS SHOCKS are measured by how many significant drops in earnings a person has suffered over their working career. Using the number of times earnings dropped to zero for at least one year (instead of using the number of times earnings dropped 10 percent or more) resulted in larger measured impacts. Earnings losses were particularly devastating for older and lower-income workers.

Age
- Shocks resulting in earnings dropping 10 percent or more decreased retirement savings by **-$2,722** for ages 55-61, and **-$6,218** for ages 66-70 per episode.
- Four or more such spells can drop savings by **-$10,000** or more.

Income
- Only middle- and lower-income workers' retirement savings dropped (by **-$1,097** to **-$1,346**) per episode of earnings loss of 10 percent or more.
- Those in the top 10 percent of income distribution did not suffer any change to their retirement savings from such earnings volatility.
- Only workers in the bottom 50 percent of income were affected when earnings dropped to zero for one year or more; each episode reduced retirement savings by **-$3,786**.
- This emphasizes the role of liquidity constraints among lower income workers, and puts into question the ability of 90 percent of workers to cushion life's surprises without raiding their retirement savings.

HEALTH SHOCKS are measured by self-reported health status and whether the individual has suffered a work-limiting disability or work-preventing disability. Poor health is the most important life event determining the size of retirement savings.

Age
- Less-than-excellent health decreased retirement savings between **-$4,768** to **-$34,497**, particularly after age 54.

Income
- Poor health reduced retirement savings for everyone by **-$9,377** to **-$86,286** depending on their income class and the severity of the health deterioration.

MARTIAL AND FERTILITY SHOCKS are measured by marital status, the number of divorces experienced and the number of children the person has fathered.

Age
- For ages 55-61, being married boosted retirement savings by **+$17,589**.
- Also for workers ages 55-61, each child depressed retirement savings by **-$2,830**.

Income
- Being married increased the retirement savings of middle-income men by **+$7,345**.
- Each divorce reduced the retirement savings of middle-income men by **-$3,111**.
- Children did not have an impact on retirement savings for men in any income group.

ADDITIONAL INCOME is measured by whether a worker received a survivor lump-sum payment from someone else's pension, a lump-sum payment for a previous job's pension, or government assistance.

Age
- Receiving a lump sum from one's own pension increased defined contribution savings across all age groups, since many workers receiving lump sums roll them over into their defined contribution savings accumulations.
- Men ages 55-61 who received a survivor lump-sum payment had **+$56,800** more in retirement savings.

Income
- The bottom 50 percent of men by income who received a survivor lump sum from another person's pension had **+$22,992** more in retirement savings.

RETIREMENT PLAN PARTICIPATION is measured by whether an individual participates in a defined benefit or defined contribution plan from a current or previous job. ***Plan participation is the most important determinant of retirement accumulations, raising everyone's retirement savings.***

Age
- A defined benefit plan boosts retirement savings by **+$5,271** to **+$20,531**, peaking at middle age.
- Defined contribution participation boosts savings by **+$13,364** to **+$47,993**, peaking at ages 62-65.

Income
- Defined benefit plan participation increased savings by **+$7,587** to **+$17,208**, depending on income group.
- Defined contribution plan participation raised retirement savings by **+$9,274** to **+$39,233**, depending on income group.

INCOME AND AGE have significant affects across all groups.

Age
- Every additional $10,000 of income leads to an increase in retirement savings between **+$34,902** and **+$47,833,** depending on age.
- The impact of higher income is only present for men under the age of 61, likely because many people retire at age 62.

Income
- Retirement savings increase by **+$14,000** to **+$50,000** for the bottom 90 percent of workers as they age, with the highest increase in accumulations reached at age 70.
- The impact of age is different for those in the top 10 percent, in which the highest increase in accumulations is reached at ages 55-61.

RACE AND CITIZENSHIP

RACE AND CITIZENSHIP are outside of a person's control, but are nonetheless significant determinants of retirement savings.

Age

- The effect of being nonwhite is independently large and negative, reducing retirements savings by:
  - **-$16,977** for blacks ages 45-54
  - **-$11,743** to **-$41,979** for Asians ages 45-54
  - **-$8,280** to **-$24,278** for Hispanic nonwhites ages 45-54

Income

- Being nonwhite decreased retirement savings more for the top 10 percent in income (**-$19,000** to **-$54,000**) than those at the bottom 90 percent (**-$8,000** to **-$16,000**).
- Citizenship led to an increase of **+$7,247** for middle-income workers, but for the top 10 percent, citizenship status increased retirement savings by **+$20,381**.

WORKPLACE CHARACTERISTICS

account for the size of a worker's employer; in what current or past industries a person works or has worked; and whether a person works full time. Additionally, union membership may affect retirement account balances because a) it is more likely for lower-wage occupations, and b) members may be more likely to have traditional defined benefit pensions, making it less critical for workers to build up defined contribution plan savings.

Age

- Union status predicated lower retirement savings of **-$7,551** to **-$27,526**, depending on age.
- Additionally, state and industry effects often were highly significant and large in magnitude (ranging from **+$61,390** to **+$114,274**), indicating that employer policies and state-specific tax policies are important determinants of retirement savings accumulations.

Income

- Working at a larger firm positively affected retirement savings regardless of income status, but the impact was greater for those at the top.
- Among the top 50 percent of the income distribution, union status was associated with lower retirement savings.

EDUCATIONAL ATTAINMENT

measures the effects of education on retirement savings.

Age

- A worker's education impacts retirement savings at age 45, but only for those with at least a college degree. Men with a college degree or higher save an additional **+$15,000** to **+$59,000** for retirement after controlling for their higher income.

Income

- The positive effects of education on retirement savings were limited to men at the bottom 90 percent of the income distribution, ranging from **+$6,000** to **+$32,000** in extra retirement savings.

ASSETS AND DEBTS

ASSETS AND DEBTS account for an individual's income and net worth. Home equity and debt have smaller effects on retirement savings than income.

Age

- The value of checking accounts, bonds, securities, stocks, the cash value of life insurance policies, and business equity less debt predict higher retirement savings. The effect on nonretirement wealth increases continuously with age.
- Debt, on the other hand, diminishes retirement savings for young and middle-aged workers — every increase in debt by $10,000 reduces retirement savings by up to **-$2,482** (depending on age).

Income

- Investments, real estate holdings and home equity complement the retirement savings of all three income groups.
- Debt levels depress only the retirement savings of lower- and middle-income workers: A $10,000 increase in debt leads to a drop in retirement savings of **-$1,290** to **-$1,969.**

In addition to the factors listed above, researchers accounted for health insurance coverage and state of residence to capture the effect of different income tax rates on retirement savings.

IMPLICATIONS AND RECOMMENDATIONS

Americans Are Not "Failures"

Nearly everyone will suffer multiple income shocks during their working lives, and their retirement savings will be affected by numerous factors, some of which individuals can control, and many which they cannot.

Practitioners, educators and policymakers can:

- Begin by communicating that low savings is not necessarily the fault of the consumer. Use this research to validate how frequently and universally income shocks and life events affect even the most disciplined of savers.
- Prepare individuals to expect income shocks, and educate them on how to manage and recover from financial setbacks with the least possible impact on their retirement savings.
- Educate individuals on which factors they control that affect retirement savings, such as participating in an employer-sponsored retirement plan. Validate individuals' decisions that do not put retirement savings first — for example, although having children results in lower retirement savings, that doesn't outweigh all the positive reasons to start a family.
- Recognize and reinforce changing demographics and cultural variances in financial attitudes. For example, NEFE-funded research studying retirement savings among Latina populations finds a strong thread of interdependency and collectivism when approaching retirement decisions. Retirement savings balances do not necessarily represent the entirety of retirement security for individuals and families.

DEALING WITH INCOME SHOCKS: A CHECKLIST FOR LEARNERS

Income shocks and financial emergencies do not necessarily have to deplete retirement savings accounts.

BEFORE

- ☐ Think through options and develop multiple contingency plans.
- ☐ Consider tax consequences, potential penalties, and other payoffs and trade-offs related to tapping various income streams.
- ☐ Identify lowest-impact sources of cash.

DURING

- ☐ Choose and implement the best course of action in alignment with your resources and financial goals.
- ☐ Research local resources available to help.

RECOVERY

- ☐ Make a plan to get savings back on track.
- ☐ Identify eligibility and process for catch-up contributions to retirement savings.
- ☐ Reactivate automatic deposits (if they were suspended during the crisis).

For more information, including the self-guided online course "My Emergency Fund Plan," visit NEFE's www.SmartAboutMoney.org.

IMPLICATIONS AND RECOMMENDATIONS

Defined Contribution Plans Are Not Perfect

The 401(k) system was built to favor high- and middle-income earners with uninterrupted and growing income. And although it has been presented as the preferred default system for all Americans, it does not serve many individuals and families as intended. The defined contribution aspects of individual retirement accounts (IRAs) similarly are not well-suited for many people.

Consider:

- Automatic deposits and early withdrawal penalties work well for households to accumulate savings that is not easily interrupted or accessed (thanks in part to inertia).
- However, this feature produces an unintended side effect: As the account grows into a household's largest financial asset, it also can serve as an essential source of liquidity to cover income shocks and other financial needs, particularly for low-income households.
- Can the 401(k)'s dual roles — retirement savings vehicle and essential source of liquidity for financial emergencies — coexist successfully? Is it reasonable for a retirement plan to have more than one goal when it is highly likely a big payout will be needed before retirement?
- Once tapped, households are familiar with the process and may be more inclined to use it again in the future.
- If earners have suspended contributions to their account, inertia may prevent them from starting back up again quickly, further reducing future retirement savings.
- Can workers really catch up after accessing or depleting retirement savings?

Practitioners, educators and policymakers can:

- Remind savers to take advantage of deductible contributions and encourage them to take an employer match to retirement savings, if offered.
- Acknowledge the necessity which drives households to tap retirement savings to cover current household economic shocks.
- If tapped, guide workers to appropriate strategies to rebuild account balances, including resuming contributions if suspended.
- Help learners plan for alternate strategies to deal with future shocks, including building an emergency savings account.
- Consider the impacts on American workers if 401(k)s remain the default choice for retirement savings. Relatively more Baby Boomers are covered by defined benefit pensions, but fewer Gen X and even fewer Millennial workers are, leaving them to the flaws of 401(k)s and IRAs.

IMPLICATIONS AND RECOMMENDATIONS

The Limits of the U.S. Retirement Savings Structure

This study's data exposed the realities of what most Americans are faced with in their working lives as they attempt to save for a secure retirement. Some challenges lie within the structure and expectations of the U.S. retirement savings system itself.

EXPECTATIONS OF RESPONSIBILITY

- The U.S. system historically has relied on three responsible entities for the retirement security of its citizens:
  - The federal government, through Social Security
  - Employers, originally through defined benefit pension plans, and more recently through defined contribution plans such as 401(k)s and 403(b)s
  - Individuals, through their own savings, originally through banks and investment accounts, and more recently through tax-advantaged individual retirement accounts
- Each expectation of responsibility contains flaws, including:
  - Social Security benefits potentially may be reduced in the future.
  - Employers are not required to offer retirement plans.
  - Individuals are not required to participate in employer or individual retirement plans.
- Although individuals are aware of the need to save for retirement, nearly 6 in 10 (59 percent) have never tried to calculate how much money they will need to have saved so that they can live comfortably in retirement.

EMPLOYER PLAN ACCESS

- About half of American workers have access to an employer-provided retirement plan; and of those, only about half participate. Many Americans are not covered by the system at all.

RETIREMENT SAVINGS ACCOUNT ACCESSIBILITY

- Taxes and penalties for early withdrawals from retirement plans do not deter many American households from tapping into, completely depleting and/or suspending contributions to their accounts. Early access to retirement funds often is the cheapest source of liquidity, even with penalties.

PRODUCT INNOVATIONS

Supplementary tools are evolving. For example, savings plans sponsored or required by state governments are becoming more widely available. Federal Treasury myRA accounts are a safe option for individuals who are beginning to save for retirement and are not covered by an employer-provided retirement plan.

The following should be considered as leaders examine shortfalls in the current system and design solutions for an improved iteration:

- Who has access to retirement plans through their employers? What will it take for the other half of American workers currently not covered by an employer-provided retirement plan to have access to a plan?
- Who actually participates in their employer-provided plan? What will it take to ensure more people participate in the plans available to them?
- What amount of savings is enough for most Americans? How can more people be encouraged to calculate how much they need in retirement?
- When faced with a hardship, should participants be allowed to suspend contributions or make early withdrawals? Are there unintended consequences for applying savings mandates or revoking the ability to access funds for preretirement needs? If a person's back is against the wall, would they be forced to more predatory sources of income?
- Can policies be developed in the future to help bolster retirement savings? For example, NEFE has recommended the creation of Roth at Birth accounts. A Roth at Birth is a financial product that could be easily created by modifying the earned income rules of existing Roth IRAs, allowing children to use their parents' earned income limits to make contributions.

Conclusion

There are clear shortfalls in the current defined contribution structure at place in the United States, and NEFE supports a debate on how to make the necessary changes to better serve Americans who hope for a secure and comfortable retirement. It's important to consider each of these factors when introducing potential solutions. After all, at the heart of every financial product is an individual who is experiencing real life — real events, real income disruptions and striving to reach real financial goals. They don't need more blame or more barriers. They need our best efforts to help them retire well.

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About the Methodology

This analysis of factors affecting retirement savings was conducted for male workers by four age groups and three income groups. The U.S. Survey of Income and Program Participation (SIPP), as well as data from the Social Security Administration (SSA) and the Internal Revenue Service, was used to identify life events and observe trends that affect retirement savings balances.

Specifically, the researchers constructed one sample by merging waves 1-11 of the 2008 panel of the SIPP (collected between 2008 and 2012), and identifying respondents, ages 25-61, who were continuously in the sample, had some retirement savings in 2009, and worked in both 2009 and 2011. Information on retirement wealth is drawn from the assets and liabilities modules in waves 4 and 10 (collected in 2009 and 2011). Characteristics of the workers' retirement plan — including employer contributions; whether the plan allows loans and investment choice; asset allocation of the defined contribution wealth; and any withdrawals or rollovers — were drawn from the retirement expectation modules in waves 3 and 11 (2009 and 2011-2012).

The linked SSA earnings records, based on IRS W-2 records, contain accurate information on current and lifetime earnings, as well as annual employee contributions to defined contribution retirement plans. The SSA earnings records allow the researchers to calculate how many times a person's annual earnings fell by more than 10 percent and the volatility or standard deviation of annual earnings over a worker's career. Data from the SSA earnings records were used in the place of self-reported SIPP data whenever possible.