

A DANGEROUS INTERSECTION? THE COMPOUNDING THREATS OF INCOME VOLATILITY AND RETIREMENT INSECURITY

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INTRODUCTION

American families are facing two distinct but interrelated financial challenges: income volatility and lack of retirement preparedness.

In a recent Federal Reserve survey, three in 10 adults in the United States (US) reported experiencing some level of income volatility from month to month.ⁱ Other research suggests that income volatility may be even more widespread.ⁱⁱ

Income volatility, along with other forms of cash flow instability such as expense volatility, makes it difficult for families to budget, save, and plan for the future. When confronted with unpredictable cashflow, households without emergency savings are often forced to make high-risk financial decisions. High-risk options can include cashing out retirement accounts, borrowing from retirement accounts, over-drafting bank accounts, turning to high-cost credit such as payday or car title loans, and delaying bill payments. While these options can help households cope with their immediate, urgent needs, they often do so in ways that can derail or diminish longer-term financial security.

SUMMARY

This brief explores the interaction between two critical financial security challenges, income volatility and lack of retirement preparedness. An emerging body of research indicates that large numbers of American households experience major fluctuations in their incomes, which can limit their ability to cope with financial challenges. Yet little is known about the extent to which income volatility during working years impacts retirement security. This paper summarizes the current literature on the nature of income volatility and the retirement savings crisis, explains what we know about how they interact, and closes by identifying important gaps in our knowledge.

Our analysis builds on the work of two Financial Security Program projects, the Expanding Prosperity Impact Collaborative (EPIC), which spent two years studying income volatility, and the Retirement Savings Initiative (RSI), which is dedicated to enabling low- and moderate-income Americans to save more for retirement.

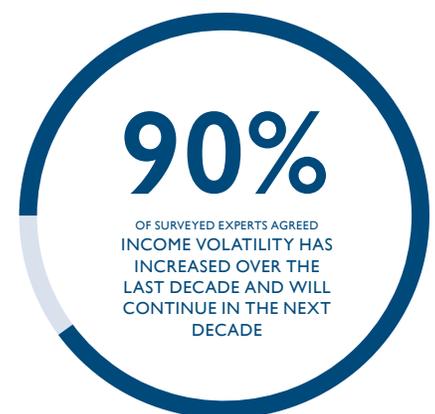
While many important questions about the intersection between the two challenges remain unanswered, emerging research suggests that income volatility disrupts the ability to save throughout one's working years, negatively impacting long-term retirement security. Even before taking volatility into account, the statistics on retirement preparedness are troubling. Half of the private-sector workforce does not have access to a retirement plan through their employer,ⁱⁱⁱ and even those who are saving are not saving enough to substantially supplement Social Security.^{iv}

■ **Income Volatility is Widespread**

A growing number of researchers in private, nonprofit, and academic institutions are collecting and analyzing data on the prevalence of income volatility:

- The Pew Charitable Trusts (Pew) found that at least one in four households experience substantive shifts in income year-to-year.^v
- The JPMorgan Chase Institute, using their customers' anonymized transaction data, estimated that 55% of individuals regularly experience more than a 30% change in income month-over-month.^{vi} The swings are nearly universal across the income spectrum.
- Income volatility is more prevalent among Hispanics, blacks, women, millennials, single-parent female-headed households, those who have a high school diploma or less, and low-income workers.^{vii}
- In a US Financial Diaries study, low- and moderate-income families averaged 5.1 months out of the year in which income was more than 25% above or below its average.^{viii}
- While one-time "income shocks" are distinct from the type of chronic fluctuations that are normally associated with "volatility," a study conducted by National Endowment for Financial Education (NEFE) found that 96% of Americans experience four or more income shocks by the time they reach age 70.^{ix}
- In a Delphi survey conducted by Aspen EPIC, 90% of surveyed experts agreed that income volatility has increased over the last decade—and nearly as many anticipate that it will continue to increase in the next 10 years.^x

Volatility alone would not be a significant problem if families had the proper buffers and systems in place to help them manage the unexpected dips in income. However, families are struggling to save. Forty percent of adults would not be able to pay a \$400 expense without borrowing or selling something.^{xi} In the first quarter of 2018, the personal savings rate as a percentage of disposable income for individuals hovered around 3%.^{xii}



Source: "Income Volatility: Expert Survey Results – November 2016." The Aspen Institute Expanding Prosperity Impact Collaborative. November 2016. Slide Deck.



■ What Drives and Compounds Income Volatility?

Aspen EPIC identified irregular work schedules and job loss as primary drivers of income volatility; and found that interrupted public benefits and irregular expenses are related challenges that compound its effects.^{xiii}

IRREGULAR WORK SCHEDULES

According to a survey conducted by the Federal Reserve, 43 percent of households who experience income volatility identified irregular work schedules as the primary cause.^{xiv} In analyzing banking records, the JPMorgan Chase Institute found that within-job variation in pay explains 86 percent of the month-to-month variation in labor income.^{xv} Experts have described the volatility that results from unstable scheduling as a “chronic” problem that leads to “routine unpredictability.”^{xvi}

JOB LOSS

The second most common explanation cited by respondents to the Federal Reserve survey was job loss and unemployment. Sixteen percent of those who experienced volatility attributed that volatility to job loss.^{xvii} Each year, some 17 million American workers experience a spell of unemployment.^{xviii} And, though most laid off workers find new jobs within 28 weeks of reentering the workforce, it can take laid-off workers six years or more to reach their previous level of earnings.^{xix}

INTERRUPTED PUBLIC BENEFITS

Ideally, safety net programs would serve as an adaptable stopgap for families faced with these kinds of challenges, but our safety net is not designed with enough flexibility to accommodate income volatility.^{xx} Only 30 percent of jobless workers receive unemployment benefits due to eligibility requirements and the rise of alternative work arrangements (see sidebar).^{xxi} During a given year, families with volatile incomes can live for months in or near poverty—described as episodic poverty^{xxii}—but just a few months with higher earnings can disqualify them from non-labor income transfers like Temporary Assistance for Needy Families (TANF) or the Supplemental Nutrition Assistance Program (SNAP).^{xxiii} Policy experts have identified this as a major weakness in the safety net system.^{xxiv}

INCOME VOLATILITY AND THE CHANGING NATURE OF WORK

The relationship between employers and employees has changed in recent decades, placing more risk on workers' shoulders. This is felt not just in the reduction of workplace benefits, including retirement, but also in the precarity of the job itself, with fluctuating hours. The rapid growth of alternative work arrangements is a testament to this change. Largely due to definitional reasons, there are numerous estimates on the speed with which the nature of our workforce is changing. While a recent survey by the Bureau of Labor Statistics found a decrease in the percentage of workers reporting contingent work between 2005 and 2017, another commonly cited finding estimates that the percentage of workers engaged in alternative work arrangements (temporary help agency workers, on-call workers, contract workers, and independent contractors or freelancers), rose from 10 percent in 2005 to close to 16 percent in 2015. For those in alternative work arrangements, pay is often dependent on the current demand for services, which fluctuates and can be hard to predict. Moreover, these work arrangements often leave workers ineligible for any benefits at all - without protection against health care expenses or the ability to save for retirement in a workplace account. Clearly then, the changing nature of work, income volatility, and retirement insecurity are intimately linked.

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EXPENSE VOLATILITY

The impacts of irregular scheduling, job loss, and outmoded public benefits are compounded by other forms of financial volatility, like expense volatility, which exists across both the income and age spectrums.^{xxv} Predictable and unpredictable expenses—the most common being seasonal bills, car costs, the cost of goods, and medical expenses^{xxvi}—can have a significant impact on a household's financial security. A 2017 report from the JPMorgan Chase Institute found that within a year, almost four in 10 families made at least one extraordinary payment of over \$1,500 related to medical services, auto repair, and/or taxes, and the impacts of these payments were still felt a year later.^{xxvii} The results of the JPMorgan Chase Institute report are mirrored in a Pew survey which found that the median household spent \$2,000 on their most expensive shock.^{xxviii}

■ **The Scope And Consequences Of Under-Saving For Retirement**

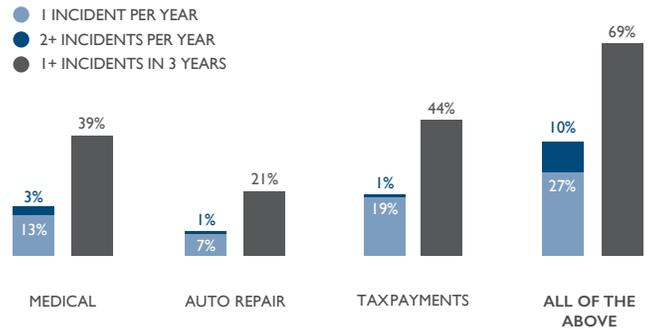
In broad terms, our retirement system works reasonably well for millions of American families, who save in 401(k)s or similar plans offered by their employers, though they may not be accumulating enough in those plans for a fully secure retirement. According to the 2016 Survey of Consumer Finances (SCF), the half of American households who have retirement accounts have a median account balance of \$60,000.^{xxix}

Millions of other households, however, lack access to proven savings models and struggle to build enough wealth to maintain their living standards in retirement. Of the approximately 110 million American workers in the private sector, nearly half—55 million people—are not offered a retirement plan through their employer.^{xxx}

Looming retirement insecurity is a particularly acute problem for people approaching the end of their working years. Over a quarter of families headed by individuals aged 50-64 have no private retirement savings at all.^{xxxi} Even for those nearing retirement with savings, the numbers are bleak. The average total balance in all retirement accounts for families nearing retirement is \$150,000, while the median sits at \$12,000.^{xxxi}

Almost four in ten families made an extraordinary payment of over \$1,500 per year.

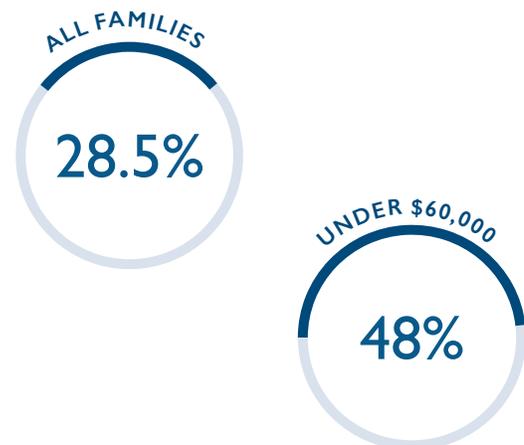
Incidence of Extraordinary Payments



Source: <https://www.jpmorganchase.com/content/dam/jpmorganchase/en/legacy/corporate/institute/document/institute-coping-with-costs-report.pdf>

Over a quarter of families headed by individuals aged 50-64 have no private retirement savings at all.

Fraction of U.S. Families Ages 50 - 64 without a Retirement Plan by Family Income (2013)



Source: Teresa Ghilarducci, L. Bernard, and Schwartz, Irene. "Inadequate Retirement Account Balances for Families Nearing Retirement." Schwartz Center for Economic Policy Analysis.



Social Security mitigates some of the impacts of low retirement account balances and is effective at providing steady income in retirement. Research indicates that it lifts 22 million Americans above the poverty line each year.^{xxxiii} However, it was never intended to be the sole source of retirement income, replacing on average only 40 percent of pre-retirement income.^{xxxiv} Nevertheless, for most households—even those in the middle class—Social Security serves as the main, if not only, source of income throughout retirement. Nearly 70 percent of retirees rely on Social Security for at least half of their income.^{xxxv} Of Americans 65 years of age and older who receive Social Security, 23 percent rely on it for 90 percent of their income.^{xxxvi}

■ **Understanding the Complex Relationship Between Income Volatility and Retirement Savings**

It's clear that millions of US households are struggling to navigate two complex financial challenges. From one lens, we see that households across the country are struggling to manage their finances month-to-month because of fluctuating earnings and expenses. From another, we see dramatic deficits in both access to retirement savings plans and overall saving levels. Considering the scale of both problems, it is likely that many households are suffering both hardships at once. However, to date, there is little research specifically looking at the relationship between income volatility and retirement savings. It is unclear whether experiencing income volatility causes workers to save less or dip into their retirement savings more, or if these are merely correlated, as jobs with volatile pay tend to be the same jobs that do not offer access to retirement plans.

A more complete understanding of these relationships requires more research, but existing evidence suggests several likely links. Namely, that income volatility reduces retirement savings by limiting the amount workers can contribute, interrupts savings largely via job loss, and reduces balances through job transition-related retirement account leakage.

LIMITED CONTRIBUTIONS

A study conducted by researchers at the New School found that for those who are already saving, negative economic shocks lead to frequent adjustments to voluntary 401(k) contributions because individuals respond to these shocks similarly to how people react to fear or trauma.^{xxxvii} When families are hit with a shock, short-term needs like household bills become the priority. A worker's desire to build long-term savings becomes irrelevant in times of financial hardship. Earnings losses, shocks, and periods of unemployment—all sources of income volatility—are associated with decreased contribution rates

Nearly 70 percent of middle-class retirees rely on Social Security for at least half of their income.

Share of Middle-Class Beneficiaries—with incomes in the middle 60% of income scale—Age 65 and Over for Whom Social Security is at Least Half of Total Income



Source: "Social Security: Main Source of Retirement Income for Most Middle-Class Beneficiaries." Center for Budget and Policy Priorities.

For those who are already saving, negative economic shocks lead to frequent adjustments to voluntary 401(k) contributions because individuals respond to these shocks similarly to how people react to fear or trauma.



and decreased defined contribution wealth accumulation,^{xxxviii} thereby rendering the ability to achieve an adequate level of savings nearly impossible.

INTERRUPTED SAVINGS

Income volatility stemming from job loss can significantly reduce retirement savings. First, there is the simple fact that unemployed workers do not have the disposable income needed to save. Even with the help of Unemployment Insurance (UI), which as noted earlier only 30 percent of unemployed workers receive,^{xxxix} reduced income leaves less left over for savings. Second, when a worker loses a job, they not only lose their income, but also lose the ability to continue contributing to their workplace retirement plan.^{xl} Making up for lost savings can be difficult for many workers, both because of the gap in contributions and the possibility of reduced earnings in the new job.^{xli} One study found that when a laid-off worker found a new position, they were paid, on average, about 33 percent less than in their previous job.^{xlii} Workers are not likely to increase their retirement plan contribution rates when trying to figure out how to make ends meet on reduced income.

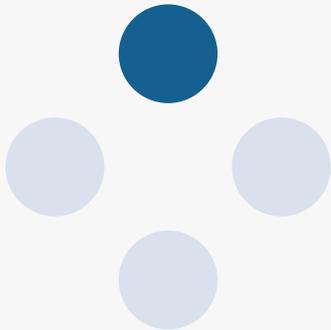
RETIREMENT ACCOUNT LEAKAGE

As described above, having a retirement account does not guarantee that workers will achieve financial security in the long-term. Many plans are undermined by leakage. Leakage occurs in one of three ways:^{xliii} hardship withdrawals—which are only allowed in specific situations of demonstrated need; cash-outs—an early withdrawal that includes a 10 percent penalty; and loans—which require repayment and are not available with all retirement plans.^{xliv,xlv} Cash outs at job separation are the largest and most common type of leakage.^{xlvi}

Not surprisingly, there is a link between financial volatility and leakage. Pew found that 13 percent of individuals who experienced a financial shock turned to their retirement savings as a source of emergency liquidity, despite the significant tax penalties, while only 1.9 percent of those who had not experienced a shock did the same.^{xlvii} One in four people with a defined contribution plan will make preretirement withdrawals to cover nonretirement related expenses.^{xlviii} Another study found that nearly three-quarters of those who take cash-outs do so because they are coping with basic financial challenges like the need to pay bills or basic expenses.^{xlix}

For some, tapping retirement savings in a time of urgent need—or at least pausing retirement contributions—might be the best option. But for others, this depletion of long-term financial security for a “quick fix” is a poor trade-off that will haunt the worker for decades to come.

*One in four people
with a defined
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■ *Remaining Gaps in the Research and Opportunities for New, Innovative Solutions*

While it is clear that individuals and families across the US are living with income volatility and retirement insecurity, we are only beginning to grasp the short- and long-term ramifications of how they intersect. Important unanswered questions include:

TO WHAT EXTENT ARE INCOME VOLATILITY AND THE LACK OF RETIREMENT PREPAREDNESS BOTH SYMPTOMS OF THE SAME PROBLEM: THE EROSION OF QUALITY JOBS?

Finding work that pays a stable wage and offers access to retirement savings tools has grown harder in recent years, especially for those without high levels of skills and education.ⁱ While it could be that a specific set of workers are victims of the two problems (those experiencing income volatility are the same workers who are not offered retirement plans), these two financial challenges could also exist separately—which brings us to two more questions:

To what extent does income volatility undermine the advantages of being offered a plan at work? Conversely, even if you have a stable income, how likely are you to regularly contribute to a retirement account if no plan is offered at work? Additional research is needed to convincingly answer these questions.

DO THE RIGHT SET OF TOOLS EXIST IN THE MARKET TO EFFECTIVELY ENABLE FAMILIES TO COPE WITH INCOME VOLATILITY, MANAGE EXPENSES, AND BUILD BOTH SHORT- AND LONG-TERM SAVINGS?

Many individuals and families face tough financial decisions. Should workers with volatile incomes prioritize saving for retirement or saving for emergencies? Consumers need tools to help them make these difficult decisions, or, better yet, help them save and manage cash flow automatically. Some policies and products are attempting to fill this need. Proposed programs like the “Rainy Day” Earned Income Tax Credit (EITC) would help families save refunds at tax time.ⁱⁱ And sidecar savings accounts could facilitate simultaneous short- and long-term savings.ⁱⁱⁱ Fintech companies like Digit try to capitalize on cashflow spikes by automatically saving portions of income bumps. This is in contrast to how the vast majority of workers save for retirement—through a fixed percentage of their salary each month—which can be difficult for those facing dynamic income and expense patterns. However, more work must be done to test and evaluate these innovations.

WHAT KIND OF INSURANCE ARRANGEMENTS ARE EFFECTIVE AT PROTECTING WORKERS IN BOTH THE SHORT- AND LONG-TERM?

New innovations in social insurance and benefits could help fill current gaps in our safety net. Policymakers should consider the advantages of upfront investment in combatting income volatility during years to save resources down the road. The income volatility we are seeing amongst workers today could mean an increase in financially insecure retirees and an increase in the number of older adults eligible for benefits like Medicaid and SNAP. Reforming unemployment insurance (UI) and/or implementing public wage insuranceⁱⁱⁱⁱ would create a buffer for workers when met with a job loss or a significant cut in earnings during their working years. Many states and cities have implemented policies around paid time off and paid family leave, which could be adapted for the purposes of testing wage insurance programs.

Researchers could also look to the private sector to learn from other insurance-based solutions. For example, SafetyNet offers an insurance product that individuals can buy to protect their finances in cases of job loss, injury, or illness.^{lv}



DOES INCOME VOLATILITY DURING EARNING YEARS CAUSE INDIVIDUALS AND HOUSEHOLDS TO DELAY RETIREMENT?

It is unclear what individuals who have experienced income volatility as workers will do as they approach retirement. Workers may choose to delay retirement and continue to work as a way of maintaining a source of income as they get older. According to the Bureau of Labor Statistics (BLS), in the coming decade, the labor force participation rate is expected to increase for workers ages 65 and older.^{lv} BLS offered a few predictions for why this may be—rising life expectancy, increases in education, and most notably changes in Social Security benefits and retirement plans. It will be worth following this trend to see where income volatility fits into the equation.

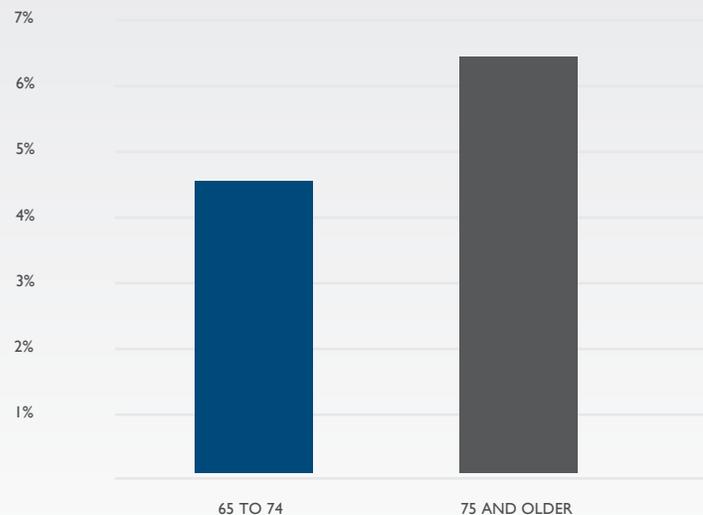
TO WHAT EXTENT IS VOLATILITY A REALITY FOR WORKERS ONCE THEY REACH RETIREMENT?

The conventional wisdom that once workers reach retirement, their expenses decrease and their income becomes fixed—a function of regular Social Security and other annuitized payments is being tested. Emerging evidence finds that expenses can fluctuate quite a bit in retirement, especially for health care.^{lv} Additionally, many seniors are working, at least part-time, well into their golden years. Lastly, large chunks of Americans' retirement savings are not annuitized and are instead distributed to retirees via crude withdrawal schedules or lump-sums. Although more research is needed, each of these factors point to increased volatility and insecurity for Americans during their retirement years.

Income volatility amongst workers today could mean an increase in financially insecure retirees, the number of older adults eligible for benefits like Medicaid and SNAP, and, consequently: more older adults delaying retirement.

Annual Growth Rate (%) in Labor Force by Age, Projected 2014 - 2024

According to the Bureau of Labor Statistics (BLS), in the coming decade, the labor force participation rate is expected to increase for workers ages 65 to 74 and 75 and older.



■ *Conclusion*

Over the last few decades, researchers in both the nonprofit and for-profit sectors have amassed an incredible amount of data and information on the financial lives of individuals and families in the US. We currently know more than we ever have about the nature of income volatility and the challenges of saving for retirement. However, the questions posed in this brief indicate that the relationship between income volatility and retirement security needs continued exploration. Given the growing threat that both problems pose to households nationwide, it is critically important that experts and leaders across sectors pursue a deeper understanding of their intersection. New research will help clarify the complexities and nuances of household finances, strengthening the policy and product solutions that will enable individuals and families across the country to achieve greater financial security.

ABOUT THE ASPEN INSTITUTE FINANCIAL SECURITY PROGRAM (FSP)

The Aspen Institute Financial Security Program's (FSP) mission is to illuminate and solve the most critical financial challenges facing American households and to make financial security for all a top national priority. We aim for nothing less than a more inclusive economy with reduced wealth inequality and shared prosperity. We believe that transformational change requires innovation, trust, leadership, and entrepreneurial thinking. FSP galvanizes a diverse set of leaders across the public, private, and nonprofit sectors to solve the most critical financial challenges. We do this through deep, deliberate private and public dialogues and by elevating evidence-based research and solutions that will strengthen the financial health and security of financially vulnerable Americans. To learn more, visit AspenFSP.org or follow [@AspenFSP](https://twitter.com/AspenFSP) on Twitter.

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