SOCIETY OF ACTUARIES

April 2017

Financial Wellness Essays

2017 Call for Essays

Prize Winners

First Prize

Calculating ROI: Measuring the Benefits of Workplace Financial Wellness

Gregory Ward

Second Prize

Fighting Procrastination for Financial Wellness: Harness the Power of Inertia

Tianyang Wang

What Makes a Workplace Financial Wellness Program Successful?

Julie Stich

Third Prize

Using Sound Actuarial Principles to Enhance Financial Well-Being

Ken Steiner

My Financial Wellness Solution: The 401(k) as a Lifetime Financial Instrument

J. M. "Jack" Towarnicky

Financial Well-Being as a Technology Solution

Scot Marcotte and John Larson

Contents

Introduction

Anna Rappaport

As increasing responsibility for financial planning and retirement security has been shifted to individuals, the concept of financial wellness has become an important area for both employees and employers to address. Employers have increasingly recognized that employees with financial difficulties may be easily distracted and less productive at work. At the same time, employees may be looking for trusted resources to help them make optimal choices and relieve financial stress. With this growing need in the employee benefit environment, the Society of Actuaries' Committee on Post Retirement Needs and Risks (CPRNR) issued a call for essays on this topic in 2016. Fourteen essays were received, which can be found in this collection. The essays represent a thought-provoking array of views and perspectives. In this regard, we are pleased the call for essays prompted an equal balance of actuaries and authors from other professions.

Financial wellness strategies provide a different approach to financial success compared to more traditional actuarial measures and points of view. The two approaches are not inconsistent, but they differ in certain aspects. Financial wellness takes a broad view of all factors impacting financial success. It includes primary emphasis on debt management and reaching a multiple set of goals in tandem. Traditional actuarial approaches often focus more on addressing risks discretely rather than in a systematic fashion (although this is not always the case) and less on debt and implementation.

Defining Wellness

There are a variety of definitions of financial well-being. In the call for essays, the definition from the Consumer Financial Protection Bureau (CFPB) was used. Its definition focuses on controlling and tracking your finances, while being able to have both financial freedom and security.

In further defining what wellness means, I recently wrote an article for *Benefits Quarterly* in which I listed my view of important aspects of retirement wellness. The article appeared in a special issue that focused on retirement wellness issues. The aspects I outlined in the article include working to maintain reasonable health or to manage one's life satisfactorily within the constraints present and having:

- A framework—financial, social and purposeful activity and health related—for managing one's life in retirement
- Sufficient financial resources and a system to manage them to make the framework a reality
- Knowledge and perceptions compatible with the framework and resources
- Passions and activities that bring meaning to one's life
- Housing that supports life activities and personal needs, and that is compatible with financial needs
- A basic financial structure to build on
- A reasonable network of personal contacts

Essay Topics

The essays in this collection cover a wide range of financial wellness considerations that include retirement wellness. Several of the essays are targeted at employer issues. One of the prize-winning essays focuses on what success means in these programs while another considers how to measure return on investment. Other essays focus on the individual: for example, the individual as risk manager and overcoming procrastination. The use of technology in building solutions and practical issues such as expanded products and later in the process solutions are taken up by a few of the essays. Overall, this collection of essays represents an important advance in the literature for this area.

What's Next?

Some of the essays include ideas that can be easily implemented and we hope they will be useful immediately. Others provide ideas that will need further development to come to fruition. Regardless of their immediate use or not, our ultimate aim is for this collection of essays to be the springboard for further research in this area with the Society of Actuaries and other organizations.

Selection of Prizes

As part of the call for essays, there was a provision for prizes to be awarded. The following essays were selected for prizes.

FIRST PRIZE
Greg Ward, "Calculating ROI: Measuring the Benefits of Workplace Financial Wellness"

SECOND PRIZE
Tianyang Wang, "Fighting Procrastination for Financial Wellness: Harness the Power of Inertia"

Julie Stich, "What Makes a Workplace Financial Wellness Program Successful?"

THIRD PRIZE
Ken Steiner, "Using Sound Actuarial Principles to Enhance Financial Well-Being"

J. M. "Jack" Towarnicky, "My Financial Wellness Solution: The 401(k) as a Lifetime Financial Instrument"

Scot Marcotte and John Larson, "Financial Well-Being as a Technology Solution"

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Calculating ROI:

Measuring the Benefits of Workplace Financial Wellness

Gregory Ward

As human resources executives and benefit-plan sponsors prepare their 2017 budgets, many will question the value of investing in a workplace financial wellness program. Determining the true value of such a program has proved to be elusive, but recent research from the Financial Finesse Financial Wellness Think Tank has introduced a viable way to forecast the potential return on investment (ROI) of the programs using data collected from actual clients. This model, as shared in a 2016 report,[1] provides results that indicate employers can find it beneficial to invest in a high-quality financial wellness program.

Workplace Financial Wellness ROI Predictive Model

The predictive model is based on the observed improvements in employee financial behavior as it relates to wage garnishments, absenteeism, and utilization of flexible spending and health savings accounts. By evaluating the difference in each behavior at each level of financial wellness (as measured on a 0–10 financial wellness scale), the model measures the value of the improvements in the following three areas.

GARNISHMENTS

According to the findings, for every level of improvement in an employee's financial wellness score, there is a decrease in the likelihood of garnishments. For example, the likelihood of garnishment fell from 4.80% to 1.84% when moving from a financial wellness score of 4 to 6. For a 50,000-life employer, this decrease in the frequency of garnishments could save more than $440,000 a year in reduced garnishment processing costs (based on an average $300 annual cost to process garnishments).

ABSENTEEISM

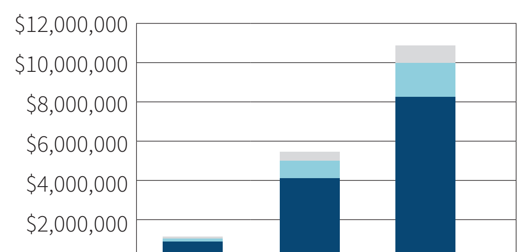
The study also found similar decreases in the average number of hours of unplanned absences as employee financial wellness improved. Specifically, the average number of hours of unplanned absences fell from 13.73 hours to 10.35 hours when moving from a financial wellness score of 4 to 6. Based on an average annual salary of $50,000, a 50,000-life employer could save upward of $4.2 million a year in unplanned absences.

FSA AND HSA PARTICIPATION

The study also observed steady increases in contributions to flexible spending and health savings accounts as employee financial wellness improved. The average combined contribution to a flexible spending and health savings account increased from $905.55 to $1,137.50 when moving from a financial wellness score of 4 to 6. Since contributions to flexible spending and health savings accounts are not subject to Federal Insurance Contributions Act (FICA) tax, an increase in participation could save a 50,000-life employer nearly $900,000 a year in reduced matching FICA tax payments.

Figure 1 shows the projected cost savings of an incremental shift in the median workforce financial wellness score from 4 to 6 using the ROI model for employers of various sizes.

Figure 1 Projected Cost Savings of Incremental Shift in Workforce Financial Wellness Score From 4 to 6 (by employer size)



	10,000	50,000	100,000
Garnishments	$88,683	$443,413	$886,827
Flex spending/ health savings	$177,446	$887,229	$1,774,457
Absenteeism	$852,879	$4,264,396	$8,528,793

1 Financial Finesse, "2016 ROI Special Report," Sept. 13, 2016, *https://ffinesse.app.box.com/v/2016-ROI-Report.*

Improving the ROI Model

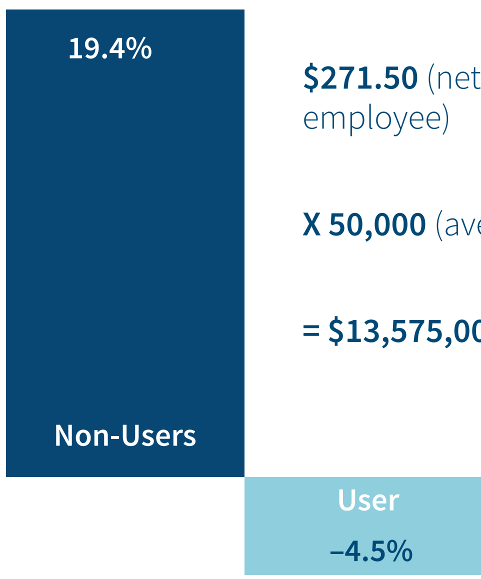
The cost savings illustrated are simply the tip of the iceberg. A much more in-depth analysis is needed to more accurately calculate the true financial impact of a financial wellness program. For example, previous studies suggest that a well-constructed financial wellness program may contribute to reductions in health care costs, costs associated with delayed retirement, and costs associated with recruiting, retaining and engaging employees.

HEALTH CARE COST SAVINGS

A 2014 study from the American Psychological Association[2] reports that 64% of those surveyed cited money as a significant source of stress, and that Americans are paying for this stress with their health.[3] Financial stress has been attributed to decreased employee productivity,[4] increased absenteeism and increased employer health care costs.

Financial wellness programs are correlated with lower health care costs. A study[5] of a Fortune 100 health care company found that employer health care costs associated with employees who used the company's financial wellness program actually decreased by 4.5%, while the costs associated with employees who never used the program increased by 19.4%. This equated to a cost savings of $271.50 per employee. If a 50,000-life employer experienced the same cost savings by offering a comprehensive workplace financial wellness program, it could save the employer more than $13.5 million a year, as shown in Figure 2.

Figure 2 Potential Annual Health Care Cost Savings



$271.50 (net health care savings per employee)

X 50,000 (average number of employees)

= $13,575,000

2 American Psychological Association, "Stress in America: Paying With Our Health," press release, Feb. 4, 2015, *https://www.apa.org/news/press/releases/stress/2014/stress-report.pdf.*

3 Associated Press, "Debt Stress: The Toll Owing Money Takes on the Body," AP-AOL Health Poll, 2008, *http://hosted.ap.org/specials/interactives/wdc/debt_stress/index.html.*

4 E. Thomas Garman, Irene E. Leech, and John E. Grable, "The Negative Impact of Employee Poor Personal Financial Behaviors on Employers," *Journal of Financial Counseling and Planning* 7 (January 1996), *http://pfeef.org/wp-content/uploads/2016/09/NegativeGarman.pdf.*

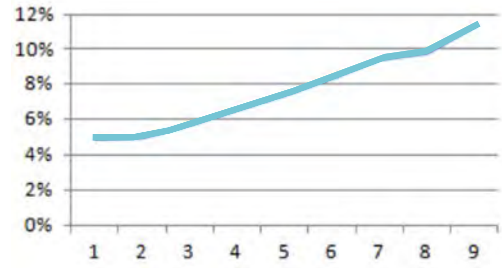
5 Financial Finesse, "Case Study: Impact of Employee Financial Stress on Health Care Costs," Sept. 6, 2013, *https://ffinesse.box.com/v/ROI-Case-Study-Healthcare.*

REDUCING COSTS OF DELAYED RETIREMENT

Employees today are woefully underprepared for retirement, with only 21% indicating they are on track to achieve their income goals in retirement, according to recent research from Financial Finesse.[6] As employees progress through the late career cycle, those who are underprepared may have to delay their retirement for financial reasons. This has repercussions throughout the workforce. According to the Transamerica Center for Retirement Studies,[7] 65% of baby boomers either plan to work past age 65 or do not plan to retire at all. For every year an employee who would like to retire delays retirement for financial reasons, the employer faces estimated additional costs between $10,000 and $50,000.

Figure 3 shows that as employees' overall financial wellness levels increased, so did contribution rates to employer-sponsored retirement plans. Higher contribution rates reduce the likelihood of delayed retirement since employees are more financially prepared.

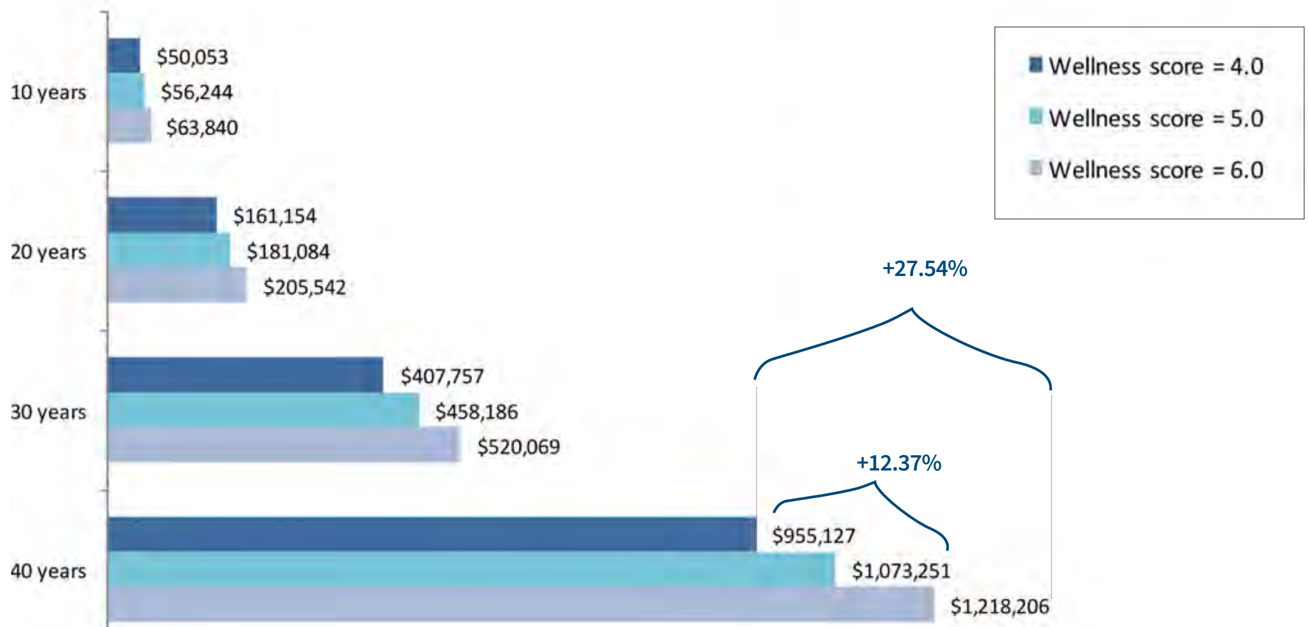
Figure 3 Deferral Election Percent



For younger employees, the research suggests that increases in contribution rates due to improved financial wellness could increase lifetime retirement savings by as much as 12% to 28%, as shown in Figure 4.

In addition, research found that employees who engaged repeatedly in their employer's financial wellness program increased their likelihood of being on track for retirement—from 34% to 47%.[8] Figure 5 shows that for a 50,000-life employer, this 13-point improvement could equate to nearly a $2.0 million annual cost reduction related to delayed retirement.

Figure 4 Potential Improvement in Retirement Plan Balance for an Employee Making $50,000 a Year



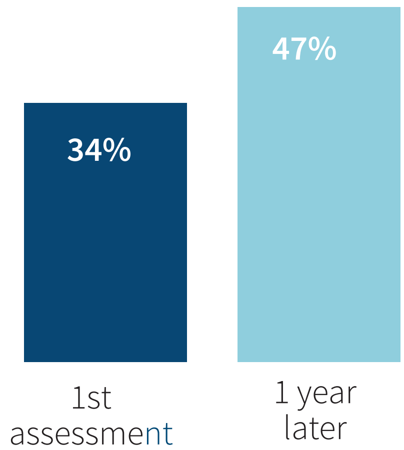
Based on an annualized 8% return on investment.

6 Financial Finesse, "Year in Review: 2015," March 8, 2016, *https://ffinesse.app.box.com/v/YearInReview2015Report.*

7 Transamerica Center for Retirement Studies, "Baby Boomer Workers are Revolutionizing Retirement: Are They and Their Employers Ready?" 15th annual Transamerica Retirement Survey, December 2014, *https://www.transamericacenter.org/docs/default-source/resources/center-research/tcrs2014_sr_baby_-boomers_and_employers.pdf.*

8 Greg Ward, "Case Study of Effectiveness of Financial Education on Pre-Retirees of a Large Utility Company," (unpublished raw data, Financial Finesse, 2014).

Figure 5 Potential Cost Savings for Helping Employees Retire on Time



13% (improvement in employees on track to retire)

X 3% (estimated % of workforce retiring annually)

X $10,000 (estimated annual cost per employee for delayed retirement)

X 50,000 (average number of employees)

= $1,950,000

RECRUIT, RETAIN AND ENGAGE TOP TALENT

According to the 2016 Deloitte Millennial Survey,[9] two-thirds of younger employees plan to leave their current job by 2020, with 25% saying they plan to leave in less than a year. Turnovers cost companies money. Citing the research of W. F. Cascio, a SHRM Foundation's report[10] indicates that "direct replacement costs can reach as high as 50% to 60% of an employee's annual salary, with total costs associated with turnover ranging from 90% to 200% of annual salary." That puts costs anywhere between $45,000 and $100,000 when replacing an employee making $50,000 a year. A 2016 Paychex survey[11] found that approximately 70% of employees cited low pay as a reason they have left or would leave a job, and 45% said they have or would leave due to a lack of benefits.

Most employees are dissatisfied with their pay and benefits because they haven't fully maximized the value of what their company offers. By not taking full advantage of employer-provided benefits such as company matching programs, discounted voluntary benefits, and health and wellness benefits, employees potentially leave thousands of dollars on the table every year. The money they are foregoing could be the difference between sinking deeper into debt and proactively saving toward key financial goals.

If a 50,000-life company with a 10% turnover rate initiates a comprehensive workforce financial wellness program that results in 50 fewer employees leaving the company (i.e., a 1% reduction in the turnover rate), it could equate to more than $2.2 million in annual savings, as shown in Figure 6.

Figure 6 Potential Cost Savings by Reducing Turnover

1% (projected reduction in employee turnover)

X 10% (turnover rate of employees)

X $45,000 (estimated net cost to replace employee)

X 50,000 (average number of employees)

= $2,250,000

9 Deloitte, "The Deloitte Millennial Survey 2016: Millennials Have One Foot Out the Door," *https://www2.deloitte.com/global/en/pages/about-deloitte/articles/gx-millennials-one-foot-out-the-door.html.*

10 David G. Allen, "Retaining Talent: A Guide to Analyzing and Managing Employee Turnover," SHRM Foundation's Effective Practice Guidelines Series, 2008, *https://blog.shrm.org/sites/default/files/reports/Retaining%20Talent-%20A%20Guide%20%28Q1%29.pdf.*

11 Paychex, "Employee Retention: What Makes Employees Stay or Leave," Human Resources survey, Aug. 19, 2016, *https://www.paychex.com/articles/human-resources/employee-retention-what-makes-employees-stay-leave.*

Measuring an Organization's ROI

Using actual, quantifiable data, Financial Finesse has developed an ROI model that can help employers project potential cost savings when implementing a financial wellness program. Based on this model, a large employer can potentially save millions of dollars every year when factoring costs such as wage garnishments, absenteeism, and utilization of flexible spending and health savings accounts. That number gets even greater when taking into account reductions in health care costs, delayed retirement and turnover. Table 1 shows the total a company could save across all categories.

While far from perfect, this model paves the way for measuring the effectiveness of corporate-sponsored workplace financial wellness programs. It will also serve as a catalyst for further development of the financial wellness industry.

Table 1 Projected Annual Savings for Company With Increased Financial Wellness

Garnishments	$443,413
FSA/HSA contributions payroll taxes	$887,229
Absenteeism	$4,264,396
Health care	$13,575,000
Delayed retirement	$1,950,000
Turnover	$2,250,000
Estimated Total	**$23,370,038**

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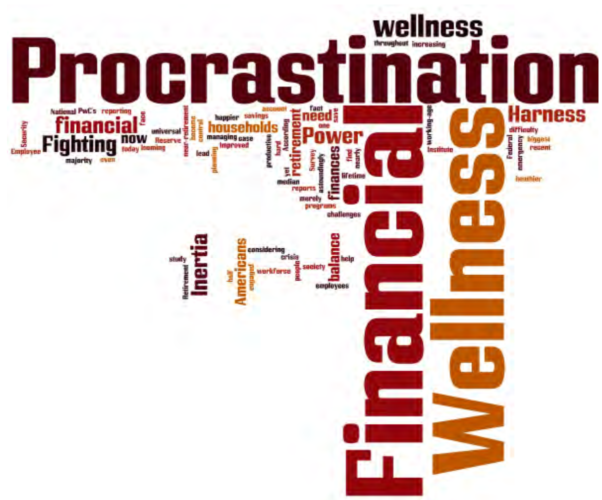
Fighting Procrastination for Financial Wellness:
Harness the Power of Inertia

Tianyang Wang

Figure 1 Procrastination: Sword of Damocles Hanging Over Financial Wellness



"The secret of getting ahead is getting started."

—Mark Twain

The need to save for financial wellness is universal, yet planning for it is hard. According to a 2016 PricewaterhouseCoopers survey,[1] 52% of employees report difficulty managing their personal finances. A majority of Americans today face a looming retirement crisis considering the fact that the median retirement account balance is only $2,500 for all working-age households and $14,500 for near-retirement households.[2] More astoundingly, a recent Federal Reserve study[3] reports that nearly half of Americans do not even have $400 in savings in case of an emergency.

Financial wellness has become one of the biggest challenges in our society. There is an increasing need for financial wellness programs to help more people find balance and control over their personal finances. Improved financial wellness will lead to a more engaged and productive workforce, and healthier and happier society.

Aside from economic and external factors that cannot be controlled, perhaps the biggest roadblock to financial wellness is procrastination. While traditional economic theory posits people are always rational, behavior finance shows the opposite. People often make irrational decisions due to various cognitive errors and behavior biases. When people procrastinate, they depart from economically rational decisions that are in their best interests. Throughout different age groups and cultures, procrastination has been identified as the major source of suboptimal retirement planning.[4] As the word cloud art shows in Figure 1,[5] procrastination is often like the sword of Damocles hanging over people's financial wellness.

People procrastinate for a variety of reasons and situations. Sometime we clearly know we're procrastinating but just cannot resist it; sometime we

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1 PricewaterhouseCoopers, "Employee Financial Wellness Survey: 2016 Results," April 2016, *https://www.pwc.com/us/en/private-company-services/publications/assets/pwc-2016-employee-wellness-survey.pdf.*

2 Nari Rhee and Ilana Boivie, "The Continuing Retirement Savings Crisis," National Institute on Retirement Security research report, March 2015.

3 Board of Governors of the Federal Reserve System, "Report on the Economic Well-Being of U.S. Households in 2015," May 2016, *https://www.federalreserve.gov/2015-report-economic-well-being-us-households-201605.pdf.*

4 See, for example, Ted O'Donoghue and Matthew Rabin, "Procrastination in Preparing for Retirement," paper (1998), *http://www.wiwi.uni-bonn.de/kraehmer/Lehre/Beh_Econ/Papiere/ODonoghue-Rabin-retire.pdf;* Eunyoung Baek and Sharon A. DeVaney, "Assessing the Baby Boomers' Financial Wellness Using Financial Ratios and a Subjective Measure," *Family and Consumer Sciences Research Journal* 32, no. 4 (2004): 321–48, *doi:10.1177/1077727X04263826*; and Gary D. Brooks, "Exploring Themes of Procrastination in Retirement Planning Behaviors of Generation X" (doctoral dissertation, University of Phoenix, 2011).

5 This word cloud art is inspired by Kalian Shang, "Visualization of Social Network Data," Society of Actuaries, *Data Visualization: 2016 Call for Essays*, and is made by online tools Wordle (*http://www.wordle.net*).

Figure 2 Typical Causes of Procrastination and Strategies Against It

CAUSES

Initiation Difficulty
- Lack of financial literacy
- Fear of embarrassment
- Choice overload
- Hand-to-mouth middle class or richer
- Those wasted windfalls
- Small reckless purchases
- What you need vs. what you want
- Trade-off anxiety
- The psychology of the credit card

Lousy Implementation
- Default effect
- Overly relying on rule of thumb

Stagnant Maintenance Mode
- Status quo

STRATEGIES

Incentivizing Initiation
- Financial literacy education breaks the ice
- Financial counseling ease the embarrassment
- Limited choices make choosing easier
- Adjusting reference point can help you save
- Use mental accounting to your advantage
- Break big goals into achievable steps
- Small incentives can go a long way
- Make a precommitment to future
- Track your spending for goal attainment

Better Implementation
- Use default options cleverly
- Step forward from the rule

Dynamic Maintenance Mode
- Introduce automatic rebalancing and lifecycle funds
- Reward the good behavior

don't even realize we are doing it. In this essay, we will outline various behavioral and psychological factors of procrastination at different stages of the savings lifecycle. Furthermore, we will discuss strategies that could harness the power of inertia to achieve financial wellness. Figure 2 summarizes the typical causes of procrastination and strategies against it.

Typical Causes of Procrastination for Financial Wellness

Getting started or keeping going, there are many points to falter over on the road to financial wellness. Many cognitive and behavior biases are natural to human nature but could have significant negative impact on one's financial position.

INITIATION DIFFICULTY

The first step is often the hardest. If a good start is half the battle, a halted start is losing the battle. Some people already give up on their financial wellness plan simply because they never really get started.

- **Lack of financial literacy: "I don't really understand it."** According to analysis of a Financial Industry Regulatory Authority survey,[6] 63% of Americans are financially illiterate and lack the basic skills to reconcile their current budget and plan for the future. As a result, people often avoid discussing their personal finances due to lack of knowledge or lack of understanding.
- **Fear of embarrassment: "I feel so embarrassed talking about it."** Sometimes people already know they have financial problems but feel too embarrassed to admit it or to seek help. In addition, they may have no idea where to go if they do need help in figuring out how bad those problems are and how to fix them.
- **Choices overload: "I don't know which one to choose."** When faced with too many options, people may freeze and not make a decision. For instance, presenting too many investment fund choices can cause confusion and hence inaction.

6 Madeline Farber, "Nearly Two-Thirds of Americans Can't Pass a Basic Test of Financial Literacy," *Fortune*, July 12, 2016, *http://fortune.com/2016/07/12/financial-literacy/*.

- **Hand-to-mouth middle class or richer: "I have no extra money to save."** National Bureau of Economic Research analysis[7] shows that about a third of Americans households are living paycheck to paycheck; two-thirds of that group are middle class or richer—the "wealthy-hand-to-mouth." A quarter of that group earns over $100,000 annually. These people may believe they have no disposable money. This is more likely because of impulse spending than low income.
- **Those wasted windfalls: "A gift card is not for saving."** Mental accounting underlies people's tendency to value some dollars less than others and thus to waste them. Study has long shown that when people get financial windfalls such as a bonus, tax refund or gift card, they are more likely to spend it than to save it.[8]
- **Small reckless purchases: "It is just a Starbucks' latte."** Many people don't consider themselves reckless spenders and are cost-conscious on large financial decisions such as a house or car. However, mental accounting discipline is relaxed when making small purchases, such as a daily Starbucks' latte.
- **What you need vs. what you want: "But I really want it."** People often spend impulsively on things they want but don't really need out of immediate emotions. When we're in a good mood, we would spend out of pleasure. When we're in a bad mood, we would spend to make us feel better.
- **Trade-off anxiety: "Live in the present, at the cost of tomorrow."** Saving for retirement involves a trade-off between now and the future. Dollars assigned to future mental accounts are often devalued, which leads us to pursue small but immediate gains and hence spend more easily and more foolishly in the present.
- **The psychology of the credit card: "Just put it on the card."** People tend to spend more when they use credit cards than when they use cash because credit card spending desensitizes people from the pain of spending.[9] Moreover, many people have savings in their bank accounts and at the same time revolving balances on their high interest credit cards.

LOUSY IMPLEMENTATION

Procrastination is still here even when you get started. A financial wellness plan is often like a new year's resolution. Many people make it; less people achieve it. We already recognize that we need to make some change in life. Procrastination is the thief of that change in our life.

- **Default effect: "I will stick to the default."** When procrastinators do make decisions, they often simply pick the default choices. For example, many employer-sponsored saving plans require active elections on the part of employees. Consequently, many employees will not be enrolled by default.[10] In addition, study also finds that the majority of employees participating in a 401(k) plan tended to stick to the default contribution rate of 3% or less.[11]
- **Overly relying on a rule of thumb: "According to the rule."** Many procrastinators can't or won't make time to examine their own financial needs and choose to take the easy way out by overly relying on some rule of thumb for making financial decisions. While rules of thumb are useful as general

7 Greg Kaplan, Giovanni Violante, and Justin Weidner, "The Wealthy Hand-to-Mouth," National Bureau of Economic Research working paper, no. w20073 (April 2014).

8 See, for example, Hal R. Arkes, Cynthia A. Joyner, Mark V. Pezzo, Jane Gradwohl Nash, Karen Siegel-Jacobs, and Eric Stone, "The Psychology of Windfall Gains," *Organizational Behavior and Human Decision Processes* 59, no. 3 (1994): 331–47, *doi:10.1006/obhd.1994.1063*.

9 Drazen Prelec and Duncan Simester, "Always Leave Home Without It: A Further Investigation of the Credit-Card Effect on Willingness to Pay," *Marketing Letters* 12, no. 1 (2001): 5–12.

10 John Beshears, James J. Choi, David Laibson, and Brigitte C. Madrian, "The Importance of Default Options for Retirement Saving Outcomes: Evidence from the United States," in *Social Security Policy in a Changing Environment,* eds. Jeffrey Brown, Jeffrey Liebman, and David A. Wise (Chicago: University of Chicago Press, 2009), 167–95.

11 James J. Choi, David Laibson, Brigitte C. Madrian, and Andrew Metrick, "For Better or For Worse: Default Effects and 401(k) Savings Behavior," in *Perspectives on the Economics of Aging,* ed. David A. Wise (Chicago: University of Chicago Press, 2004), 81–126.

guidelines, they often oversimplify complex issues in ways that can fail individuals' long-term financial prospects.

STAGNANT MAINTENANCE MODE

Procrastination persists years after you get started. Many people prefer sticking with a financial wellness decision made a long time ago and fall into the trap of status quo bias by doing nothing. In the face of dynamic changes in our life and in the market, making no decision could actually be a bad decision.

- **Status quo: "I will just keep it that way."** Once the financial decision is made, many procrastinators do nothing and just leave it unchanged. For example, an early study shows that more than half of TIAA-CREF plan participants had never changed their initial chosen asset allocation over their lifetimes.[12]

Harness the Power of Inertia for Incentivizing Savings

Employers and advisers can adapt their programs to ease people into better financial wellness. We underscore some strategies and tools to equip people to effectively initiate and manage their financial wellness plans.

INCENTIVIZING INITIATION

A journey of a thousand miles begins with a single step. Employers and advisers can incentivize and promote positive behaviors that help one make the first step toward a successful financial wellness plan.

- **Financial literacy education breaks the ice.** Financial wellness programs can offer basic financial literacy workshops with interactions, humor and games. For instance, a Monopoly-based game can walk people through different life stages such as buying a house or having a child and encourage participants to engage in "savings missions." Evidence shows that most workshop participants will take positive actions to improve their financial well-being.[13]
- **Financial counseling eases the embarrassment.** Money issues can be overwhelming and confusing. Many employers offer financial counseling services as part of financial wellness program. Talking to a knowledgeable and trustable professional can help ease the embarrassment and get people help with their personal finances.
- **Limited choices make choosing easier.** The more funds offered, the less the participation rate. Consolidated options and personalized recommendations could solve the problem of choice overload.[14]
- **Adjusting your reference point can help you save.** A hand-to-mouth person may find it too difficult to save because of current financial needs. By adjusting expectations to a lower reference point such as hypothetically imagining a salary cut or tax increase, an individual may realize he or she can actually adapt to a smaller paycheck and save for retirement.
- **Use mental accounting to your advantage.** By funneling money into a pension fund or savings account directly from your paycheck, people usually mentally count it as savings and thus less are likely to spend it. Similarly, by allocating debt payments such as a mortgage, student loan or credit card balance through direct deposit, people will mentally subtract the money from income and therefore are more likely to pay down their debts.
- **Break big goals into achievable steps.** Small steps are the secret to big success. Just a few dollars a day can add up to significant savings over time. It helps people recognize that saving may not be as daunting as it seems. For example, a person may easily save the cost of a Starbucks' latte—$5

12 William Samuelson and Richard Zeckhauser, "Status Quo Bias in Decision Making," *Journal of Risk and Uncertainty* 1, no. 1 (1988): 7–59, *doi:10.1007/BF00055564*.

13 Lewis Mandell and Linda Schmid Klein, "The Impact of Financial Literacy Education on Subsequent Financial Behavior," *Journal of Financial Counseling and Planning* 20, no. 1 (2009).

14 Sheena Sethi-Iyengar, Gur Huberman, and Wei Jiang, "How Much Choice is Too Much? Contributions to 401(k) Retirement Plans," in *Pension Design and Structure: New Lessons From Behavioral Finance*, eds. Olivia S. Mitchell and Stephen P. Utkus (Oxford: Oxford University Press, 2004), 83–95.

per day—and put away $1,825 a year, or $73,000 in 40 years, even without taking the interest rate into consideration.

- **Small immediate incentives can go a long way.** A small immediate incentive can encourage people to reach large long-term savings goals. For instance, employers can offer a $100 wellness incentive to employees who complete a financial fitness check with a retirement vendor.

- **Make a precommitment to the future.** The budget indicates the priority. People can employ precommitment strategies to help them accomplish their long-term goals. For instance, retirement accounts are such precommitment devices as they discourage impulsive behavior through penalties on early withdrawal.

- **Track your spending for goal attainment.** When people track their expenditures, they are often shocked to discover how much money is overspent or gets used for things they really don't need. Most people have a strong tendency to avoid losses, and tracking spending can help people stop unnecessary purchases and head in the right direction regarding their financial goals.

BETTER IMPLEMENTATION

For people interested in improving their financial wellness, there is always room for further improvement through better implementation. Financial wellness programs sponsored by employers and advisers can help people get access to financial education and guidance to more effective management of their personal finances.

- **Use of default options cleverly.** Empirical evidence shows that default options—such as employees are entered into an automatic savings plan by default and must take action to opt out—have tremendous impact on savings and participation rates. While less than 10% of individuals eligible for IRAs participate in a self-initiated plan, employer-sponsored retirement plans such as a 401(k) with automatic enrollment boast participation rates in excess of 90%.[15]

- **Step forward from the rule.** We can use the rule of thumb as the starting point but must adjust it based on an individual's situation. For instance, one can use the commonly cited "100 minus your age" rule to understand the basic principle of gradually reducing risk over time but select lifecycle funds to professionally determine proper investment mixes tailored to meet investment objectives based on various time horizons.

DYNAMIC MAINTENANCE MODE

Just like driving a car, you have to make adjustments along the way. A successful financial wellness program should be interactive and dynamic, such as rewarding people for making wise decisions and navigating them through different life stages for their financial wellness plans.

- **Introduce automatic rebalancing and lifecycle funds.** This strategy exploits an individual's tendency to stick with the status quo, at the same time dynamically adjusting their portfolios to meet investment objectives. For instance, retirement management firms can suggest or make it as default that retirement portfolios are automatically rebalanced on participants' birthdays. People can also select lifecycle funds that are automatically adjusted and balanced during the course of the fund's time horizon as the investor ages toward retirement.

- **Reward the good behavior.** We all like a treat for our good behaviors. Small rewards for good saving behaviors help reduce the stress and negative emotions associated with following a planned budget.

Summary

Financial wellness has increasingly become a key component of individuals' overall healthiness, happiness and productivity, yet many Americans are considerably less prepared for their personal finances due to procrastination. In this essay, we

15 J. Mark Iwry and John A. Turner, "Automatic Annuitization: New Behavioral Strategies for Expanding Lifetime Income in 401(k)s," The Retirement Security Project, no. 2009-2 (July 2009), *https://www.brookings.edu/wp-content/uploads/2016/06/07_annuitization_iwry.pdf.*

discussed various causes and negative implications of procrastination, and also different strategies to harness the power of inertia to aid individuals in their pursuit of future financial well-being. It is our hope that this work will serve to further increase public awareness about how procrastination may limit the degree of financial wellness and provide insights to help people make positive changes around financial wellness.

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What Makes a Workplace Financial Wellness Program Successful?

Julie Stich

Financial distress has been shown to impact individuals adversely, affecting personal health, safety and relationships. In the workplace, financially distressed employees may be less productive, miss work more often, display presenteeism,[1] hurt morale, alienate colleagues and customers, quit their job for another that pays just a little more or delay retirement to keep earning wages. These consequences can harm the employee and employer. Offering financial education in the workplace is an important way employers can counter the detrimental effects of financial distress. There are many approaches, methods, providers, resources and topics from which to choose.

In 2016, the International Foundation of Employee Benefit Plans surveyed its members (primarily employers and other benefit plan sponsors) about financial wellness and education.[2] The survey received 406 responses (281 from the United States and 125 from Canada). A wide variety of industries, employer sizes and regions were represented. Respondents were asked to describe how financial distress impacts their workforce and if they offer financial education programs. If yes, they were asked to share the details and success of their programs.[3]

Two in five employers (40%) indicated employees' personal financial issues had a high or extremely high impact on their overall job performance. Another 41% said financial issues had some impact. Only 4% said there was no impact. When asked to identify the job factors most affected by personal financial challenges, stress was ranked the highest at 76%. Other factors identified were:

- Inability to focus on work (59%)
- Absenteeism/tardiness (34%)
- Morale (32%)
- Physical health (30%)
- Relationships with coworkers (18%)

After describing their financial education programs, respondents were asked to self-evaluate program success. Based on this self-identification, we analyzed the results and characteristics of successful versus unsuccessful programs.[4]

Impact of Workplace Financial Education

Respondents were asked to indicate the financial "savviness" and retirement readiness of their employees. Employers that deemed their financial education program unsuccessful were more likely to rate employees as less competent in these areas. Specifically, 62% of those in the unsuccessful group chose the statement "The average active participant in our population is not at all or is only a little financially savvy"; this compares with 39% of employers in the successful group. Similarly, 43% of employers in the unsuccessful group chose the statement "The average active participant in our organization is not at all or is only a little prepared to retire when they reach normal retirement age"; 29% of employers in the successful group did so.

1 Presenteeism is the presence of an employee at work even if he or she is too sick or too engaged in work/life issues to be productive.

2 International Foundation of Employee Benefit Plans, "Financial Education for Today's Workforce: 2016 Survey Results," survey report, April 2016, *http://www.ifebp.org/pdf/financial-education-2016-survey-results.pdf*. The survey was conducted in January 2016 and released in April 2016. This essay is drawn from a forthcoming International Foundation report, "A Closer Look: What's Working in Workplace Financial Education," March 2017, *http://www.ifebp.org/financialed*.

3 Financial education programs were offered by 269 of the 406 respondents (187 from the United States and 82 from Canada).

4 Slightly more than two-thirds of respondents (181 or 67%) rated their program as somewhat or very successful. The remaining third (88 or 33%) rated their program as somewhat or very unsuccessful or as neither successful nor unsuccessful.

Best Practices for Success

Again using respondents' self-evaluation, we analyzed survey results to identify best practices. Here is a list of five recommendations for employers interested in offering workplace financial education.

MAKE FINANCIAL EDUCATION A COMMITMENT AND BE PATIENT

Employers that believe they have a responsibility to educate their employees on financial issues tend to have more successful programs. International Foundation members traditionally have seen value in educating employees about their benefits, from retirement and health plans to paid leave and perks. Some employers think this is the extent of their responsibility. Others see value in offering education about personal finance. Employers were asked to choose a statement that best reflected their level of commitment to financial education, from the lowest level—"We have no responsibility"—to the highest level—"We feel our responsibility is to educate on pension and benefit options, encourage retirement savings and improve participant financial literacy and money management." Nearly half of employers with successful programs (49%) chose the latter statement versus 38% of employers with unsuccessful programs.

Signs of commitment include leadership support, a budget devoted to financial education, and offering employee benefits like pension and retirement plans, disability insurance and employee assistance programs. While half of employers with unsuccessful programs indicate a lack of leadership support as one of their biggest obstacles to offering financial education, only one-quarter of those with successful programs did so. Results showed a big gap between successful and unsuccessful programs when looking at the existence of a budget for financial education—27% versus 6%.

A program is likely to be more successful the longer it is in place. Results from this survey showed it takes more than five years to be reported as successful. For successful employers, 24% had programs in place for six to 10 years and 49% for more than 10 years, vs. 11% and 42%, respectively, for the unsuccessful group.

KNOW THE EMPLOYEE POPULATION

Employers with successful programs survey their employees to assess both their financial well-being and which financial topics need to be covered. It is critical to have a good understanding of employees' financial challenges to build a program that addresses their needs. Employers should also measure improvement and behavior changes after the program is in place. Nearly 30% of employers with successful programs have conducted an assessment. None of the employers with unsuccessful programs had done so.

DIVERSIFY TOPICS AND FORMATS

Not all employers have the resources to implement a comprehensive financial education program at the outset. If an employer starts with a limited approach, it is best to focus on one or two topics that an employee assessment tool has identified as critical. If an employer has the ability to offer a wide-ranging program, research shows more success if a variety of topics are covered. Employers with successful programs provided education on multiple topics including savings, investments, insurance, spending, health care in retirement and pre-retirement financial planning. Overall, they offered seven topics on average versus four in the unsuccessful group.

Similarly, the success group was more likely to offer education using a wide variety of formats, including free personal consultation services, classes and workshops, online resources, workbooks and calculators. On average, the success group offered seven types of resources versus five for the unsuccessful group.

CUSTOMIZE AND PERSONALIZE EDUCATION

Information and education is more effective if it resonates with the learner. While this seems obvious, many employers use generalized communication and report less successful results. Employers with successful programs customize education for specific groups based on age or income level (33% versus 14%). They also target education by life stage (12% versus 2%). Some employers use data to identify employees who are not on pace to meet retirement income replacement goals; these employees then receive targeted communication and education. Nearly one-quarter of successful employers provide such targeted information, while 11% of unsuccessful employers do so.

Employers with successful programs are more likely to use individualized methods. For example, 30% of successful employers make financial planners available to employees, while 16% of respondents in the other group do so. Free personal consultation services are provided by 62% in the success group versus 36% in the unsuccessful group.

INCREASE ACCESSIBILITY AND INCLUSION

Employers can set up programs to be convenient and open to all or most. If a face-to-face program is planned, participation will be greater if the event is held during work hours.

Financial education is likely to be more successful if it reaches more individuals and is made available in multiple languages reflecting the workforce. Employers in the successful group were more likely to educate retirees as well as active employees (28% versus 13%), include spouses (45% versus 28%) and translate materials into languages other than English (30% versus 21%).

Conclusion

As demonstrated by research, workplace financial education programs are most successful when an employer identifies the unique concerns of its workforce and tailors the message to fit that audience. Offering a variety of topics and access points increases opportunities for participation, ultimately leading to success. What does success mean for the workplace? It means fewer employees reporting financial distress, calling in sick, being distracted and snapping at colleagues and customers. And that, ultimately, means a more productive work environment.

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Using Sound Actuarial Principles to Enhance Financial Well-Being

Ken Steiner

In theory, achieving a state of financial well-being is a relatively straightforward process. It is achieved through a combination of

1. accumulating sufficient assets and
2. properly managing those assets to accomplish one's financial goals.

In practice, however, neither of these tasks is particularly easy, and they both involve difficult tradeoffs.

Management of financial assets involves many decisions. For example, individuals or households must decide

- How to invest and protect their assets
- How much of their assets they can currently consume (spend)
- How much they must save to balance current consumption needs/desires with future consumption needs/desires

Proper asset management is enhanced by developing and following a good financial plan. A good financial plan should involve development of a reasonable budget and a process to keep spending/savings on track to meet financial goals. This essay discusses how an approach utilizing sound actuarial principles can accomplish these goals, even when actual future experience invariably deviates from assumed experience, and why it is worthwhile to perform the calculations required by this approach rather than using simple rule-of-thumb methods. Throughout this essay, when reference is made to calculations performed for an individual, it is also meant to apply for a household.

Developing a Financial Plan

The first step in developing a financial plan is to determine one's financial goals. This will generally involve some thought and analysis of desired lifestyle, both before and after retirement, and what that desired lifestyle might cost.

The second step is to make reasonable assumptions about the future and how to accomplish the goals.

The third step is to consider actions to take if the assumptions are wrong.

The next three sections of this essay will discuss how three sound actuarial principles can be utilized in a financial plan to accomplish financial goals.

Actuarial Principle No. 1: Match Assets with Liabilities

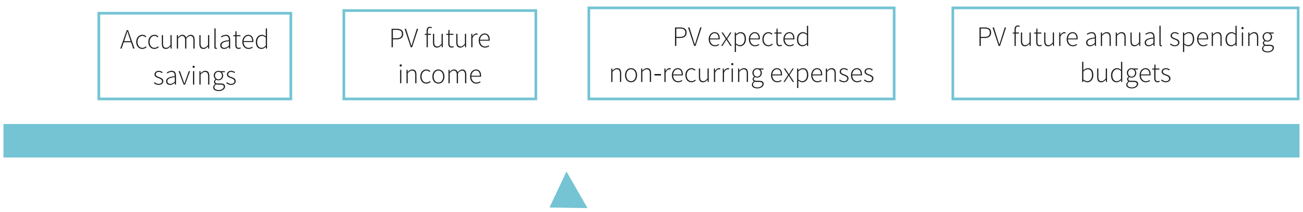
The problem of how much one can spend annually for the rest of one's life and how much must be saved to accomplish financial goals is essentially an actuarial problem that can be solved by an actuarial solution.

Fortunately, we can apply the same actuarial principles used for pension plan funding and measuring Social Security actuarial balances to this problem. The basic equation, using present values (PV), for this purpose is:

Accumulated savings + PV future income =
PV expected non-recurring expenses +
PV future annual spending budgets

This can be illustrated as shown in Figure 1. This is the classic actuarial balance equation that matches assets with liabilities.

Figure 1 Example of a Balance Equation Used for Financial Planning



The assets, represented on the left side of the equation, include not only the value of current accumulated savings, but also the present value of future income expected to be received, such as the present value of future employment wages, the present value of future expected Social Security benefits and the present value of future home sale proceeds.

The liabilities are represented on the right side of the equation, and include the present value of future expected non-recurring expenses and the present value of future annual spending budgets. Expected non-recurring expenses may include long-term care expenses, unexpected expenses and bequest motives. Expected non-recurring expenses may also include items such as mortgage payments or expected education expenses for children. This equation tells us that the present value of one's current and future spending is a function of one's assets.

To develop an initial spending/savings budget, an individual, with possible help from a financial adviser, will need to select reasonable assumptions about the future, including future discount rates (assumed rates of investment return), rates of future inflation and mortality (or expected period of retirement). On my website,[1] I recommend selecting a discount rate that is approximately consistent with discount rates used to develop current immediate annuity purchase rates, based on the presumption that an individual could, if desired, settle their liabilities by purchase of an immediate annuity. I also recommend an inflation assumption of the discount rate −2% and planning on living until age 95, or life expectancy if greater.

Once relevant assumptions about the future have been selected, the present value of the individual's expected future income from all sources is calculated and added to the individual's current accumulated savings. The sum is the individual's total assets.

The next step in the initial budget determination process is to estimate the present value of non-recurring expenses.

The final step is to choose the desired/expected pattern of future budgets. Examples of desired/expected patterns of future budgets include:

- Budgets expected to increase each year with inflation
- Annual post-retirement budgets that differ from annual pre-retirement budgets in real dollar terms
- Budgets not expected to increase each year with inflation

Once the desired/expected pattern of future annual budgets has been selected, the initial year's actuarially determined budget can be determined by subtracting the present value of future expected non-recurring expenses from the assets and solving the actuarial balance equation presented earlier for the current budget and the present value of future budgets.

Like pension calculations, actuarially determined spending/savings budget calculations can be relatively simple or quite complicated. For example, the present value of future annual budgets can include different components for different types of expected annual expenses, such as essential non-health-related

1 *http://howmuchcaniaffordtospendinretirement.blogspot.com/*. More of my writing (as well as examples of the "actuarial approach" and calculation spreadsheets) can also be found here.

expenses, essential health-related expenses and non-essential expenses, with different future increase assumptions applying to each of these components of future expenses. While such complications may make the calculations somewhat more difficult, they will also make them more realistic and consistent with expectations about the future.

It is important to note that any excess of income over spending expected during a current or future year is assumed to be saved, so not only will the actuarial approach develop an annual spending budget, it will also develop a savings budget for years when income is expected to exceed spending (such as during a period of employment preceding retirement). This is extremely important, for example, in determining how much an individual should be saving each year to meet retirement goals.

An example of how this actuarial principle can be used to develop a reasonable spending/savings budget for someone who has yet to retire is included in the appendix.

Actuarial Principle No. 2: Perform Annual Valuations, Monitor Results and Make Appropriate Adjustments

The budget process is not a "set and forget" exercise. The budget should be updated each year, using what actuaries call the annual valuation process, to keep the individual on track to meet financial goals. This is done by adjusting for experience that deviates from the assumptions made the previous year. It also provides an opportunity to adjust for changes in one's situation, for changes in assumptions about the future, or for changes in expected or desired financial goals.

The annual valuation process also provides an opportunity to monitor actual spending and saving versus the budget. If spending is consistently more than the actuarially determined spending budget (and therefore savings are less than budgeted savings), one may wish to take actions such as increasing the sources of income or decreasing the spending goals.

Actuarial Principle No. 3: Modeling "What If" Scenarios and Planning for Experience Deviations

One thing we know for certain is that actual future experience will not exactly follow assumed experience; not even actuaries can predict the future. Therefore, an important part of financial planning is to see what happens to the budget if, for example, investments lose significant value or employment is terminated prior to desired retirement date. The financial plan should consider what actions may be taken in the event of such circumstances.

Why Use the Actuarial Approach?

Developing a budget using the actuarial approach does involve calculating present values and may even involve some algebra. By comparison, rule-of-thumb saving and withdrawal approaches (such as, the recommendation to accumulate savings equal to 10 times or more of final pay, or spend 4% of accumulated savings) do appear to be much simpler on the surface. But experts who advocate these rule-of-thumb approaches will also say, for example,

- Make sure medical expenses are part of your plan
- Don't forget to include unexpected expenses in your plan
- Remember that you can use your home equity to finance your retirement

These types of expenses or sources of income are frequently ignored in the simple rule-of-thumb approaches, making such methods less reliable.

Unfortunately, planning one's spending for the rest of one's lifetime is a fairly complicated process and involves doing some math. Developing a good budget should be a function of each individual's specific situation and financial goals, not the situation or financial goals of some average person. The actuarial approach described in this essay is a comprehensive process that will allow an individual to include best estimates of all future expenses and all assets. By comparison, simple rule-of-thumb approaches can easily cause one to either be too conservative or too aggressive in their saving and spending.

Conclusion

In my experience, mathematically inclined individuals are able to do the calculations described in this essay, especially when using the spreadsheet tools available on my website. You don't need to be an actuary to do these calculations. Some individuals will be intimidated by the number crunching required and should probably seek assistance from a financial adviser. Some financial advisers use actuarial principles to help their clients with their financial planning, while many do not. If your financial adviser doesn't use these principles or similar approaches that consider all your assets, liabilities and financial goals, you might want to consider finding an adviser who does.

Appendix
Development of Mary's Age 55 Spending/Saving Budget

MARY'S DATA

- Mary is age 55 and divorced
- She is employed and her current gross pay is $100,000 a year
- Her employer matches her 401(k) contributions $.50 for each dollar up to 6% of pay
- The current value of her home is $400,000

MARY'S FINANCIAL GOALS

- Full retirement at age 65
- Maximizing her Social Security benefits
- Not becoming a burden on her daughter
- Not outliving her assets
- Approximately maintaining her pre-retirement standard of living when she retires
- Appropriately balancing pre-retirement spending with expected post-retirement spending
- Not leaving large amounts of assets to her daughter at her death

MARY'S ASSETS

- Accumulated savings, 401(k) and personal assets, of $200,000
- The present value of her future employment income
- The present value of a frozen single life fixed dollar pension benefit of $10,000 per year that she expects to commence at age 65
- The present value of her estimated future Social Security benefit of $44,058 per year commencing in 15 years at age 70
- The present value of future employer matching contributions to the 401(k) plan
- The present value of proceeds from future home sales

MARY'S ASSUMPTIONS

For present value calculations, Mary, with assistance from her financial adviser, has selected these assumptions:

- Annual discount rate of 4%
- Annual rate of inflation of 2%
- Her employment will continue until she retires, and her gross pay will increase annually at the rate of inflation
- She will defer into her employer's 401(k) plan at least the minimum to receive the maximum matching contribution
- She will downsize to a condominium at age 80 and use half of her home equity at that time to fund her annual expenses
- She will sell her condominium when she needs to enter an assisted living/nursing home facility
- The current value of her home or condominium will increase in value at an annual rate of inflation plus 1%
- She will live until age 95
- Her expenses (excluding saving) will drop by 25% in real dollars when she retires at age 65, as she will no longer have a mortgage payment and no longer have work-related expenses
- Her taxes will be somewhat lower
- Her future essential expenses (excluding health-related expenses) will increase with inflation, her future essential health-related expenses will increase with inflation +2% and her future non-essential expenses will remain constant in nominal dollars; based on her expected distribution of such expenses, her total annual expenses will increase by inflation −0.5% each year after retirement
- She will have to live the last three years of her life (age 92–95) in an assisted living facility; the current cost of a three-year stay in her geographic area is $180,000 and she believes this cost will increase in the future by inflation plus 2% each year
- When she moves into the assisted living facility, her other annual expenses will be reduced to zero
- The present value of her future unexpected expenses will be $50,000
- $41,658 in present value ($200,000 in future dollars)

Figure 2 Mary's Actuarial Balance Sheet

Total Assests		**Total Liabilities**	
Accumulated savings	$200,000	PV future unexpected expenses	$50,000
Present value (PV) of pension payments	$121,492	PV future long-term care expenses	$180,000
PV of employer 401(k) matching contributions	$26,474	PV of future funeral expenses/ bequest	$41,658
PV of future wages	$917,753	PV of future pre-retirement spending budgets	$758,129
PV of Social Security payments	$489,233	PV of future post-retirement spending budgets	$1,022,133
PV of home sale proceeds @ age 80	$157,082	PV of other expenses	0
PV of home sale proceeds @ age 92	$139,886		
PV of other sources of income	$0		
Total	**$2,051,920**	**Total**	**$2,051,920**

will be sufficient to cover funeral expenses and leave a small inheritance to her daughter

Figure 2 shows Mary's assets and liabilities at her current age of 55, based on her assumptions. All annual income items and budgets are assumed to be paid as of the beginning of each year, except for the 401(k) plan matching contributions from her employer, which are assumed to be paid at the end of each year.

Using the first actuarial principle discussed in this essay and the assumptions mentioned previously, Mary determines her current (age 55) spending budget (which includes taxes and insurance premiums to protect her assets) to be $82,607. Her savings budget for the year is therefore $17,393 ($100,000 – $82,607). These amounts are expected to increase with inflation each year until she retires. If all assumptions are realized in the future and she spends exactly her spending budget each year, at age 65 her annual spending budget will decrease to $75,523 in nominal dollars ($61,955 in age 55 dollars). This amount will be 75% of her inflation-adjusted age 55 spending budget and will be about 63% of her expected age 64 gross salary of $119,509. Her accumulated savings at age 65 (including accumulated employer matching contributions) is expected to be $571,520, or about 4.8 times her expected age 64 gross pay.

Mary's financial plan also includes revisiting her spending/savings budget at the beginning of each year for the rest of her life to keep her spending/savings on track, monitor results and make appropriate adjustments when necessary. From time to time she will also model the impact of significant deviations from assumed experience and consider alternative courses of action if such deviations were to occur.

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My Financial Wellness Solution:
The 401(k) as a Lifetime Financial Instrument

J. M. "Jack" Towarnicky[1]

There exists a single financial wellness solution that obviates the need for all of the essay challenge suggested analysis, evaluation and investigation. It is already available to all private sector employees. It is called the 401(k)—a profit sharing plan qualifying under Internal Revenue Code Section 401(k)—a variant of the plan that holds my lifetime of savings.

Concept

Meet workers where they are—specifically those who lack financial acumen and those who live paycheck to paycheck.[2] Change the 401(k) paradigm—the attitudes and mindset of workers, plan sponsors, legislators, regulators and policymakers. Morph the 401(k) into a **lifetime financial instrument**—so workers use the plan to build greater financial security—*today and tomorrow*. Eliminate all marketing and communications focus on retirement preparation because retirement is seldom a priority for those in need of a prescription to improve their financial wellness.

This 401(k) would focus workers solely on today's short-term financial considerations. It minimizes the need for workers to make investment and financial decisions. *This* 401(k) will maximize workers' financial wellness—it is structured to avoid mistakes and overcome inertia while, at the same time, it doesn't require advanced financial knowledge, awareness, analytical skills or heuristics.

Background

When I served in plan sponsor roles at four Fortune 500 employers, each corporation pursued numerous benefits objectives—but all had retirement preparation as a priority. Over five decades, I saw tens of thousands of co-workers prepare for retirement. Early on, it was obvious who would almost always succeed—those who prioritized retirement.

However, success wasn't limited to those who prioritized retirement. Another group consistently succeeded—workers who were not at all focused on retirement preparation but who pursued wealth accumulation. One gentleman, Tom, woke me up to this fact in the early 1980s. He said to me: "Jack, I am single and 35. I maxed out saving in our 401(k). I have also maxed out my IRA contribution and I'm saving in a non-qualified, variable deferred annuity. I own my home and a rental property outright. I also have investments in a taxable brokerage account. Where do you recommend I invest my next dollar?" After a brief discussion to make sure I wasn't missing something, I gave Tom my very, very best expert advice: "Take an expensive vacation and enjoy yourself!"

I never ran into another worker like Tom. But I did encounter thousands focused on wealth accumulation—not retirement preparation. Most were workers once in the category of "just getting by." Many focused on getting ahead of the debt curve—to stop living paycheck to paycheck. The 401(k) was integral to those efforts—leverage the tax preferences, obtain the maximum employer support, create tax-savvy access to

1 I would appreciate your suggestions/criticism regarding the plan presented in this essay. Email me at *jacktowarnicky@gmail.com*.

2 See question 6, in American Payroll Association, "2016 'Getting Paid in America" Survey Results," September 2016, *http://www.nationalpayrollweek.com/documents/NPW2016SurveyResults.pdf*. More than 60% of 27,000+ survey respondents indicated it would be very difficult or somewhat difficult to meet current financial obligations if their next paycheck was delayed one week. See also, Olivia S. Mitchell and Annamaria Lusardi, "Financial Literacy and Economic Outcomes: Evidence and Policy Implications," *Journal of Retirement* 3, no. 1 (Summer 2015): *doi:10.3905/jor.2015.3.1.107*. Two-thirds of surveyed Americans could not correctly answer three basic financial questions, described by the authors as having "the virtue of being simple, relevant, brief and good differentiators." See also, Board of Governors of the Federal Reserve System, "Report on the Economic Well-Being of U.S. Households in 2015," May 2016, *https://www.federalreserve.gov/2015-report-economic-well-being-us-households-201605.pdf*. More than 30% of survey respondents indicate their monthly income varies occasionally or significantly from month to month (where 43% attributed this to an irregular work schedule) while 46% indicated they could not pay for a hypothetical emergency expense of $400 without having to borrow or sell something.

monies along the way to retirement and so on. These workers adopted wealth accumulation strategies long before there was a Consumer Financial Protection Bureau, long before we encountered today's "forward-thinking employers" who embrace "financial wellness." Most didn't have retirement preparation as a priority when they started saving—and I avoided trying to focus them on retirement. Instead, in the 1980s, I named these diligent savers focused on wealth accumulation "middle-class millionaires … someday."

I became aware of another distinction besides the difference in savings objectives—those focused on wealth accumulation also tended to de-emphasize the link between the 401(k) and their current employer. For them, a 401(k) was less of a plan to save/prepare for retirement from the current employer and more of a wealth accumulation opportunity that happened to be available through an employer. They understood the 401(k) was a separate legal entity—that plan participation need not end just because employment with that plan sponsor had ended.

Because 401(k) structures are malleable, they can be shaped to anticipate and meet the needs for workers with a variety of priorities, income levels, debt burdens, personal/family circumstance and so on. Unfortunately (or fortunately), a plan sponsor is typically limited to a single 401(k) plan. So, 401(k) plans continue to evolve, to incorporate new features designed to satisfy an ever more diverse group of workers with ever more varied financial needs—plus, they offer a sustainable constant that can remain in harmony with an individual's changing needs over a lifetime:

1. The early 1980s "salary reduction" design **(401(k) Release 1.0)** was a more than adequate retirement savings solution for workers with adequate disposable income who had retirement preparation as a priority. They knew that consistent saving in the 401(k), when combined with Social Security and Medicare, would be sufficient preparation. Millions of baby boomers are all around us today—enjoying retirement because they saved through their 401(k).

2. In the 1990s, **401(k) Release 2.0** designs emerged—incorporating automatic features—automatic enrollment, escalation and investment (using a qualified default investment alternative or QDIA). Plans increasingly adopted automatic features after the Pension Protection Act of 2006 clarified the opportunity. For example, one service provider's review of client 401(k) plans showed growth in automatic features from 10% (2006) to 41% (2015)—+300% in 10 years![3] Automatic 401(k) plan designs are adequate for workers whose disposable income will accommodate current financial needs/debt service *and* retirement savings, whether or not they have retirement as a priority.

3. In the 2000s, recognizing that some workers needed more than automatic features, some plans developed new structures. Coupling 401(k) Release 2.0 automatic features with 21st century loan functionality and other provisions designed to facilitate asset aggregation/consolidation and asset retention, **401(k) Release 3.0** was born. Where the 401(k) succeeds in aggregating savings, it will meet the needs of almost all workers except those who have breaks in employment or are otherwise economically vulnerable.

My experience is that the economically vulnerable and a majority of 20-, 30- and 40-something workers have little use for retirement preparation. Often, all disposable income is committed to debt service for past purchases or immediate financial needs. Too often, workers take on payday loans or other high interest debt—sometimes guaranteeing retirement poverty. My experience confirms, for the substantial minority of workers who don't have adequate disposable income and/or who don't have retirement as a priority, the 401(k) will succeed only if we meet workers where they are. So, slowly and iteratively, the plan sponsor took actions that morphed my 401(k) from a retirement savings plan for current, active employees into a **lifetime financial instrument** for all participants. See Figure 1 for the 25-year design journey.

3 Vanguard, "How America Saves 2016: Vanguard 2015 Defined Contribution Plan Data," report, June 3, 2016, *https://institutional.vanguard.com/iam/pdf/HAS2016.pdf.*

Figure 1 Author's Plan Design Journey (1985–2010)

Provision	Component	1985	2010
Marketing/ Administration		Retirement savings plan for employees of this employer	Lifetime financial instrument
		Eligibles must take action to enroll	Automatic enrollment
		Voluntary; employer ambivalent about worker participation	Participation, savings strongly/ repeatedly encouraged
Eligibility		Three years of service	At hire
Participation		Must contribute to participate	Can start with rollover from IRA, other employer plans
IRC § 401(k): Deferrals and Limits		Pre-tax contributions up to 16% of pay	Pre-tax, Roth (1% to 80% of pay, up to IRC § 402(g) max)
Enrollment		N/A	6% of pay default, perennial re-auto enrollment for all eligibles
Escalation		N/A	1% auto escalation if defer between 6% and 12% of pay
IRC § 402(g): Catch-up Contributions		N/A	Pre-tax, Roth (1% to 80% of pay, up to IRC § 414(v) max)
IRC § 401(a): Contributions		After-tax contributions (combined limit with pre-tax contributions up to 16% of pay) or, if less, IRC § 415(c) max	Only non-highly compensated employees (NHCEs) up to IRC § 415(c) max (to trigger company paid support for retiree medical)
IRC § 414(s): Covered Compensation		Salary only	All taxable wages—including but not limited to salary, overtime, shift differential, quarterly and annual broad based incentives
IRC § 408(q): Deemed IRA		N/A	(Not adopted due to administrative complexity) Expanded Roth savings opportunity for those limited by IRC §§ 402(g), 414(v) maximums
IRC § 25B: Savers Credit		N/A	Infrequent communication to potentially eligible participants
Employer Contribution		70% on 1st 2% of pay contributed, plus 40% on next 4% of pay contributed	50% on 1st 6% of pay contributed
Vesting		Vested immediately	Graded over 5 years
Investments	Core	5 investment options: bond fund, two large cap blended funds, one large cap growth fund and a guaranteed investment contract (GIC) (2 were retail mutual funds, 3 were separate accounts); from 1985–2006, we added 42 more funds and, in 2006, we reduced Core investment options to 15	13 white-labeled Core options (all but 1 are separate accounts): 4 index funds (S&P 500, small/mid, bond and international; 1 GIC; 1 money market; and 7 actively managed funds, large cap growth, small/mid growth, large cap value, small/mid value, international equity, global and Core+ bond
	Qualified Default Investment Alternative (QDIA)	N/A	QDIA uses 10 target maturity models (TMM): no cost, fully transparent, electronic allocations across 13 Core options for economies of scale

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Figure 1 Continued

Provision	Component	1985	2010
			QDIAs use age 65 target date (48% equity allocation, "through" glide path)
	Diversification	N/A	Directed brokerage is available
Rollovers/Transfers Into Plan		N/A	Full aggregation/consolidation as code permits
Loan		N/A	21st century loan process: max 2 loans (to enable rollover of most outstanding loans from predecessor plans); automatic clearing house (ACH) processing allows repayment after separation and loan initiation after separation
			Default on any loan = ineligible for future loans
			File mortgage, issue 1098: create tax deductible interest
			(Not adopted) Build credit by reporting to credit bureau
			(Not adopted) 1 loan using line-of-credit methodology
Roth Conversion		N/A	Full, in-plan conversion to Roth
Payout Options	While Employed	Hardship withdrawals	Eliminated hardship withdrawals in 1996
		In-service after-tax monies after 2 years (hardship), after-tax monies after 5 years	In-service after-tax/employer monies after 5 years
		N/A	Rollover-out to IRAs any assets rolled into plan
		Age 59-1/2	Age 59 -1/2
	Post-Employment	Lump sum only	Default: Continue account until 2nd to die (employee or spouse)
		If < age 55, must take payout or wait until age 55	Default: Installment payments to comply with minimum required distributions
		IRA rollover, or 10-year lump sum taxation	IRA rollover
		In plan annuity eliminated to comply with the Retirement Equity Act of 1985, Norris decision "unisex" requirements	No in-plan annuity payout provision
		Spouse can "step into participant shoes"	Same
		No ad hoc payments: all or nothing	Ad hoc payments up to 100% of account balance

Continued on page 28

Figure 1 Continued

Provision	Component	1985	2010
Multiple Employer Plan (MEP)		N/A	Mutual insurance companies = "sponsored" MEP
Fees	Investments	Varies, from 0 to ~130+ basis points	Collective investment trusts: 2 to 60 basis points asset management fees
	Administration: Active employee	Internal administration via payroll system	Monthly per capita fee and transaction costs
	Administration: Former employee	No separate, added fees apply after termination	Same

While we didn't abandon all retirement preparation features, the marketing focus shifted dramatically with the 1996 introduction of new materials themed "Drive to Your Dreams." We did remove all references to and all use of the word "retirement." We knew younger workers weren't focused on retirement while older workers understood the 401(k)'s capability. Instead, we focused on a "vehicle" workers could use to "save up" for a "Drive to Your Dreams"—whatever they happened to be dreaming about. While no structure that requires a lifetime of savings will be successful where workers lack the ability to earn wages, this design enabled workers to traverse all roads, including the paycheck-to-paycheck lane and other streets with deep debt potholes.

The Future of This Concept

Unfortunately, because of unnecessary limits in current statutes and regulations, today's 401(k) plans are inadequate to fulfill the role of lifetime financial instrument **for economically vulnerable workers with median and lower incomes.** This essay proposes **401(k) Release 4.0**—completing the transition away from a retirement savings plan sponsored by a specific employer to a lifetime financial instrument (LFI) by coupling current capability (401(k) Release 3.0) with a series of modest, practical, cost neutral (from a federal budget perspective) statutory and regulatory changes.

LFI recognizes the diversity of the population to be served. It incorporates changes in concept, design, mindset and messaging. LFI is focused on wealth accumulation. It removes barriers to saving—incorporating strategies such as "once eligible, always eligible." It specifically and deliberately avoids and shuns cognitive challenges incorporated in "mental accounting"—how many households organize, evaluate and keep track of finances. LFI removes all of the complexity workers encounter in savings, investment and spending decisions. It ensures participants avoid any/all ex ante and ex post cost benefit analysis. It eliminates any need to annually, or more frequently, (re)balance "mental accounts."

LFI does all this by embracing and fully leveraging money's inherent fungibility. It eliminates the need for a retirement mental account—people won't need to be annually reminded about their lack of progress. While no lifetime of savings concept will successfully address the retirement preparation needs of the baby boomers (now all age 52+), LFI has sufficient flexibility so that it will successfully address the "retirement crisis" for today's workers under the age of 50 and for generations of workers to come.

A 401(k) that does not focus on retirement is heresy to today's practitioners, policymakers, plan sponsors and service providers (including the Society of Actuaries' Committee on Post-Retirement Needs and Risks); however, focusing workers on wealth accumulation has been shown to be successful. The four largest barriers to retirement preparation continue to be: lack of access, leakage, failure to save when eligible and failure to save enough.

- **Lack of access/leakage.** All workers have had access to an adequate retirement savings vehicle since 1982—the Individual Retirement Account (IRA). Coupled with Social Security, most workers can achieve adequate income replacement. An enhanced version of the IRA is available, the

Deemed IRA, which would allow seamless rollover within a 401(k), enabling liquidity without leakage via 21st century loan functionality.

- **Failure to save when eligible/failure to save enough.** Automatic features coupled with liquidity using 21st century loan functionality ensures individuals can comfortably save more than they believe they can afford to earmark for retirement—allowing the plan to use higher default rates for automatic enrollment and automatic escalation.

Figure 2 repeats the 2010 plan design from Figure 1 and adds 401(k) Release 4.0 features (legislative and/or regulatory actions are highlighted in red) to complete the transition to LFI—resolving access and other issues without resorting to new mandates. The design goals include provisions that:

- Meet workers where they are and accommodate workers as their circumstance changes—diverse personal interests, ability to save, current needs/accumulated debts
- Create a strong, vibrant savings habit with a laser-like focus
- Intentionally reduce the link between the 401(k) and the plan sponsor to ensure a sense of individual ownership and to minimize any suggestion that continued employment is required to continue the account or that payout should be linked to separation
- Eliminate distractions that result from separate identification of each financial need or goal, coupled with the need to calculate, plan and prepare for each goal (debt service, car, home, retirement, etc.), the need to recalculate periodically to reflect changing needs and investment results, and the need for mental accounting and related, multiple investment/savings products
- Anticipate frequent employment turnover, so workers can aggregate/consolidate accounts and actively participate in their plan of choice, including a former employer's plan (whether or not a current employer offers a 401(k) plan)
- Minimize leakage from hardship and other distributions while maximizing access using "repayment-savvy" 21st century loan functionality (save, get match, invest, borrow, continue contributions while repaying loan, rebuild account for a greater need in the future, repeat to/through retirement) featuring automatic clearing house (ACH) repayment functionality, line-of-credit structure(s), commitment bonds, etc.
- Highlight the "personal capital" relationship individuals should have with their 401(k) plans—fostering lifetime participation for the worker (and spouse, children or other dependents who are beneficiaries)

Before we "retire" the 401(k) as inadequate to resolve the "retirement crisis,"[3] why not shift workers focus to becoming a "middle class millionaire … someday" as "People (already) have within their own hands the tools to fashion their own destiny."[4]

3 Stephen Gandel, "Why It's Time to Retire the 401(k)," *Time* Oct. 19, 2009, *http://content.time.com/time/magazine/article/0,9171,1929233,00.html* which argue the 401(k) has been a failure and that it should be eliminated or, at least, that the tax preferences should be removed This is similar to hundreds of other books and articles over the past decade through present day.

4 Murray D. Lincoln, *Vice President in Charge of Revolution* (New York: McGraw Hill, 1960).

Figure 2 Complete the Journey to 401(k) Release 4.0: A Lifetime Financial Instrument

Note: All changes are voluntary; in the aggregate, they are federal budget revenue neutral at current participation levels.

Provision	Component	2010	LFI: 401(k) Release 4.0
Marketing/ Administration		Lifetime financial instrument	Same
		Automatic enrollment	Same
		Participation, savings strongly/ repeatedly encouraged	Same, plus 401(k) = "Bank of Jack" for all significant financial needs
Eligibility		At hire	Same
Participation		Can start with rollover from IRA, other employer plans	Same, plus rejoin via rollover or Deemed IRA contribution, (aka once eligible, always eligible)
IRC § 401(k): Deferrals and Limits		Pre-tax, Roth (1% to 80% of pay, up to IRC § 402(g) max)	Same; however, other structures may be a better fit for other plans
Enrollment		6% of pay default, perennial re-auto enrollment for all eligibles	Department of Labor/IRS to provide guidance for choosing between pre-tax and Roth 401(k) as default
Escalation		1% auto escalation if defer between 6% and 12% of pay	If automatic enrollment default uses Roth 401(k) deferrals, change 90-day "opt-out refund" limit to 2.5 months after end of plan year
			Allow participants who do not have access at a current employer to contribute up to plan max using Roth 401(k)
IRC § 402(g): Catch-up Contributions		Pre-tax, Roth (1% to 80% of pay, up to IRC § 414(v) max)	Same, plus allow pre-age 65 Roth catch-up—allow catch-up in any 15 calendar years
IRC § 401(a): Contributions		Only non-highly compensated employees (NHCEs) up to IRC § 415(c) max (to trigger company paid support for retiree medical)	Same for NHCEs, but for any purpose (need not be linked to company funding of retiree medical)
IRC § 414(s): Covered Compensation		All taxable wages—including but not limited to salary, overtime, shift differential, quarterly and annual broad based incentives	Same
IRC § 408(q): Deemed IRA		(Not adopted due to administrative complexity) Expanded Roth savings opportunity for those limited by IRC §§ 402(g), 414(v) maximums	Simplify regulations, add/highlight post-separation contribution option/ functionality
IRC § 25B: Savers Credit		Infrequent communication to potentially eligible participants	For those with incomes < savers credit threshold, IRC § 401(k)(4)(A) relief plus tax preference under IRC § 132(a)(7) where plans provided access to third-party tax preparation services

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Figure 2 Continued

Provision	Component	2010	LFI: 401(k) Release 4.0
Employer Contribution		50% on 1st 6% of pay contributed	Same; however, other structure/ amounts may fit other plans better
			Add IRC § 401(h) functionality for retiree medical funding to profit-sharing plans
			Allow/encourage NHCE "prize-linked" employer contributions
Vesting		Graded over 5 years	Same; however, other structure/ methods may fit other plans better
Investments	Core	13 white-labeled Core options (all but 1 are separate accounts): 4 index funds (S&P 500, small/ mid, bond and international; 1 guaranteed investment contract (GIC); 1 money market; and 7 actively managed funds, large cap growth, small/mid growth, large cap value, small/ mid value, international equity, global and Core+ bond	Same; however, other structure/ methods may fit other plans better
			Add continued accrual insurance (death, disability) as an "investment" to secure continued accruals
	Qualified Default Investment Alternative (QDIA)	QDIAs use 10 target maturity models (TMM): no cost, fully transparent, electronic allocations across 13 Core options for economies of scale	Same, specifically confirm TMM qualifies as a QDIA
		QDIAs use age 65 target date (48% equity allocation, "through" glide path)	Same; however, lifetime participation suggests target date could be updated to required beginning date (when minimum required distributions must commence)
	Diversification	Directed brokerage is available	Same
Rollovers/Transfers Into Plan		Full aggregation/consolidation as code permits	Same, plus allow Roth IRA rollovers into Roth 401(k) account
			Allow plan-to-plan transfer while actively employed, while limiting distributions in the receiving plan to commence after age 59-1/2
Loan		21st century loan process: max 2 loans (to enable rollover of most outstanding loans from predecessor plans); automatic clearing house (ACH) processing allows repayment after separation AND loan initiation after separation	Same, but change to 1 loan per loan type (residential, general) using line-of-credit method

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Figure 2 Continued

Provision	Component	2010	LFI: 401(k) Release 4.0
		Default on any loan = ineligible for future loans	Inflation-adjust 1974 loan dollar limit from $50,000 to $250,000, prospectively index
		File mortgage, issue 1098: to create tax deductible interest	Same
		(Not adopted) Build credit by reporting to credit bureau	Build credit by reporting to credit bureau
		(Not adopted) 1 loan using line-of-credit methodology.	Accept prior plan loan rollover/ conversion without applying prior plan benefits rights and features; accept prior plan loan as a plan asset
			Allow "hardship loans" of up to $500, lengthen repayment from quarterly to up to 1-year anniversary of initiating loan
Roth Conversion		Full, in-plan conversion to Roth	Same, plus allow "cashless conversion," accommodating federal/ state tax withholding, funding it with a plan loan without applying IRC § 72 maximum amount loan limits
Payout Options	While Employed	Eliminated hardship withdrawals in 1996	Same
		In-service after-tax/employer monies after 5 years	Prospectively replace with life expectancy based penalty-tax free IRC § 72(t) payout
		10% penalty tax on non-qualifying taxable distributions	Increase to 20%, eliminate penalty-tax-free IRA payouts prior to age 59-1/2
		Rollover-out to IRAs any assets rolled into the plan	Same
		Age 59-1/2	Same, other plans may decide to prospectively eliminate all in-service withdrawals as part of lifetime structure
	Post-Employment	Default: continue until 2nd to die (employee or spouse)	Same, consider limiting payouts before normal retirement (prospective contributions only)
		Installment payment commences no later than minimum required distributions	Same; however, cap minimum required distributions payout at no more than 5% of prior year-end account balance
			Treat Roth 401(k) the same as Roth IRA for minimum required distributions purposes
		IRA rollover	Same
		No in-plan annuity payout	Plan insures itself (beneficiary "participating" self-insurance wrapper) to allow an annuity-like lifetime payout
		Spouse can "step into participant shoes"	Same, also apply to non-spouse beneficiary

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Figure 2 Continued

Provision	Component	2010	LFI: 401(k) Release 4.0
		Ad hoc payments up to 100% of account balance	Same
Multiple Employer Plan (MEP)		Mutual insurance companies = "sponsored" MEP	Clarify unrelated firms use of "sponsored" MEP options—a participating employer must assume role of plan sponsor
			Confirm "sponsored" MEP ability to "spin off" "bad actors" into a separate plan
Fees	Investments	Collective investment trusts: 2 to 60 basis points asset management fees	Same
	Administration: Active Employee	Monthly per capita fee and transaction costs	Same
	Administration: Former Employee	No separate, added fees apply after termination	Add IRS Notice 2004-10, DOL FAB 2003-3 fees for Term Vested

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Financial Well-Being as a Technology Solution

Scot Marcotte and John Larson

From the creation of the first defined benefit plan in 1875, employers have long focused on the retirement problem of their workforce management. The shift from defined benefit to defined contribution has sparked a shift in the retirement industry. If employees are expected to plan their own retirement, they need help that goes beyond just retirement planning. With millennials facing huge student loan debt, Gen Xers caring for both their kids and their parents, and baby boomers worried about a financially secure life after work, the financial focus for employers has become much bigger than retirement.

One of the industry's most comprehensive global well-being surveys, the ongoing series by Conduent "Working Well: A Global Survey of Workforce Wellbeing Strategies," covering both physical and financial wellness, routinely points to stress as the top challenge employers are looking to solve. The top cause of employee stress is financial issues and its drain on productivity and workforce planning.

Technology can be a great enabler for both the short-term and long-term needs of the individual. The right technology can help get employees focused back on work, while aiding those who want to retire when the time is right.

This article explores how technology can play a role in financial wellness and answers questions on potential impact, software evaluation and adoption.

How Can Technology be Used to Impact/Improve Financial Wellness and What Forms Would be Helpful?

First, it's critical to acknowledge technology isn't the be-all, end-all. It's an enabler. It can help bring together the information necessary to facilitate individuals making smart decisions. It can assist in guiding people down the right financial path. It can support ongoing achievement of short- and long-term goals.

The same tools financial advisers use to help their one-on-one conversations—data aggregation, life planning questionnaires, stochastic analyses—can and should be offered up to the masses. People should be given the opportunity to unlock the power of their own financial data.

For employees, the financial wellness conversation starts by looking at cash compensation. Financial well-being goes beyond just cash flow into a bank account. Employers own much of the data necessary to start creating a holistic financial picture. From compensation to savings plans to equity plans to insurance programs, so much of the individual's financial picture should come together through the software we present to our employees. As a starting point, our role should be to make sure comprehensive data comes together through total rewards, total wealth or total well-being solutions.

With aggregated employer-sponsored plan data as a starting point, individuals should be able to automatically bring in personal and spousal/family holdings, as well as their debt. Personal data aggregators are fantastic at pulling together outside data but tend to fall apart in accessing employer-managed data. Technology today can marry personal and employer data to create the complete financial picture. We are at the forefront of an opportunity to allow employer data to be made personal in the context of an individual's financial data.

Having the data together in one place only goes so far. The next big software requirement is to assure the individual's short- and long-term goals are assessed and met.

Since employers have historically focused so heavily on retirement, there is currently no shortage of good tools available for retirement modeling. However, those tools often neglect some of the short-term challenges that keep people from saving for the long haul. The best software now goes through the types of questions a financial adviser would ask to understand short-term objectives such as setting up an emergency fund, preparing for children's education costs, paying down student loan debt and buying a house, while still thinking about longer-term goals of paying down that mortgage, paying off credit card debt as well as the holy grail of having enough to live comfortably through retirement.

Just as employers have incorporated physical health assessments into the annual routine of benefits communication, there's a great opportunity now to similarly use financial health assessments.

The best financial assessment tools take employer programs into account. Assessments should include such things as goal setting, risk tolerance and the like, but also should align those needs with the programs organizations make available. This alignment can point users to the best use and mix of 401(k), stock purchase, heath savings account (HSA), flexible spending account (FSA), voluntary insurance and other financial plans. These decision support tools should help an employee determine the best use of the next dollar earned.

These tools have the added benefit of increasing plan awareness, which leads to better—and more appropriate—plan participation.

We know that participation, though, is often not enough. Even with what might seem to be ideal plan participation, life happens. Markets fluctuate. The roof needs to be replaced. We lose a loved one. Scenario analysis also plays a big role in the financial technology consideration.

Adding stochastic analysis tools help users model the controllable and uncontrollable events that confront us all. They look at various probabilities of those events and can even help realign best plan usage as those events occur.

How Can Software Tools be Evaluated for Their Effectiveness and Suitability for Various Decisions?

As detailed earlier, financial software tools should minimally include:

- Aggregation of all employer-sponsored and family holding data
- Assessment and optimization tools that identify the short- and long-term goals of the individual, and that help align those needs with plans and programs employers make available
- Analysis that accounts for the probability of various future events as well as ongoing adjustments when expected and unforeseen events occur

But the best tools that can aggregate, assess and analyze are useless if they aren't used. When it comes to user experience, there's no such thing as one best practice. The big buzzword in the user experience space—human-centric design—recognizes that people learn and interact in different ways, so no one interface can be expected to work for all. We need to meet users through the channels, tone and timing that are ideal for them individually.

There are a variety of approaches that can be employed to make sure we are meeting these varied needs. These recommended approaches acknowledge there are three broad types of people to consider:

- **The superusers,** who are highly informed of the programs available and the goals they want in life and are completely confident they can do it all themselves
- **The overwhelmed,** who feel lost by it all and want us to do it for them
- **Everyone else,** who understand some concepts but could use some help to get started and to stay on track

There aren't many superusers out there, but we can save them a lot of time and get them back to work if we can offer them the aggregation, assessment and analysis tools listed previously. Of course, we need to make sure they are aware of them, so some good initial and ongoing promotion should be included.

Ongoing communications services can proactively and contextually push reminders through e-mail, text and push messaging if balances or allocations go off course.

The second group's a bit tougher. And there are plenty of them. For them, smart technology that considers their life stage and their likely needs can create bundled plan options. These bundles—similar to what we see in the marketplace with bundled home, auto and life insurance—can bring together medical, dental, life, savings plan, stock purchase and so on as a starting point for those who are overwhelmed by all the choices available to them during open enrollment or new hire sign-ups or as they experience life events.

Over time, participation rates in plans like HSA, 401(k) and stock purchases can be automatically adjusted to keep them on track for the near and future financial goals of the users.

The third represents the vast majority of our employees and recognizes that we are all human. We rarely step back to map out our life. It's bewildering, and most folks don't know where to start. We need a nudge to begin and we can't be presented everything all at once.

Starting with what we know about the individual—the plans they participate in, the programs they are eligible for, the balances they've accumulated—technology can proactively prompt employees to get started. The starting point may be a simple wizard assessing financial goals and priorities. As the individual gets increasingly comfortable with the experience, personal holdings could be voluntarily imported.

To keep our employees engaged, personalized financial messaging could be introduced to provide ongoing recommendations and options to consider. We are exploring a future that includes algorithmic driven financial advice and execution to keep people on their financial track.

In all of these approaches, technology can provide the interface for self-service or could just easily help inform a financial adviser who can interact with that individual one-on-one.

As technology is evaluated, flexibility to meet the individual who and where they are is critical.

How Can Technology be Employed to Help Those Not Knowledgeable or Uncomfortable With Computers?

Continuing the theme of technology as an enabler, the best software in the market doesn't rely on people being superusers or even average users. The best software accounts for all human expectations.

Those uncomfortable with technology can get an automatically generated but highly personal letter that helps them see where they are today with their financial situation and gives some projections on where they could be in the future. If the models don't align with their hopes, they can reach out to a personal adviser—in person or by phone—who can use the technology described to create a highly tailored action plan, fully informed by the employer and personal financial data of the individual.

Those who are comfortable with technology should be able to access these tools via self-service. They may need more just-in-time education and decision support than financial advisers, but the experience should flex by the user to meet their needs.

Making it Real

The technology we've described is not a pipe dream. It's a reality today. As you evaluate capabilities from financial wellness providers, we encourage you to consider these principals and incorporate them into your financial wellness strategy. Many of the same concepts can even be applied as you consider total well-being technology capabilities across the physical, financial and even professional spectrum.

Using these technologies effectively can significantly reduce the financial stress of your employees and their families. The organization benefits with increased productivity and reduced presenteeism. It's a win-win for you and your employees.

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A Framework for Multilayered Post-Retirement Financial Planning Strategy:

Critical Assessments of Individual Needs and Available Resources

Joonghee Huh

Financial preparation for one's post-retirement often requires a high degree of tailoring to recognize various factors involving individual circumstances. Given the idiosyncratic nature, one cannot effectively address this problem with a one-size-fits-all or rule-of-thumb approach. Rather, the approach needs to be based on a more sophisticated paradigm that can capture necessary inputs and formulate objectives in a clearly articulated and solvable manner.

Preparing for one's financial wellness in post-retirement years begins with understanding one's needs and expected financial resources and translating them coherently into a tangible and actionable strategy. A general framework that connects these ingredients can be helpful in addressing this issue.

This essay outlines a framework for formulating one's post-retirement planning strategy. Numerous relevant considerations can be categorized into the items related to post-retirement needs (i.e., what one will need) and available resources (i.e., what one will have). The first two sections of this essay provide detailed discussions on these items. The third section builds upon these two sections by incorporating them into an implementable multilayered approach to post-retirement financial planning.

Assessments of Retirement Needs

The financial needs in post-retirement years can be articulated in three levels of hierarchy. These needs can be met sequentially given availability of financial resources. These are **basic living cost, cost of comfortable living** and **needs for intergenerational transfer**. A brief description of each follows.

- **Basic living cost.** The amount needed to cover basic expenses such as food, housing and health care to maintain a minimal lifestyle.
- **Cost of comfortable living.** Expenses necessary to cover one's desired lifestyle. One example would be to maintain the same lifestyle as in one's pre-retirement years.
- **Needs for intergenerational transfers.** From a retirement planning perspective, this item is more of a want than a need. Nevertheless, one needs to take into consideration leaving one's legacy to the next generation.

Understanding the needs by the previous categorization is critical to post-retirement financial planning since one's appetite to meet these needs varies across individuals. This categorization can also be refined in a more granular way as required.

Assessments of Expected Financial Resources in Post-Retirement Years

An understanding of expected financial resources available in post-retirement years is a critical component in planning for financial wellness in post-retirement years. Considerations of financial resources can be seen in the following groupings.

- **Government safety net.** Government financial support such as Social Security benefits in the United States.
- **Social safety net.** How much one can rely on family and extended family for one's support if needed in the future.
- **Retirement plan accounts (both employer-sponsored or individual-based accounts).** One's funds earmarked for withdrawals in retirement years.
- **Additional personal savings.** All other financial products (e.g., investment, insurance and savings) that could be used to support financial well-being in post-retirement years.

Safety net availability from both government and social supports is important since it would have a meaningful influence over one's risk tolerance associated with investments of retirement plan accounts and additional personal savings. A person with higher safety nets would typically be more comfortable making riskier investments compared to those without the same support. Availability of a government safety net would be less variant among people in a given nation; however, the social safety net would vary substantially across individuals and should be recognized as part of individually tailored post-retirement planning strategies.

Multilayered Retirement Planning Strategy

Assessments of one's retirement needs and expected available resources facilitate a formulation of a well-defined problem for determining one's optimal post-retirement financial planning strategy. In particular, based on three levels of retirement needs mentioned in the first section, the post-retirement planning strategy would need to reflect the following considerations/ constraints:

1. Meet the basic living cost with **certainty**
2. Meet cost of comfortable living with **X%** probability
3. Meet the need for intergenerational transfer with **Y%** probability

Based on the earlier discussion, one can establish a post-retirement planning strategy in a systematic way. For example, the basic living cost can be in part met by government safety nets, but post-retirement planning strategies may need to address the portion of the expected basic living cost not covered by a government safety net. One way of meeting these needs would be setting aside a portion of one's retirement plan accounts and personal savings into financial products with guaranteed fixed income streams such as payout annuity or guaranteed lifetime income variable annuity products.

On the other hand, the costs associated with comfortable living and intergenerational transfers can be met with a certain probability threshold and not necessarily with certainty, given that these may not be absolutely critical needs for individuals. Based on an individual's profiles and preference, this framework allows for making riskier investments as appropriate within specified tolerances leading to more optimal allocation of one's financial resources.

A tax strategy associated with post-retirement financial planning is another example of how this framework can be utilized. For instance, the individuals with primary concerns on meeting the basic living cost would have higher appetites for financial products allowing for tax deferrals (e.g., traditional 401(k)). Their expected tax rates associated with meeting the basic living cost only in post-retirement would likely be lower compared to their current tax rates. On the other hand, those whose goal is to meet the cost of comfortable living with a reasonably high probability may have inclinations for financial products allowing for tax-free growth (e.g., Roth 401(k)). For these individuals, their expected tax rates in post-retirement would likely be higher. Lastly for those highly interested in intergenerational transfers, life insurance products such as universal life may be more palatable within their portfolios.

Conclusion

Financial wellness begins with a better understanding of one's post-retirement needs and expected available financial resources. This short essay provides a framework for formulating post-retirement financial strategies leading to financial wellness. This framework is a skeleton that needs further developments with substance. Each component within this framework has potential as a research topic. For example, more studies can be conducted in the following areas:

- Comprehensive views of one's post-retirement needs in connection with one's expected financial resources
- More robust formulation of an optimization problem for determining strategies for post-retirement financial planning
- Exploration of efficient methodologies for solving such an optimization problem

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Time to Ditch the Three-Legged Stool Analogy for Retirement and Replace it With a Two-Picture Analogy:

A Mailbox and a Piggy Bank

Barry Kozak[1]

At a very basic level, financing retirement is not much different than financing life. Strip away the verbiage we retirement professionals insert into the conversation, and it truly simplifies to a predictable stream of income and the spend down of the individual's retirement nest egg. Regardless of other motives we bring to the table, if the goal is to educate as many people as possible about preparing for and then paying for retirement, public policy should dictate we replace the proverbial three-legged stool of retirement—which might have suited us well for 80 years—with a down and dirty question: What income source in retirement will replace your salary while working?

Under this approach, the client, who is presumably still working and starting to think about retirement, is asked this question: Right now, your salary dictates your lifestyle, so when you stop working and retire, how much guaranteed income will you need to maintain your lifestyle? To this author, this is the only logical starting point. Individuals, regardless of socioeconomic status or educational level, should understand this conversation, and if they start to realize they will not have enough income, and not enough savings to purchase additional layers of income, they basically have two choices: work later than planned or downsize expectations of lifestyle. If we are having a live conversation with baby boomer clients, and advising and counseling them, this would be the appropriate time to quote Messrs. Richards and Jagger: "You can't always get what you want / But if you try sometimes, well, you just might find / You get what you need." Once an individual figures out ways to ensure a proper stream of income during retirement, every other asset owned by that individual will simply, by default, be called his or her nest egg, which will be liquidated to cover unbudgeted and non-recurring expenses. Any balance will be their legacy to family, friends and charities.

After understanding salary-replacement, possibly without ever hearing the word annuity, individuals can begin to envision some of the recurring retirement expenses for which they can draft a budget. They will soon realize expenses during retirement might be less than expenses while working, which justifies the historical emphasis by actuaries on pension replacement rates and the coordination with Social Security benefits, but they will realize they will need in the range of 75% to 90% of their current net take-home pay. Again, this is a great starting point because they are not passively listening to financial planners and attorneys talking over them, but are actively engaged in a conversation they fully understand.

Using a Stream of Fixed Income to Pay Living Expenses

Most of the following costs are controllable and can be reduced to appropriate levels with proper planning and time horizons. However, since out-of-pocket health care costs for Medicare, other than fixed monthly premiums and annual deductibles, are usually uncontrollable, they should be paid from the nest egg and not budgeted from the income stream. Typical expenses to consider (whether monthly, quarterly, biannually or annually) include:

1 This essay is loosely based on Barry Kozak, "ERISA Benefit Statements of the Future: The Need to Explain the Cost of Retirement, Including Out-Of-Pocket Medical and Long-Term Care Expenses," *Journal of Pension Planning & Compliance* 39, no. 1 (winter 2014); and Barry Kozak, "Qualified Retirement Planning Services to Your Clients: A New Fringe Benefit for Their Employees and a New Profit Center for You," *Benefits Law Journal* 29, no. 4 (winter 2016): 56.

- **For each home (primary, secondary or vacation):** mortgage or rental payments, property taxes, utilities, cable and phone bills, homeowners insurance, community assessment dues, alarm systems, landscaping and cleaning services, and other planned and expected maintenance costs
- **Taxes and fees:** federal and income taxes, state and local income taxes, sales taxes, renewal and licensing fees, and other required remittances
- **Debt:** credit card and other personal debt obligation payments
- **Automobile:** maintenance and tune ups, insurance and fees for parking passes, city stickers and disability vehicle placards
- **Insurance premiums:** life insurance, long-term care insurance, homeowners or rental insurance, and health insurance
- **Personal:** food, clothing and general personal upkeep
- **All other discretionary expenses that can be budgeted ahead of time:** vacations, hobbies, gifts, charitable contributions, dues for clubs and other organizations, securing professional services such as housekeepers, barbers, attorneys and accountants, and general entertainment

Here is where the individual planning for retirement should think of an image of a mailbox. A statement like "every month you are still alive, go to your mailbox and there will be a number of checks from different sources that, in the aggregate, will cover that month's budgeted expenses." Once this information is absorbed, we can add the complications of cost of living, joint life protection and all other risks that we, as professionals, can help our clients to mitigate.

The Spend Down of the Nest Egg for All Other Expenses

All other expenses that are unique, unbudgetable, unpredictable or, dare we say, unnecessary should be paid from the spend-down of the nest egg. This means that as long as the income stream is ample to pay all of the listed budgetable expenses, there should be no plan for the strategic liquidation of the nest egg (such as the 4% per year rule); rather, it should simply be ad hoc distributions as needed. Typical expenses to consider (whether periodic, random or contingent upon other events) include:

- Unexpected medical emergencies and other out-of-pocket health care expenses
- Retrofitting expenses in the home due to a disability and moving expenses if the current home cannot be retrofitted
- Assistance to a family member who is out of work, has a new baby, gets married, moves or goes to college, or other pleasant or emergency needs
- Large donations to charities or for funding of a legacy

As can be seen from this short list, the spend-down of the endowment could, and should, be used for some happy, pleasurable and positive expenses that were not budgeted, as well as expenses associated with emergencies. Here is where the individual planning for retirement should think of an image of a piggy bank. A statement like "every time you need extra money, dip into the piggy bank; every dollar remaining at your death will be your legacy passed along to your family, friends and charities."

Sources of Fixed Income

Now the individual planning for retirement sees that the most important aspect of retirement is the fixed income portion, and can develop a realistic budget; then we, as counselors and advisers, can explain sources of income, and if that is not enough, the priority of nest egg assets that should be converted into some form of income in advance of retirement. Most individuals are entitled to an annuity in the form of Old Age or Survivor benefits from Social Security, and although the monthly benefit depends on his or her compensation history and the number of quarters payroll taxes are contributed, each individual can choose a larger (actuarially equivalent, but don't use those words in front of your client) dollar amount by postponing the starting date. As to the employer retirement plans, if they have accrued benefits in a defined benefit plan, a discussion about opting for an annuity in lieu of a lump sum is very appropriate. If they have an account in a defined contribution plan, a discussion of taking the lump sum and converting it into an annuity stream (especially if the plan sponsor has adopted a qualified longevity annuity contract, or QLAC, option) is very appropriate.

Other general sources of annuities or income streams in retirement include (this is not an exhaustive list):

- Annuities and similar financial products from private insurance companies
- Corporate or municipal bonds that pay interest at specific points in time for a stated term
- Stocks that pay cash dividends
- Rental income
- Royalties
- Alimony and other family support payments
- Installment payments from damages awarded through lawsuits or settlements
- Sales of personal assets or businesses through an installment sale
- Certain long-term care insurance policies that provide monthly income to cover costs for assistance with activities of daily living
- Financial assistance from a governmental welfare program (i.e., Supplemental Security Income, Medicaid being called upon to pay the out-of-pocket costs associated with Medicare, Supplemental Nutrition Assistance Program, housing support)
- Reverse mortgages with an income stream
- Grantor trusts with an income stream (including charitable trusts)

Sources of Discretionary Income

This part of the conversation can end with a discussion of all other property owned by the individual that, by default, is part of the nest egg. A lump sum distribution from an employer-sponsored retirement plan can be rolled over into an IRA or deposited into some other form of savings or investment account (but the client must, at this point, also be taught about income tax issues with distributions, and instructed on required minimum distributions, which can upset any planned decumulation and spend-down phase).

Other general sources of discretionary income in retirement include (this is not an exhaustive list):

- Withdrawals from bank accounts or investment accounts (there might be fees for trades and premature liquidation)
- Reverse mortgages or home equity loans that provide withdrawals as needed or a source of credit
- Grantor trusts with a discretionary distribution option
- Monetary awards from litigation
- Gambling winnings
- The sale of property, a business or other personal assets
- The return of principal after the term of a corporate or municipal bond has expired
- Distributions from previously established health savings accounts
- Financial gifts and support from family and friends
- Financial gifts and support from charities, societies or other organizations
- Loans from, or viatical agreements against, life insurance policies

With a building block approach to education, the individual planning for retirement first envisions a mailbox, thinks about how fixed income during retirement will be the direct substitute for compensation while working, develops a budget with expected fixed living expenses, compares the realistic income stream with the expected budget, and then determines if there will be enough checks in the mailbox to pay his or her bills. If there are, great, but if not, they need to determine if there are any assets within the nest egg that can be converted into the missing part of the required income stream, if they realistically can continue working beyond the anticipated retirement age, or if they must now make plans to downsize the expected lifestyle in retirement to match the actual income stream.

Who is Responsible for Providing Financial Wellness?

Which actors should be providing this education and information about financial literacy and planning for retirement? Public policy suggests Congress should enact a law that requires a joint publication prepared and updated annually by the various federal agencies which can provide basic information about retirement, aging, end-of-life, estate and legacy issues, and links to their respective websites with more comprehensive information. Those agencies would likely be the departments of Labor, Treasury, Health and Human Services, Housing and Urban Development, and Veterans Affairs, and other tangential agencies, like Commerce, Transportation, Energy and even Homeland Security (for immigration or ex-patriot issues), and obviously some doctrinal input by the Department of Education. This will be the default notice that addresses the most common risks in retirement (why not suggest they start with the Society of Actuary's report and subsequent publications on this subject?). Such educational materials will ultimately be distributed to employers through the Department of Labor (DOL), so all members of the workforce will receive it.

This basic publication will be very generic, will provide the education discussed earlier, and will provide a more detailed summary of the various federal government programs generally geared toward retirees and older individuals:

- Old Age, Survivor and Disability benefits that will be paid from Social Security, and a basic education on timing choices
- Medical care costs that will be covered under the four parts of Medicare, and the associated out-of-pocket costs (most individuals have no idea that the portion of payroll taxes diverted to Medicare only cover the premiums for Part A, and that the individual must pay all other premiums, deductibles and co-pays out-of-pocket, or, if indigent, welfare, in the form of Medicaid, can be applied for to pay those other costs)
- A general discussion of long-term care, how it differs from medical care, and realistic costs for nursing homes and in-home care
- Aid and attendance benefits available for veterans with a disability

This new law, if enacted by Congress, can require the DOL to develop an additional model notice for employers that sponsor retirement plans. This notice can combine various communications already under their jurisdiction, such as a hypothetical disclosure of relative values, even in a defined contribution plan; whether or not it provides for any conversions to annuities (like a QLAC); and IRC § 402(f) Notice (which is under Treasury's jurisdiction). In this way, individuals can understand income tax issues well in advance of actual decisions and receive communications about their actual retirement benefits.

For employers who want to provide additional education as an employee benefit, Congress gave us a fringe benefit in the Economic Growth and Tax Relief Reconciliation Act (EGTRRA) of 2001 called "qualified retirement planning services." All we know from the statute is that employers who maintain a qualified plan can provide such education to their employees and their spouses, as long as the advice is available to non-highly compensated employees on a non-discriminatory manner. Since there is scant guidance under IRC §§ 132(a)(7) and 132(m) about what constitutes qualified retirement planning services, it is up to employee benefit plan consultants, together with other disciplines, such as social workers, dementia-care nurses, geriatric doctors, in-home medical and long-term care providers, grief counselors, funeral planners, estate planning attorneys, financial services professionals, speech therapists and all other professional disciplines that educate, support and advocate for people as they retire and age, to collectively develop the landscape of qualified retirement planning services.

Conclusion

This article suggests that we, in the industry, complicate the retirement planning discussion and then wonder why individuals have a glazed-eye look. Individuals of all socioeconomic and educational levels understand that while working, the paycheck covers monthly bills, and all other assets (whether cash in the bank, a line of credit or the sale of grandma's engagement ring) can be used to cover emergency expenses. Bankruptcy is the option when all else fails. Similarly, in retirement, the aggregate income stream replaces the paycheck to cover monthly bills, and the nest egg is spent down to cover all emergency expenses. Welfare and other programs specifically for the elderly are the option when all else fails. Congress should enact a law that requires model educational materials be prepared with input from all relevant federal agencies, and employers who want to provide a higher level of financial wellness should embrace those employee benefits professionals who provide "qualified retirement planning services" as a fringe benefit.

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Save and Grow: Considerations for Future Financial Freedom

Ramandeep Nagi[1, 2]

Financial freedom means accumulating enough assets to maintain one's lifestyle without actively working. For most, reaching this goal requires effective financial planning and involves 1) making assumptions about variables outside the saver's control, such as future market returns, and 2) taking steps and making choices over which the saver does have control, such as the amount of money to save each year. This article examines these variables and provides insights that may be incorporated into sound financial planning. It further proposes tools to test the current state of retirement readiness and offers budgeting techniques to correct the course, if required.

Future Market Returns: Being Conservative is the Best Policy

Future market returns is one of the most important assumptions in retirement planning. This unknown variable largely dictates how much we need to save to meet our post-retirement goals and how long those savings will last. A commonly used assumption is a 6% real market return for a hypothetical blend of equity and bond securities, which is the difference between an 8% nominal return and a 2% inflation rate. The appeal of using an assumed market return is significant for both financial advisors and investors. It helps advisors set concrete targets that can be easily communicated to clients and it motivates clients to stay committed to a financial plan that is easy to understand. Under a 6% real return assumption, a 35-year-old only needs to save 12.5% of his net income until age 65 to maintain his current lifestyle until age 90 (Figure 1a).

Using this same example, if we maintain a 12.5% savings rate but assume a real return consistent with actual historic market returns (Figure 1b), a 35-year-old would run out of resources before age 90 if he maintains his pre-retirement lifestyle. The actual historic market data over 87 years (1928 to 2015) was used to track 33 different time series returns (Figure 1b).[3] The chart represents asset accumulation under nominal market returns. Income and expenses are assumed to grow with historic inflation rates. The 33 time series emphasize the difference in the asset accumulation pattern for a saver who turned 35 in 1928 compared to 1929 and so on through 1960.

As illustrated in Figure 1b, high inflation rates in select time series lead to steep asset accumulation in pre-retirement years followed by rapid reduction in post-retirement years due to high cost of living. In addition, it can be observed that investors who started saving in any year between 1928 and 1960 achieved an average annualized real market return lower than 6% over a 55-year period. Hence, an investor should consider four key factors when incorporating simplified return assumptions into retirement planning.

1. **Using a long-term average assumption has its limitations.** Since the average S&P 500 real return between 1928 and 2015 was approximately 6.3%, the 6% return assumption seems reasonable on the surface. However, the average return may be made up of periods of very high real returns and periods of very low or negative real returns. Based on historic data, it is possible the average return achieved over an investor's savings horizon is lower than 6%.

2. **The impact of fluctuating returns on an investor may differ depending on where he is in the savings cycle.** For example, having negative returns close to retirement is detrimental because it lowers the value of savings at a time when savers will begin withdrawing funds. On the other hand, experiencing negative returns earlier in the savings cycle may have a limited impact, since the value of

1 I gratefully acknowledge Dean Kerr, FSA, MAAA, ACIA, principal at Oliver Wyman, and Helen Colterman, FSA, ACIA, consultant at Oliver Wyman, for their helpful insights and review.

2 The views expressed are the author's own and may not represent the views of Oliver Wyman.

3 A 35-year-old is assumed to be invested until age 90 for a total of 55 years. Therefore, the chart tracks individuals who turned 35 in any year between 1928 and 1960, since at least 55 years of return data is available for this cohort.

Figure 1 Rule of Thumb Versus Historical Market Returns

a. Rule of Thumb

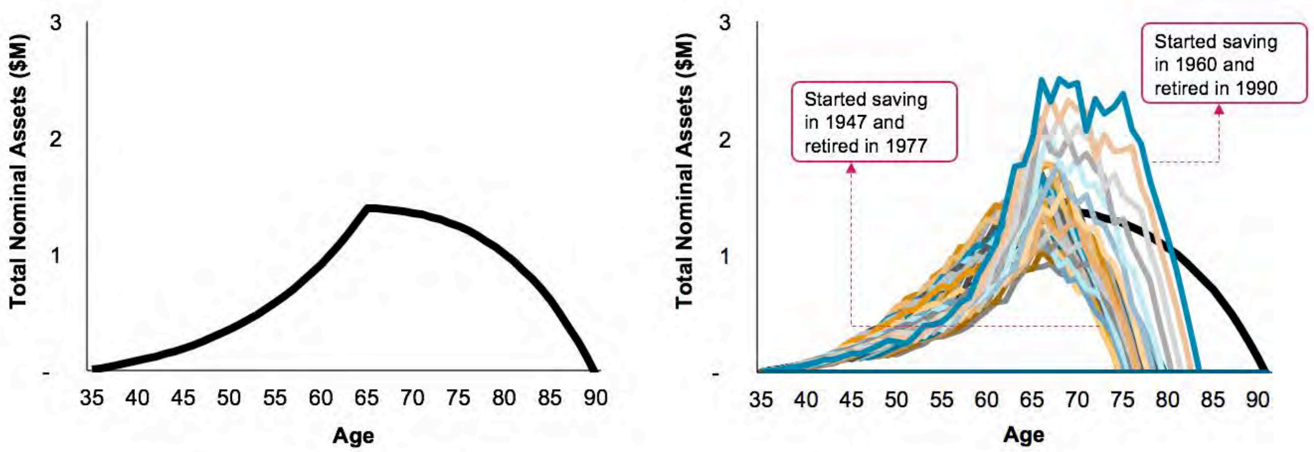
Assuming a 6% real return in the future, a 35-year-old only needs to save 12.5% of annual net income to maintain his current lifestyle until age 90.

b. Historical Market Returns

The best scenario imitates the market returns and inflation rates experienced by someone who started saving in 1960 and retired in 1990. The worst scenario belongs to someone who started saving in 1947 and retired in 1977.

Starting net income at age 35 = $90,000
Savings rate = 12.5%
Nominal return = 8%
Inflation = 2%

Starting net income at age 35 = $90,000
Savings rate = 12.5%
Historical S&P, 10-year Treasury and inflation rates, based on calendar year individual who has reached age 35



Assumptions: Equity (S&P 500) allocation = (105 – age) % rounded to nearest 5%; bond (10-year Treasury) allocation % = 100% – equity allocation. Expenses are assumed to be a constant proportion of income in pre-retirement years. Income and expenses are assumed to increase with inflation rate. Post-retirement expenses are 70% of pre-retirement expenses. Management fee = 1% per year.

Source: Data from U.S. Inflation Calculator, "Historical Inflation Rates: 1914–2016," accessed Oct. 29, 2016, *http://www.usinflationcalculator.com/inflation/historical-inflation-rates*; and "Data," accessed Oct. 29, 2016, *http://www.stern.nyu.edu/~adamodar/New_Home_Page/data.html*.

invested assets is relatively low and there is ample time for investments to recover before retirement. Since it is impossible to predict the future pattern of returns, the author recommends an investor consider lowering the return assumption to between 4% and 5% for purposes of financial planning and correspondingly adjusting other elements of the financial plan (e.g., increasing pre-retirement savings rate).

3. **Future inflation rates are an important assumption in retirement planning.** Although inflation rates are at very low levels and some western economies are even struggling with deflation, having a low inflation rate for an extended period of time is a very recent phenomenon.[4] High inflation rates during retirement years can be quite damaging, as cost-of-living increases force retirees to liquidate more of their assets to maintain their lifestyle. For example, the worst-case time series in Figure 1b involves a saver who retired in 1977 and then experienced inflation rates averaging 10%[5] for five consecutive years. Due to very high loss of purchasing power, the retiree ran out of savings eight years after retirement.

4. **Increasing life expectancies add further complexity to retirement planning.** Since the 1930s, the life expectancy for a 65-year-old has

4 U.S. Inflation Calculator, "Historical Inflation Rates: 1914–2016," accessed Oct. 29, 2016, *http://www.usinflationcalculator.com/inflation/historical-inflation-rates/*.

5 Annual inflation rate between 1978 and 1982 was 7.6%, 11.3%, 13.5%, 10.3% and 6.2%.

increased by seven years[6] in the U.S.[7] Longer life expectancies force retirees to curtail spending to provide for additional years of expenses. Stated differently, an increase in life expectancies augments the risk of retirees outliving their savings or being forced to accept a lower quality lifestyle. To counteract the financial impact of longer life expectancies, investors should consider increasing their pre-retirement savings rate.

Factors Within the Saver's Control

Until now, this article has assumed a saver is targeting a given lifestyle until age 90 based on a pre-determined set of actions, namely 1) a fixed pre-retirement savings rate from age 35, 2) a pre-defined asset allocation (underlying the assumed average market return) and 3) a pre-defined spending pattern post-retirement. However, the four factors presented in the previous section, which are largely outside the saver's control, have a significant impact on future financial readiness. To counteract potential risks or actual negative impacts related to these four factors, an investor should consider three actionable items within his control.

1. **The cost of waiting to save later in life is quite high.** For a given real return assumption, a lower savings rate is required for those who start saving earlier in life. The savings rate at different starting ages required under a 6% real return assumption and under a historic market return assumption defined by the worst-case time series (annual real return of 3.5%) is presented in Table 1.

Table 1 Required Saving Rates

Starting Age	35	40	45	50
Savings rate required under 6% real return assumption	12.5%	16.5%	22.0%	30.0%
Savings rate required under historic market assumption	25.0%	30.0%	39.0%	49.0%

2. **An asset allocation strategy is a very important factor in investment returns.** A range of asset allocation strategies exist, from very active to more passive. Passive asset allocation does not mean altogether ignoring asset allocation; rather, it typically refers to the selection of high-level market benchmarks coupled with minimal future trading activity to maintain alignment with those benchmarks. In other words, passive asset allocation involves investing assets across multiple asset classes or markets without attempting to "beat the market" by picking individual securities. According to a 2010 study,[8] 75% of total investment fund returns are explained by the underlying market movement and 20% of returns are explained by asset allocation. Since 95% of the returns are explained by presence in the market and prudent asset allocation, the benefits of picking individual securities are questionable over a long-term horizon. Instead, an appropriately diversified portfolio with asset allocation targets based on one's personal risk tolerance is the key to maximizing risk-adjusted future returns.

   In the model described earlier, savings was assumed to be allocated to a blend of equities and 10-year Treasury bonds. In reality, the number of available asset classes is significant. Investors should consider diversifying the equity portion into home country, developed market and emerging market equities. Similarly, the fixed income allocation can be further diversified into government bonds, corporate bonds, emerging market bonds and preferred shares. Depending on portfolio size and risk tolerance, the investor can also consider asset classes such as agricultural commodities, land, oil and precious metals.

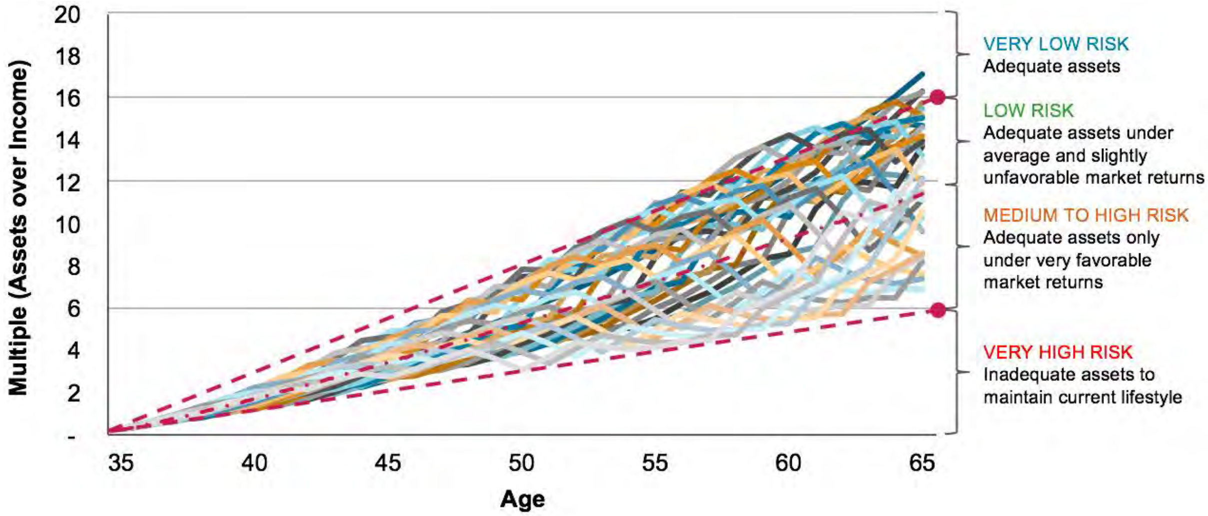
   As discussed earlier, even passive asset allocation is a dynamic process. It is important for an investor to

6 Social Security Administration, "Retirement & Survivors Benefits: Life Expectancy Calculator," accessed Oct. 29, 2016, *https://www.ssa.gov/OACT/population/longevity.html*.

7 Social Security Administration, "Life Expectancy for Social Security," accessed Oct. 21, 2016, *https://www.ssa.gov/history/lifeexpect.html*; Centers for Disease Control and Prevention, "Table 22. Life expectancy at birth, at age 65, and at age 75, by sex, race, and Hispanic origin: United States, selected years 1900–2010," accessed Oct. 21, 2016, *https://www.cdc.gov/nchs/data/hus/2011/022.pdf*.

8 James Xiong, Roger G. Ibbotson, Thomas Idzorek, and Peng Chen, "The Equal Importance of Asset Allocation and Active Management," *Financial Analysts* Journal 66, no. 2 (March/April 2010): 22–30.

Figure 2 Total Assets Relative to Annual Net Income (Retirement Age = 65)



Assumptions: Equity (S&P 500) Allocation = (105 - Age) % rounded to nearest five percent; Bond (Treasury 10Y) Allocation % = 100% - Equity Allocation
- Expenses are assumed to be a constant proportion of income in pre-retirement years
- Post-retirement expenses are 70% of pre-retirement expenses; Management Fee = 1% per year
- Income and Expenses are assumed to increase with inflation rate

Sources: http://www.usinflationcalculator.com/inflation/historical-inflation-rates/ and http://www.stern.nyu.edu/~adamodar/New_Home_Page/data.html

rebalance his asset allocation to predefined targets on a regular basis; this results in diverting capital toward asset classes that have fallen out of favor and away from asset classes that may have exhibited above-average gains and which have an increased risk of correcting downward.[9]

Overall, proper asset allocation and rebalancing promote long-term asset accumulation and financial readiness.

3. **A dollar saved is a dollar earned.** Spending and savings rates and patterns define an individual's lifestyle and, ultimately, his financial readiness. Savings rates and spending patterns will be further discussed shortly.

Measuring Retirement Readiness in Pre-Retirement Years

Using current savings rate as the sole measure of retirement readiness is inadequate as it does not take into account assets already accumulated by the saver. Instead, the comparison of accumulated assets and current annual net income provides a clearer picture of the current state of retirement readiness.

According to Figure 2, a 65-year-old with accumulated assets that equate to more than 16 times his annual net income should be able to maintain his current lifestyle until age 90, even under worse-than-average future returns. Similarly, a retiree with total assets between 12 and 16 times annual net income at age 65 should fare well in the case of average market returns but may have to adjust his lifestyle slightly in a scenario with worse-than-average returns. On the other hand, a retiree with assets between six and 12 times his annual net income at age 65 will only be able to maintain his lifestyle under very favorable scenarios and faces an increased risk of running out of funds before age 90.

9 Ronald Balvers, Yangru Wu, and Erik Gilliland, "Mean Reversion Across National Stock Markets and Parametric Contrarian Investment Strategies," *Journal of Finance* 55, no. 2 (April 2000): 745–72.

Improving Retirement Readiness: Using a Budget-Based Approach to Save Appropriately

Although it is important for all income earners to save adequately for retirement, inadequate savings have an outsized impact on the lifestyles of high income earners. Two drivers are the progressive taxation system and the fact that Social Security payments in retirement cover a higher proportion of expenses at lower income levels in comparison to higher income levels.[10] As a result, it is important for a high income earner to save a relatively larger percentage of his pre-retirement income if he wishes to support his current lifestyle post-retirement; he can do so utilizing a budget-based approach.

Under a budget-based approach, one's pre-retirement net (i.e., after-tax) income is divided into three categories: **necessities**, **discretionary** and **savings**. The necessities category includes required costs for day-to-day living, such as rent, utilities and groceries. The discretionary category includes expenses that contribute to a person's general happiness and well-being such as travel, entertainment and shopping. Finally, the savings category includes funds earmarked for retirement and emergencies. Table 2 shows some examples.

Table 2 Categories for a Budget-Based Approach

Necessities	Discretionary	Savings
Rent/mortgage	Dining out	Money to retire
Utilities	Entertainment	Emergencies
Groceries	Travel	
Transportation	Shopping	
Clothing	Hobbies	
Health care	Gifts	

For a family with above-average income, the author recommends limiting the budget allocated toward necessities to 50% of annual net income. Spending more than 50% in this category leads to a leveraged lifestyle, since these expenses are often fixed in nature (e.g., mortgage payments) and thus difficult to adjust lower in the short term. In addition to increasing risk, high spending on necessities constrains the amount available for discretionary spending and savings. Therefore, keeping these expenses under control directly supports future financial readiness. As income increases, however, this category usually consumes a lower percentage of income and consequently provides an opportunity to increase savings without additional effort or impact on current lifestyle (which is proxied by discretionary spending).

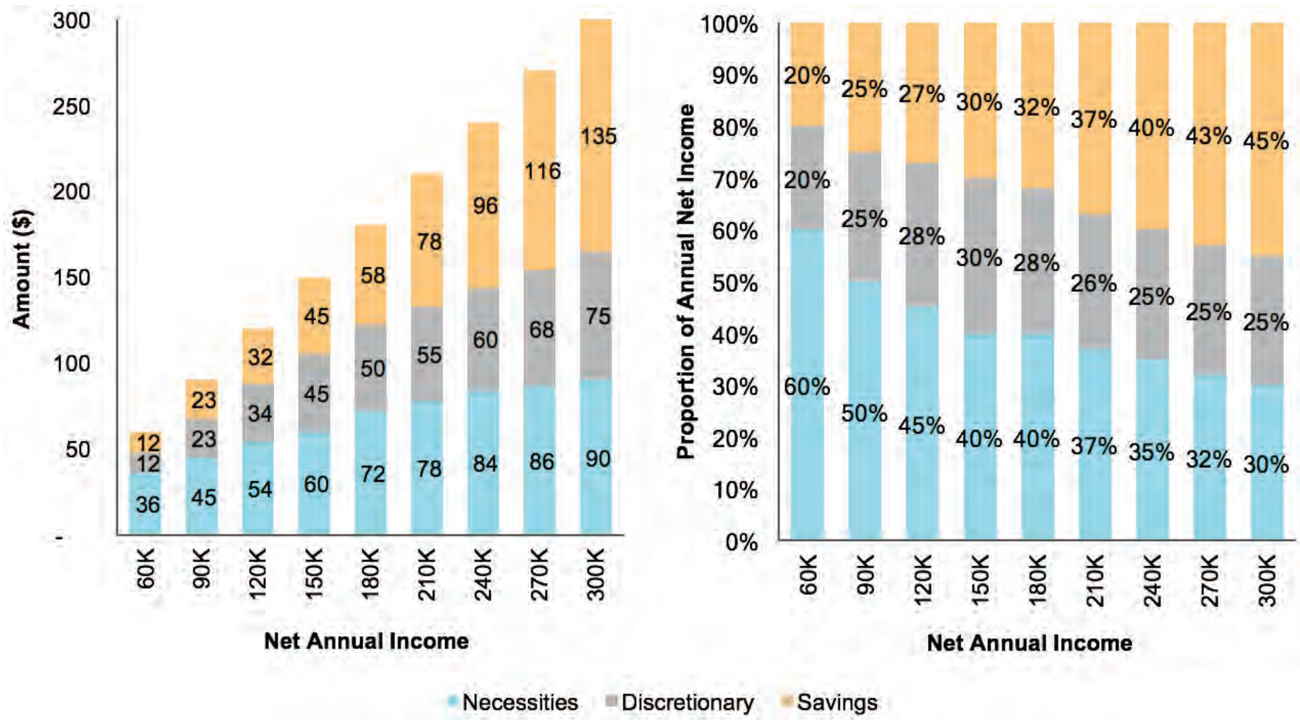
The author recommends limiting discretionary spending to 30% of annual net income, which, when coupled with necessities spending of under 50%, results in a savings rate of at least 20%. For a 35-year-old, a 20% savings rate provides sufficient asset accumulation to sustain his pre-retirement lifestyle until age 90 even under a fairly low real return assumption of 4%. Therefore, 30% discretionary spending allows an individual to enjoy life while still promoting future financial security. Given the typical variable nature of these expenses, spending in this category can be easily adjusted in the near term to adjust for lower-than-expected asset accumulation. However, attention should also be paid if spending in this category dips beneath 15% of income since discretionary spending drives quality of life in pre-retirement years. It provides one with new experiences, improves social interactions with others and contributes to overall happiness.

The proportion of income spent on necessities and discretionary items should be recorded and targeted separately. For example, if discretionary expenses are already beneath 30% of annual net income, it is not recommended to decrease them further to compensate for higher-than-target spending on necessities. The real problem in this case is high fixed expenditures on necessities.

Figure 3 provides a guideline as to what proportion of annual net income should be allocated to each of the three categories under different net income brackets. As income increases, the recommended expenses for necessities and discretionary items also increase but at

10 National Academy of Social Insurance, "How Do Benefits Compare to Earnings?" accessed Oct. 31, 2016, *http://www.nasi.org/learn/socialsecurity/benefits-compare-earnings.*

Figure 3 Amount and Proportion Spent Under Each Category



a lower rate, resulting in a higher proportion of income going toward saving.

The advantage of this budget-based approach is that it creates a more balanced lifestyle by encouraging people to live within their means and having them assess if something is truly a necessity. It also emphasizes a "save smart" rather than "save more" approach by taking into consideration the importance of discretionary spending. By categorizing expenses, this approach creates greater awareness of how income is being allocated and whether an adequate percentage is being saved for retirement.

This approach can also be utilized post-retirement, based on post-retirement annual net income generated from savings.

Conclusion

When it comes to making assumptions about market returns in retirement planning, it pays to be conservative. For example, one might consider planning for the realization of a 4% or 5% long-term real return rather than 6%. In addition, proper asset allocation and rebalancing should be a major consideration during pre-retirement years to maximize risk-adjusted returns. To safeguard against higher life expectancies, market volatility and inflation rates, a higher savings rate should be considered. This rate can, in part, be determined using a budget-based approach, and by comparing accumulated assets to annual net income to measure one's retirement readiness. If assets are deemed inadequate, adjustments in spending and saving behavior should be made.

Retirement planning involves many unknown variables, but the considerations specified in this paper provide a framework that can be leveraged to achieve a balanced lifestyle in pre-retirement years and financial freedom in post-retirement years.

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Don’t Forget the Role of Families in Lifetime Financial Security

Anna Rappaport

As we consider financial wellness, we should be sure to focus on issues that tend to be downplayed or ignored. For many Americans, the extended family plays the role of sharing risk and supplementing (or even taking the place of) personal savings and formal risk management. For other Americans, there are few (and sometimes no) family members available to help.

I want to encourage greater consideration of issues related to family support in retirement planning and other lifetime financial security matters. Some key questions to think about follow.

- What is the role of the family in serving as a financial safety net?
- How can one tell if the family is likely to be supportive?
- What is the role of the family in helping those who have grown old and are now incapable of managing their own affairs?
- How much intergenerational support is there between seniors and younger family members? In what direction?
- Are family financial help and other support roles adequately considered in planning?
- How does it affect financial wellness if the family is not considered?
- Are blended families different? Do they have special issues?
- In couples, what is the impact on the caregiving spouse when the other member of the couple needs support? What later happens to the survivor?
- What should people without family do?
- What are the differences by gender?

We have clues about the answers to some of these questions. Many remain unanswered, however, so there is a need for further research. At a minimum, it would be useful to develop a process to do a family analysis to understand both the possibility of future help and likely future requests for help.

What Seniors Want and Expect

In 2015, the Society of Actuaries conducted focus groups[1] with individuals retired 15 years or more. Two years earlier, focus groups were conducted with more recent retirees. The 15-year plus retirees said they did not want to rely on their children for support, but some of them saw children as possible support and a resource to fall back on. My impression is that seniors do not plan on having children help them, and many work hard to avoid it, but at the end of the day, children and other family members typically offer a substantial amount of help.

One of the major topics of the 2015 focus groups and risk survey was shocks and unexpected expenses. One of the most frequently mentioned shocks was children needing help. This was also one of the shocks that was most difficult to manage, possibly because help was needed over a longer time. Many of the participants did not do a good job of planning for the unexpected. Also note that many Americans are not prepared to handle even a modest unexpected expense. The data on family financial help shown in the next section, however, indicates seniors are providing much more financial help to children than vice versa.

What Americans Say About Family and Retirement

“The New American Family” study[2] documented the sense of responsibility Americans feel for aiding family members who need help. This study surveyed adults age 45 to 80 and focused on understanding whether there were differences by family type. It found that half of the

1 Greenwald and Associates, “Post-Retirement Experiences of People Retired for 15 Years or More: A Report on Twelve Focus Groups and Fifteen In-Depth Interviews in the United States and Canada,” Society of Actuaries, January 2016, *https://www.soa.org/Research/Research-Projects/Pension/2016-post-retirement-experience-15-years.aspx.*

2 MetLife Mature Market Institute, “The New American Family: The MetLife Study of Family Structure and Financial Well-Being,” study in partnership with the Society of Actuaries’ Committee on Post-Retirement Needs and Risks, September 2012, *https://www.soa.org/research/research-projects/pension/research-post-retirement-needs-and-risks.aspx.*

respondents with adult children have provided them with financial assistance, and a fourth of respondents expect children to help retired parents in need. The study looked at issues related to blended families and found that couples in first marriages were better off financially. However, the results did not show any clear differences in support between first marriages and blended families. Big differences in support were found between couples and single individuals.

Merrill Lynch in partnership with Age Wave conducted a survey[3] of the link between retirement and family issues. They found strong links and introduced the idea of a **family bank,** defined as the household that family members most often turn to for help. Of respondents age 50+, 56% held the belief that there is a family bank in their family. That study indicated 62% of people age 50+ are providing financial assistance to family members. It can be one time, ongoing or something in between. The families providing such support are generally not factoring it into their retirement plans. Therefore, they may be underestimating their retirement spending requirements.

The study shows that among respondents age 50+ who provided money to family members in the last five years, recipients were:

Adult children (21+)	68%
Grandchildren	26%
Parents/in-laws	16%
Siblings	13%
Other relatives	14%

Some families help people in more than one group.

Among the individuals who were age 50+ and provided family financial support, the average amount of family help in the last five years was $14,900, and this varied by the individual's amount of investable assets.

Respondents age 50+ who had provided family support in the last five years were asked for what reason: 80% said it was the right thing to do, 50% said they thought it was a family obligation, and 15% said they had been helped in the past. The age 50+ pre-retiree respondents also indicated they would be willing to make "retirement sacrifices" to financially support family members: 60% said they would be willing to retire later/work longer, 40% said they would be willing to work after retirement, and 36% said they would be willing to have a less comfortable lifestyle in retirement.

The Merrill Lynch study states, "Unfortunately, very few people have prepared financially for potential family events and challenges." The study indicates 88% have not budgeted or prepared for providing financial support to others and 91% have not prepared for caring for an aging parent or relative.

Society of Actuaries post-retirement risk research is generally compatible with these findings and has consistently shown that many people do not plan for the longer term. When these results are looked at together, it seems likely that, in many cases, the implications of potential future family support are not carefully considered.

Financial Transfers

There is more research on family transfers. The Employee Benefit Research Institute (EBRI) discusses family transfers in a 2015 *Issue Brief*.[4] This is an analysis of Health and Retirement Study[5] longitudinal data. The EBRI report shows that 38% to 45% of older households make cash transfers to younger family members vs. 4% to 5% of older households that receive transfers from younger family members. The cause of the transfers is not identified. The older households are age 50+ and analysis covers 1998 to 2010. Table 1 shows the percentage of households making transfers to children and grandchildren and the amount of transfers by age group in 2010.

3 Merrill Lynch, "Family & Retirement: The Elephant in the Room," study in partnership with Age Wave, 2016, *https://mlaem.fs.ml.com/content/dam/ML/Articles/pdf/family-and-retirement-elephant-in-the-room.pdf.*

4 Sudipto Banerjee, "Intra-Family Cash Transfers in Older American Households," *EBRI Issue Brief* 415 (June 2015), *https://www.ebri.org/pdf/briefspdf/EBRI_IB_415.June15.Transfers.pdf.*

5 The Health and Retirement Study is a national longitudinal database of people at ages over 50 sponsored by the National Institute on Aging. It examines the period leading up to retirement, how they retire and their lives in retirement.

Table 1 Intrafamily Cash Transfers by Older American Households

Age Group	% Making Transfers	Average Amount	Average: 2nd Income Quartile	Average: Top Income Quartile
50–64	51%	$16,272	$7,411	$27,378
65–74	39%	$13,639	$7,784	$21,072
75–84	33%	$14,704	$9,849	$22,864
85–over	28%	$16,836	$13,474	$24,601

Note: Average amount is average transfer in last two years by households making transfers in 2014 dollars. Averages are shown for all households, and for second and top income quartile.

Source: Sudipto Banerjee, "Intra-Family Cash Transfers in Older American Households," *EBRI Issue Brief* 415 (June 2015).

Transfers are more likely in higher asset and income families, and the amounts are larger.

The 2015 SOA post-retirement risk research, both surveys and focus groups, reinforced these results. One of the major shocks and unexpected expenses experienced by the respondents was transfers of assets to children (and presumably grandchildren). The focus groups indicate the shocks were primarily in response to some sort of "problem"—a child had a major illness, lost their job, got a divorce and so on. These payments were one of the shocks that had a lasting impact and were often not dealt with well. My impression is the parents believed it was very important to help children when there was a need even if they could not really afford it.

The Family and Long-Term Care

The transfers discussed earlier do not include the value of help provided by family members, or the reduction in earnings or retirement savings experienced when help is provided. The vast majority of long-term care is provided informally at home, very often by women. The price to the caregiver of providing care is extremely high, but, in many cases, it may not be recognized. One study has estimated that the individual who provides caregiving for aging parents loses a lifetime average of more than $300,000 in wages, retirement benefits and Social Security benefits.[6] In married couples, the caregiver is often the wife. She then may be left as a widow without a spouse to care for her, and with family assets having been depleted due to her husband's care needs.

The Merrill Lynch study asked respondents age 50+ about their top choice for receiving long-term care, if needed. The majority, 86%, indicated their top choice was in their own home, 10% in an assisted living facility, 2% in a family member's home and 2% in a nursing home.

The SOA conducted in-depth interviews with caregivers of people retired 15 years or more and needing long-term care.[7] These interviews reinforced the huge impact of providing care on the caregiver.

Divorce and Retirement Security

The SOA focus groups found divorce after retirement was one of the shocks retirees could not recover from easily. The Merrill Lynch study points to the increase in **gray divorce,** or divorce among older adults. That report states that 14% of people age 50+ who were once married are now divorced and single, up from 2% in 1960.

Many studies show that couples are much better off than singles in retirement and widows are often better off than divorced individuals. It seems likely that most families do not have enough resources to provide adequately for both parties after divorce, and retirement security is often not at the top of the list of items to be considered in divorce. My view is that women are less likely to remarry after divorce, and if they spent earlier years more focused on the family than on financial security, they may pay a heavy price after divorce.

Special Issues Later in Life

Children are particularly likely to be called on to help as parents age. The chances of cognitive and physical decline are greater at the high ages. Research underway with later-in-life individuals (85+) shows not

6 Sandra Timmerman and Anna M. Rappaport, "Often Overlooked Issues in Retirement Planning: How Family Caregiving and Living Arrangements Relate to Long-Term Care," *Retirement Management Journal*, 6, no. 1 (summer 2016).

7 See Greenwald and Associates, "Post-Retirement Experiences of People Retired for 15 Years or More."

only informal support being provided, but a major role for family members in helping their elders manage their finances day-to-day. Interviews with people in assisted living and in their 90s showed that children were playing a heavy role in helping their parents manage their finances. This work needs to be supplemented by more extensive research.

Even when children are not providing hands-on care, they may be called on to help in different ways. When couples are both present, one may be able to help the other, although some couples also need additional help. Single individuals including widows are more likely to need help. Widows are heavily represented in the 85+ population. Research is needed about how people without family members are getting similar help, and what role neighbors, churches and so on are playing.

Consequences of Failure

Many, but certainly not all, people will step up to help family members when help is needed. While some may plan to do this, it appears that such help is more often provided without pre-planning.

Of the families who have become the family bank, some will have adequate resources, and there is no particular impact on their retirement security. But for many others, giving family help may drain their resources and leave them in a worse or even very difficult situation for retirement. This is potentially a huge problem for people who are involved in long-term caregiving requiring them to give up a job or reduce hours, and for people involved in long-term family support. For people not planning long term, the consequences of some of these decisions may not show up until much later.

A Family Analysis

A family analysis should include a listing of parents, siblings and children (and maybe others), together with some evaluation of who might be able to help and who might request help, with any notes about potential magnitude. Help can be with management of medical care, shopping, errands, household chores, household management, hands-on care, financial management and/or financial help. If people need to move because of diminished capacity, they may need help moving and/or cleaning out their earlier residences.

Conclusion

Over people's lives, help from family members can be an important source of support. Many people may also need/want help from family. Data from several sources indicates that many more older adults provide financial help to younger members of the family than vice versa. Data was not provided about caregiving, but most likely younger family members offer more caregiving and household assistance to older family members. (This discussion does not consider raising children.)

People without families need some of the help that family members offer. They have the challenge of finding help or figuring out how they will manage.

Planning usually does not take into account the potential for family help across generations. Nor does it take into account the added challenges for those without family. Financial wellness programs should help people to understand and focus on issues of importance, and give them information to help them address these issues. I recommend providing information on family as part of such programs as well as information on considering other support. These issues have become increasingly important as employers reduce their support for employees. Communication between family members is critical to success and the wellness programs can stress that issue.

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Practical Issues in Financial and Life Management for the Late-in-Life Population

Anna Rappaport and Sally Hass

Financial wellness is an idea promoted with support from many employers as well as financial service companies. But there is a group often forgotten is these efforts—those in the last years of life. These issues have become more important recently because the population age 85 and over is growing.

Society of Actuaries Committee on Post-Retirement Needs and Risks (CPRNR) research shows big gaps in planning and a failure to focus on the long term, leaving open the big question of what will happen to people as they reach ages over 85 and whether things will fall apart.

If we start at age 85, most people will live a few years and some will live 15 to 20 more years. There are critical questions for those who are late in life but may have several years of life left, including:

- How do we ensure our assets last?
- What kind of help will we need and where do we find it?
- If we are unable to manage our finances, what should we do?
- How do we recognize when we are starting to have problems dealing with our lives?
- Will we have cognitive problems? Mobility problems? Increasing health challenges?
- How will we pay for health and long-term care?
- Where should we live?
- Should we move into senior housing? If so, when? Can we afford it?
- If the partner who does the most to keep things together becomes limited, what do we do?

Think of these issues as a mosaic. While some of them are part of traditional retirement planning, some are often overlooked. Assistance with management of finances and general support are considered once needed but not in longer-term planning. They raise substantial issues for multiple generations in the family. This essay brings together personal experience and research about the very old and fills in some parts of the mosaic. It specifically focuses on the issues of help and financial management. The essay is strongly focused on recommendations to prepare for this period and considers people planning for themselves and their helpers, most often their children and other supportive family members.

Context and Basic Assumptions

From living arrangements to legal issues, there are many factors to keep in mind as we think about these concerns.

CHANGE LATER IN LIFE

There do not appear to be any specific changes related directly to a specific age. However, many more people need help at the older ages. Many people will have experienced cognitive or physical decline. The percentage of people who have experienced decline is much greater at the high ages. Examples of common types of physical decline include loss of mobility, balance problems, slowing down, hearing loss and sight limitations. People who are not sick may still experience significant decline.

LEGAL ISSUES

Legal documentation and instructions lay the foundation for some help.[1] However, practical advice is provided in this essay assuming wills, powers of attorney and trusts, if they are used, are in place. It is assumed the individual has an attorney, and worked with an attorney to write a will and set up powers of attorney designating helpers for both financial and health care issues.

1 Additional legal issues beyond the scope of the essay, but that affect the 85 and over population, include court-appointed guardians when people are unable to function and have no designated helpers, and Adult Protective Services to safeguard seniors from abuse. When financial institutions suspect abuse, they should call on these services.

TYPES OF HELP NEEDED

Some people experience a period of decline at the end of life but others do not. There is a huge range in the types of help needed and the period it is needed for. Aid may be needed for many years and some of the help requires expertise and/or physical strength.

Once there is cognitive decline or a significant medical event, everything changes. Unmanaged cognitive decline can be very messy and bad things may happen before the situation is recognized. This can severely deplete assets before a helper assumes a major role.

In addition to assistance with household tasks, transportation, shopping and physical tasks, financial management assistance includes support with daily tasks like bill paying, as well as advice about decisions and managing investments. In some cases, the helper becomes the effective decision-maker. Help with daily money management is different from the services generally provided by financial advisers.

Couples may find that one person experiences decline and the other can help and assume a greater role. In other cases, couples both experience decline and both need assistance. Single individuals including the survivor after one member of a couple dies are most likely to need aid.

MAKING AND SUPPORTING DECISIONS

Helpers perform some well-defined tasks and others that are more ambiguous. It is desirable for people to communicate with their helpers their wishes about financial management, health decisions, giving gifts and distribution of property. The helpers need to hear from those they are assisting about their philosophy and rationale and what they want. The helpers also need to be supported by others who may not like the decisions made. The ability to make decisions may gradually change, or there may be a sudden event, leaving the helper without further guidance.

ATTEMPTED FRAUD

The elderly are often targeted by fraudsters, but they are not the only target. In this day of electronic fraud, everyone is a target. Fraudsters are knowledgeable about opportunities and people who are more vulnerable. People helping others need to be alert and prepared. Family members can also take advantage of those in need. Care is necessary in choosing and watching over helpers as they too can be involved in fraud.

FAMILY ISSUES

Where there are multiple children, usually one or two of them (often not all) are chosen to manage for the parents. The issues are more complex in blended families, particularly when there are children from prior marriages.

The burden of caretaking may not be spread equally. Some family members will be far away from those who need assistance. Some will not want to help. And many baby boomers will work to later ages than the group before them. Some of these families had children quite late. For some, it may be very difficult to spend large amounts of time helping older parents while they are still raising children and working.

PREFERRED LIVING ARRANGEMENTS

Most people prefer to stay in their own homes, but this can become very complex and expensive.

Findings From our Experience and Investigation

After all of the legal documentation is in place (and even if it is perfect), there remain practical challenges. Our ideas focus on helping things go smoothly and on removing barriers.

MONEY MANAGEMENT PRACTICES AND HELP

- People living independently without significant cognitive difficulty often continue their prior money management practices as they age.
- People in assisted living need more support and very often get help with money management. Family, very often children, are frequent helpers. Family members are not necessarily well qualified to assist.
- There are professionals who specialize in daily money management and bill paying. Some of them specialize in working with elders. We have no evidence about how often such services are used.
- Financial advisers who helped at an earlier age are often but not always continued later in life. When adult children do not work with the same advisers as their parents, the children may encourage a change.

PRACTICAL ISSUES AND PROBLEMS

- Serving as a trustee on a personal trust or as a helper in a different role can be a difficult job even if the paperwork is perfect. Many families have disagreements, creating challenges.
- Oversolicitation by charities is common and potentially a form of abuse. Helpers may have a role in controlling contributions.
- Some older individuals are approached by family members and others for gifts and loans. Such requests can be a thorny issue, particularly for family members who are helping their older relatives.
- Some people have secret lists of assets and/or debts they do not expect to reveal when they turn over information about their finances. The helper needs assurances that they have the entire story.
- Powers of attorney and living wills need to be available at the right time. But even then there may be practical challenges in dealing with them. Powers of attorney can also be abused.
- Problems can occur when the family is in different locations.

TRANSITIONS

- When a family member is having problems but does not want to transition responsibility, it can get quite messy. The potential helper and others may start to recognize the issues, but it may not be easy to move forward.
- Any of the people involved may be in denial, making the transition much more difficult.
- Transitions can be fuzzy and can lead to things falling through the cracks. The transition is a time when there is a hand-off of responsibility for duties such as managing investments, taxes or day-to-day finances. Transitions may occur in stages.[2]
- In couples where one has handled all the finances, there can be a mess when that person is no longer able to function.
- When an adviser realizes the client seems to be having problems, it can get quite messy. There is a process to handle this, for example, designating a person the adviser can contact if they need to talk issues over. Some firms have a process in place for this. This may use a form identified as "In case of emergency."[3]

FAMILY ISSUES

- There can be resentment and difficulty over tangible belongings, regardless of whether they may have a lot of economic value.

Tips for Family Members who May Serve as Helper

Planning can anticipate changes later in life to varying degrees. The job of helper can be made much easier when the person being helped discusses their wishes and works with the helper to avoid practical problems. It will probably smooth the way if the person to be helped:

- Engages in discussions now with the expected helper and other important family members, either as a group or individually to determine if there are pre-existing issues or ill will regarding their support, care and estate plan
- Discusses preferences with regard to gifts, charitable contributions, disposition of personal property and health care
- Provides guidance about where the helper can seek confidential guidance and support if there is a conflict
- Offers the helper access to all advisers and an introduction before the time help is needed

The transitions will probably be easier if there has been advance discussion of the conditions that would trigger transition, and some documentation. This is particularly important because denial is a common response at the point a transition is desirable.[4]

2 For an example of a gradual transition of financial responsibility and the triggers for each step along the way, see the case study in Anna M. Rappaport, "Improving Retirement by Integrating Family, Friends, Housing and Support: Lessons Learned from Personal Experience," *Managing the Impact of Long-Term Care Needs and Expense on Retirement Security Monograph*, Society of Actuaries (2014), *https://www.soa.org/Library/Monographs/Retirement-Systems/managing-impact-ltc/2014/mono-2014-managing-ltc.aspx.*

3 This issue was discussed at the 2016 Pension Research Council Conference. See Anna Rappaport and Monica Dragut, "Financial Decision-Making and Aging: Observations About the 2016 Pension Research Conference," *Pension Section News* 90 (September 2016): 50–54, *http://pensionsectionnews.soa.org/?issueID=10&pageID=51.* Another option is going to Adult Protective Services, but that is usually a second choice.

4 Some possible triggers for transfer include an individual being unable to maintain and balance their checkbook, failure to send in documents on a timely basis and unpaid bills when the individual previously always paid on time. An anecdote mentioned in an SOA committee discussion was that the individual's father was suddenly unable to determine the tip on a restaurant bill.

Tips for the People Needing Help

Getting legal documents in place is a first step. Next is to decide how much is to be communicated and when. Some people prefer not to communicate too much to the family until the time for help is very close. There is a trade-off between privacy and smoothing the situation once assistance is needed. Sometimes one knows help is needed now, and, in other situations, one does not know when it will be needed. There can always be a sudden event that triggers the need for support, such as an accident or a stroke.

In families with multiple children or relatives interested in the situation, there is significant potential for conflict. The person who will get the help can reduce the potential for future conflict by what and how they communicate. The more one does to specify what one wants, the less potential for conflict. Specifying the distribution of tangible property (or giving it away earlier) reduces one type of conflict. It is also important to communicate about any promises made.

Communicating to all of the children what authority and instructions have been granted to the person offering the help can also be of benefit, but sometimes it will not. Setting limits on gifts and communicating them can also be useful.

Communication to the helpers is very important. Full disclosure of assets and liabilities, legal documents, safety deposit box contents and key locations, and the location and combinations of safes are a start. Wishes with regard to charitable donations and gifts are also important, as are wishes with regard to health care and health care decisions.

In spite of the best efforts to keep things peaceful, it might not work. It is useful to identify in advance an adviser to the designated helper if a sounding board is needed.

Conclusion

Our society is experiencing substantial growth in the age 85+ population and this will continue for a long time. Some people will live a long time at this life stage, creating new challenges for families and our society. More focus is needed on practical issues and useful solutions for life challenges at very high ages. Solutions need to consider the diversity of family situations including people with and without partners, people with and without children, and those without access to any family helpers. Financial wellness programs can be used to help people improve their personal solutions.

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Personal Risk Manager:
Driver of Resilience

Max J. Rudolph

Today's wealth manager is part friend, part psychologist, part insurance expert, part investment expert. The list seems to go on forever. Whether a client is considering filing for Social Security benefits or buying a long-term care policy for parents, the wealth manager has historically been the go-to person for advice. For years, family wealth offices served the needs of the affluent, but today these services are vital to many below the top tier of income earners. Personal risk managers are prepared to perform these duties.

Financial wellness is a squishy marketing term that lacks definition. Each person is unique. A homeless person's goal is to secure food and shelter, while circumstances differ greatly for those living at the poverty line, in the middle class and those lucky enough to be in the "1 percent." This essay's required length does not allow time to consider many of these situations and so will focus on those fortunate enough to have savings for retirement.

Some families have the internal expertise to address many of these issues on their own and need only to bring in experts for a few topics. Others choose to outsource the entire role to a family office and want to be sure they can trust this team of experts. Most can benefit from an unbiased external perspective.

The role of a personal risk manager is to lead this team of experts (or provide peer review), building resilience for an individual, a couple, a family, even an extended family or group of families. The goal is to develop plans that bend but don't break during periods of adversity and stress, and be proactive about risks likely to impact the client in the near term but also have a vision that looks out far enough on the time horizon to see potential emerging risks.

Human emotions are a core part of our life experience, but there are times we should pause to ponder options rather than follow our instinctual flight response. The personal risk manager allows us to overcome our personal cognitive biases. Don't be afraid to seek help!

Margin of Safety

Many wealth advisers ask clients to estimate their needs in retirement and back into an accumulated amount that is likely to last for their expected lifespan, generally until a couple is 80 to 90 years old. The default is often to generate income as a percentage of final salary. Each situation is unique, but there are many sources, and uses, of income that might be considered in addition to this oversimplified technique.

An investor might think of this as getting a return on investment, while most others would consider it part of normal life. We often fall into events, but those who think proactively about scenarios, making periodic adjustments, tend to "make their own luck."

Proactive analysis leads naturally to what value investors refer to as margin of safety. For example, some nationally branded wealth advisers talk about calculating a "number" as if this is the ultimate goal. A personal risk manager can calculate such a target, periodically monitoring progress toward goals and objectives, but conservatism and personal preferences need to be built in.

Instead of trying to reach a single number, why not set a redundant goal driven by 120%, 150% or even 200% of the target? Instead of trying to save $1 million, build a margin of safety by extending the goal to $1.3 million. The additional hardships are minor, and the journey more likely successful, especially if encouraged to start early in life. This could be a qualitative assessment or use sophisticated techniques and metrics like conditional tail expectation (CTE), moving from 50% likely success (50/50 odds) to 65% or even 95%. The "right" number is one that allows you to sleep at night.

A personal risk manager can create a flexible game plan using a simple spreadsheet, considering possible expenditures like health care, retirement savings, college, vacations, second homes and nursing home care. This process combines a budget for today with savings goals and conservative returns. By building in a margin of safety, it is more likely the original goals will be exceeded. Assumptions can be regularly updated, perhaps every five years early in a career and more frequently within the last 10 years before and during retirement.

The entire plan should be reviewed, not just asset accumulation progress. Has there been a change in family health status, a divorce or marriage, a change in the family structure, a change in employment history or some other change that impacts frequency and severity of future events? Perhaps future needs have changed. For example, a parent has died, or an adult child with their own children becomes disabled. Tell a family story through scenarios. What could go right and require extra funding (e.g., medical school, long lifespans) or wrong (e.g., drug dependency, early death)?

Unearned Income

Income during retirement can come from many sources, including defined benefit plans, Social Security payments, investment income, release of qualified assets (like IRA, 401(k) and 403(b)) and so on.

One way of looking at asset accumulation is to consider its flip side: expected income. The investor adds up anticipated unearned income from things like bond coupons, retirement income, real estate income and dividends from stocks. This can be especially useful when close to retirement and the potential retiree is trying to determine if they can afford to fully retire or if a part-time job or extra year(s) in their current job are necessary.

For those close to having enough accumulated to live exclusively from income, it is extremely comforting to see how much cash is expected to come in each year. Of course, stock dividends are not guaranteed but they often grow, reflecting the upside of volatility risk. Retirees are also finding out their defined benefit income streams may not be guaranteed.

Conservatism is built in by ignoring a drawdown of assets, thus providing an initial scenario for those who would like to leave an inheritance or charitable gift.

Retirement Benefits

Only by considering various scenarios can someone eligible for Social Security or a defined benefit stream decide what is best for them. You and your employers make a lifetime of payments into the system, but you only get one chance to get it right when it's time to choose a payout option. And it becomes more complex if there is a spouse involved (special rules apply for divorcees, widows, parents of minors, etc.).

Running scenarios, looking at expected and cumulative benefits (with/without discounting), and merging them with other income streams can provide comfort or a wakeup call for how realistic retirement plans are. A personal risk manager will consider a variety of scenarios and can impartially help someone think through these options and choose one that meets their needs.

Tradeoffs

Families today are faced with many choices. The goal is to make them consciously and not by default. It may be best for your extended family to support children well beyond their college years, but there is a price to be paid. It may mean sandwich generation members will be more likely to live with their children during retirement than their parents were. It's all about tradeoffs. High student debt and an increasing likelihood of outliving assets in a nursing home is uncharted territory. Buying that condo in Mexico, building a McMansion or taking an annual cruise is fun now but may have financial repercussions later in life.

Decisions already made are sunk costs, water under the bridge. Today's decisions have consequences. Small amounts of saving now, like small amounts of exercise, build up geometrically using the power of compound interest. There is no time like the present to start.

Nudges

The human experience includes cognitive biases (e.g., confirmation bias, overconfidence, hindsight bias). Being aware that we are not perfect and viewing decision-making in this light can help us avoid these influences. We know that recent events have a larger impact on our choices than is warranted. Knowing a favorite aunt recently entered a nursing home or that a large earthquake occurred close by makes us think future likelihood for those types of events has increased.

Behavioral finance is the study of these biases, and self-analysis can leave your family in better shape. A school cafeteria might put apples at the checkout to encourage, or nudge, students to eat healthy. Your 401(k) plan may default to a contribution rate of 3%, investing in the stock market, rather than the historical defaults of 0% and cash. We often need more incentive than someone placing a treadmill where it is easy to use. We need to make it a habit to save. It is the most important component of a retirement plan.

Solutions to Consider

It's not easy to make choices that lengthen our healthy and productive lives, but habits formed early in life can have lasting value. It is never a better day to quit smoking than today, and the same is true with exercise and adding to your financial knowledge. Not everyone needs to get a degree in economics, but everyone can take the time to understand the drivers behind the tax system and how compound interest works. For those without the time or passion, personal risk managers and their team of experts are waiting to help. These teams are especially valuable during life events that make it hard to think straight.

Individuals should include the value derived from their immediate family's human capital in this analysis. This calculates a dollar value on future employment. Future earnings are driven by education, number of family members in the workforce and expected health of workers. Families already do this qualitatively when setting budgets based on current income. This analysis should anticipate longer employment time horizons.

When life events occur, make conscious decisions about what is best for your family. If you go back to school while children are young, will this add income in the long run, and will it overcome the time lost with children, spouse and friends? Will a promotion that requires extensive travel be worthwhile? This exercise is a cost/benefit analysis for a family, with personal as well as financial outcomes considered. Momentum choices, made by default, often lead later to second thoughts and poor decisions. Following the herd is easier than considering and making tough decisions, but may not be the best option in the long term. Buying every new technological toy that comes out is fun now but, if it comes at the expense of saving, it can have a large impact on quality of life in the long run. Life is a complex adaptive system, and ongoing tradeoffs impact results later in life.

External Stakeholders

Government has a role in choices made. Regulations and laws can change over time. Employers play a role. Defined benefit valuation models should consider the limited lifespan of a business and use conservative return assumptions. Health care and how to finance it is always a challenging topic. In the long run, knowledgeable individuals and families who are accountable and consider scenarios will make the best decisions for their unique situation.

Conclusion

The key to a happy financial life is to make the individual/family accountable, giving them the tools and knowledge to make good decisions. These tools are often qualitative rather than quantitative, although rules of thumb tend to be based on more complex analysis. Keeping it simple is OK, and overthinking the multitude of potential scenarios just keeps you up at night. Focusing exclusively on today's enjoyment has potentially adverse consequences that may lead to big family households, as parents move back in (often needing care) and children never move out. Recent generations may be the aberration; multigenerational households may be the natural way of life. A large family unit has many positives, from lower expenses to the emotional support only family can provide. The key is to make these choices proactively based on what is best for you and your family. A personal risk manager can facilitate this discussion, considering longer time horizon risks like climate change and technology that have both positive and negative outcomes depending on choices made.

If your goal is to become independent of social and family safety nets, choices regarding education and saving early in adult life are keys to success and provide a margin of safety with respect to realistic goals. Taking care of today's needs, and proactively deciding which of today's wants can be satisfied without jeopardizing future needs, puts an individual on a strong path to success. There will be plenty of bumps in the road. Anticipate them. Provide a margin of safety in your goals so you can maneuver and avoid getting caught in a downward financial spiral. Being your own personal risk manager, or hiring someone to help you review choices, gives you flexibility toward your own financial wellness, building resilience through redundancy and conscious choices.

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Practical Insights Into Financial Wellness

Zenaida Samaniego

In a U.S. employee financial wellness survey,[1] top concerns among 30% to 50% of those surveyed include having emergency funds for unexpected expenses, being able to retire, meeting monthly expenses, being laid off, keeping up with debts, paying for college and losing one's home.

Effectively managing these concerns is a hallmark of financial wellness. To summarize the U.S. Consumer Financial Protection Bureau (CFPB), financial wellness is a state of being wherein you

- Have control over day-to-day, month-to-month finances
- Have the capacity to absorb a financial shock
- Are on track to meet your financial goals
- Have the financial freedom to make the choices that allow you to enjoy life[2]

What drives financial wellness? In one South African[3] study of household financial wellness,[4] key factors include education, employment, marital status and housing. For example, 75% of the financially sound households (top 28%) completed secondary education, 65% were gainfully employed and 54% were married. For the financially distressed (bottom 4%), 42% attained primary education, 16% were employed, and 29% were divorced, separated or widowed.

Wellness in General

If the drivers of financial wellness sound familiar, let us consider how they apply to general well-being. Consider also that good health is just as essential to financial wellness as it is to one's well-being. And like good health, financial wellness is a common goal shared by family, employers, professional advisers and service providers, local and national government leaders and policymakers. Both drive personal success and security, as well as productivity and economic growth that benefit society in general.

In this essay, we will allude to and draw comparisons with good health practices, as the latter contribute to general wellness, and explore practical considerations that can similarly apply to personal financial wellness.

What drives health fitness? In a recent report on the American Fitness Index,[5] the "AFI reflects a composite of personal health measures, preventive health behaviors, levels of chronic disease conditions, as well as environmental and community resources and policies that support physical activity."

Yet health literacy, like financial literacy, rates poorly in many countries, and remains elusive even for most Americans. As such, they are a major concern in our political, economic and social systems.

Knowledge is Power

Significant research has been done to date on these causes and their impact on wellness. However, it would appear that individual education is core and foundational to one's wellness, from either a financial or health perspective—from any other perspective, for that matter.

One's education starts at home, as early as birth, where building blocks begin to form. Learning in school is aimed to cultivate the mind and expand knowledge to prepare one to step out into the world.

1 PricewaterhouseCoopers, "Employee Financial Wellness Survey: 2015 Results," April 2015, *https://www.pwc.com/us/en/private-company-services/publications/assets/pwc-employee-financial-wellness-survey-2015.pdf.*

2 Janneke Ratcliffe, "Four Elements Define Personal Financial Well-Being," Consumer Financial Protection Bureau blog, Jan. 27, 2015, *http://www.consumerfinance.gov/about-us/blog/four-elements-define-personal-financial-well-being.*

3 The author is not aware of a comparable study in North America on household financial well-being.

4 Momentum/University of South Africa (UNISA), "SA Household Financial Wellness Index: 2014," report, 2015, *https://www.momentum.co.za/wps/wcm/connect/momV1/dcf4f61a-7d75-44be-8977-3f76a7863b33/momentum-unisa-household-financial-wellness-index-2014-full-report.pdf?MOD=AJPERES.*

5 American College of Sports Medicine (ACSM), "Actively Moving America to Better Health: 2015 Health and Community Fitness Status of the 50 Largest Metropolitan Areas," *ACSM American Fitness Index 2015*, May 2015, *http://www.americanfitnessindex.org/wp-content/uploads/2015/05/acsm_afireport_2015.pdf.*

Learning does not stop after graduation. There is so much knowledge out there that continues to whet one's curiosity and encourage one to improve on what one already knows. "Lifetime learning" provides additional benefits to those who actually practice it, by continually engaging, challenging and stimulating the mind, especially at a time when one's cognitive ability tends to wane with advancing age.

As stated earlier, education is foundational for general wellness. A "successful education" particularly in the areas that have real-life applications generally lead to the other hallmarks and benefits of well-being, such as having a family and owning a home, health benefits and so on, but more important feeling in control of one's affairs where it matters.

Thus, financial and health literacy can be viewed as having many things in common. "Staying fit," in both cases, depends on learning and forming good habits beginning at as early an age as possible, that endure yet evolve with growing experience and increasing age.

The beauty of it is when the cycle repeats itself. The educated become educators to their family, and so on.

Balancing Act

I learned early on that "money does not grow on trees," meaning money must be earned and it is not easy to acquire it. It also means one should be careful how much money one spends because there is only a limited amount.

As I was growing up, my parents instilled in me a sense of thrift as, for example, I would bring a box lunch from home and save my school allowance for snacks during recess. Then I knew I could ask my parents for my other needs, such as school uniforms, textbooks and other essentials. A new dress or toy would usually come on special occasions like my birthday or Christmas. I might also get money for gifts, which I was then encouraged to save and deposit in the bank. While our family took vacation and seasonal trips together, any special trips (e.g., abroad) I would earn by getting good grades in school. Thus I learned to take personal responsibility and, in the process, earned my parents' trust and took pride in being encouraged to learn further about family and other responsibilities.

In school, math is an essential part of the basic curriculum, as is cultural and practical knowledge such as languages—both grammar and literature, science, art/music, health, religion, home economics, physical education and hygiene.

Work ethic means completing our homework and preparing for quizzes during the school week/nights. But as the saying goes, "all work and no play make Jack a dull boy." So we play just as hard during recess, physical education and weekends and whenever there is time left after classwork is done for moonlit neighborhood games.

What it comes down to is a balancing act. For example, one learns about smart time management to get necessary things done and if one makes extra effort, one expects a payoff (e.g., attaining one's goal, dream or ambition). It also helps one maintain work-life balance, especially in this fast-paced world.

Incentives certainly help, such as an increase in allowance and/or savings for doing special errands at home. Graduating with honors earned me that special trip abroad. Above all, there's the knowledge that one makes the family proud.

The same applies to health habits. One learns about a good balanced diet. For example, if I consume more (or less) than I need, I will expect to gain (or lose) weight. Even routine visits to the family dentist can be painful and thus help discourage one from eating too many sweets.

Then there is money management, such as balancing one's sources and uses of money. For example, I know that if I spend more than my allowance, I can go broke and hungry next recess. Or I can opt for patience and self-control and instead save some money for that special treat or future wants. Unless one learns early how to manage these small sums, it becomes problematic later on when one is on their own. For many young Americans, this can occur as soon as they go off to college, when they come face-to-face with credit cards and college loans, unprepared and clueless, and knowing they are without parental support any longer.

Synergies

Attaining and maintaining an ideal weight should remain a continuing goal as we age. We know that often times the culprits are a poor diet and lack of exercise. After all, one cannot expect to pile on calories without commensurate output of energy. We also know that health problems can and do arise, which only get more exacerbated with increasing age. By then lifetime habits become very hard to break even as the most drastic measures fail to turn around the downward spiral.

The same applies to maintaining a balanced budget and accumulating savings. One should not be surprised or wonder about a sorry state of financial affairs when one habitually spends more than one earns and piles on unnecessary debt.

Worse, financial worries can lead to compulsive eating, sleeplessness and deteriorating health. Conversely, poor health can exacerbate dire finances from unexpected health spending or unscheduled sick leaves that may lead to loss of gainful employment.

It becomes evident then that the positive synergies which result from a "successful education," as discussed earlier, could easily be turned around on its ugly head. The toll on individuals can ultimately translate to societal woes as support systems break down from the weight of social responsibility.

Professional Help

One goes to a physician or medical expert for regular check-ups and protections such as immunizations, or when one is ill, to obtain proper diagnosis and treatment, whether short- or long-term. As a result, one becomes well informed early on about one's physique and best practices for staying well and fit.

It should not be any different for financial wellness. While growing up, one may be fortunate enough to get informal guidance from parents or perhaps be familiar with the concept of saving through deposits and other transactions made at the local community bank.

Other than that, there are no corresponding structured systems or resources to consult or learn and discuss about financial matters on a regular basis. Financial lexicon such as bonds, stocks, mortgages, real estate, mutual funds and so on all seem foreign, and deemed by one to exist in the business section of the newspaper primarily for businesses, rather than individuals as potential investors.

Indeed, the first time one is exposed to financial jargon may unfortunately be also the instant one needs to make that important investment decision, such as allocating contributions to a benefit plan at work, borrowing money to help pay for college or buy a home, or deciding on necessary insurance protection of self and/or family against risk of loss covered under a homeowners, auto, life or health plan.

In fact, most or all financial advisers cater primarily to young adults and the middle aged in the workforce with potential to invest their hard-earned wages in the market. These financial professionals provide investment guidance, usually for a fee, to investors both institutional and individual. However, many individuals often times do not understand the choices, cannot discuss their concerns and/or feel compelled to follow in blind trust. Notwithstanding protection under the law,[6] many are prone to unwise or fraudulent investments. Then it becomes imperative to have the wherewithal and ability to catch up on this essential knowledge even at this later stage.

That said, all this points clearly to a huge gap during school age in learning and guidance as regards financial wellness, which is compounded by the fact that the time when the mind is developing and most malleable would have been the optimal learning opportunity.

6 The CFPB was formed July 21, 2011, for consumer protection in the financial sector. Effective April 10, 2017, is regulatory guidance from the U.S. Department of Labor on fiduciary and conflict of interest that also helps protect those receiving investment advice when facing retirement choices. See Office of the Federal Register, National Archives and Records Administration, "Definition of the Term 'Fiduciary'; Conflict of Interest Rule—Retirement Investment Advice," *Federal Register* 81, no. 68 (April 8, 2016), *https://www.gpo.gov/fdsys/pkg/FR-2016-04-08/pdf/2016-07924.pdf.*

Economic Conundrum

As stated earlier, financial wellness and overall well-being is a common societal goal. However, it would appear, at least in my layman's view, that economic theory may be confusing the issue. For instance, the news reports regularly say consumer spending accounts for 70% of the economy, but, in truth, business spending or investment on capital goods, new technology, entrepreneurship and productivity is a more significant factor in sustaining the economy and a higher standard of living. Rather, consumer spending is the effect, not the cause, of a productive healthy economy.[7]

It is also common to hear it said that a rise in the savings ratio can have a very significant impact on economic activity. In the case of economic stagnation, a slight fall in the savings rate combined with a corresponding rise in consumer spending would help promote economic recovery. In principle, a "savings investment culture" or higher savings can help finance levels of investment and boost productivity over the longer term. Also there's nothing wrong with encouraging a decent level of savings.[8]

With the lack of societal incentive to save combined with the capitalist pressure to spend, as consumers pile up more debt faster than wages can grow, it is no surprise that many find themselves in financial trouble before too long.

Summary

Building a financially sound and healthy society is most effective from the ground up, starting at home. Even before a baby is born, good health is a top concern, while gender may be secondary. Beginning at birth, a health regimen is established so that proper nutrition, necessary immunizations and medical checkups are provided for the newborns and throughout their growing years until they reach adulthood. By then, they will have learned and acquired good habits, not only from the family but also from the community and school system.

We propose a financial regimen can be similarly drawn so that children can be taught starting soon after they can count and do basic math, to earn and manage their allowance, as well as save for "likes and wants" and, like the squirrel, for "a rainy day."

Arts and sciences are already in our school curriculum. We propose math and health education, in particular, should be enhanced with real life models and applications that will supplement and reinforce learning at home. The community can play a large part in this engagement and endeavor.

There is professional help for staying physically and mentally healthy, which is available throughout the lifecycle. While people will say health is more important than wealth, we have seen how staying financially fit can affect one's physical and mental health. We propose that the "school age" gap in financial guidance be bridged in a number ways, such as publishing an easy reader and/or teachers' guide[9] on the basics of saving, money management and/or or investments, teaching an enhanced curriculum with hands-on lessons in real-life math applications, school competitions, volunteer mentoring and outreach by financial professionals and/or nonprofits to this currently underserved group who also happen to be potential future investors.

Most important, our businesses, support systems, leaders and policymakers need to be all in sync with this basic education tenet.

Once learned and acquired, good habits become a legacy passed on from generation to generation, and family to family, and so on. In the end, the individual and the society as a whole benefit from financial soundness and overall well-being.

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7 Mark Skousen, "Consumer Spending Drives the Economy?" Foundation for Economic Education's Entrepreneurship blog, Sept. 22, 2010, *https://fee.org/articles/consumer-spending-drives-the-economy/*.

8 Tejvan Pettinger, "Would an Increase in Savings Help the Economy?" Economics Help's Economics blog, March 11, 2013, *http://www.economicshelp.org/blog/7102/economics/would-an-increase-in-savings-help-the-economy/*.

9 Actuaries can and do play an important role in mentoring our youth and others. The Actuarial Foundation has a breadth of initiatives that include its *Expect the Unexpected with Math* series with titles such as *Plan, Save, Succeed* (for grades six through eight) and *Building Your Future* (for grades nine through 12). See *http://www.actuarialfoundation.org/programs/youth/etu.shtml*.

Retirement Readiness and the Value of Future Social Security Benefits

John A. Turner

Nine out of 10 individuals age 65 and older receive Social Security benefits. Among that age group, 53% of married couples and 74% of unmarried individuals receive 50% or more of their income from Social Security. In addition, 22% of married couples and 47% of unmarried individuals receive 90% or more of their retirement income from Social Security.[1]

A major goal of financial education and financial literacy is to help people prepare for retirement. However, scoring 100% on a standard financial literacy examination is not going to be much help for middle- or lower-income individuals if they do not have a good basis for forecasting their future Social Security benefits.

Policy analysts, financial planners and individuals all encounter the problem that, without change, according to the intermediate projections of its actuaries, Social Security will be insolvent in 2034. At that point, in the absence of legislative changes, current and future retirees will receive less than 80% of their statutorily promised benefits.

Social Security trustees traditionally have reported on the status of the combined Old-Age and Survivors Insurance (OASI) Trust Fund and the Disability Insurance Trust Fund (DI). After the last major reform of Social Security in 1983, Social Security (OASDI) was projected to have adequate financing through 2063. As of 2016, however, the combined funds are projected to run out of money in 2034. Starting then, current and future retirees will take a 21% cut in their benefits if financing reforms are not made.[2] That cut would be an average of $10,000 a year for a couple retiring that year,[3] or a $100,000 cut in lifetime benefits for the typical 50-year-old.[4]

Responsible commentators recognize that fixing Social Security will most likely involve both revenue increases and benefit cuts.[5] As seen later, however, a number of retirement readiness tools make the extreme assumption of no benefit cuts.

Retirement Readiness Tools

The U.S. Department of Labor (DOL) in its "Savings Fitness" guide and worksheets[6] does not mention the issue of the future insolvency of Social Security benefits. It implicitly directs users to assume there will be no future cuts in Social Security benefits and no increases in Social Security payroll tax rates, assuming the impossible situation that the status quo will be maintained. The U.S. General Accountability Office in its review of the DOL's savings guide[7] also makes no

1 Social Security Administration, "Fact Sheet: Social Security," 2015, *http://www.ssa.gov/news/press/basicfact.html.*

2 Board of Trustees, Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds, "The 2016 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds," June 22, 2016, *https://www.ssa.gov/OACT/TR/2016/tr2016.pdf.*

3 Maya MacGuineas, "Statement by Maya MacGuineas on Vice Presidential Debate," Committee for a Responsible Federal Budget press release, Oct. 5, 2016, *http://crfb.org/press-releases/statement-maya-macguineas-vice-presidential-debate.*

4 Marc Goldwein, "These 5 Supposed Fixes for Social Security Won't Solve Its Problems," Committee for a Responsible Federal Budget's Social Security blog, Oct. 31, 2016, *http://crfb.org/blogs/marc-goldwein-these-5-supposed-fixes-social-security-won%E2%80%99t-solve-its-problems.*

5 Steve Vernon, "Can Social Security Survive Without Benefit Cuts?" CBS Money Watch, March 9, 2015, *http://www.cbsnews.com/news/can-social-security-survive-without-benefit-cuts/.*

6 Employee Benefits Security Administration, U.S. Department of Labor, "Savings Fitness: A Guide to Your Money and Your Financial Future," 2016, *http://www.dol.gov/ebsa/publications/savingsfitness.html.*

7 U.S. General Accountability Office, "Retirement Security: Better Information on Income Replacement Rates Needed to Help Workers Plan for Retirement," Report to Congressional Requesters, GAO 16-242, March 2016, *http://www.gao.gov/assets/680/675526.pdf.*

mention of the future insolvency of Social Security. This approach, in the author's opinion, can mislead people using the guide into believing they are better prepared for retirement than they would be if, in fact, Social Security benefit cuts occur.

Under the heading of "Planning for Retirement," the Consumer Financial Protection Board (CFPB),[8] an agency of the federal government, provides Social Security retirement benefit estimates assuming there will be no benefit cuts. Thus, CFPB assumes the best-case scenario from the perspective of the users of its projections. It doesn't alert users to the possibility there will be benefit cuts. Financial planners generally assume what they consider to be reasonable or conservative assumptions, rather than best-case assumptions.

To provide people an estimate of what their Social Security benefits would be, Social Security sends out benefit statements to people every five years, starting at age 25, and annually to people age 60 and over who are not receiving benefits. These statements base the estimate on the assumption that there will be no cuts in future benefits, but they do indicate the possibility of future benefit cuts.

Critique of No-Benefits-Cut Assumption

This section assesses how likely it is that Social Security reform will not involve benefit cuts. One approach to analyzing this question is to look at the historical record. In particular, that approach would consider the outcome of the 1983 reform and whether a similar package is likely, or how the next reform might be different given the different circumstances under which it will occur. The 1983 reforms, coupled with an increase in Medicare premiums, reduced the Social Security replacement rate, as measured by the Social Security Administration, for an average worker retiring at age 65 from 40% in 2005 to 32% in 2030.[9]

While the 1983 reforms are often described as a balanced approach, only the short-term changes were balanced. The short-term reforms to get Social Security through the 1980s were roughly balanced between their effects on contributors and beneficiaries, with 44% of the changes due to increased revenue from contributors and 39% due to decreased benefits for beneficiaries, through postponing the cost-of-living adjustment and taxing some benefits. Part of the short-term increase in revenues came from extending Social Security coverage to newly hired federal government employees (16%).[10]

The longer-term reforms, occurring through the increase in the normal retirement age, were entirely benefit cuts. Combining the long-term and short-term reforms, 10% of the shortfall was made up by increases in revenues, while 70% was made up by decreases in benefits, with the remainder made up by extending coverage.[11]

The current financing problem is more difficult to resolve than the problem in 1983. The shortfall in 1983 was estimated by Social Security's actuaries to be 2.09% of taxable payroll over the 75-year period.[12] By comparison, if reform is postponed to the last moment, as was done in 1983, the shortfall indicated in the 2016 Trustees Report[13] is 3.58% of taxable payroll, or 71% larger.

Benefit cuts can take various forms. In the 1983 reform, current beneficiaries at the time of the reform did not have a nominal benefit cut. They did have a real benefit cut in that the cost-of-living adjustment was postponed six months. Future beneficiaries faced substantial benefit cuts due to the increase in the normal retirement age.

8 Consumer Financial Protection Board (CFPB), "Planning for Retirement: Before you Claim," accessed Jan. 23, 2016, *http://www.consumerfinance.gov/retirement/before-you-claim/.*

9 Daniel Marans, "The Reagan-O'Neill Myth of Bipartisan Social Security Reform," *The Blog*, Huffingtonpost.com, Nov. 20, 2012, *http://www.huffingtonpost.com/daniel-marans/the-reaganoneill-myth-of-_b_2162028.html.*

10 Janice M. Gregory, Thomas N. Bethell, Virginia P. Reno, and Benjamin W. Veghte, "Strengthening Social Security for the Long Run," National Academy of Social Insurance, *Social Security Brief* no. 35 (November 2010), *https://www.nasi.org/sites/default/files/research/SS_Brief_035.pdf.*

11 *Ibid*.

12 *Ibid.*

13 Board of Trustees, Federal OASDI, "The 2016 Annual Report."

A survey conducted by the National Academy of Social Insurance (NASI),[14] an organization opposed to Social Security benefit cuts, has found that 69% of Republicans and 84% of Democrats agree "it is critical to preserve Social Security benefits for future generations even if it means increasing the Social Security taxes paid by working Americans." However, another survey finds that most Americans expect a future reform will involve both benefit cuts and revenue increases. That survey finds that more than half of American workers (58%) expect Social Security reform will involve both financing increases and benefit cuts, while 18% think reform will mostly or entirely involve benefit cuts, and nearly a quarter think it will mostly or entirely involve revenue increases.[15]

Conclusion

The topic of Social Security reform is controversial, the nature of future reforms is not known, and some people are adamantly opposed to benefit cuts. While the author does not attempt to predict the outcome of future Social Security reform, for the purposes of retirement readiness planning, an economic analysis of Social Security's financing problem suggests that the best-case scenario assumption of no benefit cuts has little justification. That conclusion is based on the role of benefit cuts in the 1983 reforms and considering that the shortfall now is much greater than then. It is also based on the practice of making conservative assumptions when doing retirement readiness planning. The author argues that advice to people planning for retirement based on the assumption of no benefit cuts is presenting the best-case scenario. To provide conservative advice, as is the standard practice for financial planning, better advice would be to assume that more than half of the shortfall will be made up by benefit cuts, as was done in 1983.

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