

---

*Falling Short:  
The Coming Retirement Crisis  
and What to Do About It*

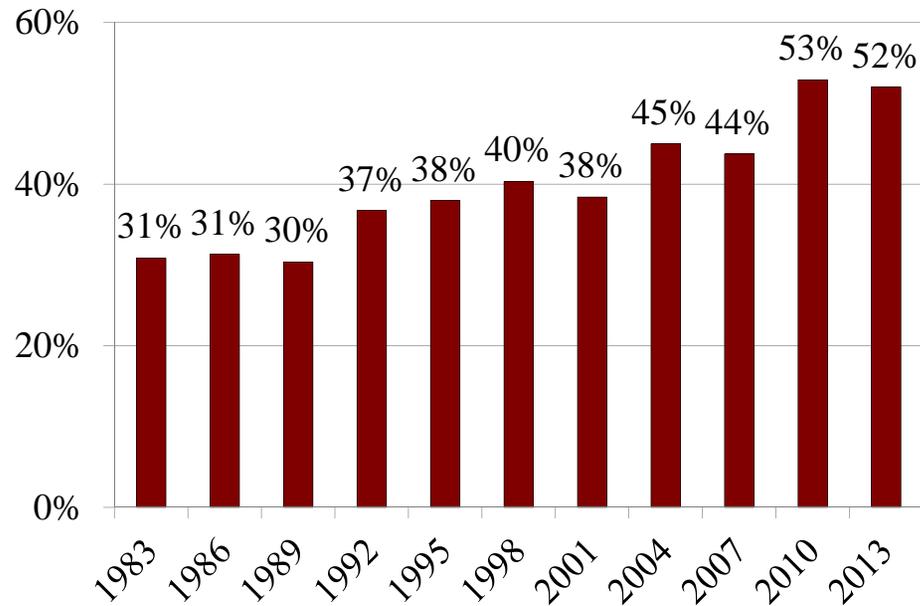
Alicia H. Munnell

Peter F. Drucker Professor, Boston College Carroll School of Management  
Director, Center for Retirement Research at Boston College

Research Affiliates 2016 Advisory Panel  
Newport Beach, CA  
March 28-30, 2016

# What is the problem? The NRRI shows half of current workers falling short.

The National Retirement Risk Index, 1983-2013



Source: Alicia H. Munnell, Wenliang Hou, and Anthony Webb. 2014. "NRRI Update Shows Half Still Falling Short." *Issue in Brief* 14-20. Center for Retirement Research at Boston College.

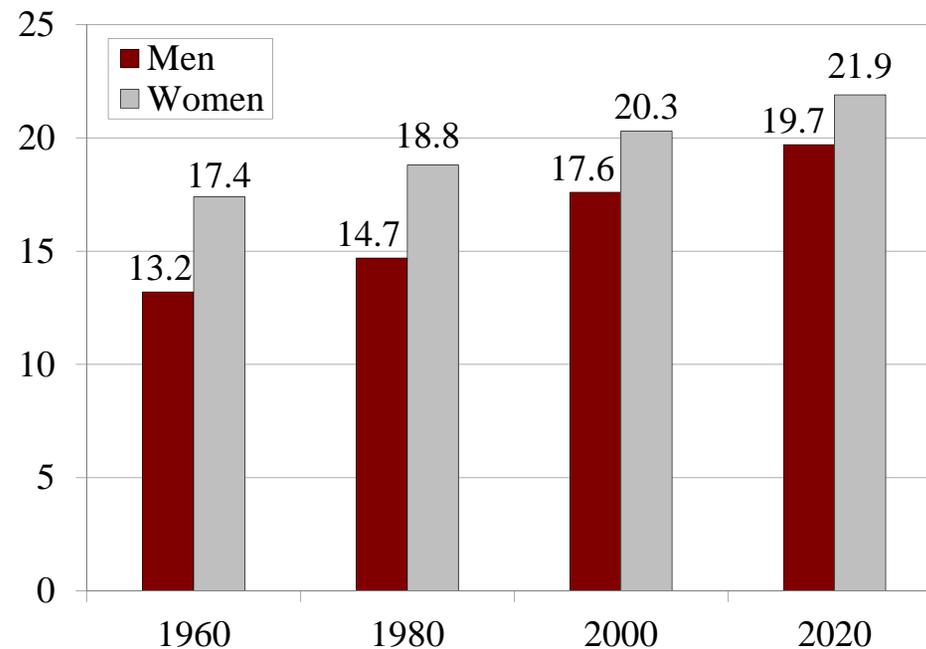
---

# The retirement shortfall is driven by a growing gap between:

- the need for retirement income and
- the availability of retirement resources.

# One reason people need more retirement income is that they are living *a lot* longer.

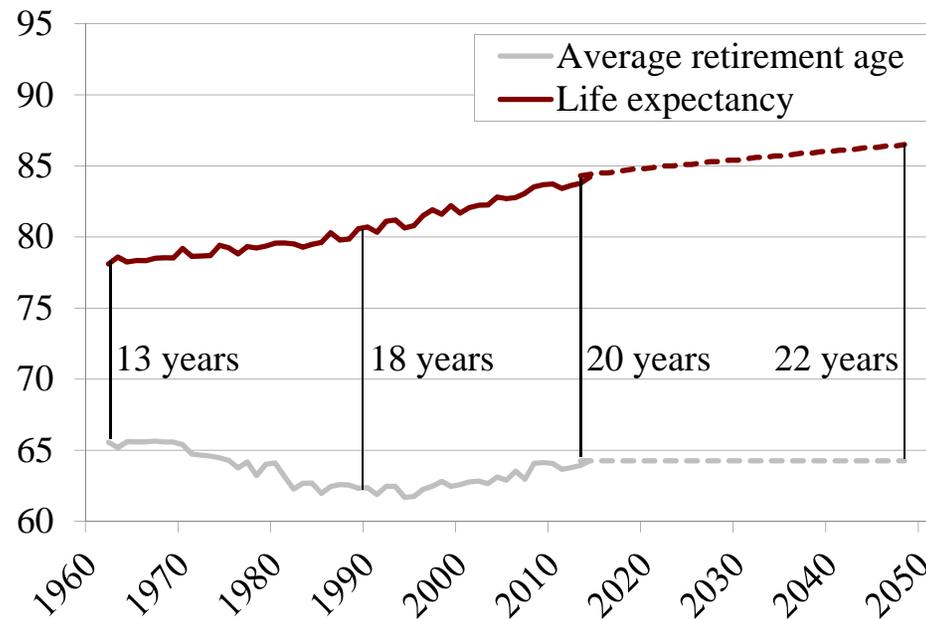
Life Expectancy at Age 65, 1960-2020



Source: U.S. Social Security Administration. 2015. *The Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds*. Government Printing Office.

But they are only working *a bit* longer, so the retirement span is growing.

Average Years in Retirement for Men, 1960-2050



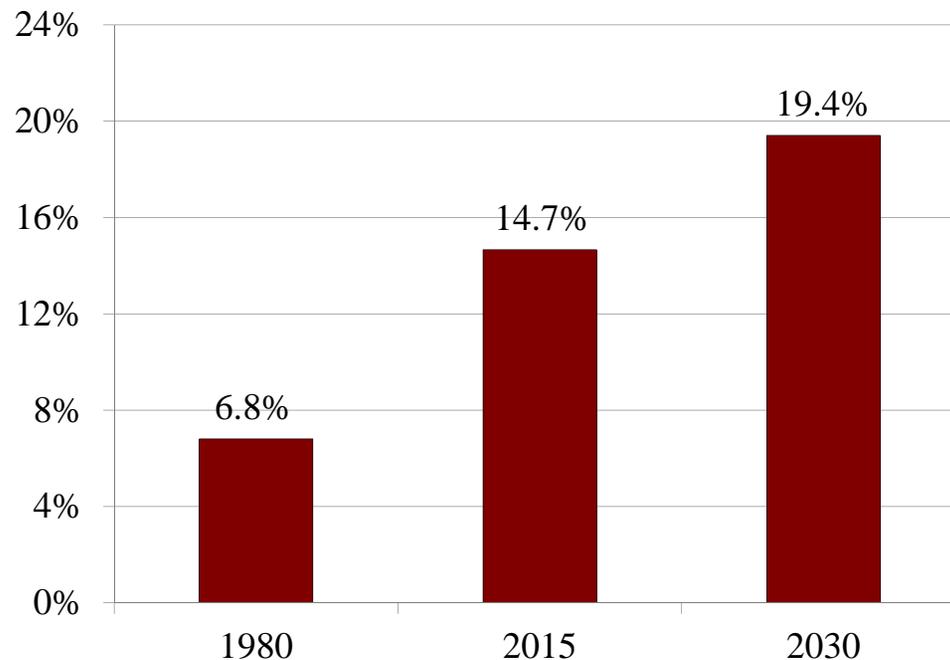
Note: Average retirement defined as when 50 percent of individuals are not participating in the labor force.

Sources: Center for Retirement Research at Boston College estimates from U.S. Census Bureau. *Current Population Survey*, 1962-2015; and U.S. Social Security Administration 2015. *The Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds*. Government Printing Office.

---

# In addition, people need more because retiree health care costs are high and rising.

Medicare Part B Premium and Out-of-Pocket Payments as Percentage of Average Social Security Benefits, 1980-2030

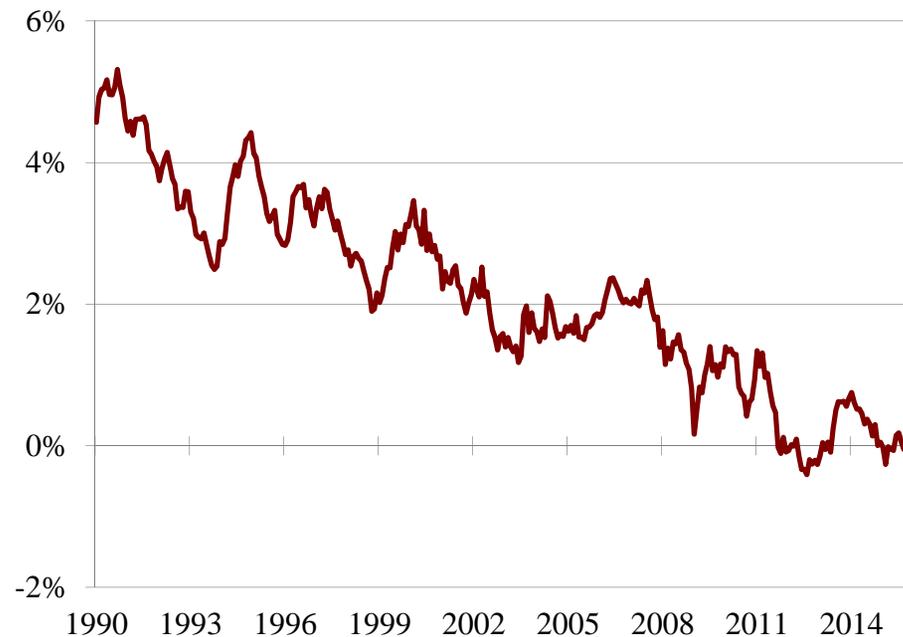


*Source:* Centers for Medicare & Medicaid Services, Office of the Actuary. 2015. "SMI Out-of-Pocket Expenses as a Percent of Illustrative Social Security Benefit."

---

And interest rates are low, which reduces what people get from their nest egg.

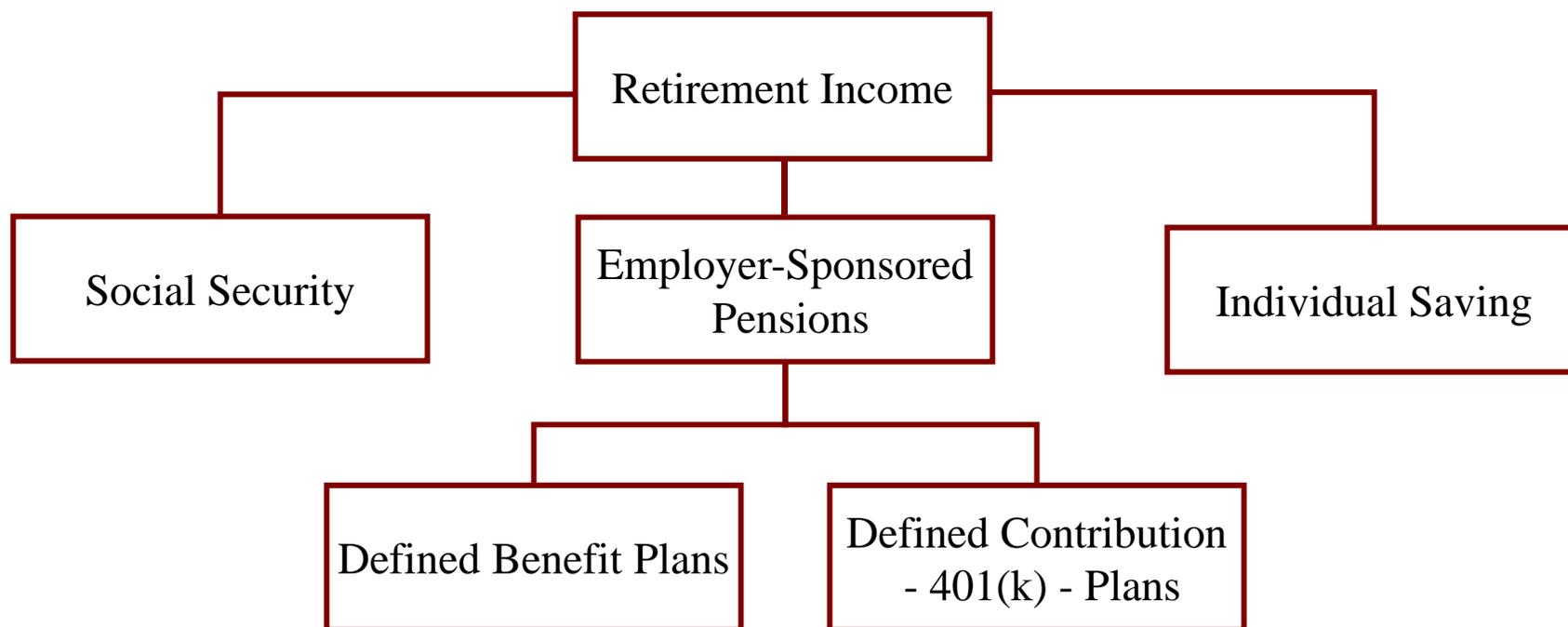
Real Interest Rate, 1990-2015



Sources: U.S. Board of Governors of the Federal Reserve System. 2015. Selected Interest Rates (Daily) – H.15. Available at <http://www.federalreserve.gov/releases/h15/update/default.htm>; Joseph G. Haubrich, George Pennacchi, and Peter Ritchken. 2012. “Inflation Expectations, Real Rates, and Risk Premia: Evidence from Inflation Swaps.” *The Review of Financial Studies* 25 (5):1588-1629.

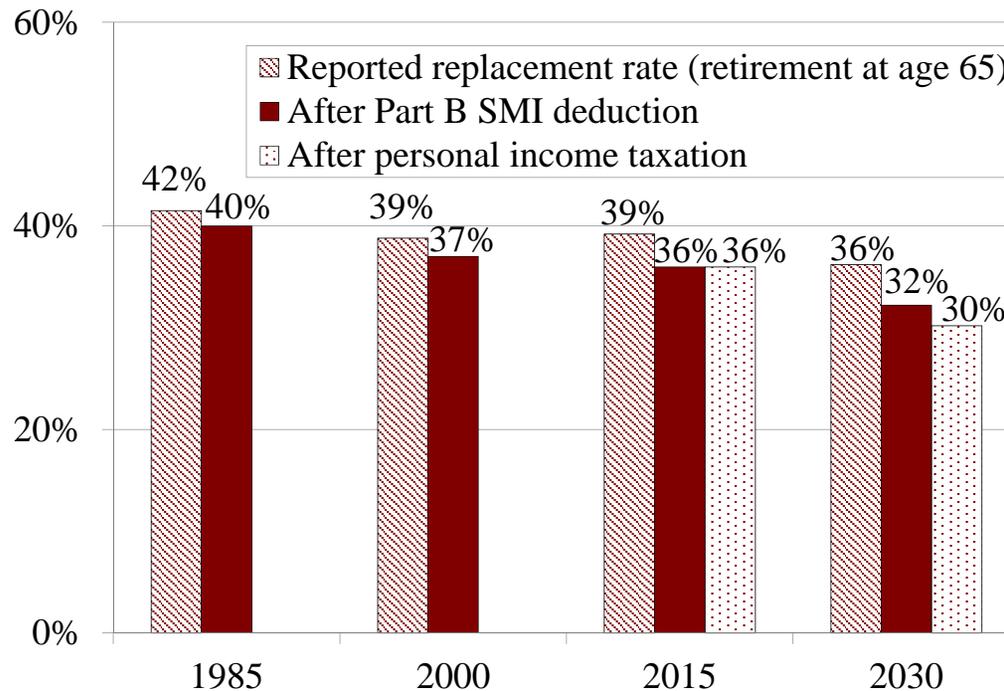
---

At the same time, the U.S. retirement system is contracting.



# Social Security will replace a shrinking share of pre-retirement earnings.

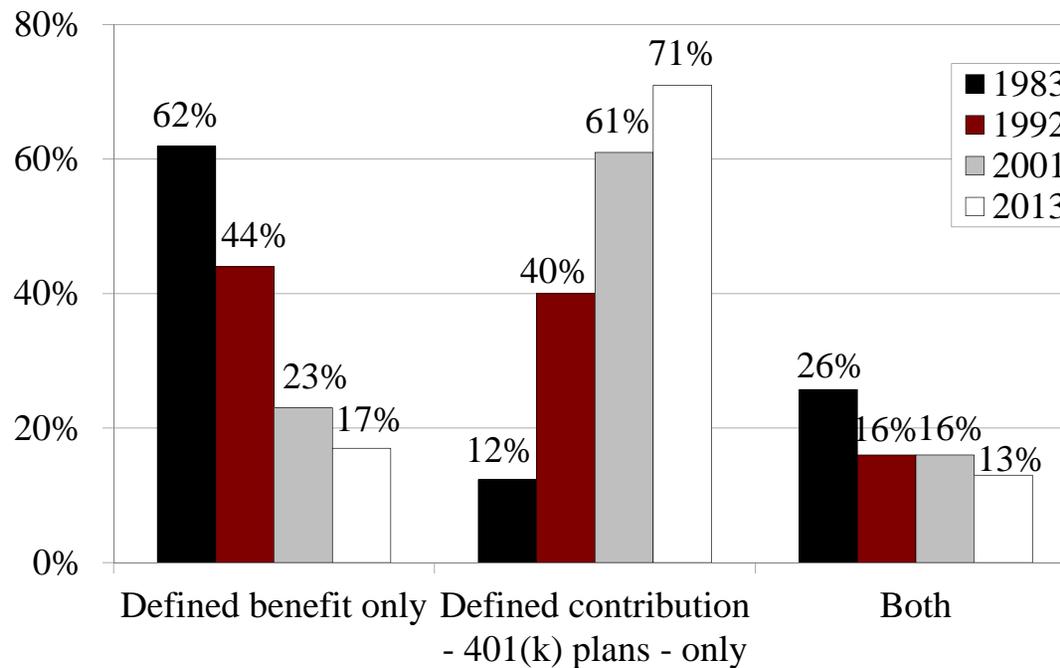
Social Security Replacement Rates for Average Earner Retiring at Age 65, 1985, 2000, 2015, and 2030



Sources: Centers for Medicare and Medicaid Services. 2014. Unpublished data from *Annual Report of the Board of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds*. Government Printing Office; and U.S. Social Security Administration. 2014. Unpublished data from *The Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds*. Government Printing Office.

# And employer plans have shifted from defined benefit to 401(k).

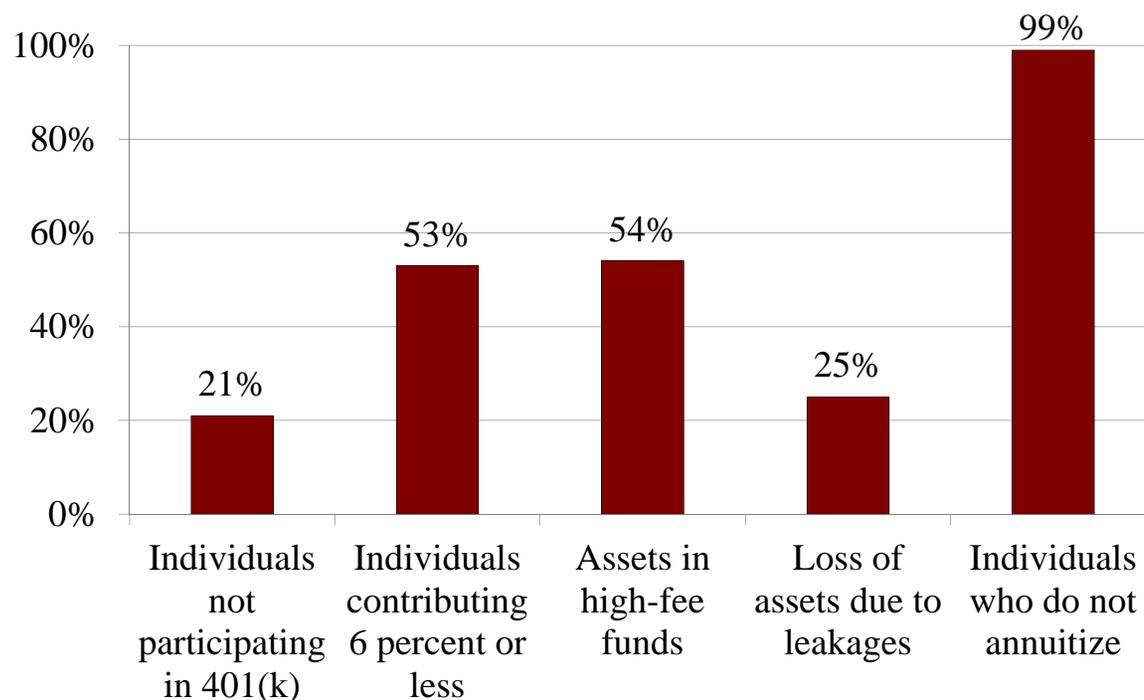
Workers with Pension Coverage by Type of Plan, 1983, 1992, 2001, and 2013



Source: Center for Retirement Research at Boston College calculations based on U.S. Board of Governors of the Federal Reserve System. *Survey of Consumer Finances*, 1983, 1992, 2001, and 2013.

# 401(k)s could work, but people make mistakes at every step.

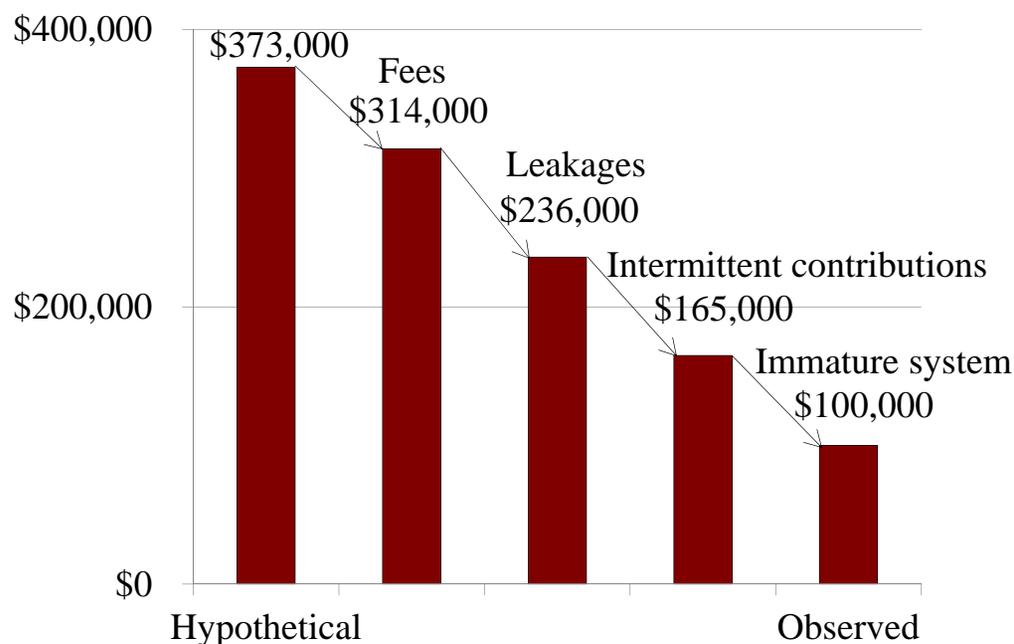
Prevalence of 401(k) Mistakes



Sources: Author's calculations based on U.S. Board of Governors of the Federal Reserve System. *Survey of Consumer Finances*, 2013; Vanguard. 2015. "How America Saves 2015: A Report on Vanguard 2014 Defined Contribution Plan Data."; Investment Company Institute. 2014. "ICI Research Perspective." 20(3); and Alicia H. Munnell and Anthony Webb. 2015. "The Impact of Leakages from 401(k)s and IRAs." Working Paper 2015-2. Center for Retirement Research at Boston College.

# And these mistakes erode their balances.

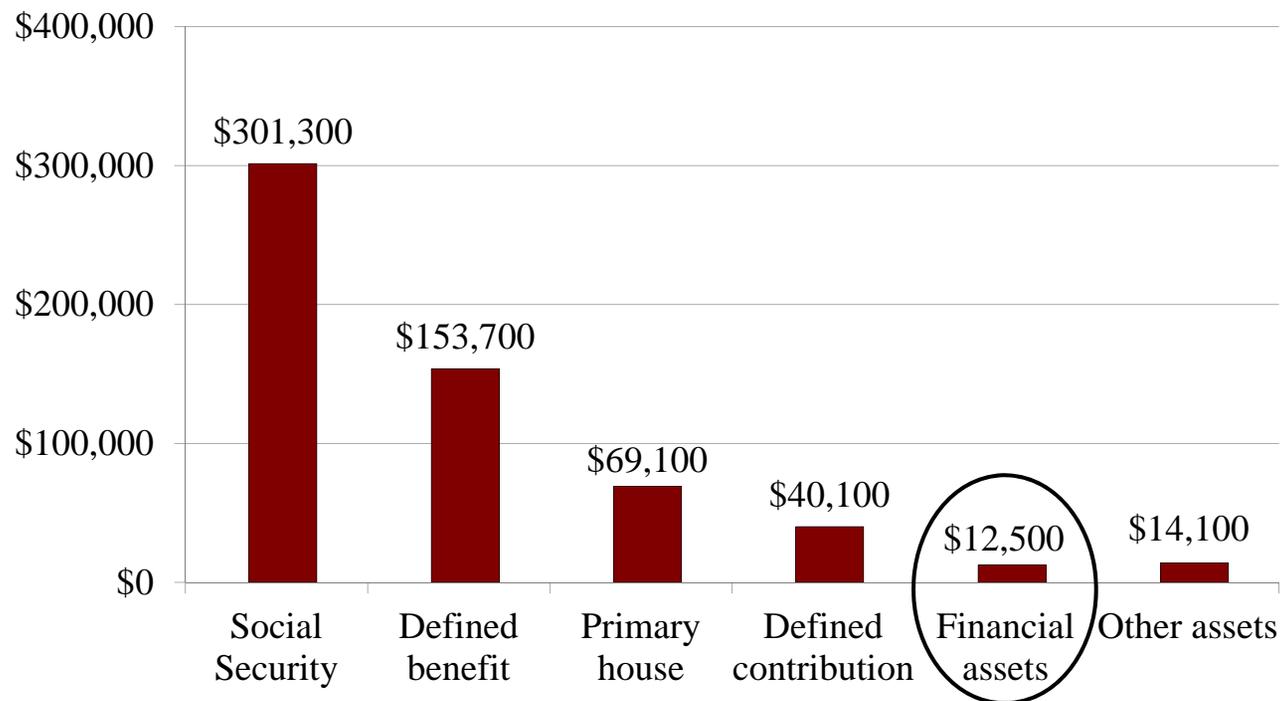
Impact of Fees, Leakages, and Contributions on 401(k)/IRA Balances, 2013



Source: Alicia H. Munnell. 2014. "401(k)/IRA Holdings in 2013: An Update from the SCF." *Issue in Brief* 14-15. Center for Retirement Research at Boston College.

# Still, having a plan is very important because people do not save on their own.

Wealth of Typical Household with Head Age 55-64, 2013

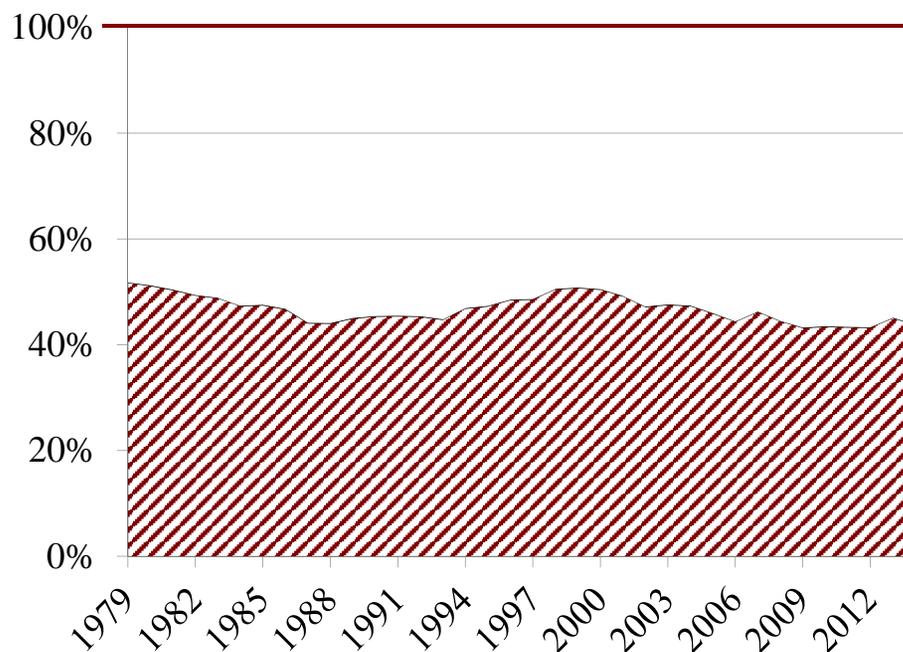


Source: Alicia H. Munnell. 2014. "401(k)/IRA Holdings in 2013: An Update from the SCF." *Issue in Brief* 14-15. Center for Retirement Research at Boston College.

---

# So we should be very concerned that only half of private sector workers have a plan.

Percentage of Private Sector Workers Ages 25-64  
Participating in an Employer-Sponsored Pension, 1979-2014



---

# What to do? Solutions are straightforward.

- *Work longer* to build assets & shrink retirement period;
- *Save more* via Social Security and employer plans; and
- *Consider the house* as a retirement asset.

---

# Working longer is feasible for most, and they can *still* enjoy a lengthy retirement.

Retirement Age Equal to Age-65 Retirement in 1940,  
Based on Rising Life Expectancy (In Years: Months)

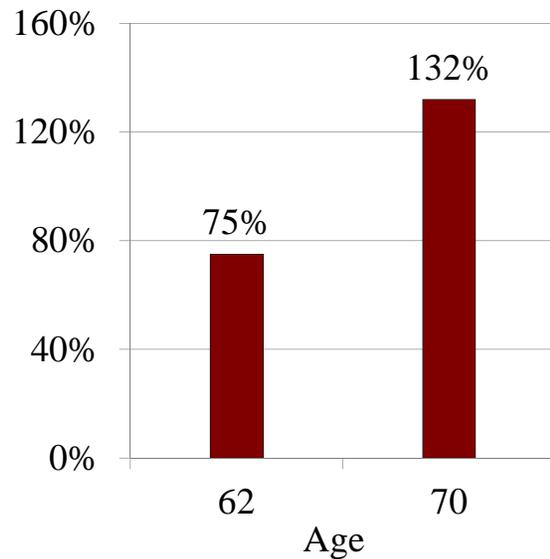
Year	Age at which ratio of expected retirement to working years remain constant
1940	65:00
1950	65:11
1960	66:08
1970	67:06
1980	68:00
1990	68:06
2000	69:00
2010	69:07
2020	70:02
2030	70:08

Note: For the ratio of expected retirement to working years, people are assumed to start work at 20.

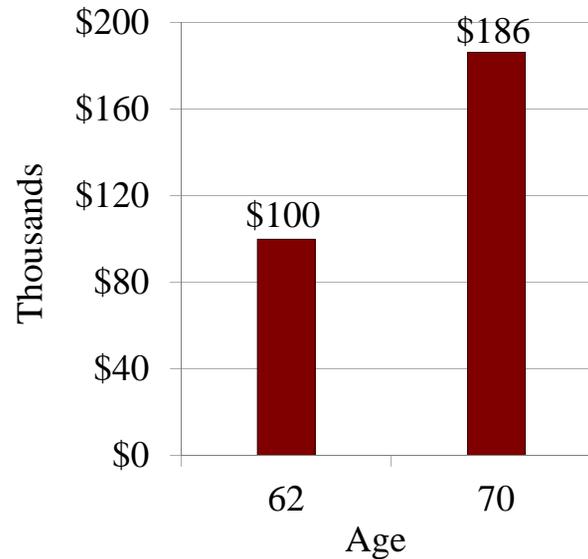
Source: Author's calculations using U.S. Social Security Administration, 2004. Life Table Functions Based on the Alternative 2 Mortality Probabilities in the 2004 Trustees Report (unpublished).

# And it improves security in three ways.

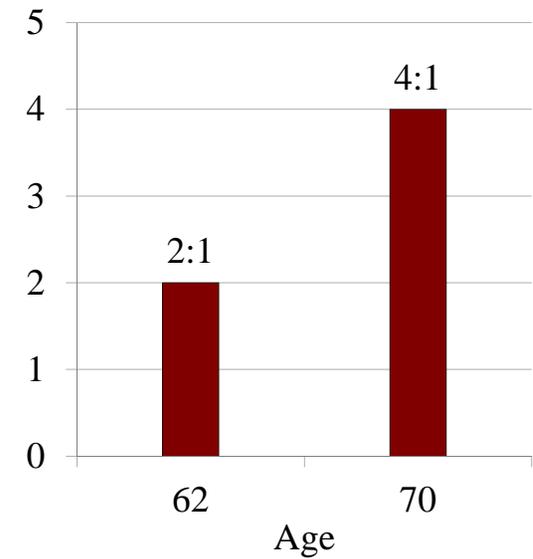
Social Security Benefits Up 76%



401(k) Assets Nearly Double



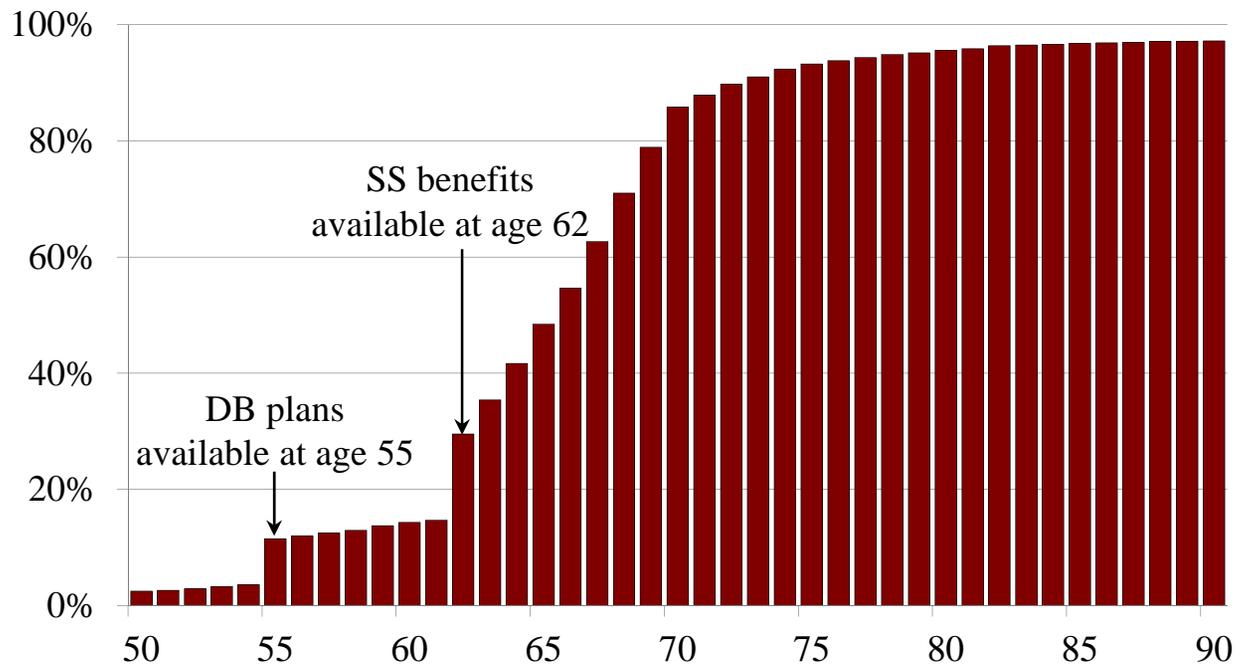
Increased Ratio of Working to Retirement Years



Source: Author's calculations; and Charles D. Ellis, Alicia H. Munnell, and Andrew D. Eschtruth. 2014. *Falling Short: The Coming Retirement Crisis and What to Do About It*. Oxford, UK: Oxford University Press.

# By itself, working until age 70 would do the trick for most people.

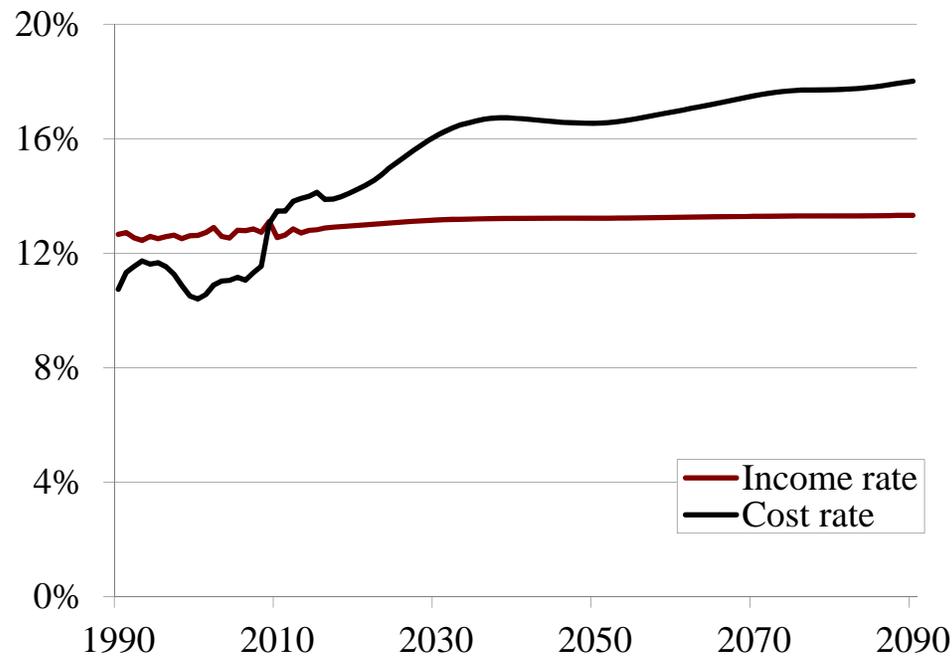
Cumulative Readiness by Retirement Age



Source: Alicia H. Munnell, Anthony Webb, Luke Delorme, and Francesca Golub-Sass. 2012. "National Retirement Risk Index: How Much Longer Do We Need to Work?" *Issue in Brief* 12-12. Center for Retirement Research at Boston College.

# On the saving side, the first step is to shore up Social Security.

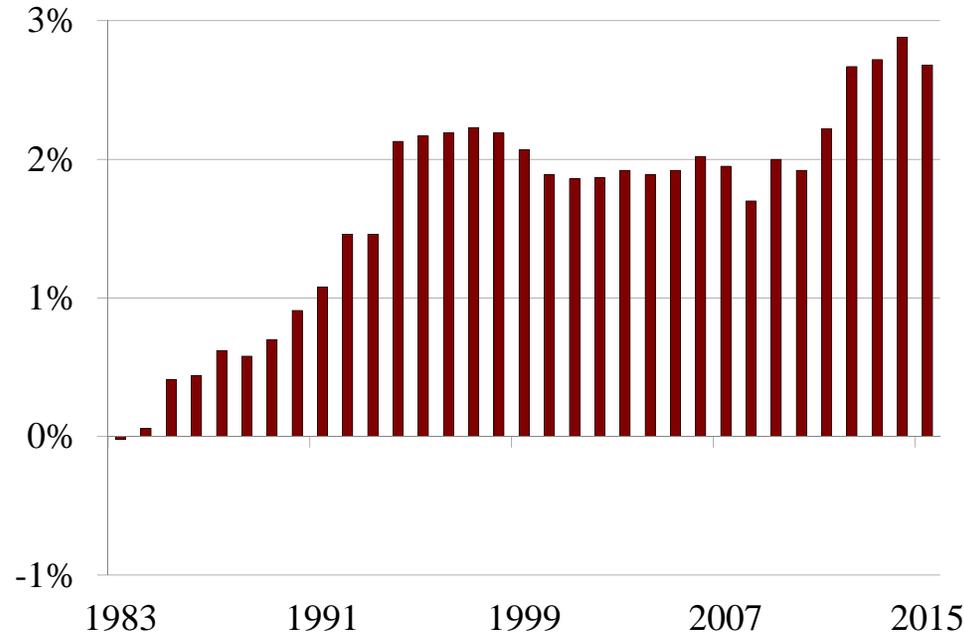
Projected Social Security Income and Cost Rates, as a Percentage of Taxable Payroll, 1990-2090



Source: Alicia H. Munnell. 2015. "Social Security's Financial Outlook: The 2015 Update in Perspective." *Issue in Brief* 15-12. Center for Retirement Research at Boston College.

# Solving the 75-year problem requires a 2.68 percentage-point increase in payroll taxes.

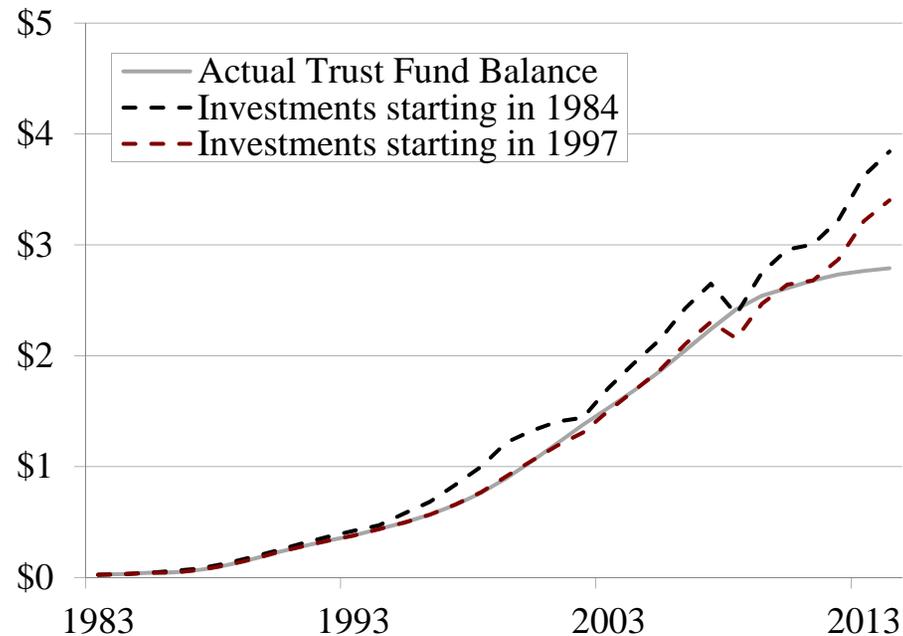
Social Security's 75-Year Deficit as a Percentage of Taxable Payroll, 1983-2015



Source: Alicia H. Munnell. 2015. "Social Security's Financial Outlook: The 2015 Update in Perspective." *Issue in Brief* 15-12. Center for Retirement Research at Boston College.

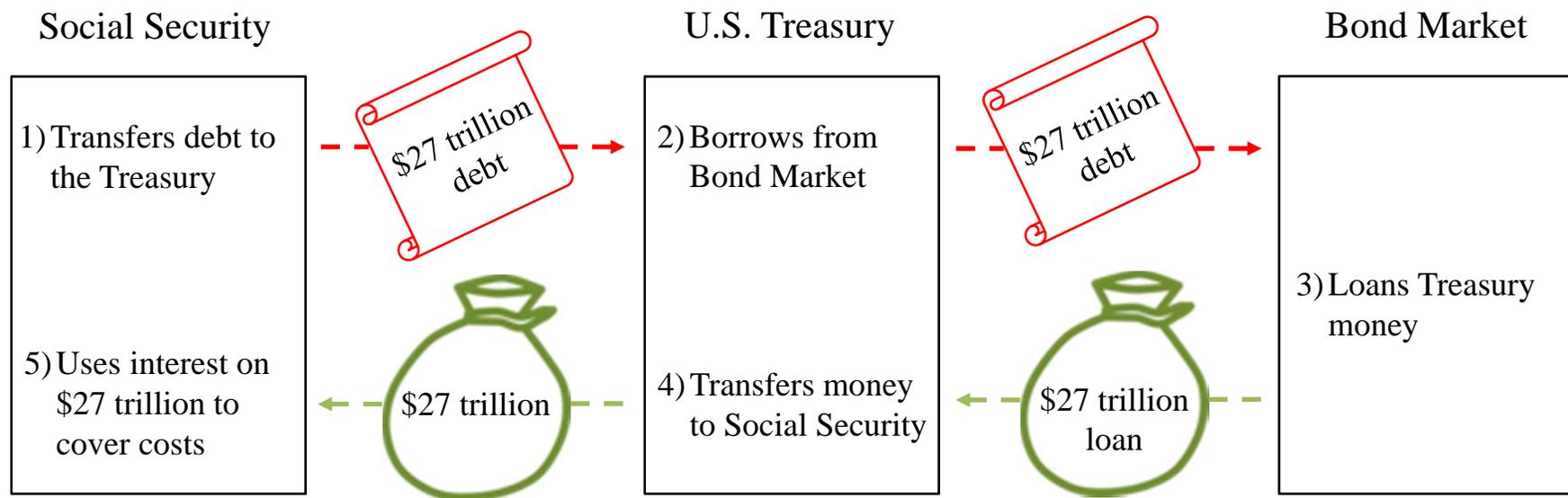
# Two additional thoughts: 1) Investing some Social Security assets in equities.

Projected Social Security Trust Fund Assets Assuming Trust Fund Investment, Trillions of Dollars



Source: Gary Burtless, Anqi Chen, Wenliang Hou, Alicia H. Munnell, and Anthony Webb. 2016 (forthcoming). "How Would Investing in Equities Have Affected the Social Security Trust Fund?" Working Paper. Center for Retirement Research at Boston College.

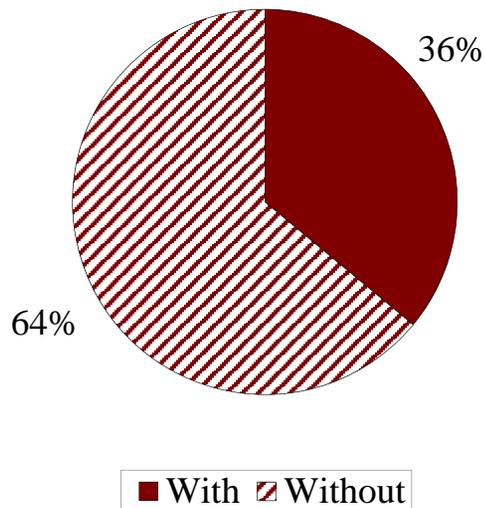
## 2) Shift legacy cost from SSA to Treasury (from payroll tax to income tax).



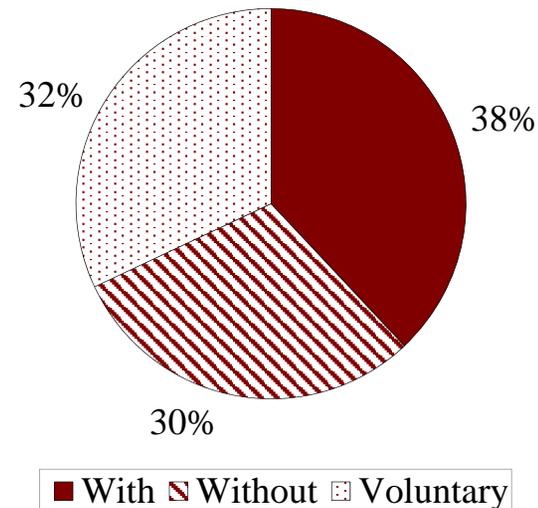
# In 401(k)s, we need to get more money into plans by making them fully automatic...

Percentage of 401(k) Plans with Automatic Enrollment and Automatic Escalation, 2014

Percentage of Plans with Automatic Enrollment, 2014



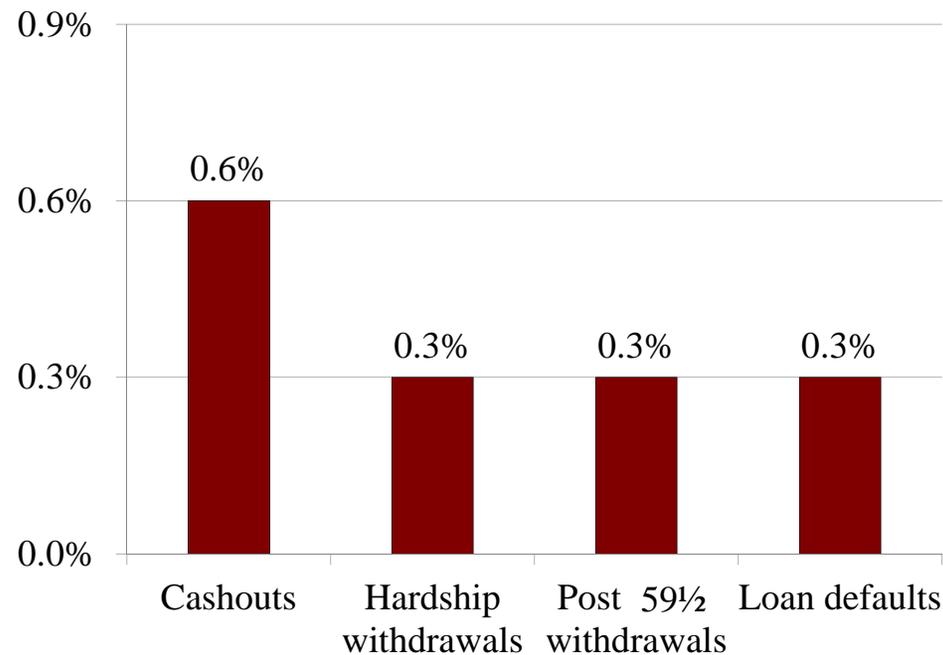
Percentage of Automatic Enrollment Plans that Increase Default Deferrals over Time, 2014



Source: Author's calculations based on Vanguard. 2015. "How America Saves 2015: A Report on Vanguard 2014 Defined Contribution Plan Data."

# ...reduce money leaking out...

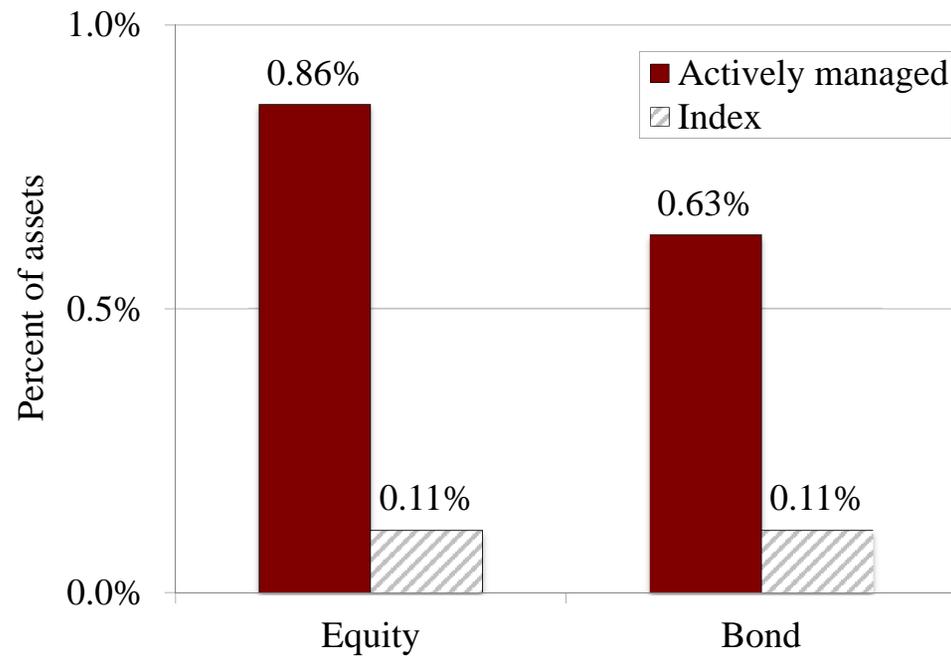
Annual Leakages Out of Vanguard Accounts as a Percent of Assets, 2014



Source: Author's calculations based on Vanguard. 2015. "How America Saves 2015: A Report on Vanguard 2014 Defined Contribution Plan Data."

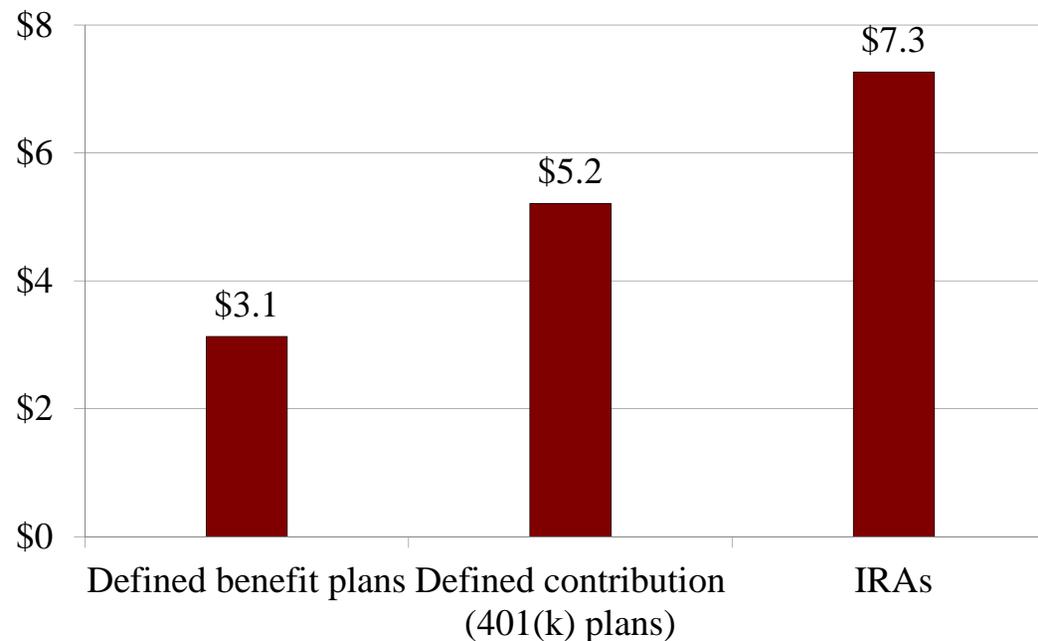
# ...and keep an eye on investment fees.

Fees as a Percent of Assets for Actively Managed and Index Funds, 2014



# Investment fees are a particular concern, because 401(k) savings have shifted to IRAs.

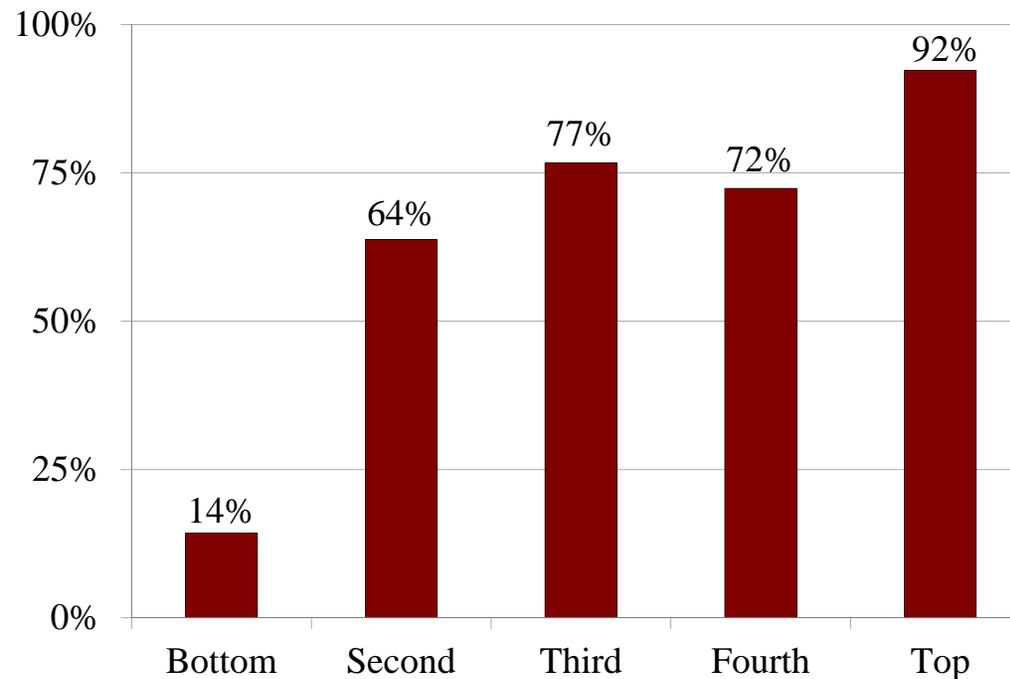
Private Retirement Assets, Trillions of Dollars, 2015 Q3



Source: U.S. Board of Governors of the Federal Reserve System, *Flow of Funds Accounts of the United States*, 2015.

# A final issue with 401(k)s is how people will draw down their assets in retirement.

Percent of Remaining Median Assets in 2002 for Singles Ages 72-81 in 1995, by Permanent Income Quintile



Source: Mariacristina De Nardi, Eric French, and John Bailey Jones. 2009. "Life Expectancy and Old Age Savings." *American Economic Review: Papers and Proceedings* 99(2): 110-115.

---

# Draw-down solutions include buying an annuity or using sensible rules of thumb.

- Single Premium Immediate Annuities (SPIAs) provide a secure flow of monthly income *throughout* retirement.
- Advanced Life Deferred Annuities kick in later than SPIAs, providing income for a shorter period but at a very low cost.
- IRS' Requirement Minimum Distribution Rules provide a reasonable way to draw down your assets without an annuity.

---

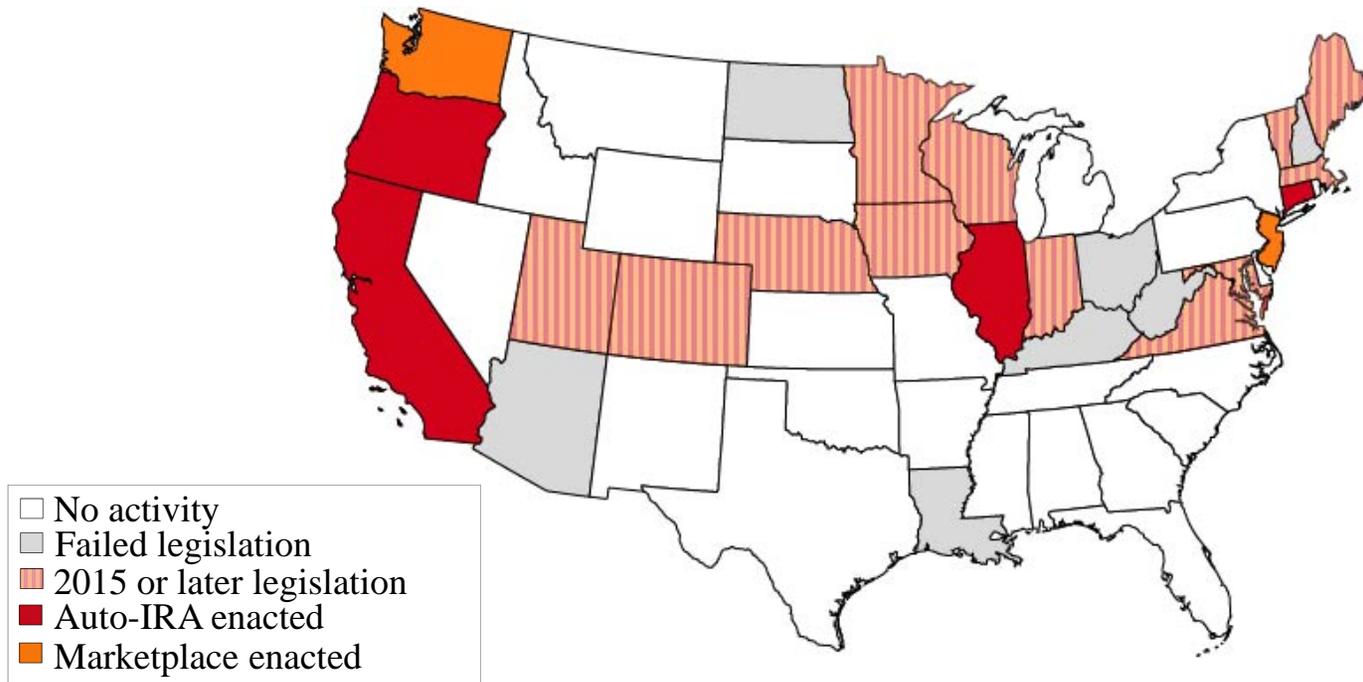
Beyond 401(k)s, many proposals exist to cover the half of workers with *no* plan.

- Auto-IRA plans (Obama Administration)
- USA Retirement Funds (Senator Harkin)
- SAFE Retirement Plans (Center for American Progress)
- NEST accounts (United Kingdom)

---

# But Congress has not passed any legislation, so the states are stepping into the breach.

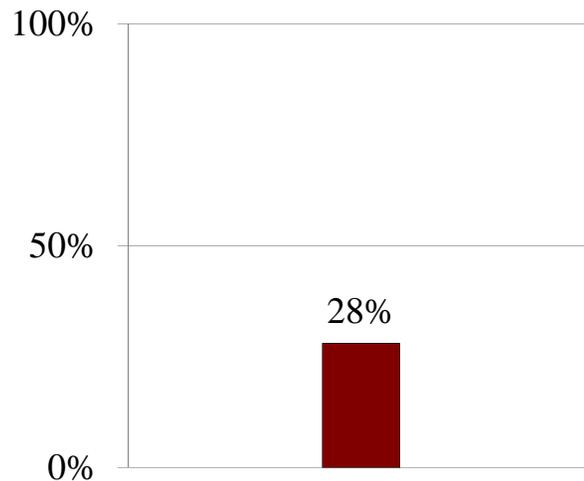
State Retirement Security Activity, as of March 2016



# The most promising approach is an employer mandate and auto-enrollment.

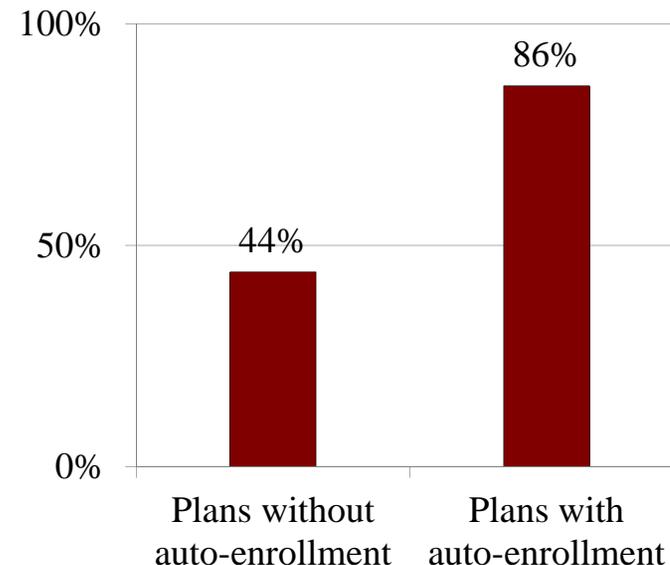
Mandate needed because many firms won't offer a plan.

Percentage of workers at small firms offered a plan, 2014



Auto-enrollment needed because many employees won't participate.

401(k) participation rates for workers < \$50,000 by auto-enrollment status, 2014



Sources: U.S. Census Bureau, *Current Population Survey*, 2015; and author's calculations from Vanguard. 2015. "How America Saves 2015: A Report on Vanguard 2014 Defined Contribution Plan Data."

---

Finally, we need to convince retirees to view their house as a potential source of income.



# People can get money from their house in two ways: downsize or take a reverse mortgage.

## OPTION

①

### DOWNSIZE

- **ADD** to your income.
- **PAY** selling & moving costs.
- **GIVE UP** your current home, to live in a less expensive home.
- **KEEP** proceeds from sale and equity in new home.

## OPTION

②

### GET A REVERSE MORTGAGE

- **ADD** to your income.
- **PAY** loan-related fees.
- **GIVE UP** equity you can tap as a reserve or leave as a bequest.
- **KEEP** living in your current home.

Source: Steven A. Sass, Alicia H. Munnell, and Andrew D. Eschtruth. 2014. *Using Your House for Income in Retirement*. Center for Retirement Research at Boston College.

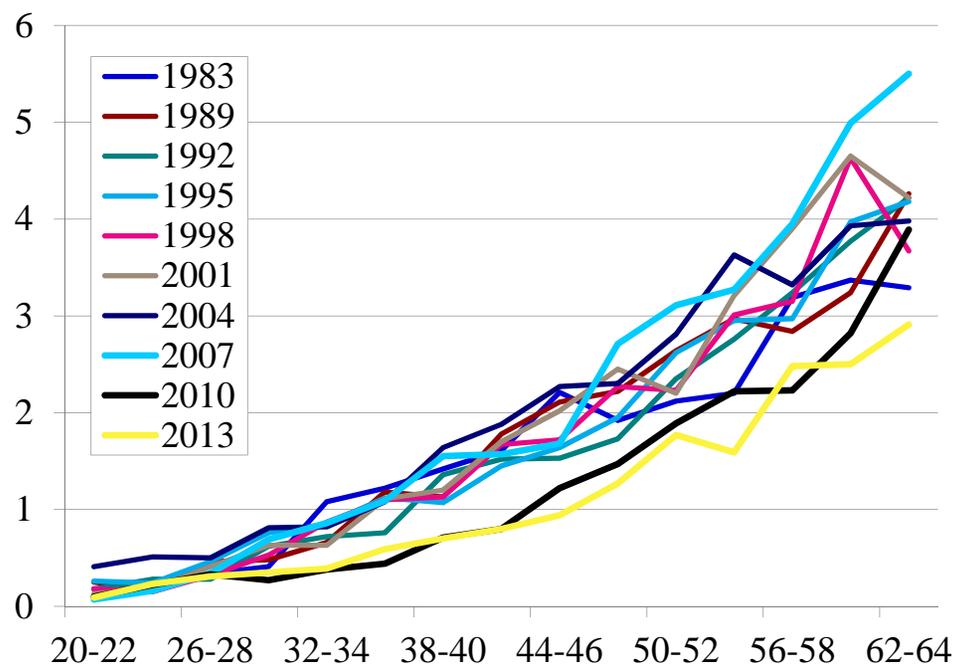
---

# Conclusion

- The current retirement income system will deliver *less* when people need *more*.
- As a result, half are at risk of having insufficient income.
- We can solve the problem by:
  - working longer;
  - fixing Social Security and 401(k)s;
  - expanding coverage; and
  - using home equity.
- All solutions are possible with existing financial infrastructure.

# Some argue that the NRRI overstates the problem, but raw data tell the same story.

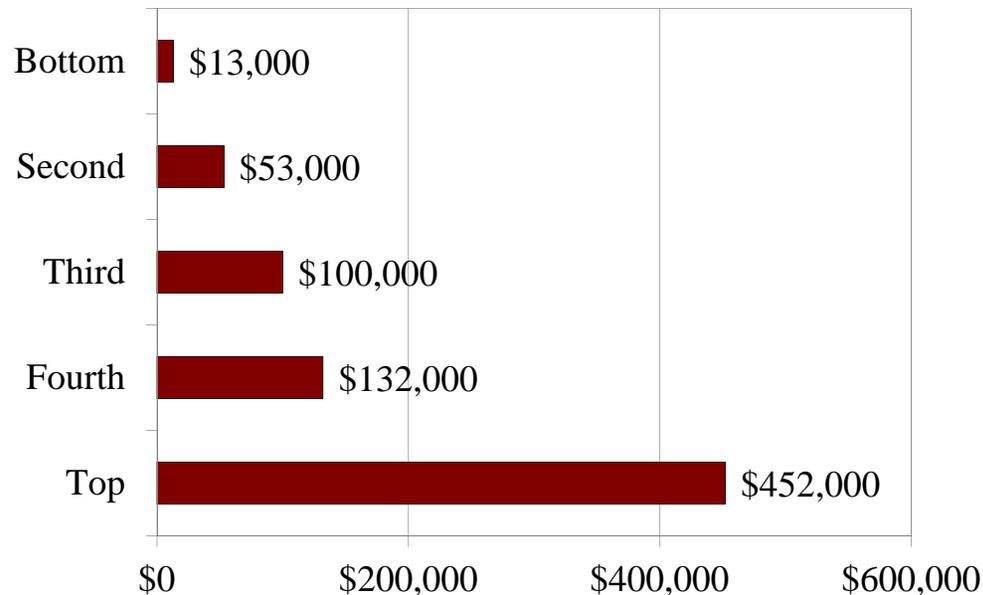
Ratio of Wealth to Income by Age from the *Survey of Consumer Finances*, 1983-2013



Source: Center for Retirement Research at Boston College calculations based on U.S. Board of Governors of the Federal Reserve System, *Survey of Consumer Finances*, 1983-2013.

# Due to mistakes, participants often end up with modest balances.

401(k)/IRA Balances for Median Working Household with a 401(k),  
Age 55-64, by Income Quintile, 2013



Source: Alicia H. Munnell. 2014. "401(k)/IRA Holdings in 2013: An Update from the SCF." *Issue in Brief* 14-15. Center for Retirement Research at Boston College.