

The Myth of Under-Annuitization: Managing Income and Assets in Retirement

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The Myth of Under-Annuitization: Managing Income and Assets in Retirement

Key Findings

Americans' retirement security has many components. These components complement each other, and retirees manage both assets and income in retirement. With the growth of defined contribution (DC) retirement plan assets, some policymakers have considered promoting the offering and use of annuities in DC plans. The underlying premise behind such policies, that most Americans are under-annuitized and that promoting the annuitization of DC plan account balances would benefit American retirees, is incorrect. The relevant research and data show that:

- » Retirement resources, which allow workers to reallocate lifetime resources from their working years to their retired years, should be thought of comprehensively.
- » The US retirement resource pyramid has a strong annuitized base, Social Security, which is progressive and provides high replacement rates for lower-income workers.
- » When including all retirement resources, it is clear that the majority of near-retiree US households are highly annuitized outside their DC plans.
- » Individuals entering retirement who need more annuity income should first consider delaying claiming Social Security before purchasing an annuity in the market.
- » In addition to regular income, most households want access to resources in times of unexpected need, and required minimum distributions (RMDs) are a responsible way to produce a lifetime income stream while still maintaining access to the account balance.
- » Most retirement savers steward their accumulations to and through retirement.
- » Households having difficulty in retirement typically had difficulty while working, and promoting annuitization will not solve the problem of limited lifetime resources.

Research Does Not Support the Premise That American Workers Need More of Their Retirement Income in the Form of an Annuity

The underlying premise of those promoting lifetime income in DC plans is that most Americans are under-annuitized and that promoting annuitization of retirement account balances would benefit American retirees. This premise rests in part on research that uses simplified economic models to predict that individuals should annuitize all wealth at retirement. The supposed “annuity puzzle” arises because, contrary to these predictions, few households choose to purchase annuities.

This white paper provides evidence that the underlying premise is incorrect, and that the so-called annuity puzzle is more a reflection of the limitations of the models used to predict behavior than it is a reflection of poor decisionmaking by households. A long line of research has pointed out that models predicting full annuitization at retirement oversimplify the choices that households face.

Additionally, analysis of data reflecting actual US experience finds that US households generally steward their retirement accumulations to and through retirement and appreciate the flexibility of having control over both income and assets, often citing concern about unexpected needs. US workers change jobs over their careers and the majority of workers across all age groups have low tenures at their current employers, which means the DC plan balance at any given employer is just one component of a household’s retirement resources.

Research on the Annuitization Decision Has Evolved to Incorporate a Broader Range of Households’ Concerns

The belief that there is an “annuity puzzle” in the United States dates back to the 1960s, when a seminal research paper showed that, absent a bequest motive, rational consumers should use all of their life savings to purchase an annuity at retirement.¹ The puzzle arose because the predictions of the economic model used in the paper were at odds with the actual behavior of US households—which rarely choose to purchase annuities, much less use their entire savings to do so.

Subsequent research has raised several issues with the models used to predict full annuitization. For example, rather than being actuarially fair, the price of annuities sold in the market includes sales charges and must be adjusted for adverse selection (that is, individuals who choose to buy an annuity tend to live longer than those who do not).² The models do not account for the fact that individuals have other annuitized resources, such

¹ See Menahem E. Yaari, “Uncertain Lifetime, Life Insurance, and the Theory of the Consumer,” *Review of Economic Studies* 32, no. 2 (1965): 137–150.

² For example, see Olivia S. Mitchell, James M. Poterba, Mark J. Warshawsky, and Jeffrey R. Brown, “New Evidence on the Money’s Worth of Individual Annuities,” *American Economic Review* 89, no. 5 (December 1999): 1299–1318.

as Social Security and defined benefit (DB) pensions.³ Nor do they incorporate uncertainty about future consumption needs, which would cause individuals to keep a portion of wealth liquid in case of unexpected need.⁴ Further, the models typically focus on single individuals, whereas married couples get much less insurance value from purchasing an annuity.⁵ In addition, the prediction of full annuitization relies on the assumption that individuals place no value on resources passed on to their heirs, whereas evidence suggests that a large portion of the population desires to leave bequests.⁶

In fact, a recent study by Felix Reichling of the Congressional Budget Office (CBO) and Kent Smetters of the Wharton School finds no evidence of an annuity puzzle, concluding that most households should not annuitize any wealth.⁷ Although previous research has found that the prediction of full annuitization was largely unaffected by the issues raised by critics,⁸ Reichling and Smetters (2015) determines that the robustness of results is driven by assumptions embedded in the model. Specifically, the authors illustrate that the results of the original model are impervious to many considerations because of the assumption that individuals know what their survival probability will be in all future years. If, instead, it is assumed that individuals learn new information about their health and mortality risk over time, and that adverse health events both increase mortality risk and are costly (in the form of lower income or higher out-of-pocket expenses), then the result that retirees should fully annuitize disappears.

³ For example, see B. Douglas Bernheim, “How Strong Are Bequest Motives? Evidence Based on Estimates of the Demand for Life Insurance and Annuities,” *Journal of Political Economy* 99, no. 5 (October 1991): 899–927.

⁴ For example, see Sven H. Sinclair and Kent A. Smetters, “Health Shocks and the Demand for Annuities,” *Congressional Budget Office Technical Paper* 2004-9 (July 2004); available at <https://cbo.gov/sites/default/files/cbofiles/ftpdocs/56xx/doc5695/2004-09.pdf>. Sinclair and Smetters (2004) concludes:

A new explanation is offered for the thin private market for individual annuities in the United States. Individuals face a risk of health shocks which simultaneously cause large uninsured expenses and shorten the life expectancy. The value of a life annuity then decreases at the same time as the need for cash increases, undermining its effectiveness in providing financial security. When the risk of such health shocks is substantial, it is no longer optimal for risk-averse individuals with uncertain life spans to hold all their wealth in life annuity form, even if annuity contracts are reversible, and bequest motives, transaction costs, and adverse selection are absent.

⁵ For example, see Laurence J. Kotlikoff and Avia Spivak, “The Family as an Incomplete Annuities Market,” *Journal of Political Economy* 89, no. 2 (April 1981): 372–391; Jeffrey R. Brown and James M. Poterba, “Joint Life Annuities and Annuity Demand by Married Couples,” *The Journal of Risk and Insurance* 67, no. 4 (December 2000): 527–553; Irena Dushi and Anthony Webb, “Household Annuitization Decisions: Simulations and Empirical Analyses,” *Journal of Pension Economics and Finance* 3, no. 2 (July 2004): 109–143; and Peter J. Brady, “Can 401(k) Plans Provide Adequate Retirement Resources?” *Public Finance Review* 40, no. 2 (March 2012): 177–206.

⁶ For example, see B. Douglas Bernheim (1991), note 3, *supra*; and John Ameriks, Andrew Caplin, Steven Laufer, and Stijn Van Nieuwerburgh, “The Joy of Giving or Assisted Living? Using Strategic Surveys to Separate Public Care Aversion from Bequest Motives,” *The Journal of Finance* 66, no. 2 (April 2011): 519–561.

⁷ See Felix Reichling and Kent Smetters, “Optimal Annuitization with Stochastic Mortality and Correlated Medical Costs,” *American Economic Review* 105, no. 11 (November 2015): 3273–3320. Specifically, they conclude, “even under conservative assumptions, it is indeed not optimal for most households to annuitize any wealth; many younger households should actually *short* annuities” (page 3317).

⁸ See Thomas Davidoff, Jeffrey R. Brown, and Peter A. Diamond, “Annuities and Individual Welfare,” *American Economic Review* 95, no. 5 (December 2005): 1573–1590; available at <https://economics.mit.edu/files/604>.

Retirees Manage a Range of Resources in Retirement and Typically Do Not Need Additional Annuitization

This white paper explores what resources retirees have, how they access these resources in retirement, and reviews the reasons households do not demand additional annuitized resources. There are seven key takeaways from the research and data, which will be discussed in turn.

Comprehensive Retirement Resources

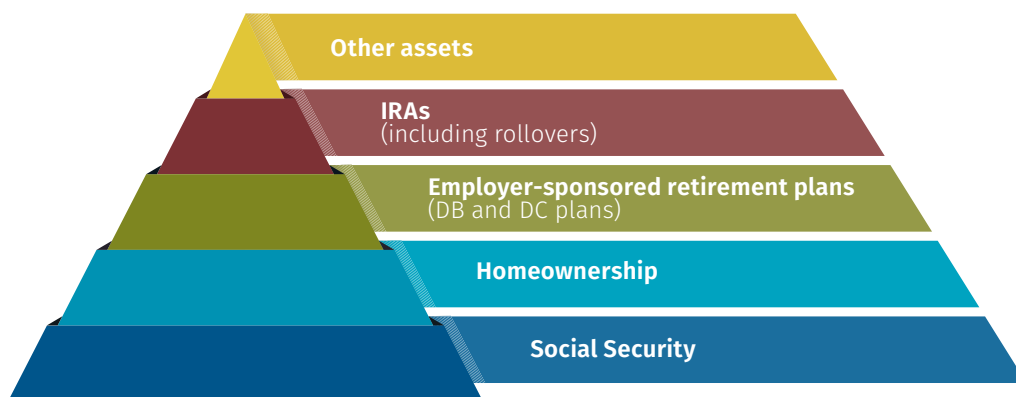
Retirement resources, which allow workers to reallocate lifetime resources from their working years to their retired years, should be thought of comprehensively. Before contemplating whether American workers should annuitize a portion of their DC plan accumulations, it is important to consider the full context of retirement resources.

One analogy for understanding Americans' retirement resources is a five-layer pyramid that draws from government programs, compensation deferred until retirement, and other savings (Figure 1). Specifically, the five layers are: Social Security; homeownership; employer-sponsored retirement plans (private-sector and government employer plans, including both DB and DC plans); individual retirement accounts (IRAs), including rollovers; and other assets.

American households rely on a combination of resources in retirement, and the role each type of resource plays has changed over time and varies across households. Though the use of each layer differs by household, together they have broadly enabled recent generations of retirees to maintain their standard of living in retirement.⁹ Nearly all

FIGURE 1

The Retirement Resource Pyramid



Source: Investment Company Institute; see Figure 8.1 in *2019 Investment Company Fact Book* (www.icifactbook.org)

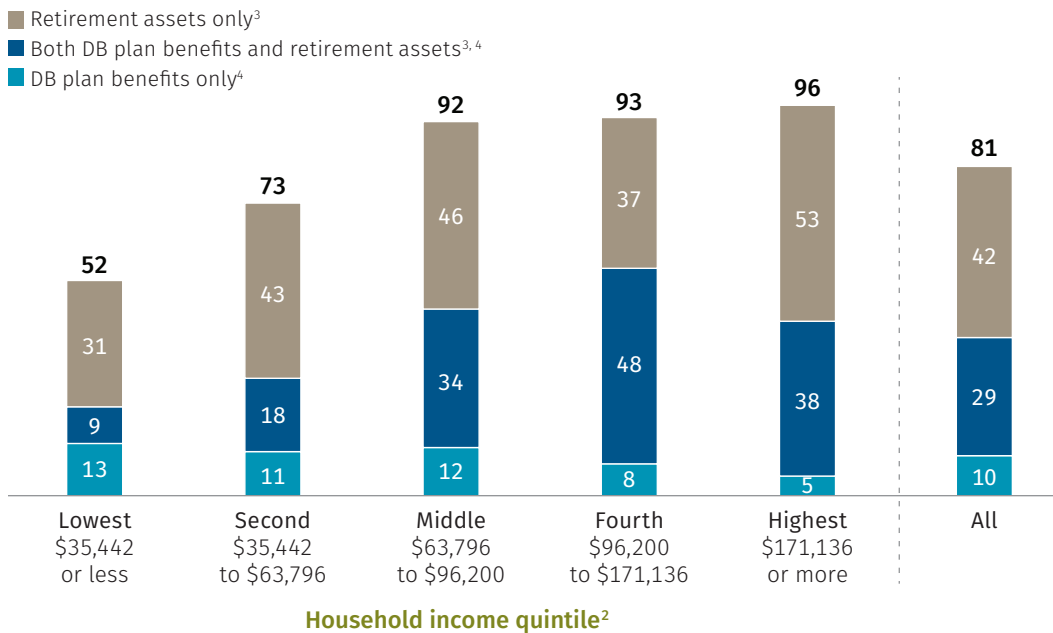
⁹ See Peter Brady, Kimberly Burham, and Sarah Holden, *The Success of the US Retirement System* (Washington, DC: Investment Company Institute, December 2012); available at www.ici.org/pdf/ppr_12_success_retirement.pdf.

workers have Social Security benefits,¹⁰ and eight in 10 near-retiree households own their homes.¹¹ Complementing Social Security, eight in 10 near-retiree households have retirement accumulations, whether from DB plans, DC plans, or IRAs. In 2016, about four in 10 near-retiree households had DB plan benefits, about seven in 10 had DC plan assets or IRAs, and about three in 10 had both (Figure 2). Regardless of income quintile, a majority of near-retiree households have these retirement accumulations.

FIGURE 2

Near-Retiree Households Across All Income Groups Have Retirement Assets, DB Plan Benefits, or Both

Percentage of near-retiree households¹ by income quintile,² 2016



¹ Near-retiree households are those with a head of household aged 55 to 64, and a working head of household or working spouse.

² Income is household income before taxes in 2015.

³ Retirement assets include DC plan assets (401(k), 403(b), 457, thrift, and other DC plans), whether from private-sector or government employers, and IRAs (traditional, Roth, SEP, SAR-SEP, and SIMPLE).

⁴ Households currently receiving DB plan benefits and households with the promise of future DB plan benefits, whether from private-sector or government employers, are counted in this category.

Note: Components may not add to the total because of rounding.

Source: Investment Company Institute tabulations of the 2016 Federal Reserve Board Survey of Consumer Finances; see Figure 8.4 in *2019 Investment Company Fact Book* (www.icifactbook.org)

¹⁰ See Social Security Administration, “Fact Sheet on the Old-Age, Survivors, and Disability Insurance Program” (December 2019); available at www.ssa.gov/oact/FACTS/fs2019_12.pdf.

¹¹ ICI tabulations of the 2016 Federal Reserve Board Survey of Consumer Finances (SCF) find that 80 percent of near-retiree households (households with a head of household aged 55 to 64 and a working head of household or working spouse) owned their homes—56 percent owned the home with a mortgage and 24 percent owned their home mortgage-free.

The concept of annuitization is broader than just annuity products, and the decision regarding annuitization requires consideration of all household resources. Social Security benefits and DB plan benefits (that are not paid out as a lump sum) represent an annuitized asset because they provide monthly payments for life. Owner-occupied housing also represents an annuitized asset in that it provides housing services, which reduces the amount of monthly income retirees need to generate.¹²

Social Security Is a Strong Base

The US retirement resource pyramid has a strong annuitized base—Social Security—which is progressive and which provides high replacement rates for lower-income workers. By design, Social Security is the primary means of support for retirees with low lifetime earnings and a substantial source of income for all retired workers. Based on CBO estimates, for those in the lowest quintile (20 percent) of workers ranked by lifetime household earnings, first-year Social Security benefits are scheduled to replace 89 percent of inflation-indexed lifetime earnings, on average, for workers born in the 1960s who claim benefits at age 67 (Figure 3).¹³ That replacement rate declines to 67 percent for workers in the second quintile of lifetime household earnings, and then declines more slowly as lifetime household earnings increase. Even for workers in the top 20 percent of lifetime household earnings, Social Security benefits are scheduled to replace a considerable portion (36 percent) of earnings at full retirement age.

US Households Are Highly Annuitized

When including all retirement resources, it is clear that the majority of near-retiree US households are highly annuitized outside their DC plans. Nevertheless, support for promoting annuitization within DC plans appears to rest at least partly on a perception that DC plan participants are under-annuitized and therefore that more participants in DC plans should annuitize their accounts. There is no evidence to support such a conclusion. All retirement income products and strategies involve tradeoffs and consideration of an individual's personal circumstances, such as other assets or income (including from Social Security), health status and life expectancy, the need for emergency reserves, specific goals in retirement, and the need to provide for other family members.

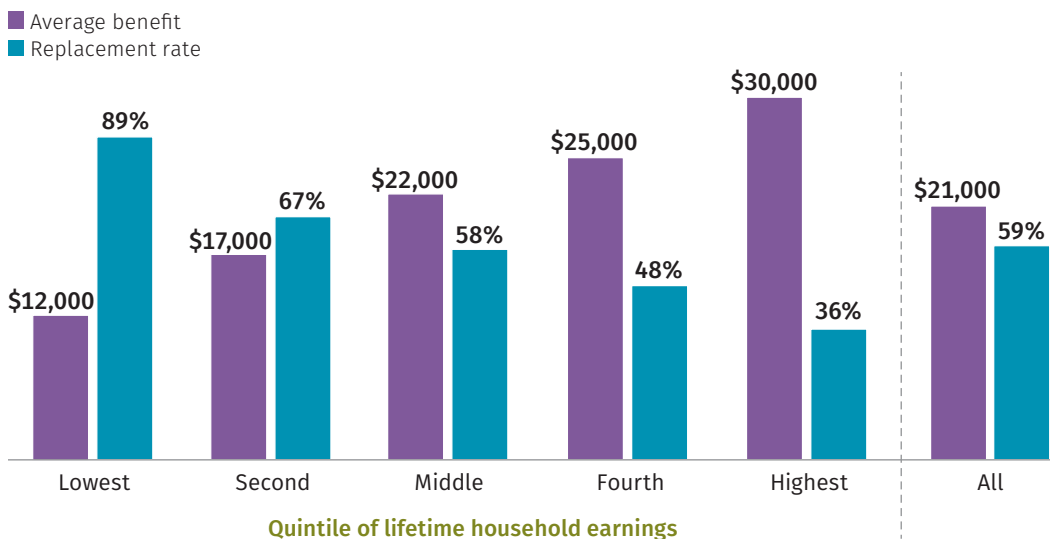
¹² If a household did not own its home, it would be required to pay rent to live in the home. Owner-occupied housing provides imputed rental income in excess of expenses, which reduces the need for a regular stream of income from other sources.

¹³ See "Table C-2: Mean Initial Benefits for Retired Workers, with Scheduled and Payable Benefits" in Congressional Budget Office, *CBO's 2019 Long-Term Projections for Social Security: Additional Information* (September 2019); available at www.cbo.gov/publication/55590 and www.cbo.gov/system/files/2019-09/55590-CBO-longterm-projections-social-security.xlsx. The CBO calculation assumes claiming at age 65; ICI adjusts to claiming at age 67 (see discussion in Figure 6).

FIGURE 3

Social Security, a Real Annuity, Forms a Strong Base in the US Retirement System

Average benefits and replacement rates for workers born in the 1960s by lifetime household earnings quintile



Note: The average benefit is the scheduled benefit net of income tax and in constant 2019 dollars. The replacement rate is the scheduled Social Security benefit, net of income tax, as a percentage of a worker's average inflation-indexed lifetime earnings. CBO estimates are for workers who claim at age 65. ICI proportionately adjusts the CBO's estimates to represent workers claiming at age 67 (the full retirement age for workers born in the 1960s) according to Social Security rules.

Sources: Investment Company Institute and Congressional Budget Office; see CBO's 2019 *Long-Term Projections for Social Security: Additional Information*

Analysis of Comprehensive Household Wealth Finds High Levels of Annuitization

A key explanation for why annuity demand is low is that most US retirees already hold most of their wealth in an annuity-equivalent form, including both future Social Security and DB plan benefits, and owner-occupied housing.¹⁴ Households rationally may not want to annuitize more assets, preferring instead to preserve the liquidity and flexibility of their DC plan balances. Academic research that includes the present value of future Social Security benefits and DB plan benefits in a comprehensive measure of household wealth

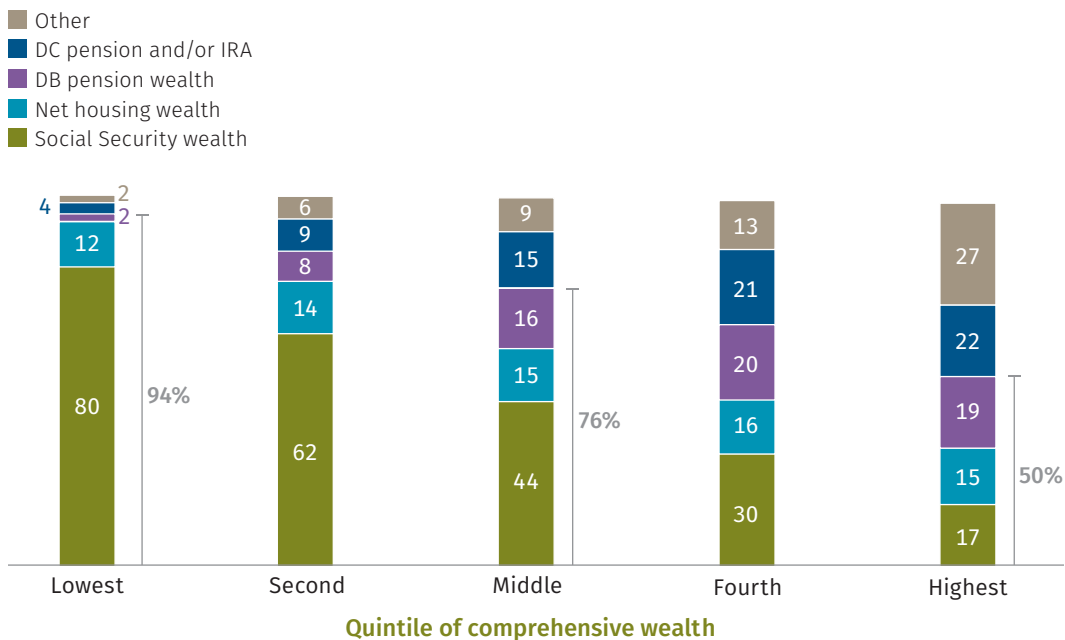
¹⁴ See note 12, supra.

shows that the majority of household wealth for those near retirement age is effectively annuitized (Figure 4).¹⁵ For example, 94 percent of comprehensive wealth of the lowest wealth quintile is annuitized assets, consisting of 80 percent in Social Security wealth, 12 percent in net housing wealth, and 2 percent in DB pension wealth. About three-quarters of the comprehensive wealth of the middle wealth quintile of households near retirement age is annuitized assets: 44 percent in Social Security wealth, 15 percent in net housing wealth, and 16 percent in DB pension wealth. Even the highest wealth quintile is highly annuitized (half of their comprehensive wealth).

FIGURE 4

Many American Households Approaching Retirement Age Already Are Highly Annuitized

Percentage of comprehensive wealth by comprehensive wealth quintile, 2010



Note: Data represent households with at least one member aged 57 to 62 and exclude the highest and lowest 1 percent of households ranked by comprehensive wealth. Comprehensive wealth includes the present value of future Social Security benefits and the present value of future DB benefits, in addition to financial assets, net housing wealth, and other balance sheet items. Components may not add to the total because of rounding.

Source: ICI tabulation derived from an updated Table 3 of Gustman, Steinmeier, and Tabatabai (2009)

¹⁵ See Alan L. Gustman, Thomas L. Steinmeier, and Nahid Tabatabai, “How Do Pension Changes Affect Retirement Preparedness? The Trend to Defined Contribution Plans and the Vulnerability of the Retirement Age Population to the Stock Market Decline of 2008–2009,” University of Michigan Retirement Research Center Working Paper 2009-206 (October 2009); available at www.mrrc.isr.umich.edu/publications/papers/pdf/wp206.pdf.

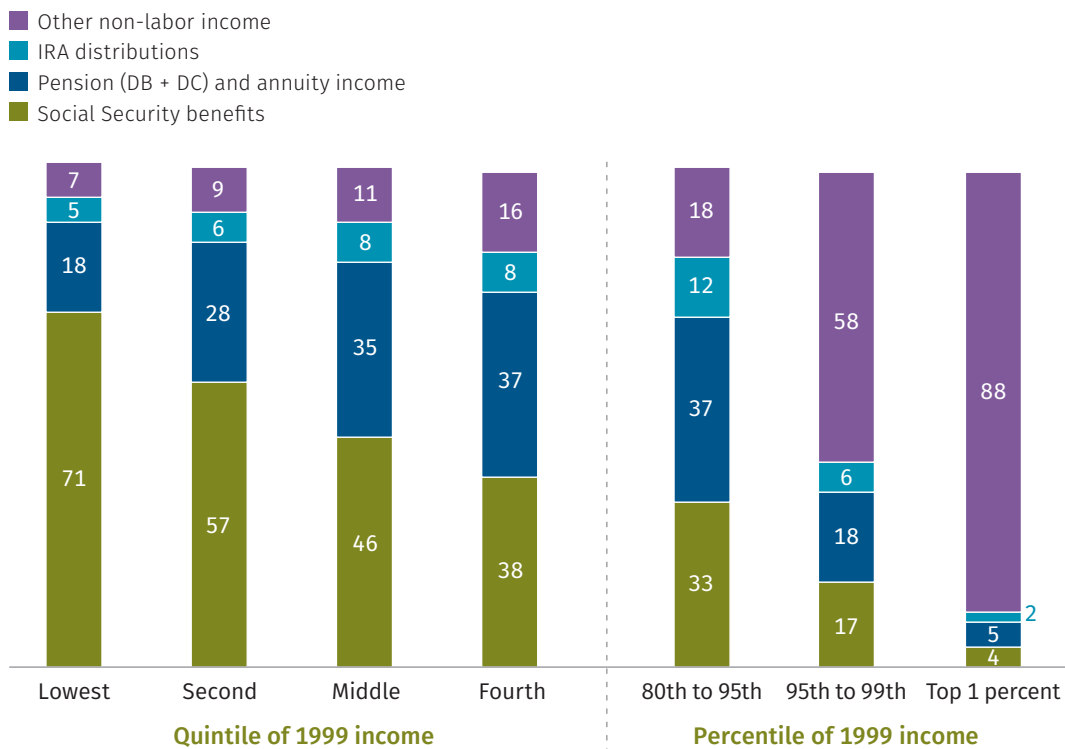
Data Show That a High Percentage of Retiree Income Comes from Annuity Streams

Analysis of Internal Revenue Service (IRS) Statistics of Income tax data shows that most taxpayers' non-labor income is highly annuitized in the third year after claiming Social Security.¹⁶ Reflecting the design of Social Security, 71 percent of non-labor income is Social Security benefit payments for the lowest income quintile (Figure 5). As one moves up the income distribution, this share falls to 57 percent for the second income quintile, 46 percent for the middle quintile, and 38 percent for the fourth income quintile. In

FIGURE 5

Composition of Non-Labor Income Reflects Design of Social Security

Percentage of non-labor income in third year after claiming Social Security



Note: This figure presents the composition of non-labor income in the third year after workers claimed Social Security. Components may not add to 100 percent because of rounding.

Source: Using Panel Tax Data to Examine the Transition to Retirement (www.ici.org/transition_to_retirement)

¹⁶ The research analyzed administrative tax data for individuals aged 55 to 61 in 1999 who were working and not receiving Social Security benefits. Data on these individuals were collected through 2010, with the analysis focusing on those workers who claimed Social Security retirement benefits between 2000 and 2007. The study found that most workers maintained or increased their spendable income in the three years after claiming. The study also found that, after claiming, most individuals received substantial income from both Social Security benefits and retirement income (from employer-sponsored retirement plans, annuities, or IRAs). See Peter Brady, Steven Bass, Jessica Holland, and Kevin Pierce, "Using Panel Tax Data to Examine the Transition to Retirement," SOI Working Paper (Washington, DC: Internal Revenue Service and Investment Company Institute, April 2017); available at www.irs.gov/pub/irs-soi/17rpttransitionretirement.pdf and www.ici.org/pdf/ppr_17_brady_tax_panel_data.pdf.

addition to Social Security, a portion of pension distributions (from DB and DC plans) and annuity distributions, which tend to rise in share as one moves up the income distribution, is annuitized. Eighteen percent of non-labor income is DB, DC, and annuity payments for the lowest income quintile, rising to 37 percent for the fourth income quintile.

IRA distributions, which typically are used to provide a series of payments over time,¹⁷ tend to edge up in share across the income distribution. In the third year after claiming Social Security, IRA distributions represent 5 percent of non-labor income for the lowest income quintile, and 8 percent for the fourth income quintile (Figure 5).

Other non-labor income¹⁸ represents a small share of non-labor income for most US retirees, with the exception of the top 5 percent of the income distribution.

To Increase Annuity Income: Consider Delaying Social Security

Individuals looking to increase annuity income in retirement have two options: they can purchase an annuity in the market or they can delay claiming Social Security benefits. Delayed claiming will provide more annuity income because the Social Security benefit increases for delayed claiming are designed to be actuarially fair for the average worker, and market-priced annuities are not.

Delayed Claiming Increases Annual Social Security Benefits

Although Social Security can be claimed as early as age 62, every month an individual delays claiming increases the monthly benefit (up to age 70). For example, for the middle quintile of lifetime household earnings for workers born in the 1960s, Social Security replacement rates are projected to be 40 percent, on average, for workers who claim at age 62 (Figure 6).¹⁹ Claiming at the full benefit retirement age (age 67) increases the replacement rate to 58 percent and waiting until age 70 results in a 72 percent replacement rate. The average benefit amount nearly doubles from age 62 to age 70.

The adjustment in Social Security benefits by claiming age are designed to be actuarially fair. That is, the increase in monthly benefits is intended to compensate for the shorter number of months over which benefits are expected to be paid and keep the present value of lifetime benefit payments unchanged.

¹⁷ IRA distributions may be calculated based on life expectancy (whether using the RMD rule or some other calculation), as a percentage of the account balance, as a fixed dollar amount, or as a lump sum. See Figure 10 on page 19 for the distribution behavior of traditional IRA-owning households.

¹⁸ Other non-labor income includes interest; dividends; gains or losses; business income (other than self-employment income); farm income (other than self-employment income); income from rental real estate, royalties, partnerships, S corporations, and trusts; alimony received; unemployment compensation; refunds, credits, or offsets of state and local income taxes; and other income.

¹⁹ See discussion in note 13, supra.

FIGURE 6

Delaying Social Security Dramatically Increases Benefits

Average scheduled initial Social Security replacement rates for workers born in the 1960s, middle lifetime household earnings quintile, percent



Note: The CBO estimates replacement rates for workers who claim at age 65, calculated as scheduled Social Security benefits, net of income tax, as a percentage of a worker's average inflation-indexed lifetime earnings. ICI proportionately adjusts the CBO's average replacement rate at age 65 according to the Social Security rules to determine the replacement rates at the other ages.

Sources: Investment Company Institute and Congressional Budget Office; see *CBO's 2019 Long-Term Projections for Social Security: Additional Information*

Market-Priced Annuities Are Not Actuarially Fair

Annuities sold in the market are not actuarially fair—that is, typical estimates are that, for every dollar invested, expected lifetime payments are worth about 80 to 85 cents in present value.²⁰ Insurance company fees account for only a portion of the difference in value. Even if insurance companies charged no fees, market-priced annuities would not be actuarially fair because of asymmetric information and adverse selection. That is, individuals have a better estimate of their life expectancy than insurers and, as a result, individuals who voluntarily purchase an annuity typically live longer than average.

²⁰ For example, see Mitchell et al. (1999), note 2, *supra*.

Delayed Social Security Claiming Maximizes Annuity Income

As explained in Brady (2009), delayed Social Security claiming dominates the purchasing of a private-sector annuity:

Because annuities bought in the private market are not actuarially fair for the average individual, the cheapest way to increase annuity income in retirement is to delay claiming Social Security benefits. Social Security benefits can be claimed as early as age 62, but, if initial receipt of benefits is delayed, benefits are increased using actuarially fair adjustments until the individual attains age 70. If a portion of retirement assets are earmarked for the purchase of an annuity in the private marketplace, it would be better to use those assets to fund retirement consumption and delay claiming Social Security benefits until the assets were exhausted or age 70, whichever comes first.²¹

In fact, Shoven and Slavov (2014) finds that the returns to delaying Social Security claiming are better than actuarially fair because of changes to policy, mortality, and real interest rates since the claiming age adjustments were designed.²²

Several recent studies have highlighted that delaying Social Security claiming dominates purchasing market-priced annuities:

- » Bronshtein, Scott, Shoven, and Slavov (2016) finds that “most primary earners who either purchase a retail-priced annuity or opt for a defined benefit annuity when a lump sum is offered, while forgoing the opportunity to delay Social Security” would have been better off using the resources to delay claiming.²³
- » Rundle (2018) concludes that “results for the scenarios analyzed generally support delaying Social Security as a preferred method to annuitize assets over the direct purchase of a deferred annuity, particularly under the married scenario.”²⁴
- » Vernon (2017) recommends that those who stop work before age 70 “use a portion of savings to enable delaying Social Security benefits as long as possible but no later than age 70.”²⁵

²¹ See pages 30–31 in Peter J. Brady, “Can 401(k) Plans Provide Adequate Retirement Resources?” PRC Working Paper WP2009-01 (January 2009); available at <http://pensionresearchcouncil.wharton.upenn.edu/wp-content/uploads/2015/09/Brady-WP-Tweaked-01.12.09.pdf>.

²² See John Shoven and Sita Nataraj Slavov, “Recent Changes in the Gains from Delaying Social Security,” *Journal of Financial Planning* 27, no. 3 (2014): 32–41; available as a working paper at www.nber.org/papers/w19370.

²³ See Gila Bronshtein, Jason Scott, John B. Shoven, and Sita N. Slavov, “Leaving Big Money on the Table: Arbitrage Opportunities in Delaying Social Security,” NBER Working Paper, no. 22853 (November 2016); available at www.nber.org/papers/w22853.pdf.

²⁴ See Jonathan Rundle, “A Social Security ‘Annuity Purchase’: Is Delaying Social Security More Effective Than Purchasing a Deferred Income Annuity?” *The Journal of Retirement* 6, no. 1 (Summer 2018): 8–21.

²⁵ See Steve Vernon, *How to “Pensionize” Any IRA or 401(k) Plan*, Stanford Center on Longevity (November 2017); available at <http://longevity.stanford.edu/wp-content/uploads/2017/11/How-to-pensionize-any-IRA-401k-final.pdf>.

Policymakers considering rule changes to promote annuitization within DC plans must be mindful of the impact of such changes on the resources available to households to delay Social Security claiming. If the goal is to increase annuitized income, policymakers should be promoting delayed Social Security claiming, not the purchase of market-priced annuities.

Rainy Day Funds Are Also Important

In addition to regular income, most households want access to resources in times of unexpected need. RMDs, which are based on remaining life expectancy, are a responsible way to produce a lifetime income stream while still maintaining access to the account balance.

Households Want Access to Resources in Case of Unexpected Needs

Financial security in retirement requires not only regular monthly income, but also resources to tap in times of unexpected need. From time to time, households may need to replace an appliance, fix a car, or pay for an unexpected hospital bill. In those cases, it may be better to have liquid savings than to go into debt and pay it off monthly.

Retirees place value on having access to a “liquid” asset balance that is available for emergencies and other large expenditures that might arise. When traditional IRA-owning households were asked to consider how they expected to use future traditional IRA withdrawals in retirement, 65 percent indicated they planned to use some of their traditional IRA withdrawals for an emergency, 34 percent indicated healthcare expenses, and 25 percent indicated home purchase, remodeling, or repairs.²⁶

Annuitization is difficult to reverse, and therefore reduces the liquidity available to the retiree. In fact, some of the observed “behavioral bias against annuitization” is simply prudent risk management on the part of real-world retirees, who have a greater awareness of the uncertainty of their own future spending needs. Household survey data indicate that more than four in 10 older households (aged 65 or older) indicate their primary savings goal is for liquidity (Figure 7). Households without such reserves to handle emergencies face the possibility of high-cost debt to cover a significant large expenditure that arises. Additionally, households may want the flexibility to spend more earlier in retirement while they still have the physical capability to enjoy the money.

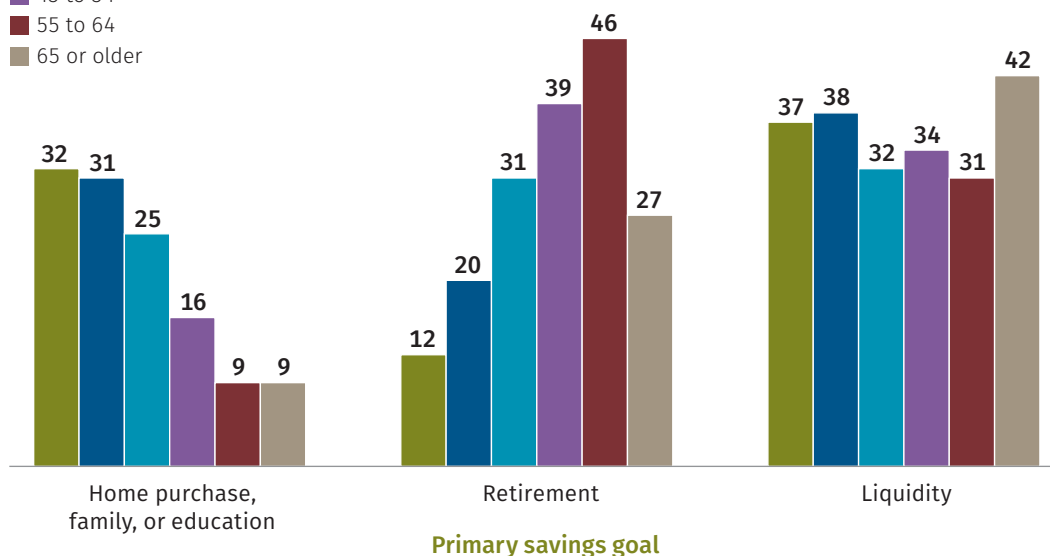
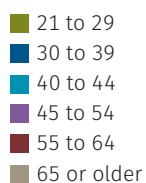
²⁶ Multiple responses are included; 62 percent indicated they would take future traditional IRA withdrawals in retirement to pay for living expenses. The base of respondents includes the 23 percent of traditional IRA-owning households in mid-2015 that were retired but did not take withdrawals (that were asked about their future plans), the 6 percent of nonretired traditional IRA-owning households in mid-2015 that took withdrawals, and the 55 percent of nonretired traditional IRA-owning households in mid-2015 that did not take withdrawals. See Figure 32 in Sarah Holden and Daniel Schrass, “The Role of IRAs in US Households’ Saving for Retirement, 2015,” *ICI Research Perspective* 22, no. 1 (February 2016); available at www.ici.org/pdf/per22-01.pdf.

FIGURE 7

Older Households Often Indicate Need for Precautionary Saving

Percentage of US households by age, 2016

Age of head of household



Source: Investment Company Institute tabulations of the 2016 Federal Reserve Board Survey of Consumer Finances

RMDs Provide a Reasonable Distribution Plan While Preserving Access to Liquidity

DC plan participants have a range of income options, whether inside or outside of the plan, to manage income and assets in retirement. In addition to life annuities, these options include installment payments and systematic withdrawal plans, life expectancy withdrawals, longevity insurance, and managed payout products.

Research finds that withdrawals based on remaining life expectancy work well. For example, Dus, Maurer, and Mitchell (2005), comparing life annuities versus phased withdrawal plans, concludes:

As a stand-alone strategy, the $1/[\text{expected life expectancy}]$ phased withdrawal rule is appealing since it offers a relatively low expected shortfall risk, good expected payouts for the retiree during his life, and some bequest potential for his heirs.²⁷

²⁷ See Ivica Dus, Raimond Maurer, and Olivia S. Mitchell, "Betting on Death and Capital Markets in Retirement: A Shortfall Risk Analysis of Life Annuities Versus Phased Withdrawal Plans," *Financial Services Review* 14, no. 3 (Fall 2005): 169–196; available as a working paper at www.nber.org/papers/w11271.

This is particularly true for married couples, who can pool mortality risk by making their spouse the beneficiary of their retirement account. This pooling provides benefits that compare favorably to market-priced annuities.²⁸

After an extensive review, the US Government Accountability Office (GAO) concludes that RMDs can work so well that they should perhaps be a default distribution option: “RMD-based default income can stretch out the account balances of these participants throughout retirement if sponsors and participants understand how they can be administered and used.”²⁹

In addition, Vernon (2017) does not recommend that retirees purchase annuities. Instead, workers are encouraged to delay claiming Social Security as long as possible (up to age 70), invest their remaining savings, and “use the RMD to calculate retirement income.”³⁰

Stewardship of Retirement Accumulations

Most retirement savers steward their accumulations to and through retirement. Some proponents of annuities also appear to be concerned that annuities need to be promoted to prevent people from spending down their balances too quickly. Again, research finds that US retirees generally manage their income and assets responsibly in retirement.

Majority of Terminating DC Plan Participants Preserve Assets

Research finds that, by and large, people act responsibly with their DC plan account balances over their careers and at retirement.³¹ For example, Utkus and Young (2019), analyzing Vanguard recordkeeping data for plan year 2018, conclude that nearly two-thirds of DC plan participants across all age groups with termination dates in 2018 preserved

²⁸ See Kotlikoff and Spivak (1981); Brown and Poterba (2000); Dushi and Webb (2004); and Brady (2012), note 5, *supra*.

²⁹ See page 54 in US Government Accountability Office, “401(k) Plans: DOL Could Take Steps to Improve Retirement Income Options for Plan Participants,” *Report to Congressional Requesters*, GAO-16-433 (August 2016); available at www.gao.gov/assets/680/678924.pdf.

³⁰ See page 8 in Vernon (2017), note 25, *supra*.

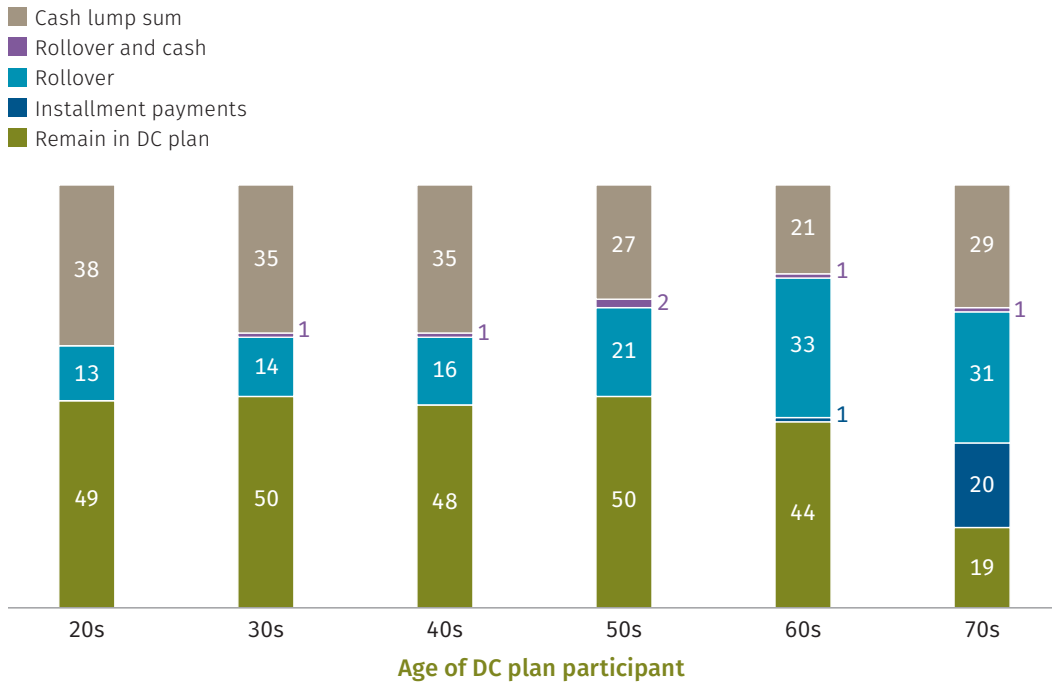
³¹ For household survey data on DC plan distribution choices at retirement, see John Sabelhaus, Michael Bogdan, and Sarah Holden, *Defined Contribution Plan Distribution Choices at Retirement: A Survey of Employees Retiring Between 2002 and 2007* (Washington, DC: Investment Company Institute, 2008); available at www.ici.org/pdf/rpt_08_dcdd.pdf. The survey finds that few retirees cashed out their balances, and most selected reinvesting a lump-sum distribution in a traditional IRA. Others selected installment payments, annuities, or leaving the balance in their employer’s plan. Nearly one-tenth did a combination of distribution options.

their retirement assets,³² with about half leaving their account balances in the plan and about one-fifth rolling their account balances into IRAs (Figure 8).³³ Although one-third of terminating participants in 2018 took cash lump sums, these tended to be individuals with small accounts. As a result, 93 percent of assets of terminating participants were preserved

FIGURE 8

Majority of DC Plan Participants Preserve Their DC Assets When They Leave Employment

Percentage of participants with termination dates in 2018 by participant age



Note: Participants' use of the annuity option is negligible and is not plotted. Fewer than 0.5 percent of terminating participants younger than 60 set up installment payments. Fewer than 0.5 percent of terminating participants in their twenties did rollover and cash.

Source: Vanguard 2018 defined contribution plan data; see Utkus and Young (2019)

³² Overall, 66 percent of DC plan participants terminating in 2018 preserved their assets. See Figure 116 in Stephen P. Utkus and Jean A. Young, *How America Saves 2019: Vanguard 2018 Defined Contribution Plan Data* (Valley Forge, PA: The Vanguard Group, June 2019); available at <https://pressroom.vanguard.com/nonindexed/Research-How-America-Saves-2019-Report.pdf>.

³³ Although less than half of terminating participants in their seventies remained in the plan, in contrast to younger terminating participants, 20 percent set up installment payments from their DC account balances, likely reflecting RMDs.

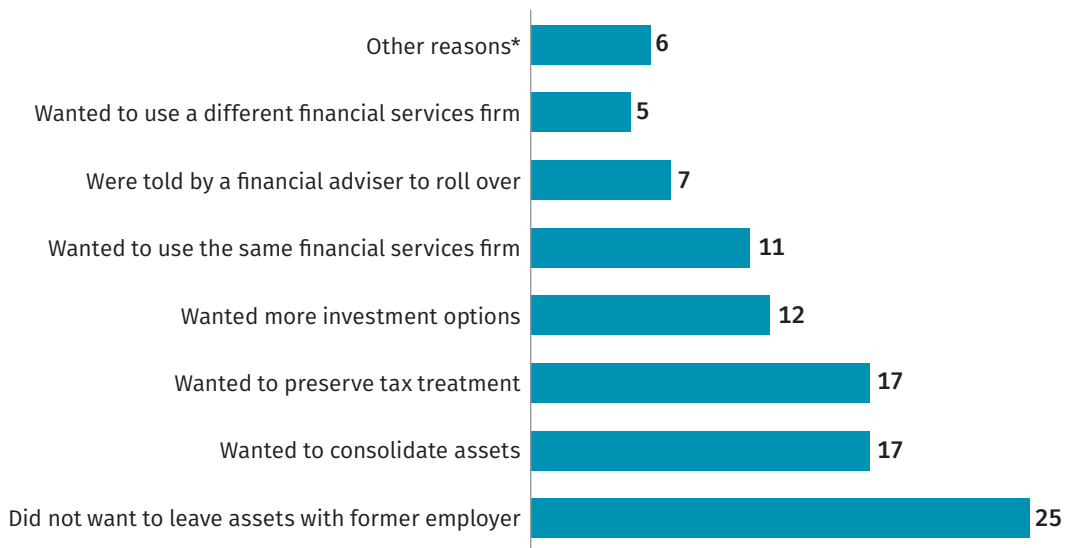
for retirement.³⁴ If the analysis considers all terminated participants with access to plan savings (including participants who terminated before 2018), 81 percent of terminated participants preserve assets and 96 percent of assets are preserved.³⁵

Research shows that participants who choose to roll over account balances into IRAs have researched the decision and have reasons for doing so.³⁶ In mid-2019, 42 percent of traditional IRA-owning households with rollovers indicated their primary reason for rolling over was essentially to keep track of and consolidate the money (Figure 9). Others primarily were seeking more investment options (12 percent), to use the same financial services firm (11 percent), to use a different financial services firm (5 percent), or to follow the advice of a financial adviser (7 percent).

FIGURE 9

Traditional IRA Rollovers Are Used to Consolidate Assets

Primary reason for most recent rollover; percentage of traditional IRA-owning households with rollovers, mid-2019



* Other reasons includes thinking it was easier to roll over to an IRA than to a new employer’s plan (4 percent) and wanting the same investments as in the former employer’s plan (2 percent).

Source: Investment Company Institute IRA Owners Survey; see Holden and Schrass (2019)

³⁴ See Figure 116 in Utkus and Young (2019), note 32, supra. Despite the fact that 8 percent of DC plans covering 7 percent of participants offer an annuity distribution option, and 12 percent of DC plans covering 1 percent of participants have a grandfathered annuity option in Vanguard’s recordkeeping system (see Figure 113 in Vanguard’s report), the number of participants (and share of assets) engaging that option is negligible and is therefore, not included in Figure 114 in Vanguard’s report (or Figure 119 in Vanguard’s report, note 35, infra).

³⁵ See Figure 119 in Utkus and Young (2019), note 32, supra.

³⁶ See Sarah Holden and Daniel Schrass, “The Role of IRAs in U.S. Households’ Saving for Retirement, 2019,” *ICI Research Perspective* 25, no. 10 (December 2019); available at www.ici.org/pdf/per25-10.pdf. Figure 13 in the report presents the sources of information participants consulted when making the rollover decision.

IRA Investors Spend Down Their Balances Responsibly

Research finds that traditional IRA investors are responsible stewards of those assets to and through retirement.³⁷ Few IRA-owning households withdraw money from their IRAs in any given year, and most withdrawals are retirement related. Twenty-five percent of households owning traditional IRAs in mid-2019 reported taking withdrawals from these IRAs in tax year 2018.³⁸ Among households taking traditional IRA withdrawals in tax year 2018, 88 percent reported that someone in the household was retired from their lifetime occupation.³⁹

A common strategy to tap retirement assets is through withdrawals based on remaining life expectancy, often RMDs. Among traditional IRA-owning households in mid-2019 that took withdrawals from their traditional IRAs in 2018, 77 percent calculated the withdrawal amount to meet the RMD (Figure 10). Another 9 percent had systematic withdrawals in place, with either a regular dollar amount (7 percent), an amount based on life expectancy (1 percent), or a fixed percentage of the account balance (1 percent) determining the amount. Another 12 percent of traditional IRA-owning households that took withdrawals had taken a lump sum based on needs, which highlights the flexibility of maintaining an IRA balance.

Worker Mobility Makes Annuitization Within DC Plans Problematic

Promoting a deferred annuity purchase early in a worker's career is problematic because American workers are a mobile workforce, which means that over the course of a career one individual could have several retirement plan accounts or accumulations. It also means that during their careers, they likely will be changing jobs at some time. The median tenure among private-sector workers aged 25 to 34 is three years (Figure 11). Median tenure only rises a bit among private-sector workers aged 35 to 44, to five years, and to seven years among private-sector workers aged 45 to 54. As a result of this workforce tenure pattern, in-plan products that do not provide liquidity and flexibility may pose challenges for workers as they move through their careers.⁴⁰

³⁷ As households roll over and otherwise open IRAs, they do so at a range of financial services providers. In mid-2019, 75 percent of traditional IRA-owning households held their traditional IRAs through investment professionals and 31 percent went directly to mutual fund companies or discount brokerages. Multiple responses are included. Investment professionals include full-service brokerages (29 percent of traditional IRA-owning households in mid-2019), independent financial planning firms (25 percent), bank or savings institutions (25 percent), and insurance companies (8 percent). Direct sources include mutual fund companies (20 percent of traditional IRA-owning households in mid-2019) and discount brokerages (13 percent). See Figure 19 in Holden and Schrass (2019), note 36, *supra*.

³⁸ See Figure 21 in Holden and Schrass (2019), note 36, *supra*.

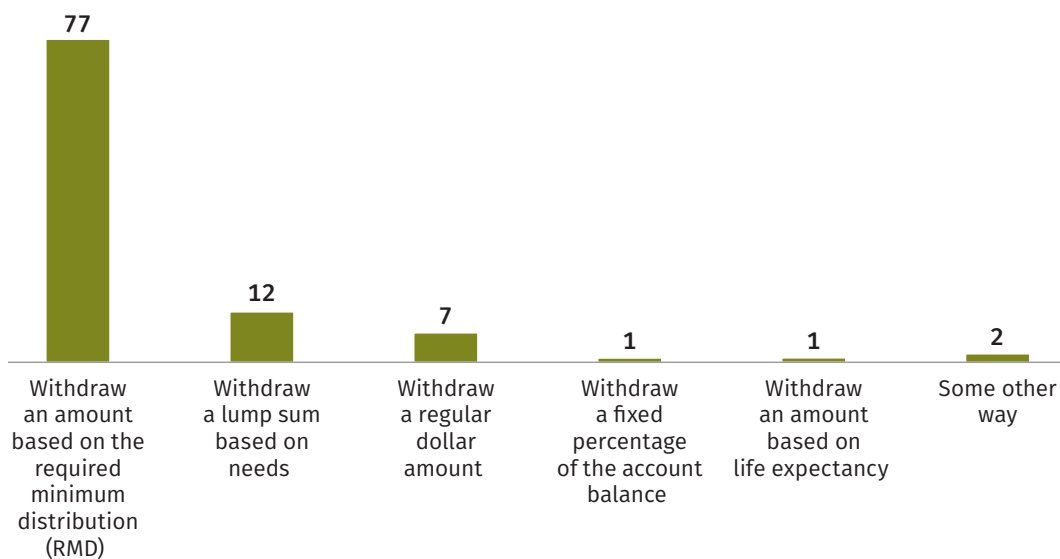
³⁹ *Id.* In addition, IRS Statistics of Income Division data on IRA investors find that the majority of distributions are taken by older IRA-owning taxpayers (see IRS Statistics of Income, "SOI Tax Stats: Accumulation and Distribution of Individual Retirement Arrangements (IRA)"; available at www.irs.gov/statistics/soi-tax-stats-accumulation-and-distribution-of-individual-retirement-arrangements). In addition, ICI analysis of recordkept data on IRAs in The IRA Investor Database™ finds that distributions are concentrated among older IRA investors, and in the case of traditional IRAs, often calculated to fulfill RMDs (see the *ICI Research Report* series available at www.ici.org/research/investors/database).

⁴⁰ See Craig M. Gross and Jonathan R. Kahler, "Perspective on Annuities for Accumulation in Defined Contribution Plans," *Vanguard Commentary* (May 2017); available at <https://institutional.vanguard.com/iam/pdf/ISGAMA.pdf?cbdForceDomain=true>.

FIGURE 10

RMDs Are the Dominant Withdrawal Amount

Percentage of traditional IRA-owning households in mid-2019 with withdrawals in tax year 2018

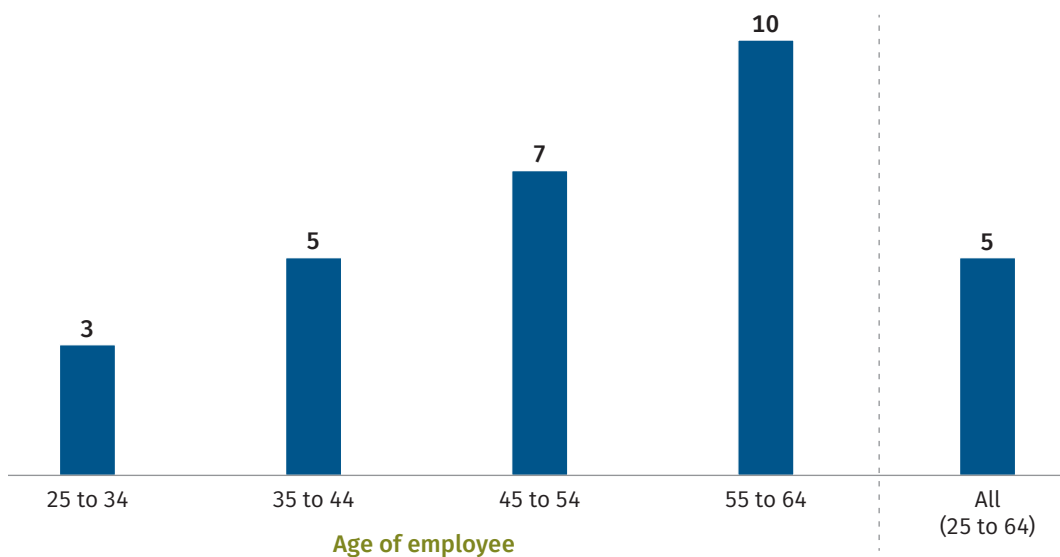


Source: Investment Company Institute IRA Owners Survey; see Holden and Schrass (2019)

FIGURE 11

The American Workforce Is Mobile

Median length of employment at current employer among private-sector wage and salary workers, in years, by age group, 2018



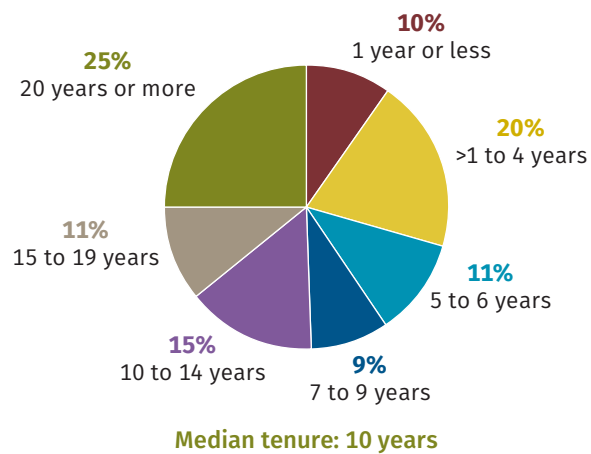
Source: ICI tabulations of Current Population Survey

In fact, it is unclear that any DC plan in a person's career is where an annuitization decision should be made, particularly given that the reason many roll over assets into IRAs is to track and consolidate the assets. Current Population Survey data indicate that even among private-sector workers aged 55 to 64, there is a wide range of tenures. Thirty percent of private-sector workers aged 55 to 64 have been at their current employers for four years or less, and three-quarters have less than 20 years of tenure (Figure 12).

FIGURE 12

Few Near-Retiree Workers Have Been at Their Employers for Full Careers

Percentage of private-sector workers aged 55 to 64 by length of employment at current employer, 2018



Note: Components do not add to 100 percent because of rounding.

Source: ICI tabulations of Current Population Survey

Americans Value Flexibility and Choice with Regard to Annuitization at Retirement

ICI recently included questions in our fall 2019 survey to gauge US individuals' views on annuitization in DC plans. Surveying consumer preferences regarding annuitization is difficult because the subject matter is complicated⁴¹ and may not be salient at the current time for many households. In addition, academic research has shown that word choice in surveys on annuities has a dramatic impact on the perceived desirability of the annuity option.⁴²

With these difficulties in mind, ICI asked three questions regarding the control of retirement account balances in a survey of US individuals. In the first question, respondents were asked to react to a simple statement: "Retirees should be able to make their own decisions about how to manage their own retirement assets and income." Ninety-three percent of respondents either "strongly agreed" or "somewhat agreed" with that statement.⁴³ Agreement was slightly higher for individuals with retirement accounts (95 percent) than for individuals without retirement accounts (88 percent). In addition, agreement with the statement was generally higher for older individuals.⁴⁴

The second and third questions about control of retirement accounts were focused on sentiment regarding more-specific annuitization policy options. The second statement read: "The government should require retirees to trade a portion of their retirement plan accounts for a fair contract that promises to pay them income for life from an insurance company." The third statement replaced "from an insurance company" with "from the government." The distinction between insurance company and government as annuity provider had only a small effect on respondent sentiment, so the results for the second and third retirement account disposition questions were very similar.

⁴¹ See Suzanne B. Shu, Robert Zeithammer, and John W. Payne, "Consumer Preferences for Annuity Attributes: Beyond Net Present Value," *Journal of Marketing Research* 53 (April 2016): 240–262; available at www.anderson.ucla.edu/faculty_pages/robert.zeithammer/ConsumerPreferencesforAnnuityAttributes.pdf.

⁴² See Jeffrey R. Brown, Jeffrey R. Kling, Sendhil Mullainathan, and Marian V. Wrobel, "Why Don't People Insure Late-Life Consumption? A Framing Explanation of the Under-Annuitization Puzzle," *American Economic Review* 98, no. 2 (2008): 304–309; and John Beshears, James J. Choi, David Laibson, Brigitte C. Madrian, and Stephen P. Zeldes, "What Makes Annuitization More Appealing?" NBER Working Paper, no. 18575 (November 2012); available at www.nber.org/papers/w18575.

⁴³ See Figure 5 in Sarah Holden, Daniel Schrass, Jason Seligman, and Michael Bogdan, "American Views on Defined Contribution Plan Saving, 2019," *ICI Research Report* (January 2020); available at www.ici.org/pdf/20_ppr_dc_plan_saving.pdf.

⁴⁴ Id.

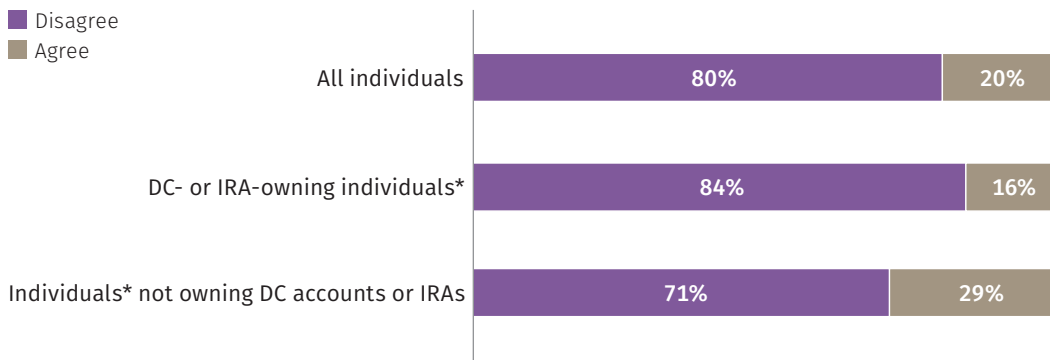
Overall, about eight in 10 respondents either “somewhat disagreed” or “strongly disagreed” with the proposed change in control of account disposition (Figure 13). The overall disapproval rate occurred even though the question was worded to eliminate bias toward disagreement; the proposal indicated that the retiree trade only “a portion” of their assets under a “fair” contract giving them “income for life.” The disapproval rates for the proposed annuitization requirements are higher for those owning DC accounts or IRAs. Disapproval also tends to increase with both age and household income.⁴⁵

FIGURE 13

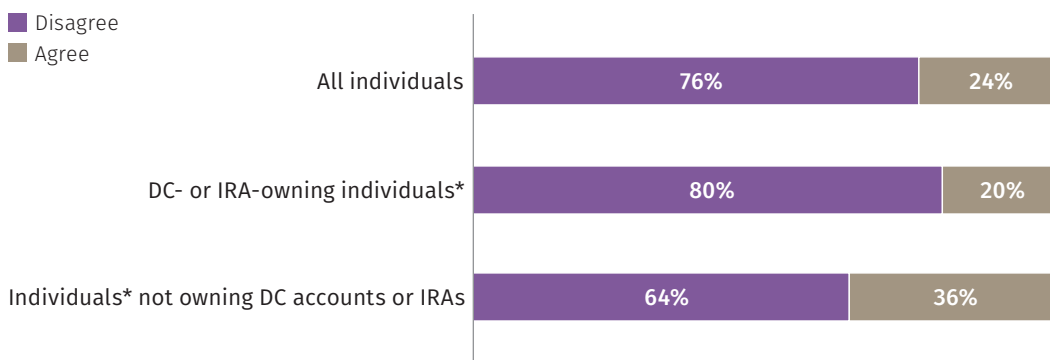
Large Majorities of Americans Want to Keep Retirement Income Flexibility

Percentage of US individuals disagreeing or agreeing by ownership status, fall 2019

The government should require retirees to trade a portion of their retirement plan accounts for a fair contract that promises to pay income for life from an insurance company.



The government should require retirees to trade a portion of their retirement plan accounts for a fair contract that promises to pay income for life from the government.



* DC- or IRA-owning individuals are individuals aged 18 or older whose households owned 401(k) plan accounts, other DC plan accounts, or IRAs at the time of the survey.

Source: ICI tabulation of NORC AmeriSpeak® survey data (fall 2019); see “American Views on Defined Contribution Plan Saving, 2019,” *ICI Research Report* (January 2020)

⁴⁵ Id. See Figures 6 and 7 in the report.

Annuitization Will Not Solve Low Lifetime Resources

Part of the goal of promoting annuities in DC plans appears to be motivated by a concern that retirees will spend down balances too quickly or irresponsibly, but several researchers have found that retiree households tend to maintain their wealth in retirement.⁴⁶ Households having difficulty in retirement typically had difficulty while working, and promoting annuitization will not solve the problem of limited lifetime resources. Recent research finds that retired households that have low end-of-life wealth typically entered retirement with low wealth. Poterba, Venti, and Wise (2018) studies the evolution of household wealth through retirement to the end of life and concludes:

Low levels of wealth accumulation before age 65, rather than gaps in the safety net after 65 or rapid spend-down of accumulated assets, appear to be the primary determinant of low levels of wealth just before death.⁴⁷

Conclusion

Because the factors affecting the decisions on how to manage income and assets in retirement vary across households, there is not one best method for managing or planning for the decumulation phase for all participants. Given this heterogeneity in solutions and individual circumstances—and the already important role that Social Security plays in providing a real annuity for life—policy changes should not tilt the playing field to promote annuitization inside DC plans or as a decumulation tool in retirement. Because market-priced annuities are not actuarially fair—that is, typical estimates are that, for every dollar invested, expected lifetime payments are worth about 80 to 85 cents in present value—individuals seeking additional annuitization should first consider delaying claiming Social Security. Decisions on managing assets in retirement are highly individualized and may involve a combination of several different products or strategies and possibly multiple accounts. Policymakers should be careful to not put a government seal of approval on one particular form of decumulation strategy—annuitization—which could lead to detrimentally locking retirees into a product that is not suitable to their individual circumstances.

⁴⁶ For example, see David Love, Michael Palumbo, and Paul Smith, “The Trajectory of Wealth in Retirement,” *Journal of Public Economics* 93, no. 1–2 (February 2009): 191–208.

⁴⁷ See James M. Poterba, Steven F. Venti, and David A. Wise, “Longitudinal Determinants of End-of-Life Wealth Inequality,” NBER Working Paper, no. 23839 (September 2017, Revised May 2018); available at www.nber.org/papers/w23839.



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