

LONGSTANDING AND NOVEL RISKS FACING HOUSEHOLDS ALREADY RETIRED AND HOUSEHOLDS IN THE RUN-UP TO RETIREMENT

BY **GEORGE A. (SANDY) MACKENZIE**, *Consulting Economist and Former editor of the Journal of Retirement*

INTRODUCTION

Both preretired and already retired households have always faced, in varying degrees of severity, five basic risks. This essay will describe and analyze each of the five risks in a detail appropriate to the essay's length, and will address the extent to which formal or informal insurance arrangements or institutions can address them adequately. But it will also address a new, and forbidding, risk that could affect each of the five longstanding risks: the risk or risks entailed by the economic and financial consequences of the COVID-19 pandemic. The essay's presentation addresses each of these five risks, and ends with some tentative conclusions and recommendations for public policy, and for households and businesses.

I. THE FIVE BASIC RISKS

The five longstanding risks faced by preretired and already retired households are (a) longevity risk, (b) investment and labor market risk, (c) health-care cost risk, (d) long-term care cost risk, and (e) political risk.

A. LONGEVITY RISK

The term "longevity risk" refers to the risk of outliving one's resources. It stems from the basic fact that lifespans are unpredictable. As in most countries, the United States provides basic longevity insurance through the federal government in the form of the indexed annuity to which virtually all working Americans are entitled once

they reach the age of 62. The benefit is progressive: its marginal replacement rate declines, and declines quite markedly, as average income as the Social Security Administration (SSA) calculates it, increases. The benefit is also structured to increase at a rate that is slightly more than actuarially fair as the age of the claimant increases from 62 to 70, at which age it stops increasing.

For those households for whom the publicly provided annuity is insufficient, nominal (unindexed) annuities are available from life insurance companies. The market for these has always been small, although it has increased in size of late, and the market for privately provided indexed annuities is very small. This phenomenon has given rise to what economists have termed the "annuity puzzle." A pathbreaking paper by Menachem Yaari demonstrated that, under a number of somewhat heroic assumptions, a retired household would want to annuitize all its wealth!

It would take someone braver than this author to explain the annuity puzzle, but some observations are in order. First, for older Americans in the lower reaches of the wealth distribution, the capitalized value of the Social Security benefit they will receive or have already chosen to receive is a very large share of their total wealth, particularly if the equity in their home is excluded. For more-affluent Americans, the lack of popularity of annuities is less obviously explained, but may reflect a combination of a desire to leave a bequest and a strong desire for the option that liquidity provides. They fear that an unexpectedly large need for liquidity to pay for health and medical care could be a major deterrent,

especially if the associated expenses cannot be spread out over a long period. Some economists have also argued that households simply underestimate the risk of living a long life, but others have pointed out that fears of an insurance company's insolvency are not baseless, notwithstanding the provisions that state regulators have to indemnify annuitants against losses entailed by insolvency of annuity providers. Insurance companies, for their part, must worry about the difficulty of predicting the probability distribution of the number of years of life that annuitants will live once they are retired. Longevity bonds—bonds whose value increases with the years actually lived by a particular age cohort—might be at least a partial solution to this problem, although they would have to be attractive to a counterparty²

Self-insurance is also a possibility. A prudent household might simply assume that its members, once retired, would live relatively long lives, and plan to accumulate enough wealth by retirement and invest it at an assumed conservative rate of return, to ensure an adequate and steady income over the assumed postretirement lifespan. The calculations such self-insurance require are probably beyond the means of many households, although they could be provided by an honest and competent retirement planner.

B. INVESTMENT AND LABOR MARKET RISK

It is a truism to say that no investment is without risk. Even short-term Treasury bills are subject to inflation risk, and longer-term Treasury bonds are even more so. Both long-term nominal bonds and Treasury Inflation-Protected Security (TIPS) are subject to capital risk if they are not held to maturity; if they are held to maturity, but need to be reinvested, the actual interest rate they earn may be less than the one on which the investor had planned.

Investments are also subject to sequence of returns risk: even if the average geometric rate of return on the asset

over a given period is as expected, the outturn for the investor is affected by the sequence in which the returns are earned. It is better if the fat years come first, and then the lean. In the current environment, the investor faces a truly unfavorable trade-off between risk and reward. Earning a decent rate of return requires that the investor take a degree of risk that was not necessary a decade ago.

Investment risk is a matter of most concern for more-affluent households. Investments in stocks and bonds, or in mutual funds that hold them, become significant only well up in the wealth distribution. Investment in the market may be widely spread around, but it is quite concentrated. Conventional wisdom holds that households with individuals still in their 60s should hold more than half their portfolio in equities, but this can leave them vulnerable to a precipitous drop in the stock market, such as occurred in 2008–9. Losses like these are of less concern for younger households because they have more time to recoup them.

The risk of having to reinvest fixed-interest securities at lower-than-expected rates can be mitigated by a laddering strategy that aims to match the value of bonds that will mature in a given year with the expenditure those bonds are expected to finance. The risk of stock market fluctuations, for households for which more-complicated strategies that rely on options are not available, can in principle be mitigated by building in a cushion—an amount that the household can lose without the loss cutting into the expenditure stream deemed necessary to finance its desired lifestyle. Households with older adults, especially if they were planning to rely on realized capital gains to finance expenditure, can find themselves in a difficult position if they have been holding a substantial share of their financial assets in equities, and lack a cushion.

Older households are also vulnerable to job loss. The majority of households whose heads are aged between 55 and 64 years of age are still relying on the labor market

1. Mackenzie (2006, chap. 1) presents an informal discussion of the annuity puzzle. As an intuitive explanation, consider a 65-year-old who has the choice of investing all her wealth in a security that will pay a constant monthly sum for 35 years to her or to her beneficiary, or in a security that will pay the same constant monthly sum but will stop paying at her death. (We assume that the chances of living beyond 100 are effectively zero.) The first security must be worth more than the second. However, if the potential annuitant has no need for liquidity and no heirs, the second security—a life annuity—should be more attractive than the first because a lower sum obtains the same return conditional on her survival. No one would devote all their wealth to either security, because everyone needs some liquidity, and home ownership, when affordable, is preferred to renting. Even so, the annuitization of at least some wealth would seem attractive. In practice, however, annuity markets are small, and that is what many economists consider a puzzle.

2. See Abraham and Harris (2016) for a discussion of the role longevity bonds could play in promoting the development of a market for longevity annuities, which are annuities where the first payment to the annuitant begins some years after the premium is paid.

for most of their income. Although the unemployment rate of older Americans is somewhat below the average for all ages, it takes them much longer to find another job if they become unemployed, and a job loss relatively late in working life can precipitate exit from the labor market altogether.

C. HEALTH-CARE COST RISK

Older working Americans who are not yet eligible for Medicare and who rely on employer-provided health insurance, which is the case for most Americans, are at risk for the loss of that insurance if they lose their job. Even if they find another job relatively quickly, the new job often does not come with the same benefits or the same pay level. Insurance under the Patient Protection and Affordable Care Act (ACA or ObamaCare) may be available in these cases, including to the unemployed, but it is not costless even if it is subsidized.

Virtually all Americans become eligible for Medicare at age 65. Enrollment in Medicare Part A, which is automatic when someone has elected to receive the Social Security benefit, covers hospital stays, and is normally free. Part B covers the services of doctors and other medical professionals, and Part C covers the services of HMOs. Part D, which covers pharmaceuticals, is a private sector plan with rules set by the government. Medicare is financed mainly by payroll tax collections and general revenues intermediated by two trust funds. Medicare premiums are likely to rise, both because the program is already underfunded and because health-care costs are likely to continue to rise at rates higher than overall inflation.

Medicare coverage has some holes. The first night of a hospital stay requires a deductible of \$1,408. Days 1 to 60 as an in-patient are fully covered, but a coinsurance payment is required after that; for really long stays, coverage eventually expires. Only 80 percent of the in-patient and 80 percent (after a deductible) of out-patient charges of physicians and other health-care providers are covered. Consequently, most Medicare participants obtain additional coverage, typically provided by insurance companies under regulations set by the govern-

ment. Most Americans aged 65 and older are thus reasonably well protected from high, unexpected medical bills, but there are still gaps in the coverage of drug costs, and copays can be burdensome for households with modest incomes.

D. LONG-TERM CARE COST RISK

A basic problem with the risks posed by long-term care (LTC) costs is that the coverage of LTC by government programs is poorly understood, in part because it is extremely complicated. Most older Americans believe that LTC is covered by Medicare, but it is not. Medicare covers short-term stays in nursing homes and similar facilities that the patient needs to recover from surgery. Long-term stays in nursing homes and care provided by community-based facilities are covered by Medicaid, but Medicaid's regulations are complex, and, unlike Medicare, they vary from state to state. Although the overall regulatory framework is established by the federal government, the states and the District of Columbia may opt out of the various pathways that Medicaid provides to coverage.

Coverage is now much broader than it was when the program was introduced as part of the Johnson administration's Great Society legislation. Most states offer coverage to older Americans whose income is substantially above the poverty line, but more-affluent households are not covered. A well-designed estate plan can protect household assets that would otherwise have to be spent down to meet the asset tests imposed in the household's state of residence, but most households do not have such plans.³ More-affluent households either have to self-insure or take out private LTC insurance. The evidence suggests, however, that the demand for such insurance is crowded out to a large extent for middle-income households by the public sector's provision of LTC via Medicaid (Brown and Finkelstein 2009).

Unlike the provision of income in retirement, LTC is mainly an insurance issue.⁴ We will all need income in retirement, though there is an obvious insurance aspect to it, but the need for and timing of the start of needed LTC coverage is uncertain. Many older Americans

3. See Correia, Sayre, and Allen (2017) for a discussion of estate planning that shelters assets from Medicaid's asset tests.

4. See Schieber (2015) for a discussion of this point.

will not need it, or will not need it for many years, and not until an advanced age. That said, many will need it. These are the kind of conditions that can cause people to overlook the risk that they will be among those who do need LTC insurance. The COVID-19 pandemic has revealed major problems with the operation and finances of nursing homes, which are briefly taken up in section II of this essay.

E. POLITICAL RISK

The benefits from Social Security that Americans will receive when they retire, either because their age or a disability qualifies them for those benefits, are at risk, stemming from the ongoing depletion of the trust fund for old age, survivors, and disability insurance (OASDI) benefits and the uncertainty over when and how Congress will deal with it. FICA tax collections are falling short of entitlement payments, and the latest report of the OASDI trustees projects that, under the report's intermediate or middle-of-the-road 75-year projection, the trust fund will be completely depleted by 2035. Congress cannot keep kicking this problem down the road. The longer it delays in addressing the problem, the greater the adjustments to taxes and/or benefits will have to be. A similar problem faces the trust funds associated with the government-run health programs, although the size of the needed adjustment for those programs is less.

It is difficult to predict who will be affected by changes to the financing of the entitlement programs, but it is likely that those who are already receiving benefits will be spared, although means-testing might affect more-affluent retirees. Older Americans still working but approaching retirement might also escape a reduction in their benefits. Both retirees and near-retirees have powerful lobbies on their side, making it likely that younger workers will be the ones who will face lower benefits, while new entrants to the workforce might confront both higher payroll taxes and lower benefits.

On the whole, it appears that, depending on the relative adjustments to the taxes they pay and the benefits they receive, younger workers may have to save more to maintain their income in retirement at the same level they enjoyed

while working.⁵ Changes to Social Security would not be particularly important for more-affluent investors, who neither contribute much to nor receive much from the system.⁶ Nonetheless, many younger Americans could be obliged to increase their personal saving rates substantially to avoid a postretirement drop in living standards.

II. RISKS ASSOCIATED WITH THE PANDEMIC

The COVID-19 pandemic has upended American life in ways that are already evident. Its ultimate effects are impossible to foresee in mid-2020. Quite apart from the misery and emotional suffering it has inflicted on the severely ill, the deceased, and their families, the pandemic has had and will continue to have profound effects on both the structure of the economy and aggregate income, and on the financial position of households young and old.

This section primarily addresses the economic and financial effects of the pandemic on older households, both those still working and those already retired. These effects are working through several channels: the labor market, the financial markets, and arrangements for LTC. These effects are to some degree mitigated by the fiscal policy measures the government has taken, and the Federal Reserve's efforts to shore up credit markets.

The short-term impact on employment has been devastating. About 31 million claims for unemployment insurance for all programs had been filed as of June 6, 2020, according to data from the U.S. Department of Labor. The impact on employment is likely to have been more severe for younger workers, because the median age of those employed in the sectors that were most affected by the partial shuttering of the economy is lower than the economy-wide median age. For example, the median age of employees in accommodation and food services is 31 and in leisure and hospitality is 32, compared to an economy-wide age of 42. Nonetheless, older

workers are still affected; even in normal times the loss of a job for workers in the run-up to retirement is usual-

5. An increase in payroll taxes with no change in benefits would have the effect of raising the ratio of Social Security benefits to aftertax working-life income, which would actually reduce the saving needed to sustain the ratio of aftertax income in retirement to aftertax working-life income. The opposite is true if the adjustment were to fall entirely on benefits.

6. The ceiling on wages and salaries subject to the taxes is currently \$137,700. The calculation of benefits ignores any excess of salaries over this amount.

ly followed by a long spell of unemployment, if not by a permanent exit from the labor force.

Workers who have reached the age of 62 who find themselves unemployed can opt for Social Security, but early claiming is costly, as noted above—the benefit increases by about 8 percent for each additional year the first claim is delayed. Participants in 401(k) plans or those who hold IRAs can make withdrawals from them to tide themselves over until they can claim Social Security on more-favorable terms—the CARES Act eliminated the penalty on early withdrawals—but the benefit from this strategy will depend on the size of their plans and account balances. Another possible strategy would be for households with sufficient equity in their residence to take out a reverse mortgage, although these instruments, like annuities, have never attracted much of a clientele.

Americans who are already retired and not dependent on the labor market for their income are not directly affected by the surge in unemployment. However, they may feel obliged to make transfers to children who have lost their jobs.

One of the unexpected results of the partial shutdown has been its effects on saving rates. For those households with reasonably secure sources of income, which would probably include most older households, saving rates have tended to increase, because the decline in their expenditure on those sectors of the economy where activity has been directly affected by the pandemic appears not to have been fully offset by increases in expenditure on goods and services provided by the rest of the economy. These households may thus be financially at least better off than they were previously. How long this effect will persist is impossible to predict.

The government's programs to assist the unemployed and business have had a huge impact on its deficit and the stock of debt. The Committee for a Responsible Federal Budget (CRFB) in its June 24 update projected an increase in the ratio of debt to GDP from 79 percent precrisis to 101 percent by the end of 2020, and to 118 percent by 2030, even without additional relief measures. For the moment, it appears that the appetite for U.S. Treasuries by U.S. residents and nonresidents is sufficiently robust that the increase in the stock of debt will not require a noticeable increase in interest rates. This may in part reflect the purchase, or monetization, of some of the debt by the Federal Reserve. The increase in saving by more financially secure households would also generate a demand for financial assets in general. However, the demand for government debt is not infinite, and the out-

look for interest rate levels is definitely more uncertain than it was prior to the pandemic. That must be true in spades for the stock market, and the increase in financial market uncertainty may be promoting the increase in saving by some of the more financially secure households mentioned above.

If interest rates do increase significantly, bondholders will suffer a capital loss. This is a more serious matter for households that are already retired and who were planning to run down their stock of savings to pay for current expenditure, although a really major impact on these households would require a fairly large increase in interest rates.

The horrific mortality rates at nursing homes are creating very serious financial problems for them (see Gleckman 2020). Their costs are rising because of the need for investment in redesigned facilities that allow for social distancing, while demand is in decline because potential residents and their families are coming to view them as death traps. Even once the pandemic has abated, this lost demand is not likely to recover entirely, as more and more older people will try to age at home, or seek alternative arrangements such as group homes. Assisted living facilities have been much less affected by the pandemic, but demand for their services is also likely to suffer.

The overall impact of the pandemic clearly depends on how quickly the economy begins to recover, and the rate of recovery is really anyone's guess at this point. As of this writing it seems unlikely that a large share of the economy will be shut down again, which means that controlling the pandemic will depend on the success of policies of social distancing, the wearing of masks, and hand-washing, as well as the rate of testing and the efficiency of testing protocols and contact-tracing. The author is not in a position to predict how stringently these policies and practices will be applied, or how successful even stringent application will be in controlling further outbreaks. Social distancing, if effectively applied, has a substantial economic cost. The quicker it and the measures that must complement it work, the less time it will need to be practiced, and the faster economic recovery can be.

CONCLUSIONS

If these conclusions had been written before the coronavirus had emerged, and if there were no section II, this section would have noted the possibly less than optimal

coverage of longevity risk, and the potential problems attendant on self-insurance, like overly optimistic assumptions about the rate of return on non-annuitized liquid wealth, as well as issues of self-control. Investment risk is more difficult to hedge than longevity risk, and the lack of really adequate financial literacy creates risks of its own, such as a tendency to sell low and buy high, and overreact to market swings. Among older Americans, health- and medical-care cost risk is concentrated among those not yet protected by Medicare and a supplementary policy. The degree of LTC cost risk partly depends on the state in which the taxpayer resides, and may be aggravated by a tendency to downplay the risk entailed by uncertain events whose timing and probability of occurrence is hard to predict.

It is difficult to predict political risk because of the inherent uncertainty of politics. The pandemic has essentially superimposed an added level of risk on at least three of the basic risks. Investment and job loss risk have been aggravated, health-care cost risk has been increased by the consequences of job loss for health insurance coverage and possibly the increased risk of illness, and LTC cost risk has been increased by the undoubtedly diminished role of nursing homes for older adults.

So, what can be done? Surely the first line of defense must be stopping the spread of the virus, in a way that entails as little decline in economic activity as possible. The government must be prepared to support the unemployed and promote the retention of employees at their place of work for some additional time, doing that through some combination of unemployment insurance and well-targeted support for businesses. State and local governments and health-care facilities also need support. When a faulty electrical job causes a fire to break out in a house, the first thing to do is to put out the flames, not sue the contractor or reform the regulation of electrical contractors.

When the fire is out—when the pandemic has been quelled—it will be time to address the flaws in our health-care and LTC systems, and in the way we regulate both the accumulation and the decumulation phases of retirement saving. Volumes have been written on the necessary reforms. What follows is only the baldest summary.

First, health insurance must be available to all. This does not necessarily require the end of employer-provided insurance, but it would require at a minimum a publicly provided backstop for those people who lose their insurance when they lose their jobs.

The basic problem with the current system for retirement saving is the low coverage of the second tier. Slightly more than half the work force is covered by employer-provided plans, typically defined-contribution 401(k) plans, and not all workers who are eligible to participate do so. If mandatory coverage is not an option, then policies that nudge workers into participation by making coverage automatic unless participants explicitly chose to opt out should be more aggressively pursued. The CARES Act's relaxation of the penalties for early withdrawal of funds from 401(k) and other employer-provided plans and IRAs should be rescinded once the worst of the pandemic has passed.

A particular weakness of the current system is the way it imposes investment risk on its participants while doing little to promote the uptake of longevity insurance. Participants in a defined-contribution system can reduce investment risk by electing a conservative portfolio and can reduce unnecessary risk, given the expected return on their portfolio by careful selection of mutual funds and directly held securities. However, the evidence on financial literacy makes clear that many investors lack the necessary skills to do this, and they do not seek good advice to compensate for that lack. The extent to which financial education can undo financial literacy is uncertain. Longevity risk is partly addressed by Social Security. For middle- and upper-income plan participants that risk can be addressed further by promoting more annuitization options in plans along the lines of the SECURE Act.⁷

LTC in nursing homes is in a desperate state, both for its residents and their families as well as, for financial reasons, for its providers. Nursing home care is financed largely by Medicaid, and extra funds from that source will be needed to prevent a serious contraction of the supply of accommodation. Prompt action by Congress on the imbalances of the entitlement trust funds will obviate the need for more-drastic action if there is further delay and will give Americans who are saving for retirement more time to plan for their retirement needs.

7. See Mackenzie and Forman (2013) for a fuller account of possible reforms to the second tier of the retirement system.

That action will be needed even sooner than previously thought, given the impact of high unemployment on payroll tax collections.

If these conclusions had been written before the coronavirus had emerged, and if there were no section II, this section would have noted the possibly less than optimal coverage of longevity risk, and the potential problems attendant on self-insurance, like overly optimistic assumptions about the rate of return on non-annuitized liquid wealth, as well as issues of self-control. Investment risk is more difficult to hedge than longevity risk, and the lack of really adequate financial literacy creates risks of its own, such as a tendency to sell low and buy high, and overreact to market swings. Among older Americans, health- and medical-care cost risk is concentrated among those not yet protected by Medicare and a supplementary policy. The degree of LTC cost risk partly depends on the state in which the taxpayer resides, and may be aggravated by a tendency to downplay the risk entailed by uncertain events whose timing and probability of occurrence is hard to predict.

It is difficult to predict political risk because of the inherent uncertainty of politics. The pandemic has essentially superimposed an added level of risk on at least three of the basic risks. Investment and job loss risk have been aggravated, health-care cost risk has been increased by the consequences of job loss for health insurance coverage and possibly the increased risk of illness, and LTC cost risk has been increased by the undoubtedly diminished role of nursing homes for older adults.

So, what can be done? Surely the first line of defense must be stopping the spread of the virus, in a way that entails as little decline in economic activity as possible. The government must be prepared to support the unemployed and promote the retention of employees at their place of work for some additional time, doing that through some combination of unemployment insurance and well-targeted support for businesses. State and local governments and health-care facilities also need support. When a faulty electrical job causes a fire to break out in a house, the first thing to do is to put out the flames, not sue the contractor or reform the regulation of electrical contractors.

When the fire is out—when the pandemic has been quelled—it will be time to address the flaws in our health-care and LTC systems, and in the way we regulate both the accumulation and the decumulation

phases of retirement saving. Volumes have been written on the necessary reforms. What follows is only the baldest summary.

First, health insurance must be available to all. This does not necessarily require the end of employer-provided insurance, but it would require at a minimum a publicly provided backstop for those people who lose their insurance when they lose their jobs.

The basic problem with the current system for retirement saving is the low coverage of the second tier. Slightly more than half the work force is covered by employer-provided plans, typically defined-contribution 401(k) plans, and not all workers who are eligible to participate do so. If mandatory coverage is not an option, then policies that nudge workers into participation by making coverage automatic unless participants explicitly chose to opt out should be more aggressively pursued. The CARES Act's relaxation of the penalties for early withdrawal of funds from 401(k) and other employer-provided plans and IRAs should be rescinded once the worst of the pandemic has passed.

A particular weakness of the current system is the way it imposes investment risk on its participants while doing little to promote the uptake of longevity insurance. Participants in a defined-contribution system can reduce investment risk by electing a conservative portfolio and can reduce unnecessary risk, given the expected return on their portfolio by careful selection of mutual funds and directly held securities. However, the evidence on financial literacy makes clear that many investors lack the necessary skills to do this, and they do not seek good advice to compensate for that lack. The extent to which financial education can undo financial literacy is uncertain. Longevity risk is partly addressed by Social Security. For middle- and upper-income plan participants that risk can be addressed further by promoting more annuitization options in plans along the lines of the SECURE Act.

LTC in nursing homes is in a desperate state, both for its residents and their families as well as, for financial reasons, for its providers. Nursing home care is financed largely by Medicaid, and extra funds from that source will be needed to prevent a serious contraction of the supply of accommodation. Prompt action by Congress on the imbalances of the entitlement trust funds will obviate the need for more-drastic action if there is further delay and will give Americans who are saving for retirement more time to plan for their retirement needs. That action will be needed even sooner

than previously thought, given the impact of high unemployment on payroll tax collections.

The author would like to end his account of the broad direction policy in a national emergency should take with the three millennia-old analysis found in Genesis 41. Joseph, who is a Hebrew slave in Egypt, is summoned by the pharaoh and asked to interpret the pharaoh's particularly troubling dream in which Egypt's ruler first sees seven fat cattle and then seven lean ones, followed by seven healthy stocks of grain and then seven withered ones. Joseph interprets the dream as foretelling seven years of plenty followed by seven years of famine. The pharaoh is so impressed that he gives Joseph plenipotentiary powers to address the looming catastrophe, and Joseph begins

stocking the country's granaries while the good years still allow it.

This is not a parable about central planning, but rather one about the wisdom of foresight and preventive action. At both governmental and personal levels, there has been too little of either in recent years. The United States no longer faces famines, but pandemics and recessions will always be with us. Households cannot insure themselves against pandemics, and many households are too poor to avoid living from paycheck to paycheck. But many of the households that could avoid that practice do not do so, and many that could save a bit more for retirement do not do that either. Once this terrible period in our country's history is behind us, we must hope that the old-fashioned virtues of thrift and forbearance play a more prominent role in our national life.

To learn more, visit the Retirement Income Institute at www.allianceforlifetimeincome.org/retirement-income-institute

REFERENCES

- Abraham, Katherine G., and Benjamin H. Harris. 2016. "The Market for Longevity Annuities." *Journal of Retirement* 3 (4).
- Brown, Jeffrey R., and Amy Finkelstein. 2009. "The Private Market for Long-Term Care Insurance in the United States: A Review of the Evidence." *Journal of Risk and Insurance* 76 (1).
- Correia, Candice, Richard Sayre, and Jessica C. Allen. 2017. "Avoiding the Medicaid Trap: A Step-by-Step Guide to Estate Planning." *Journal of Retirement* 5 (2).
- Gleckman, Howard. 2020. "The Grim Post-COVID-19 Future for Nursing Homes." *Forbes*, May 4, 2020.
- Mackenzie, George A. (Sandy). 2006. *Annuity Markets and Pension Reform*. New York, NY: Cambridge University Press.
- Mackenzie, G. A. (Sandy), and Jonathan Barry Forman. 2013. "Reforming the Second Tier of the U.S. Pension System: Tabula Rasa or Step by Step?" *John Marshall Law Review* 46 (3). The 11th Annual Employee Benefits Symposium: America's Retirement Crisis: What Can Be Done?
- Schieber, Sylvester. 2015. "U.S. Retirement Policy Considerations for the 21st Century." *Journal of Retirement* 3 (2).