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Replacement Ratio: The Dinosaur of Retirement Planning

By R. Evan Inglis

Do you need a replacement ratio target? Will it be helpful for you to try to achieve a level of income in retirement that is a certain percentage of your pre-retirement income? The answer is that a replacement ratio might not be that helpful. Over the years, a lot of thinking has been done on the concept of replacement ratios. Along the way, valuable insights helped advance the concept—identification of expenditures that disappear at or near retirement (e.g., costs of commuting, mortgage and providing for kids at home), changes in taxes, and the consideration that some pre-retirement income is saved and not spent.

Still, the concept is of limited help to individuals whose spending needs and desires are often quite different before and during retirement. Replacement ratios are useful for policymakers and plan designers who want to create systems that target the right level of savings and income **in general** or **on average**. However, they are not always useful for individuals. There are several reasons for this, especially in the retirement system as it currently exists in the U.S.:

- With fewer defined-benefit plans, we focus more on spending wealth than a level of income.
- The desired level of retirement expenditure varies by person, without a consistent relationship to pre-retirement spending.
- People adapt spending to circumstances more than plan.
- The timing of retirement often ends up being less planned than forced by circumstances.
- Spending needs change significantly during retirement.

HOW DO PEOPLE PLAN?

The SOA's Retirement Risk Surveys and focus groups have consistently found that people adapt to circumstances more than they follow a plan for retirement.[1] The key question for most people may be "How much can I spend, given my savings?" rather than "When should I retire so that I can spend 80 percent of my pre-retirement income?"

Rules of thumb exist for determining how much savings one needs in order to spend the amount desired. Examples include the 4 percent rule[2] and the feel-free rule (divide your age by 20).[3] If the spending rule doesn't support the desired level of spending, individuals have three choices:

1. Buy guaranteed lifetime income to enable a higher level of spending at a safe level. Variable-annuity solutions can increase the spending levels prescribed by the 4 percent and feel-free rules by up to 3 or 4 percent of savings per year.
2. Do careful planning and financial analysis to enable a significant spend-down of one's savings during retirement. This can increase the level of spending by 1 to 2 percent but is likely to reduce any bequest.
3. If possible, work longer to save more and enable a higher rate of spending.

TYPES OF SPENDING DURING RETIREMENT

Neither replacement ratios nor spending rules get at a key issue for retirement planning, which is that spending priorities change throughout retirement. Table 1 illustrates one way to categorize retirement spending.

Table 1
Retirement Spending Priorities

Spending Need	Description	Priority	Change During Retirement
Sustenance	Food, housing, utilities	Limited flexibility	Increases with inflation
Lifestyle	Travel, leisure, discretionary	Flexible	Leisure activity declines with age
Medical	Long-term care, dental	Unpredictable	Likely to occur late in life
Bequest and gifts	For kids, relatives, charities	Flexible but emotional	Mostly late in life and after death

While the sustenance category has the least flexibility, it may be more flexible than is sometimes presumed. People can change their housing situation and the food they buy. Some may even compromise basic needs in favor of a bequest motive.

The lifestyle category is most adaptable to circumstances and most likely to drop as a retiree gets older. One way to think about providing for this aspect of spending is that a decrease in activity may offset inflation, but eventually expenses are likely to drop off even after inflation.

Medical expenditures are unpredictable, so insurance should be an effective way to handle this need for many retirees.

SPENDING PATTERNS DURING RETIREMENT

That spending tends to drop during retirement has only recently been widely understood and acknowledged. In 2005, Ty Bernicke used the U.S. Bureau of Labor Statistics Consumer Expenditure Survey to show that people aged 75 and older spent significantly less in most areas than people aged 65–74. While Bernicke's study looked at different cohorts of people, whose habits may have differed for reasons other than age, the premise that people spend less as they age has been supported by other studies. It also is confirmed with more recent data. Table 2 shows the type of data Bernicke looked at, sorted by the categories from Table 1, based on BLS data from 2016–17.[4]

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Table 2
Annual Spending in Retirement, by Age Group

	65–74	75+
Sustenance		
Food and alcohol	$ 7,191	$ 5,501
Housing	17,476	14,618
Personal care	714	566
Insurance and pensions	3,975	1,720
Lifestyle		
Apparel and services	1,344	836
Transportation	8,679	5,050
Entertainment	3,085	1,671
Miscellaneous	1,939	1,298
Health Care	6,373	6,222
Cash Contributions	2,180	2,781

Source: Data from Bureau of Labor Statistics, Consumer Expenditure Survey, 2016–17, *https://www.bls.gov/cex/csxgloss.htm.*

Note that all categories of expenditures are significantly lower for the people over 75, with two exceptions. Health care spending remains about the same. "Cash contributions," which includes charitable contributions and gifts to relatives, is actually somewhat higher.

HOW TO PLAN FOR YOURSELF

So, what to do? Once you understand your spending needs and desires and the income you will have from Social Security and other sources, you can get a rough sense of your ability to spend. The 4 percent rule and the "divide your age by 20" rule are good starting points, with dividing your age by 20 being much safer. Keeping in mind that your spending is likely to drop eventually, you may be comfortable spending a bit more. Even so, making provision for long-term care at older ages should always be a consideration.

If you're willing and able (presumably most *Retirement Section News* readers are), you can set up a planning spreadsheet. You may ultimately need to adapt to unanticipated circumstances as so many retirees do, but planning will help in any case. As President Eisenhower used to say, "Plans are worthless, but planning is essential." Or better yet is Mike Tyson's version: "Everyone has a plan, until they get punched in the mouth." Once you get "punched" and are retired for good, you can adapt your plan by buying lifetime income, carefully planning to spend down your assets, or adjusting your spending as many retirees do.

Evan Inglis, FSA, EA, FCA, MAAA, is an actuary and thought leader on financial and investment issues for retirement programs and pension plans. He can be contacted at revaninglis@gmail.com.

ENDNOTES

1 For example, see introduction of 2015 Risks and Process of Retirement Survey: Retirement Survey Report Key Findings and Issues (Society of Actuaries, 2016), p. 6, available at *https://www.soa.org/research-reports/2015/2015-risk-process-retirement-survey/*.

2 The 4 percent rule says to spend 4 percent of your savings in the first year of retirement and then increase that amount with inflation every year during retirement. This was developed by William Bergen in 1994, based on the probability of wealth lasting during retirement even during market downturns similar to those that had been experienced in the past.

3 The feel-free spending rule is to divide your age by 20 and then feel free to spend that percentage of your wealth. So, for example, at age 70, you could spend 70/20 = 3.5 percent of your wealth. This was developed by the author as a safer approach than the 4 percent rule in response to the expectation in 2018 of lower future returns and the common desire for people to maintain most of their wealth throughout retirement. The level of spending is designed to be slightly higher than real returns but slightly lower than nominal returns on a typical portfolio through most of retirement.

4 Bureau of Labor Statistics, Consumer Expenditure Surveys: Glossary, https://www.bls.gov/cex/csxgloss.htm. Explanations for each category of expenditure can be found starting about halfway down the page.