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**TOPIC #1:** Benchmarking Retirement Income

**PROMPT:** For the purposes of benchmarking retirement income, what is the relationship between gross and net income replacement rates? What issues should be considered when determining an appropriate replacement rate from pre-retirement income?

The decision to benchmark retirement begins with deciding what percentage of a client's income during his/her working years should be maintained in retirement to sustain lifestyle goals. The target percentage of pre-retirement income that is desired for post-retirement is known as the "replacement" rate. The idea is if the amount of income one hopes to reproduce (ie., replace) in retirement can be identified, advisors can then help clients back into the lump sum amount or what best assemblage of resources would be sufficient to provide a draw large to meet said optimum.

Many researchers propose to compute one's replacement ratio using clients' "gross" income, or before-tax income, as federal, state and local tax brackets can be a moving target, often further complicated by various tax credits and deferrals. A notable retirement study referenced by Ibbotson, was published at Georgia State University in 2004 providing a rule of thumb for workers of various ages and incomes to choose how much of their gross income they wished to provide in retirement at age 65, and the study eye balled a suggested saving percentage of that gross income as a guideline.

Foundational researchers Roger Ibbotson, et. al. (2007) took the concept of gross replacement a step further. They factored in that one's actual savings for retirement effectively reduce their pre-retirement living expenses; also highlighting out that underlying required income in retirement may be less since the action of saving will no longer be required (one hopes!). In conclusion, if using a gross income calculation, one may be asked to *over-save* on a regular basis throughout his/her working years. Ibbotson, et. al. (2007) proposed a set of net income replacement rates where net income is defined as gross income minus retirement savings. Two net replacement rate tables were proposed, one that suggested the appropriate savings rate for a worker with zero current savings, and another that discounted the savings percentage by a factor dependent upon the number of retirement dollars *already* in savings. Naturally, if one already has a nest egg growing, s/he would be ahead of the game and require a lower savings rate than a peer without any savings.

When determining what replacement rate to use, issues to consider, begin with current age, life expectancy and available income streams such as social security, pensions and annuities. Other components to follow are tethered to whether expected living expenses will be higher or lower during retirement years. Purportedly clients may reduce standard of living, such as spend less on wardrobes or less on dining out. Mortgages may be paid off, college costs for children may be gone, and travel costs may rise for a few years and then reduce over time. Also, high unexpected or anticipated medical costs could come late in retirement or dependents may arrive on the scene (parents or children, etc), putting an additional drag on resources. The more clients can articulate, the more appropriate the replacement assumptions can be. Another very interesting issue is clients' risk tolerance, and their overall willingness

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to limit lifestyle expenses based on available income. Research such as Scott and Watson's (2013) "floor leverage rule" or Bengen's (1994) "SAFEMAX" aim to address this spread in tolerance—do clients feel comfortable employing a utility model where performance of their investment portfolio dictates their available income to some degree, versus establishing a safe-withdrawal rate or predictable income stream to provide the minimum income threshold that satisfies fixed costs and necessary expenses.

#### References:

Ibbotson, Roger, James Xiong, Robert P. Kreitler, Charles F. Kreitler, and Peng Chen. 2007. "National Savings Rate Guidelines for Individuals." *Journal of Financial Planning* 20, 4 (April): 50-61.

Scott, J. S., & Watson, J. G. (2013). The Floor-Leverage Rule for Retirement. *Financial Analysts Journal*, 69(5), 45-60.

Bengen, W. P. (1994). "Determining Withdrawal Rates Using Historical Data." *Journal of Financial Planning*, 7(4), 171.

Ervin, D.M., Faulk, G.K., & Smorila, J.C. (2009). The impact of asset allocation, savings, and retirement horizons, savings rates, and social security income in retirement planning: A Monte Carlo analysis. *Financial Services Review*. 18, 313-331.

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