Economics teaches us a lot about financial planning, and perhaps the best way to gain insights is by talking to a financial planner who also happens to have a Ph.D. in economics from a top university. I recently interviewed Rick Miller who runs Sensible Financial Planning in Waltham, Massachusetts. We specifically focused on how he applies his economics training to his overall approach to financial planning, and how he deals with particular aspects of planning such as retirement withdrawal strategies or recommendations about insurance products.

Miller earned his doctorate at the University of Chicago where he studied family economics, which includes lifetime planning. He taught economics at Johns Hopkins University for a few years, and then worked as a consultant and in the investment business. Through his work, he got involved in researching ways to extend investment management into a broader financial planning context, and this experience served as a basis for going out on his own and founding Sensible Financial in 2002.

Initially Miller focused on investment management for clients, but quickly recognized that clients asking the question – “How am I doing?” – were looking for more than a presentation about how their investments were performing against benchmarks. What they really wanted to know was how their overall financial plan would affect the way they lived. This led Miller to apply the economic concept of life-cycle planning to his work with his clients.

Financial planning and consumption smoothing

Life-cycle economics contributes two foundational concepts to financial planning. The first is that individuals and couples must accumulate savings during their working years to support themselves in retirement. How much to save while working and how much to spend in retirement are together the fundamental financial planning problem. The second concept is consumption smoothing. In simplest terms, clients prefer to maintain a steady standard of living over the full cycle of accumulation and decumulation.

An economic focus on consumption smoothing places the planning emphasis squarely on annual spending over the life-cycle (including projected levels, variability and risks of disruption) rather than on conventional performance measures such as asset balances and probabilities of plan failure.

In practice, consumption smoothing is much more complicated than saving a percentage of income while working and then withdrawing a percentage of savings after retirement. For example, consider a couple with children in public schools, then college, then moving out and having a two-person household. Maintaining a certain standard of living requires recognizing how the cost of that living standard varies with the family situation. And there are other complicating matters such as taxes that will vary over the life cycle and need to be taken into account.

Not surprisingly, dealing with all these complexities requires computer help, and Miller has been a long-term user of ESPlanner financial planning software developed by Boston University economics professor Laurence Kotlikoff. This product was profiled in this 2011 Advisor Perspectives article by Bob Huebscher. A newer product from Kotlikoff, MaxiFiPlanner is also designed to support the consumption smoothing approach. Both require detailed input about family structure and finances in order to deliver recommendations for savings and withdrawals that will accomplish consumption smoothing. Kotlikoff has been a long-term critic of conventional financial planning approaches that don’t pay sufficient attention to maintaining a constant standard of living, as he argued in this 2007 paper.

Special aspects

Having presented a general description of consumption smoothing, it’s time to get into more details about Miller’s approach to financial planning.

Risk assessment: An early-stage activity in most financial planning involves some type of client risk assessment, and advisors may be faced with sorting through a confusing collection of different risk elements such as risk tolerance, risk perception, loss aversion, risk aversion, required risk and risk capacity. Miller focuses on risk capacity and risk tolerance, and assesses them differently. Risk capacity can be
measured by comparing desired consumption with the level of consumption that could be supported by
safe investments in Treasury inflation protected securities (TIPS). If, for example, a client has a desired
annual consumption of $60,000 and savings and income sources based on TIPS investing are sufficient to
support consumption of $100,000, the client has capacity to take some investment risk. Assessing the
maximum amount of risk the client can afford to take involves estimating the amount of smoothed
consumption the client could enjoy in a worst-case scenario, for example a 5th percentile result, and
comparing those 5th percentile results for various stock allocations to the desired level of consumption. The
client’s risk capacity is the level of stock exposure for which “worst case” consumption is equal to desired
consumption. A higher allocation to risk assets such as stocks will generally produce a worse 5th percentile
result.

Risk tolerance is measured by focusing on asset values rather than consumption. Miller provides a chart to
clients with hypothetical bad years for the stock market that relate to historical events in an approximate
way:

- 25% loss (Dot-com bubble)
- 50% loss (Great Recession)
- 75% loss (Great Depression)

He shows clients the dollar losses (not percentage losses) that their savings portfolios would suffer under
these scenarios. A 25-year-old with a $10,000 portfolio and prospects for a full working life might not be
bothered by any of the scenarios, indicating a tolerance for a stock-heavy portfolio. On the other hand, a
65-year-old with substantial savings and on the verge of retiring might well be alarmed at the prospect of a
25% stock loss, particularly when translated to dollar terms. Discussion with clients about both risk capacity
and tolerance feed into the decision about mix of risky and safe assets.

**Projected investment returns:** Financial planning requires making assumptions about future investment
returns. Miller anchors his forecast based on current 10-year Treasury yields and then adds forecast
premiums for risk assets using an approach inspired by Ibbotson’s methodology. So the average returns he
feeds into ESPlayer’s Monte Carlo forecasts are often significantly more conservative than using historical
returns for stocks and bonds. Miller’s general approach to investing involves recommending low-cost index
and other passive funds or ETFs.

**Annual adjustments:** A key distinction between conventional approaches to financial planning and
consumption smoothing, which particularly applies to the retirement years, is that the conventional
approach involves setting an annual withdrawal amount and sticking with it (adjusting for inflation) unless
change is clearly indicated. Consumption smoothing, on the other hand, involves a fresh look each year and
making changes to recognize updated information.

**Insurance products**

Lifestyles can be significantly disrupted by such contingencies as death or disability during the
working/savings years, living significantly longer than expected or needing an extended period of long-term
care. There are insurance products that can be used to mitigate such risks, and some work better than
others.

**Life insurance:** ESPlayer directly addresses the risk of early death that can result in income loss and
disruption to the standard of living of survivors. The software projects the amount of life insurance required
every year to provide the necessary income replacement for surviving family members.

**Disability insurance:** This is a particular area of focus for Miller and one that does not get nearly enough
attention from advisors. Like life insurance, the idea is to provide income replacement to maintain the
standard of living. Although employers may provide disability benefits, those benefits are often inadequate.
Miller makes a point of carefully analyzing any workplace benefits or disability insurance clients may have
in place, and then recommends additional insurance where warranted. The practical reality is that Miller
often ends up recommending the maximum amount of disability insurance clients can obtain.

**Annuities:** Miller likes the mortality pooling benefits and simplicity provided by single-premium immediate
annuities (SPIAs), but recognizes that these products are not a fit for all clients. For example, they can be
good products for risk-averse clients without a strong bequest motivation, and they can help create
additional risk capacity compared to using a TIPS benchmark. They are not a good fit for clients with ample
risk capacity and a strong bequest motivation.

Miller’s client base tends to be affluent, so while he discusses SPIAs with most clients, only occasionally do
clients buy them. For those cases where annuities are a strong recommendation, he notes that the annuity
purchase decision typically takes place over an extended period of time, first with discussions that help
clients understand the benefits of mortality pooling, and then with purchases over time so that clients can become accustomed to the benefits of an income flow independent of stock market performance.

**Long-term care (LTC):** This is an area where Miller wishes the insurance industry offered better products. He would like to be able to provide low-cost stop-loss insurance products to clients that would make payments only for long-term care needs of more than three- or five-year durations, with clients self-funding any shorter durations. However, since the insurance industry is in retrenchment mode on LTC products, there is not likely to be an appetite anytime soon to offer such stop-loss products.

Given the existing offerings, Miller prefers traditional LTC insurance, and encourages clients to allocate their premium budgets to “long and skinny” policies (lower benefits for longer durations) versus “short and fat” (richer benefits, but for only short durations). He believes that those who advocate “short and fat” fail to recognize that, even though most claims are for shorter durations, it is the minority of long duration claims that pose the most financial risk.

Miller pays particular attention to determining the amount of LTC insurance to purchase. Under the general consumption-smoothing approach, it’s important to recognize which expenses will be reduced or eliminated when an individual needs long-term care. Discretionary spending needs for vacations, entertainment, and new clothing may diminish or go away, for example. The idea is to do a careful analysis of which expenses will be reduced and by how much and then purchase insurance to fill the gap. The analysis can be quite different for couples versus single individuals, as a healthy spouse may need to continue to fund home operating expenses, while a single person in assisted living or nursing care would not.

**Conclusion**

Research on life-cycle economics and consumption smoothing has a rich history in economics stretching back almost 100 years, and more than a dozen Nobel laureates have contributed to the field of study. Unfortunately, this economics approach has not crossed over to the mainstream financial advice community. But, for the types of issues advisors encounter, it provides both a general unifying theme as well as sensible approaches for particular issues, and therefore deserves more attention.

Joe Tomlinson is an actuary and financial planner, and his work mostly focuses on research related to retirement planning. He previously ran Tomlinson Financial Planning, LLC in Greenville, Maine, but now resides in West Yorkshire in the UK.

Rick Miller is founder and CEO of Sensible Financial Planning and Management, LLC in Waltham, Massachusetts. As the article suggests, the firm actively pursues analytically supported improvements to financial and investment advice.