A Behavioral Perspective on Goal-Based Investing

By Peter Brooks, PhD, Greg B. Davies, PhD, and Robert E. D. Smith, CFA®

ased on our many years of talking with clients about what motivates their investing decisions, discussions about investors' goals stand out as some of the most enlightening conversations any advisor can have. This conversation often provides a clear sense of what is important to a client and helps clarify why, or indeed whether, the client should be investing in the first place. By framing personal wealth in terms of what the client wants to use that wealth to achieve, an advisor can channel the client's emotions and decisions. This helps clients become more comfortable with wealth structures better-aligned to achieving their financial ambitions.

Experienced advisors have written extensively about how to approach conversations about goals.1 In this article, we describe how to apply the emotive conversations about goals to the practical process of building the best investment strategy for a client.

The Nature of Goals

We define investment goals as current preferences for future expenditures.2 As such, they reflect future liabilities, but they are not contractual liabilities in the sense a debt would be. These future liabilities have a number of interesting features worth exploring in greater detail:

- 1. They represent what clients think they will want in the future, and they almost certainly will change over time.
- 2. They are usually fuzzy and imprecise both in magnitude and timing.
- 3. They have varying degrees of importance and priority.

- 4. They have varying degrees of certainty with regard to what clients think they will want in the future.
- 5. They are often highly contingent on what happens in the future, and in particular on the client's future realized portfolio value.

Consider a newly married couple who plan to start a family. They might be saving for a larger home, thinking they want to move in about eight years, planning on having a couple years before their first child is born, then a couple more before their second child is born, and then moving to the bigger house about the time their older child starts school. Biology imposes lots of imprecision in the timing of this goal, and that's not all. Imagine this family is blessed with twins in their second pregnancy. Rather than the two children they planned for so carefully, they now have three. Do they now need a still bigger house? A larger family car? Which is now a higher priority, the car or the home? Both are important, but does achieving both mean that the home needs to be a little further out of the city?

This is an example of a common type of problem we all face in our financial planning. Even when we have constructed a good plan, the world throws us curveballs. Understanding investment goals creates a dynamic, and potentially complex, system of desires, contingent actions, and priorities. We believe these difficulties lead many advisors to "jam-jar" approaches, where specific assets and cash flows are segregated in separate accounts aligned to the specific goal they will fund, or to avoid using goals at all. We strongly believe that goals are the

key to investment objectives, even if they are difficult for financial advisors to build into investment models.

Goals help investors in a number of ways. Principally, they help investors to think constructively about what matters, and about the relative priorities of future aspirations, the most crucial of which may be many years in the future. Goals also motivate investors to plan and prepare. It would be foolish for advisors not to take advantage of this intuitive behavioral hook and risk leaving investors unprepared for foreseeable expenditures, or with a portfolio that fails to reflect their needs.

Jam-jar approaches are simplistic and inadequate, but defining the complete dynamic system of goals for any individual investor seems intractably complex. So what can advisors do about it?

We recommend the following five simple steps for working with a dynamic system of goals:

Consider only important and large goals,

rather than long over-engineered lists of small and unimportant goals. This focuses the investment strategy on the investor's key needs.

Capture the investor's best guesses at the rough timing and magnitude of goals. Take time to emphasize goals' flexibility and adaptability to changing circumstances.

Capture the priority, conditionality, and optionality around the timing and magnitude of each goal. For instance, if your

client were planning a round-the-world trip in retirement, there likely would be flexibility in the timing and a willingness to delay the trip to save a bit longer and make it truly memorable. However, if that trip were to celebrate a milestone wedding anniversary it might make sense to not delay, to rather accept the likelihood of spending less on the holiday to secure the timing.

Emphasize the overall system of goals.

The overarching need is to have enough money to spend when you want to for all of the goals in the system. This means avoiding organizing assets into accounts for specific goals or jam jars. This allows money to flow to the highest-priority goals at all times and avoid the inefficiencies of mental accounting present in jam-jar based planning (Thaler 1999).

Regularly review the system of goals to

validate that these are still the most important things to your client. You often will find yourself reconfiguring the investment strategy to adapt to shifts in circumstances and preferences. Avoid aligning goals to separate jam jars or accounts, ensuring that the investor retains the financial and psychological flexibility to make dynamic reconfiguring easier and potentially less costly.

Problems with Goal-Based Approaches

We have previously criticized risk-profiling approaches that ask the investor to establish different risk preferences for each goal (Davies and Brooks 2014). The common approaches that set aside cash to fund each goal or liability individually, attempting to use actual accounts to replicate mental accounts, are similarly flawed. It has been argued that it is possible to build optimized portfolios with mental accounting (Das et al. 2010). Setting aside the fundamental disagreement of whether any investor can adequately and stably express risk preferences simultaneously for multiple individual goals, and hence individual mental (or real) accounts, we believe that optimizing per goal means optimizing for a spuriously precise description of current preferences. This places undue emphasis on the pursuit of goals that are not truly valid, even at the

point of designing the initial investment strategy; and thereafter committing to an investment strategy that over time bears less and less relation to the investors' changing goals and circumstances.

Failing to account for the contingency, malleability, and valuable optionality of investors' goals often leads to taking too little risk because it leads to attempts to ensure delivery of future cash flows as if these goals were fixed and immutable. This reduces overall expected return and is inconsistent with an approach seeking to maximize overall portfolio value. In effect, by targeting individual goals, we reduce the probability that investors can exceed currently imagined goals and achieve more with their wealth. This effect will be particularly damaging when an investor has been asked to provide a long list of goals, many of which may be of marginal importance and would be happily dropped if circumstances prohibited them. It is better to optimize the overall value of the portfolio, and thus maximize future spending power for any future set of goals, than to protect future cash flows that may be marginal, spurious, contingent, or only currently desired.

Focusing on goals one by one can lead to a lack of financial and psychological fungibility; the act of eliciting goals, and of structuring the portfolio to optimally meet them, ossifies in the investor's mind a particular set of goals at a single point in time and may reduce the investor's future psychological flexibility. For example, sunk cost and endowment effects may make it more difficult for clients to realize when goals become less important, consequently making those goals more difficult to drop from financial plans.

This psychological stickiness is reinforced by financial stickiness. What really matters to clients is whether they have the money they need, when they want to use it, for their highest-priority goals. Money should be completely fungible, but by allocating funds to unimportant goals it becomes likely that money doesn't flow to the highest-priority goals in an efficient way. Moving money from a low-importance

goal to a high-importance goal requires both physical and emotional effort, and thus it becomes more difficult. This movement has the potential to trigger loss aversion against the low-importance goal, so as to avoid the psychological pain associated with this perceived loss, even though it is of low importance, means the investor may not move the funds at all. The result is a plan that over time fails to reflect the changing circumstances and preferences of the investor.

Imagine an investor who, several years ago, desired a vintage sports car and started accumulating funds in a specific account for this purpose. The purchase was clearly contingent on how future events would unfold, but at the time it was an important aspiration. Since that time, the investor has started a family, and now the most important and less contingent goals are to pay school fees for the children. There is a risk that the investor remains reluctant to raid the vintage car account and allocate these funds toward school fees, even when this behavior leaves the investor substantially less able to achieve what is now most important. In the intervening years, the cash set aside to protect the (now largely defunct or at least distant) goal has been suboptimally invested, leading to lower total wealth available to support the investor's (now quite different) current aspirations.

One criticism of our proposal is that clients do find a mental-accounting approach intuitive. We agree that a one-to-one mapping between goals and assets does have some benefits. Principally, it can help someone who is not motivated to save by clearly showing any progress made toward goals. This is perhaps less problematic in simple goal systems with only a couple of highly important goals, but when the goal system becomes more complex and dynamic, we believe the accompanying costs of jam-jar mental accounting too often are missed, ignored, or glossed over.

From Goals to an Investment Strategy

Recall the definition of an investment: my current preference for a future expenditure. So future goals are liabilities against our future selves, and as such they form an important component of an investor's risk capacity. In essence, any future liability that needs to be funded from a given asset base constrains the investor's financial ability to take risk, thereby lowering the overall risk that should be taken in the portfolio.

Here we address briefly the misdirected philosophy of determining a required return for a portfolio given an investor's goals. This approach implies that specifying more goals should lead to an increase in risk to meet the return required. Although taking more risk may increase the probability of achieving more or larger goals, it also increases the probability of falling spectacularly short. Imagine how this approach would have played out in 2008. This strategy may be appropriate when failure to meet a certain and fixed goal would be calamitous, where increasing risk to maximize the probability of meeting this threshold is the only option.3 This is, however, a very unusual scenario in wealth management (unless clients have borrowed from Tony Soprano). We believe it is better to encourage investors to completely exhaust all other options such as saving more or adjusting goals before recommending they increase risk, even if current assets won't achieve essential current goals. It is easier and safer to reconfigure goals and reduce future expectations where required than to start taking dangerous levels of risk.

Future investment goals are not contractual future liabilities like repaying the capital on a loan. As such, in addition to being discounted for time, each goal also should be discounted for its priority and flexibility. The further a goal is in the future, the lower its importance to the investor (priority) and the more the investor can delay the timing or reduce the size of the cash flow (flexibility), then the more that cash flow should be discounted when determining its effect on present-day investing. Equivalently, the less certain a goal is to happen, then the less it will constrain the risk capacity of the investor, and the less we should reduce current risk to protect it.4 This discounting approach ensures that the largest, most important, and least flexible goals are

protected most—precisely the outcome that a client would expect from an investment strategy.

By doing this we determine for the investor a system of all the discounted future liabilities that ought to be protected through reduced risk taking and avoid spurious precision. We also need to consider how net discounted future savings (the difference between annual income and expenditure in future years) acts as a future asset to offset these future liabilities. Together these inform us whether the investor's risk capacity is constrained and requires a reduction in risk taking, or if there is excess risk capacity that might suggest taking a little extra risk for the opportunity to boost returns.

This approach to goal-based planning offers the psychological benefits of goal setting, namely increased savings motivations, but does not suffer the behavioral and financial inefficiencies of traditional goal-based approaches, where assets are managed in separate goal pots. If we treat the system of goals as a constraint on risk capacity, we simply decrease the risk level of the overall portfolio where this system of preferences needs protecting in the future. The discounting approach to future goals means they are protected only insofar as they matter, are likely to arise, and are noncontingent.

The investor's focus is thus on what matters most: the overall affordability of the system of goals. This system is flexible and adaptable, both as preferences change and future circumstances change, and any changes simply require an adjustment of the portfolio's risk profile. Importantly, this approach to goal-based investing enhances flexibility in decision making and hugely simplifies portfolio management by removing the need to simultaneously monitor multiple segregated portfolios. This approach much more easily reveals whether an investor's goals are unattainable from the current asset base and encourages a re-evaluation of expectations and priorities as the primary response. This focuses the investor on the actions that will boost the achievability

of the most important goals: saving more, delaying or shrinking goals, or dropping lower-priority goals.

By utilizing our more-flexible approach to goal-based investing, many investors achieve more of what matters to them and avoid a number of behavioral inefficiencies that lower overall portfolio value, make portfolios more difficult to manage, lower the number of goals achieved in full, and consequently, lower overall investor satisfaction. Essentially, we retain the motivational benefits of mental accounting without incurring the associated costs to efficiency and adaptability.

Peter Brooks, PhD, is a behavioral finance specialist with Barclays. He earned a PhD in behavioral economics and an MSc in economics and econometrics, both from the University of Manchester. Contact him at peter.brooks@barclays.com.

Greg B. Davies, PhD, is head of behavioral and quantitative finance with Barclays. He earned an undergraduate degree from the University of Cape Town, and an MPhil in economics and a PhD in behavioral decision theory, both from Cambridge University. Contact him at greg.davies2@barclays.com or follow him on Twitter at @GregBDavies.

Robert E. D. Smith. CFA®, is a behavioral finance specialist with Barclays. He earned a BEng in mechanical and manufacturing engineering from Warwick University. Contact him at robert.e.smith@barclavs.com.

Endnotes

- 1. As just one example, Richards (2015) contains many good examples of conversations about goals
- 2. This excludes notions such as wealth preservation, capital growth, or income generation as investment goals. Although advisors and clients commonly express these terms as investment objectives, they are quite different from the goals of investing, which must be related to how wealth is used. Instead, these constitute high-level means used to achieve particular goals.
- 3. This may be the case for the impoverished, where the only way of generating enough income to survive requires gambling on something risky, such as a subsistence farmer gambling on a cash crop (Wright and Kunreuther 1975). These extreme cases aside, investors almost always have the possibility to make compromises among goals, so using a notion of

Continued on page 37 ▶

Continued from page 18

- "required return" in setting risk levels is dangerously misguided.
- 4. It is possible to add mortality as an additional discount factor. If the investor has died before the goal was desired then the spending would not occur.

References

- Das, Sanjiv, Harry Markowitz, Jonathan Scheid, and Meir Statman. 2010. Portfolio Optimization with Mental Accounts. Journal of Financial and Quantitative Analysis 45, no. 2: 311-334.
- Davies, Greg B., and Peter Brooks. 2014. Risk Tolerance: Essential, Behavioural and Misunderstood. Journal of Risk Management in Financial Institutions 7, no. 2: 110-113.

Richards, Carl. 2015. The One-Page Financial Plan: A Simple Way to Be Smart about Your Money. New York: Portfolio.

Thaler, Richard H. 1999. Mental Accounting Matters. Journal of Behavioral Decision Making 12, no. 3: 183-206.

Wright, Gavin, and Howard Kunreuther. 1975. Cotton, Corn and Risk in the Nineteenth Century. Journal of Economic History 35, no. 3: 526-551.

