COWIN FINANCIAL LITERACY PROGRAM
TEACHERS COLLEGE COLUMBIA UNIVERSITY

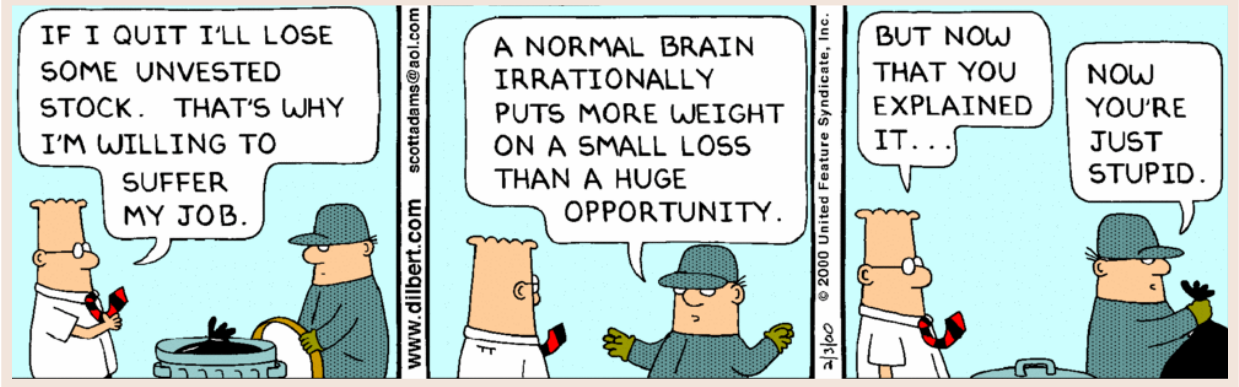
Generously supported by TC Trustee Joyce B. Cowin

Quick Start Guide
Case Study: Shore Financial

Topic: financial planning

The four most dangerous words in investing are:
"this time it's different."

–Sir John Templeton, American-born British stock investor,
labeled as "the best stock picker of the 20th century"[1]



Our irrational behaviors are neither random nor senseless—they are systematic and predictable. We all make the same types of mistakes over and over, because of the basic wiring of our brains.

–Dan Ariely, behavioral economist and psychologist at Duke and MIT and author of
Predictably Irrational: The Hidden Forces That Shape Our Decisions

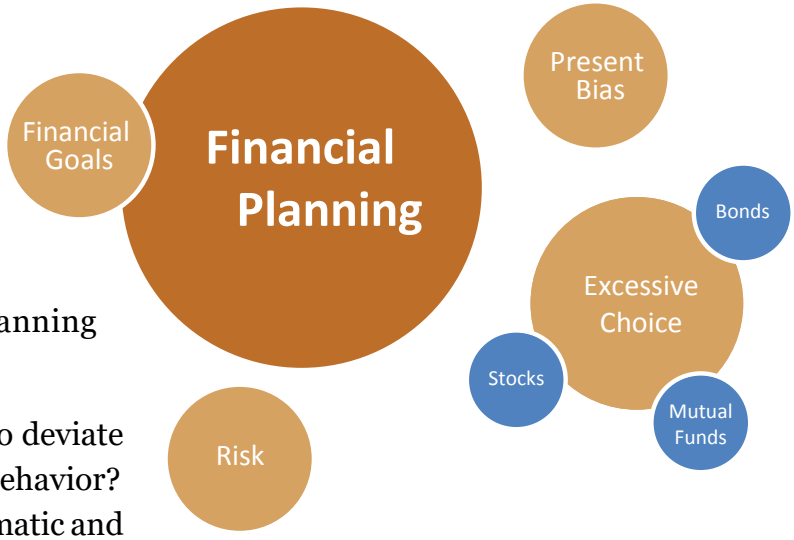
[1] http://www.sirjohntempleton.org/articles_details.asp?a=16

Introduction

When it comes to managing money and long-term financial planning, the advice from experts is simple and consistent: set goals, start early, pay yourself first, and diversify to manage risk. And yet the array of choices and information that an individual investor faces can often be overwhelming, and research and experience have shown how seldom people follow this straightforward formula. Recent research in behavioral economics and social psychology may help shed light as to why: although conventional economic theory makes predictions about how people will behave based on certain basic assumptions about human behavior, those assumptions may be violated in ways that are systematic and predictable. This case not only introduces students to the conventional content on investment opportunities, but also challenges them to consider *why* people often make choices that are less than economically optimal for themselves, thereby equipping them to be aware of their own cognitive biases and potentially avoiding some of the same pitfalls in their own financial decision making. This case follows a slightly different format than the other cases because it addresses foundational content in financial planning while also deconstructing the ways we manage our money and the "irrational" choices we sometimes make.

Dilemma

Why do clients of pro bono financial planning services so often fail to heed the sound advice of professionals?



- What is sound financial planning advice?
- In what ways do people tend to deviate from "optimal" or "rational" behavior? How are such deviations systematic and predictable?
- How can the advice, the way it is communicated, the way decisions are made, and the firm's attitudes toward its clients change to better accommodate real-world decision making?

What Students Will Learn

This case introduces students to long-term financial planning and its complex terminology. Although these choices represent a large chunk of what constitutes personal finance, this case contextualizes this important content in a way that students may be more likely to respond to, and thus they are more likely to retain the information: as experts uncovering the puzzle of why people so often fail to do what is economically "rational."

Problem-Solving Skills

- To conceptualize and engage with a hypothetical case study as a true problem, not one that fits neatly into, and illustrates, a preordained solution
- To incorporate and critique multiple sources of information, including technical and financial information, to solve a problem
- To solve a problem using meta-analytic skills—not just addressing the information needed to solve the problem, but also the thinking processes behind it

Related Financial Literacy Concepts

Bond: A bond is like a loan—a note that promises repayment to the holder that can be resold. Many different types of bonds exist, with different terms, levels of risk, interest rates, and tax implications, but they can broadly be divided into corporate bonds for private entities and government bonds for public entities.

Hyperbolic discounting: There is a fundamental trade-off between consumption in the present and investing in potentially greater consumption in the future. The extent to which we prefer the present (which, research shows, almost all of us do) is measured by our individual *discount rate* (i.e., the rate at which people place less value on the future as opposed to the present). If the discount rate is significantly higher for sacrifices in the near-term vs. the short-term, it is referred to as *hyperbolic*.

Investment: Although the word *investment* has several closely related definitions, depending on the perspective and discipline, in personal finance it refers to sacrificing spending today by putting money into particular financial instruments with the expectation of future gains. We generally assume there is a trade-off between risk and

reward, whereby riskier investments may offer larger *potential* gain, but also have the potential for losses. Some common examples of gains and losses are listed here:

Potential Gains

- Growth in value of investment (principal)
- Interest payments for savings or loans
- Dividends, or shares of profits in companies owned

Potential Losses

- Loss of principal value
- Loss of access to money tied up in investments (loss of liquidity)
- Investment does not keep pace with inflation, so loses value in real terms (e.g., if interest rate is fixed)

Mutual fund: Diversifying financial assets helps reduce risk, but can be challenging for individual investors with limited capital to invest. Mutual funds help by pooling funds of many investors to invest in a range of assets selected by professional managers, although they still carry risk and often come with fees to compensate for the management of the fund.

Stock: Stock refers to ownership of a small piece of a corporation, a company owned by many people. Stocks can provide returns in the form of dividends paid on company profits, as well as increases in the value of the stock with the expectation of company growth and future profits. However, buying and selling stock in individual companies also carries great risk.

In the Classroom . . .

1 HOMEWORK

As noted in the introduction, this case differs from the others in this set. One important implication is that optimally, students will *not* have read the case before beginning, because that may "spoil" some of the introductory behavioral experiments. Instead, we recommend the following, slightly modified procedure:

1. In advance, assign one student for each group of 3–4 students to be a group leader. The leaders should read the case before anyone else (perhaps while others are completing other, unrelated classwork).
2. Go through the introductory experiments in the "Background" section of the case in the last 15 minutes of the class the day before you plan to begin the full case.
3. Only *after* students have experienced the opening experiments should they then read the entire case for homework to be ready to dive into the substance of the case the next day. At this point, students should read the case twice: in the first reading, students should try to understand the basic facts and issues in the case. As they read a second time, students should make a list of the key issues or questions in the case and bring the list to class, prepared to discuss.

2 AS A WHOLE CLASS

After students have all had a chance to read through the case, ask them to recap the facts of the case so that everyone has a shared understanding of the key issues in the case. The dilemma in this case is even more open-ended than in several of the other cases in this collection in which the protagonists face a clear choice. To help students tackle the ambiguity, complexity, and sheer magnitude of the case, it may be helpful to divide the discussion into two parts. First, students catalogue what is already known about money management, financial planning, and investment, primarily from the case but also from their prior knowledge and any other lessons and resources on these topics. In a second pass, students then catalogue what is known from reading the case and from experiencing the behavioral experiments about people's decision-making

processes, and the systematic ways in which those processes might deviate from economically optimal or "rational" choices.

Show students a sample dilemma map on a different topic from "Using the Quick Start Guides." Show students how various elements of a complex dilemma can be "mapped" to show how they relate to each other—in this case, an example of a dilemma in which there are numerous options, a lot of information about each option, and a lot of uncertainty might be a good example.

Once students understand the basic concept of the map, begin working together to create a dilemma map for this case, but do not complete it—inform students that completely mapping out this dilemma will be a major part of their work on this case.

3 GROUP ACTIVITY: PART 1

Break students into groups of about 4–6 based on grouping strategies you normally use. Orally or on the board, give them directions to do the following as a group:

1. Consider what questions need to be answered in order to complete a map to help Shore Financial resolve the dilemma. Make a list of what the firm needs to know and where you can find the information.
2. Scan the list of resources to determine which ones would be most valuable to answer the questions the group has and give them more information to understand the decisions that need to be made.

4 PAIRED RESEARCH

Students should now be divided into pairs. Each pair should receive a small set of the resources deemed valuable in the previous section. Students will then examine each resource so they can first come to their own understanding and then confer with a partner to come to a shared understanding.

For each resource, students should identify relevant information and evidence that answers their questions. They should also consider the credibility of the information and of the resource itself, examining the source of the information, any potential sources of bias, and how well the resource defends the information it provides.

5 GROUP ACTIVITY: PART 2

After they have had some time to examine the resources, students should come back together and share what they've learned and how it answers their questions. They should also note what questions remain and what further questions arise from the new information.

The group should then revisit their map and determine if they wish to add or change anything, now that they have additional information from the resources.

As groups begin to dig into the case, listen for signs that students are beginning to approach the case with a structured, problem-solving approach. Such signs may include:

- Inventorying what is known and unknown about the case
- Specifying the main questions/problems/dilemmas in the case
- Creating a set of criteria by which to evaluate options
- Investigating suggested resources and determining what information can be gleaned from each

If groups very quickly converge on one solution, you may wish to challenge their thinking by introducing some of the "Complicating Factors" listed on the following page. These factors reflect research on how people make financial decisions and add complexity to the case.

6 CLOSURE

Groups will now share their maps and recommendations to Shore with the entire class. As they present, the class should discuss what they have in common, what is different, and why. Additional discussion questions include:

- What is known and unknown in this case?
- How does uncertainty affect the decision-making process?
- (If students have completed other case studies in this collection): How is this case different from the others? In what ways is it more complicated?

Complicating Factors

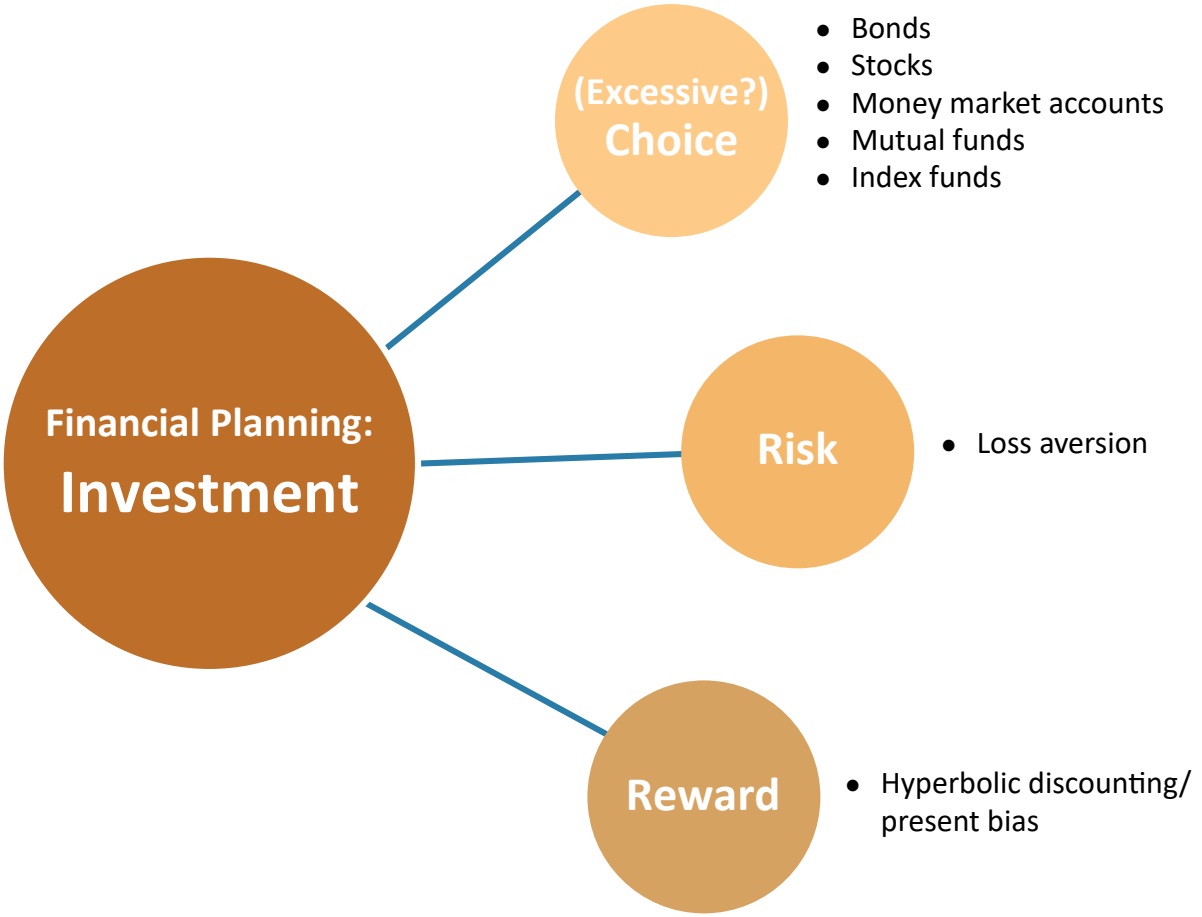
- Recent research finds suggestive evidence that *poverty itself* may actually impede cognitive function due to the additional mental stress induced by worrying about finances. This could lead to a self-perpetuating cycle, in which stress about money causes the poor to make worse financial decisions, helping to keep them poor. Researchers tested their hypotheses by, among other things, comparing the cognitive performance of farmers before harvest, when they are relatively poorer, and after harvest, when they are relatively richer.[2]
- Several additional elements of behavioral economics and finance can influence decisions, beyond the issues of overwhelming choices and hyperbolic discounting featured in the case. These include loss aversion (the idea that losses "hurt" more than the equivalent gains "feel good") and anchoring, the idea that our intuition for what something is worth will be influenced by external suggestions for what it "should" be worth.

[2] Mani, A., Mullainathan, S., Shafir, E., & Zhao, J. (2013). Poverty impedes cognitive function. *Science, 341*(6149), 976–980.

Extensions

1. Students might come to the conclusion that Shore Financial's scope of possible actions is too limited, and to truly achieve its objective of improving decision making among the poor it needs to lobby for legislative or regulatory changes in the banking industry. Have students consider what the next steps might be, in light of the behavioral economics research they have read, and how to go beyond individual advice into possible systemic changes.
2. The resources provided alongside this case offer just a snapshot of the myriad materials on behavioral economics and finance. Two more in-depth sources that will likely be challenging but still accessible for high school students are *Predictably Irrational* by Dan Ariely and *Nudge* by Cass Sunstein and Richard Thaler. Encourage students interested in learning more to read all or sections of both books and consider how the additional information might change the advice they gave in this case.

Completed Dilemma Map



Dilbert's Dilemma