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Insights from Behavioral Finance and Economics for Building Financial Capability

Traditional economic theory suggests that people are rational, capable of finding and incorporating relevant information, and have likes and dislikes that are consistent and stable over time. It would not be incorrect to read an economic text and think that in fact we all use our brains like computers and exercise the willpower of a saint. Most programs and policies designed to promote financial capability largely rest on the belief that access to services or information will lead to greater financial security. However, people often fail to take advantage of appropriate financial products when they are offered, and very often struggle to put their financial knowhow to use. As a result people often struggle to change their behaviors even when they genuinely intend to do so. Recognizing these barriers to changing behavior, the field of behavioral finance incorporates insights from psychology and other disciplines to better explain human behavior.[1]

This brief summarizes a select number of ideas from the emerging field of behavioral economics and suggests how these findings might be used to improve programs aiming to improve financial capability.

Resource Slack & Self-Control Problems

Picture a short length of string about a foot long. You hold one end of the string in each hand. When you pull the string it tightens, and when you move your hands closer together the string loosens and sags. Social psychologists Gal Zauberman and John Lynch[2] suggest money and time can be thought of as that string. When we are busy, we have little slack in terms of time; when money is tight we have little financial slack. When we borrow money from the future or delay a deadline, we gain more slack today at the expense of a tighter string in the future. Importantly, people often underestimate how difficult it will be to manage a tighter string in the future—people tend to project that in the future their string will have more slack than it actually will.

In essence, people assume that they will have more time and money in the future than they actually will. This results in decisions that are more present-focused, which can impede people from reaching their intended goals. Procrastination is one example of how not having self-control in the present can lead to a long-run failure. Behavioral economics emphasizes that people are poor at predicting their future states of mind, and that people are sometimes better off when their future selves can somehow prevent their present selves from taking actions now. A sophisticated consumer understands these challenges and builds systems to cope with them—tying their hands now in order to be better off in the future.

Strategies:

How can people learn to plan or 'pack' their time and financial resources more efficiently such that their slack is well managed? Here are a few possibilities:

- *Commitment Devices.* People can force themselves to defer spending today, thereby shifting slack to the future. One

[1] Popular and widely accessible books in this field include *Nudge: Improving Decisions about Health, Wealth, and Happiness* by Richard Thaler and Cass Sunstein; *Why Smart People Make Big Money Mistakes* by Gary Belsky and Thomas Gilovich; and *Predictably Irrational* by Dan Ariely.

[2] See: Gal Zauberman and John Lynch "Resource Slack and Propensity to Discount: Delayed Investments of Time versus Money"

example is a savings account that requires additional steps or hurdles to be able to access funds, including a penalty for withdraw--for example a US Savings Bond. Other examples include using automatic electronic deposit to transfer earnings into savings accounts (i.e. "paying yourself first") or committing today to save portions of future raises. Of course to be effective backing out of the commitment needs to be onerous, it possible at all.

- *External Monitoring.* People are less likely to procrastinate when their intentions are known publicly. Telling other people about a goal means that an individual will pay a social cost (e.g. embarrassment) for failing to follow through. A third party can watch and hold people accountable to their stated goals or intentions. Financial coaching is one example of external monitoring in action—a client defines a goal, and then the coach holds the client accountable over time.

Commitments: Stickk.com

Founded by a group of leading behavioral economists, Stickk.com allows individuals to take out precommitment contracts on themselves. For example, individuals can agree to exercise a certain number of days each week and specify a penalty for failing to do so (e.g. giving a certain amount of money to a charity they dislike). Note that the site also allows the user to specify a "referee," who functions as an external monitor. Creative ways to help individuals precommit to certain actions abound, but to be successful these strategies must be binding.

Top of the Mind

In psychology there is a concept called executive attention, which is the degree to which individuals are thinking about a particular task in the working, active parts of their brains (as opposed to the parts of the brain involved in automatic processes, such as driving a car). There are only so many hours in the day, and our minds can only focus on a certain number of tasks at once. Because so many items are competing for our attention in our active working brains at any given time, it is important that financial capability programs consider ways to keep important issues on the top of people's minds. As people pay more attention, they may be more likely to act according to their intentions.

Strategies:

How can people bring financial tasks or concepts they find uninteresting to the top of their minds? This is an emerging area of research, but two strategies include:

- *Reminder Messages.* Reminders can help keep particular actions on the top of people's minds and therefore make it more likely to succeed in sticking with an intended behavior. A recent study by a group of economists[3] shows that customized text messages, emails, and letters focusing on financial goals or aspirations increase savings rates. The more vivid the message, the more people respond.
- *Alerts.* Technology can be a useful and cost effective way to provide warnings on issues people may otherwise neglect. Text messages or emails can be set up to notify people when account balances fall below $500, for example, or to remind people when their bills are due.

Choice Burden and the Appeal of the Status Quo

Consumers in the U.S. face a multitiude of options when buying anything from toothpaste to a new car—choices abound. Although most people say they actually prefer having more rather than fewer options, deciding among many options can quickly become overwhelming. Think of a restaurant with a 20 page menu. The ability to order almost anything might seem attractive at first, but pouring over pages of

[3] See: Dean Karlan, Margaret McConnell, Sendhil Mullainathan and Jon Zinman " Getting to the Top of Mind: How Reminders Increase Saving"

text and weighing options takes time and mental resources.

Many alternatives are not clearly inferior or superior to one another ("should I have the triple pepper jack bacon burger, or the bacon triple stack burger with pepper jack?"), which means the optimal choice may be ambiguous. Making a decision is even more difficult when the alternatives differ along dimensions that are hard to compare, such as quality or durability, rather than just price. Psychologists Sheena Iyengar and Mark Lepper conducted a simple experiment: grocery store shoppers were offered either 6 kinds of jams (40% stopped and looked at the jams, and 30% bought a jam) or 24 jams (60% stopped and looked, but just 3% bought a jam).[4] Thus, while more choices might initially seem attractive, too many choices actually inhibits action. A follow up study found that as employers add 401(k) investment options, workers are less likely to pick any investment and therefore fail to participate in the 401(k) plan at all.

In a related point, when the opportunity exists to do something or do nothing, people will often do nothing since the act of choosing at all is in itself a mentally taxing activity. Individuals are strongly inclined towards the status quo. It might seem to make no difference whether a particular option is defined as the status quo or as an alternative—people should simply choose the option that best suits their circumstances regardless of which choice is the status quo.[5] Nonetheless, the status quo bias arises even when the costs of choosing an alternative are small.

Strategies:

Given the status quo bias and the difficulties people have in making choices when presented with a multitude of options, what can be done to enhance financial capability? Here are a few possibilities:

- *Reduce Options*. This strategy may seem antithetical to what people want (more choice), but in fact fewer options may help facilitate decision making. Tinkering with people's options may seem manipulative. However, people's ability to choose is maintained, and this strategy is far less manipulative than mandating certain choices. It makes sense to offer options in a way that helps people make choices.
- *Defaults and Opt In vs. Opt Out.* Imagine two forms. The first requires people to complete a set of questions to enroll in a program. The second instead contains information telling people that they are automatically enrolled but can fill out the form if they would like to opt out. Economists Brigitte Madrian and Dennis Shea have conducted a number of studies showing that the opt out approach results in much higher participation rates than the opt in approach.[6] Of course, the usefulness of defaults varies greatly across programs and policies, but the overall point is to remember to consider how defaults are structured, and perhaps how they could be restructured in such a way that helps people overcome the inertia of the status quo.

Emotion

It should not come as a surprise that emotions, rather than just rational calculations, influence people's decisions. Hot or visceral emotions such as anger or jealousy obviously could affect how people make decisions. However, even weaker positive or negative emotions can change how people think. Positive feelings can help people think more creatively and connect information. In fact, financial economists have shown that stock markets perform better on days with good weather (presumably because people are in better moods).[7]

[4] See Sheena Iyengar and Mark Lepper "When Choice is Demotivating: Can One Desire Too Much of a Good Thing?"

[5] See William Samuelson & Richard Zeckhauser, " Status Quo Bias in Decision Making"

[6] see Brigitte Madrian & Dennis Shea "The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior"

[7] See David Hirshleifer & Tyler Shumway, "Good Day Sunshine: Stock Returns and the Weather"

Beyond the effects of current emotions, predictions about future emotional states can also influence decisions. For example, people may make a decision because they want to avoid feeling regret about not making a choice. Other times people may make choices based on what other people do, feeling that they must either follow the crowd or feel left out. This “herd behavior” partially explains the emergence of price bubbles (such as the recent housing boom and bust). Herd behavior stems from the idea that when other people are doing something, there is “safety-in-numbers.”

Strategies:

How can we deal with the unpredictable effects of emotions? Here are some possibilities:

- *Learn to Recognize How Emotions Affect Financial Choices*. Once people know and can predict how emotions will affect their behavior, they become more attentive to these issues and perhaps avoid the biases they may exhibit. Most people understand not to do or say things in the heat of the moment of anger, but may not see how more subtle spending and borrowing decisions may be influenced by less visceral feelings. Knowing that anxiety (or fear tactics) might result in less attention to details of a financial product sales pitch is one example. Realizing that the 'herd' may in fact not be so wise to follow, even if it might lead to regret, is another example.
- *Present Opportunities in a Positive Format*. At least one study indicates that individuals are more likely to participate in programs when they are first reminded or “primed” to think positively in general.

Losses Loom Larger Than Gains

Acclaimed psychologists Daniel Kahneman (who won the Nobel Memorial Prize for Economic Sciences in 2002) and Amos Tversky have elaborated on why people value the same amount of money differently depending on context. A regular paycheck, for example, might be treated differently than a annual bonus of the same amount. The loss of a $20 concert ticket might not be felt in the same way as the loss of a $20 bill. Most importantly, a $1,000 loss is more painful to most people than the benefit of a $1,000 gain. People will work harder—roughly twice as hard—to avoid a loss than they will to achieve a similarly sized gain.

Strategies:

What does mental accounting tell us?

- *Consider gains and losses*. All activities have components that seem like benefits and others that seem like costs—people tend to weigh rewards and penalties when making decisions. Sometimes avoiding a penalty—which feels like a loss—might provide more motivation than being awarded an incentive.
- *Segregate Accounts.* People can create their own "mental accounts" tied to their goals. For example, a tax refund might be divided into “spending” and “saving.” If saving feels like a loss, the gain of spending can help offset that feeling.

Conclusion

The ideas presented here are evolving as research in behavioral sciences advances, but hopefully they can serve as a starting point. There are many other approaches worth considering, but the main point is to be creative and innovative.[8]

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[8] For more ideas see: http://s3.amazonaws.com/alcdownloads/II.10_Behavioral%20Economics_Skricki.pdf