

BE101x: Behavioural Economics in Action
Unit 2.1.1 Mental Accounting

DILIP SOMAN: All of us have heard the statement that a penny saved is a penny earned. In fact, economic theory tells us that money is fungible. And what that essentially means is that a dollar is a dollar, no matter how you earn it, no matter where you save it, and no matter what currency or form it takes.

For example, I have in my right hand a \$20 bill, and in my left hand three bills that total \$20. And if economic theory is to be believed, I'm going to spend this in exactly the same way as that. It turns out that my research shows that that is not true. And, in fact, the principle of fungibility is often violated.

Today, I want to spend some time talking about an area of research, mental accounting, which is perhaps the single area in which I have done most of my own research over the past 20 years. Let me start off by throwing a simple illustrative hypothetical example. Let's imagine you love music. You've got tickets to the symphony. You've paid \$50. And let's create two versions of this story.

In story one, you go to the symphony hall. You buy a ticket, and then you have some time. You go out and get a snack. When you come back, you realize that you have lost the ticket. You go to the box office. The box office tells you that the only way in which you can get to consume the symphony is to buy a second ticket, because there were no seat numbers on the original. Would you buy a second ticket?

Here's a second version of the same story. You go to the symphony hall. You've planned to spend \$50. But before you buy the ticket, you realize that you have lost \$50 in cash. And the question is, would you buy a ticket to the symphony?

Now, if you're an economist, both of these stories are exactly the same story. In both stories, you lost a piece of paper, you lost it because of your own carelessness, and it was the same exact symphony, and the same performance, that you were about to consume. Yet, as Richard Thaler showed us in one of his landmark papers, people in the first story are much more likely to say, no, they would not buy a second ticket than people in the second story. If you lose cash, it turns out you're willing to buy a ticket. If you lose a ticket, you do not want to buy a second ticket. Why does that happen?

Mental accounting explains this story. What is mentally accounting? It is the idea that people tend to label money with certain names. And the moment you label money differently, it gets spent differently. People behave like accountants. It sounds like a bit of a scary concept, but that's what we do.

For example, if you decide to watch a symphony worth \$50, what you might end up doing is to create an account in your head. It's called the symphony. It's got a budget of \$50. And the moment you've bought the ticket, that budget is gone. It's blown. So now if you lose the ticket, you have nothing left in that budget. On the other hand, if you lose cash, that's OK, because that comes from the general expenses account. So the point is very simple. People look at their money, and they tend to categorize it into different groups, and, as a result, they spend money differently.

A number of years back, I was doing some research in Canada-- and previously in India-- on different budgeting techniques that people use for their money. And I came across an interesting story from a friend of mine who was telling me about how his grandmother used to budget their

household expenses. That method of budgeting is something called Jar Accounting. Or Viviana Zelizer, who's a sociologist at Princeton, documents a similar phenomenon that she calls Tin Can Accounting.

And the idea is simple. Husband comes home, thinks about all of the disposable income that they have to spend for the month. They budget that into separate categories, and they put them in separate jars with different names on it. So, for example, this one is a jar called "eating out." It's got \$70 and some change in it. This one is called but "Dilip's allowance." It's got only \$5. And so on, and so forth.

And the next time you're faced with a consumption opportunity, what you do is you look at the jar. So your kids come to you, and say, can I go get an ice cream? You look at the jar. If there's money in there, you say, OK. If there isn't enough money, you say, no. So what's happened here is you've taken cash, which is fungible-- it could have been this, or this. But then you put a label on it-- ice cream money and entertainment money. And the moment you put a label on it, you tend to spend those funds differently.

So how do people mentally account? How do they create these different categories? Well, there's a number of different ways in which they do it. You could mentally account as a function of how you earn the money. If I find money on the streets, I'm going to spend it differently from if I worked really hard to earn it-- fun money, laborious money. Fun money is spent on frivolous stuff. Money that earn through my salary is typically spent on paying my bills.

The other way in which you could account is by time period. You could budget by the week, or by the month, or sometimes even by the day. Alternately, you could budget as a function of different expenses, or different categories-- like we just saw here. And finally you could even create mental accounts for a specific transaction, like the symphony example that we looked at.

Every mental accounting process has two components. Part one is what we call the metering process. The metering process looks at counting how much money is actually in the account. Part two is the scope or width of the mental account, defining the category over which that account exists.

For example, when I look at the symphony mental account, it's a narrow mental account. It exists only for that particular consumption opportunity. And the metering part of it is a negative 50, which I have just incurred in order to see the symphony. Now, the moment you actually incur or prepay to consume something in the future, it sets up an interesting mental accounting phenomenon that we call the Sunk Cost Effect.

What does that mean? It means the following. Let's, again, go back to our symphony example. You spent \$50. You plan to go to the symphony. And if you live in Toronto, let's say there's a really bad snowstorm, or a blizzard. It's difficult to drive. Your friends tell you it's perhaps not worth going to the symphony. But you go. And the reason you go is because the \$50 would otherwise burn a hole in your pocket.

In India, when I grew up, there used to be a term that was called "paisa vasool." And what "paisa vasool" stood for is making sure you get your money's worth. And that effect turns out to be relatively irrational economic behavior, because economic theory tells us that we should make decisions based on what's going to happen in the future, ignoring sunk costs.

But Dick Thaler, for example, in a lot of his early work, documented a number of instances of people who made irrational decisions simply because they had paid more to consume something in the future. If you've paid \$100 to go see a basketball game, you will go see it no matter how bad the weather is. If you got the same seat as a gift for free, you're likely to not go during a snowstorm. There are people who actually play tennis with a terrible tennis elbow simply because they have prepaid to consume a set of lessons.

And so the Sunk Cost Effect becomes a huge motivator of consumer behavior. If people prepay for something, it is very likely that they will want to consume something. And that is something that is called the Red and the Black accounting. The idea is simple. The moment you prepay, you have a deficit in your account. If you cannot consume, then you have to close your account in the red. It's like making a loss. People don't like making losses, and so they are driven to consume that particular product opportunity. So the Sunk Cost Effect turns out to be a huge motivator in nudging people to consume products and services.