

Predicting Our Expenses

ACADEMIC PERSPECTIVE

In yet another fallout of the COVID-19 crisis, CNBC recently reported that about half of American consumers are worried about how to pay their bills, in part, because it's so hard to estimate future income streams *and* future spending patterns.¹ Without a crystal ball, how can we get a better handle on what our financial futures will look like?

Let's travel back to 1969 when a young student named John Gott visited the Berlin Wall. He had gotten into a debate with friends regarding just how long the Wall would remain standing. Could the wall have been just at the beginning of its existence or toward the end? To figure out how much longer the Berlin Wall would be around, Gott used a principle he later introduced to the study of planet lifetimes (he became a Princeton astrophysics professor). Essentially, he assumed the current point in time could be anywhere between the very beginning and the very end. What this means is that on average, the current point in time is probably right in the middle of some interval.

It's not always easy to translate astrophysics into consumer behavior, so let's put it more simply. Gott reasoned that the best way to estimate the remaining duration of something would be to use its past duration and mirror that ahead to the future. In 1969, the Berlin Wall had been standing eight years, so he assumed it would continue to stand another eight years. That's quite precise, though, so he built in a margin of error and assumed it would stand anywhere from another two and a half years at the low end to 24 years at the high end. The wall fell exactly 20 years later in 1989, solidly within the interval Gott had predicted by using only the wall's past duration as a starting point.

Gott's Principle, as it came to be called, doesn't just work for estimating the life of planets and political walls. My own take is that the general idea should also apply to the way we consider our financial lives. When trying to estimate our future budgets, we might be wise to draw on our past spending behavior. How can we predict, for example, what our spending habits will be next week, next month and in the coming year? One good way would be reviewing our spending habits from last week, last month and last year.



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¹Michelle Fox, "Coronavirus crisis is causing financial stress for nearly 9 in 10 Americans," CNBC, April 16, 2020, <https://www.cnbc.com/2020/04/16/coronavirus-crisis-causing-financial-stress-for-near-9-in-10-americans.html>.

Effective Budgeting Is Paramount

And yet, we regularly overspend, underbudget and sometimes find our credit card statements surprisingly large. Underpredicting future expenses can be detrimental to overall financial health, especially in a time like now when many consumers are already so stressed. Even more, saving adequately for the future is one of the most important aspects of a long-term investment strategy, but savings goals can't be achieved without effective budgeting.

One compelling answer for why we experience difficulty with budgeting comes from marketing professors Abby Sussman and Adam Alter (both co-authors of mine). Essentially, we're pretty good when it comes to estimating our ordinary expenses such as groceries, housing costs and transportation. Where we're not so good, however, is estimating unusual or "exceptional" expenses. Imagine, for instance, that a few months ago you were gearing up for a family trip and spent a relatively large amount of money on plane seats, hotel reservations and amusement park tickets. The following month, your tires were finally too smooth to continue driving on them, so you quickly spent \$800 on new ones. If asked what you expected to spend next month, you'd probably accurately predict not buying more amusement park tickets and another new set of tires.

The problem, however, is that even though we might not purchase these specific big-ticket items any time soon, there's a good chance other exceptional expenses could arise. A new TV to make binge-watching more enjoyable? It's not a new set of tires, but it could be costly. What Sussman and Alter cleverly identified is that people tend to think too narrowly about exceptional expenses, focusing only on the specific purchase itself (e.g., new tires) and accurately predicting they won't have that expense in the near future but inaccurately predicting they won't have other bigger-ticket expenses down the line.

Another recent paper considered this behavioral pattern in a novel way. Chuck Howard, a doctoral student at the University of British Columbia, along with Sussman and Dave Hardisty, found that when making up a budget for the future, people tend to think about their typical spending patterns, failing to pay broader attention to any patterns (e.g., sudden medical expense) that may be atypical. As a result, when we predict future expenses, we're prone to think about the expenses we have most often or what researchers call "modal" expenditures. If our modal spending patterns were equal to our mean spending patterns, then it wouldn't be problematic to use our past typical expenses to predict the future. But, once you add in all the exceptional (atypical) expenses that we regularly incur, it works out mathematically that our mean patterns are greater than our modal patterns.

So, what's the best way to deal with our tendency to come up with inaccurate budgets and underpredict future expenses? It may be useful to make sure we don't focus on our expenses too narrowly. Sure, we won't buy another new TV in September and October. But other big expenses will inevitably arise, so it may be in our best interest to consider the overall category of "larger" expenses when planning budgets or deciding how to spend on a given item right now. In fact, Sussman and Alter asked a group of research participants to consider how much they had spent in the past year on presents for birthdays, anniversaries and holidays. They asked another group to think only about birthday presents purchased over the last year. When all the participants were asked how much they would spend on a watch for a friend's upcoming birthday, the people who had thought about birthdays, anniversaries and holidays were more likely to want to spend less on the friend's birthday present. Presumably, they recognized this wasn't just a one-time birthday expense but part of a larger category of bigger expenses.

Don't Forget the Big Picture

When it comes to making predictions about the future—whether it's how long the Berlin Wall will remain standing or how much we might spend next month—we can easily use the past as a guide. It's crucial, however, to attend to the right aspects of the past when

using it to think about what's to come. Focusing too narrowly on what's typical—but failing to consider the big picture—might result in problematic budgeting and spending patterns.

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