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Consistently inconsistent

People are often maddeningly irrational in their decisions about the future. Do not despair: rational economists are starting to explain why

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ECONOMISTS have a problem with self-control. They cannot help thinking that it should not be a problem. *Homo economicus* always acts in his best interest, so he has no need to tie his hands to prevent himself misbehaving in future. Yet mere mortals all too often check in to fat farms or save through Christmas clubs.

Until recently, economists shied away from explaining such irrational behaviour. But in a recent paper*, Ted O'Donoghue of Cornell University and Matthew Rabin of the University of California, at Berkeley, try to shed light on it.

Consider a man who buys a doughnut. Economists usually assume that he is making a rational choice to maximise his wellbeing: he reckons the benefits of buying a doughnut will outweigh the costs. That seems reasonable. But now take a fat man who eats lots of doughnuts. Is it still fair to conclude that the immediate pleasure he gets from eating doughnuts is greater than the future cost of putting on weight? Or does he really have a self-control problem?

Such seemingly trivial questions have a wider relevance. Weighing up whether to buy jam doughnuts is similar to deciding whether to borrow: pleasure today needs to be balanced against pain tomorrow. Economists usually model such decisions by assuming that people discount the future at a constant rate: if they value a dollar next year at 10% less than a dollar now, they will also value a dollar two years from now at 10% less than a dollar a year from now. This assumption has the virtue of making calculations simple. It also seems rational, since it implies that people's preferences remain consistent over time: whenever they are asked, they will always value a dollar a year ahead at a 10% discount. Yet it does not square with unhappy fat people.

To see why, go back to the doughnut example. A fat man may decide in the morning that he is fed up with being overweight and that he will go without a doughnut at lunch. Yet come lunchtime he may not be able to resist. Such behaviour is similar to that of somebody who decides that he does not want to borrow at the prevailing interest rate of 10%, but cannot subsequently resist going on a splurge. Messrs O'Donoghue and Rabin argue that such lack of self-control implies that, when considering trade-offs between the near future and the more distant future, the overindulger places greater weight on the earlier moment (lunch) as it draws nearer. Because the overindulger's present and future selves disagree, economists call this kind of behaviour "time-inconsistent".

Sophisticated inconsistency?

Those who place undue weight on the near future suffer two kinds of problem. They overindulge, because they cannot resist immediate temptation. And they procrastinate, because they have trouble enduring immediate pain. For example, a student who has all week to write an essay may put it off until the weekend. Messrs O'Donoghue and Rabin further distinguish between sophisticates, who correctly foresee that they will have self-control problems in the future, and naïfs, who do not.

It would seem rational to assume that sophistication—being aware of one's own weaknesses—will always be a good thing. Clearly it can be. Sophisticates tend to procrastinate less than naïfs because they know how costly delay can be. Indeed, they may overcompensate for their weakness: a sophisticated procrastinator who expects to have self-control problems ahead may do a painful task sooner than somebody who does not. Naïfs, however, may repeatedly put off an unpleasant activity in the incorrect belief that they will do it tomorrow. For that reason, Messrs O'Donoghue and Rabin show that naïfs with only a small tendency to procrastinate can end up much worse off.

Sometimes, however, it is better to be naïve. Naïfs may overindulge less than sophisticates. Whereas naïfs may delay giving in to temptation because they overestimate the benefits of waiting, sophisticates are properly pessimistic about their future behaviour, and so are more tempted to grab today's immediate reward. A sophisticated doughnut-fiend knows he will give in to temptation at lunch. Because he realises this he caves in sooner than if he thought he would resist temptation to the end; so he ends up caving in at once and has a doughnut for breakfast. Thus sophisticates with only a slight tendency to overindulge can end up much worse off. And because becoming sophisticated does not always make somebody better off, naïfs have little incentive to learn from their mistakes.

In real life, many people appear to be time-inconsistent sophisticates. They use alcohol clinics or diet schemes. Others appear naïve. They lack the "will-power" to forgo tempting food or drink, all the while predicting that tomorrow they will do it.

Messrs O'Donoghue and Rabin have much to do to flesh out their model. For instance, it does not cater for the uncertain nature of the future. (The student's essay-writing decision, for example, may be influenced by whether he thinks it will be sunny at the weekend.) But their thinking is already relevant for policymakers.

Take saving, which governments are usually keen to encourage. That may be a good idea for naïfs, who undersave because they cannot resist consuming now. But it may be a bad idea if people are sophisticated, since they may have overcompensated by saving too much. Or take the level of alcohol taxes. Raising them may deter drinking by naïfs, who have trouble resisting immediate pleasure. But some sophisticates might drink more, since high prices might persuade them they cannot afford to become alcoholics in future.

Food for thought. Doughnut, anyone?

* “Doing It Now or Later”, *American Economic Review*, March 1999

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