Time Inconsistency: Today’s Actions = Tomorrow’s Regrets

September 2011

“A budget tells us what we can’t afford, but it doesn’t keep us from buying it.”

—William Feather

Have you ever bought something you really couldn’t afford? You simply swipe your credit card and leave the store with something shiny and new. That instant gratification overpowers any thought of the regret you’ll have when you must start paying off your accumulated debt. Economists call this phenomenon time inconsistency. An individual with time-inconsistent preferences pursues happiness today even if it results in unhappiness tomorrow. Consequently, he will make decisions that do not maximize lifetime satisfaction (i.e., utility). In “econ speak,” a person with time-inconsistent preferences values the present more than the future. Accordingly, he will make decisions with a present bias, choosing what makes him happy in the moment. Thus, time inconsistency can be understood as the inability to consistently follow a good plan over one’s lifetime.

Let’s return to the shopping example. Even though you know that in the long-run you will have to work more hours and/or sacrifice other fun activities to pay your credit card bill (and the act of paying off that debt does not make you happy), showing off your new purchase maximizes your utility today.

Although this example describes time inconsistency using microeconomics, this concept also applies to macroeconomics. For example, just this summer, the government debated whether to raise the debt ceiling (the legal maximum amount the federal government can borrow) and how to implement policies to reduce future budget deficits. Ultimately, Congress voted to raise the debt ceiling without immediately reducing the deficit. This plan implies the government will neither have to cut spending on current programs nor raise taxes in the short run. The new law is most beneficial to policymakers today: They can continue to provide for their constituents just as before, thereby increasing their chances of re-election. In the long run, however, taxpayers will still have to repay the debt. Thus, raising the debt ceiling will likely make politicians unhappy in the long run because of the political risks associated with increasing taxes and/or cutting government programs.

On the other hand, if Congress had voted to maintain the debt ceiling and reduce the budget deficit, the government would have had to cut current spending, raise taxes, or some combination of the two. Doing so would have made most politicians unhappy in the short run because cutting programs and/or raising taxes could risk their re-election and possibly hinder economic growth. In the long run, maintaining the debt ceiling could have resulted in more sustainable budgeting choices and programs in the future.

So how can individuals and governments maximize lifetime utility in the face of time inconsistency? Rather than making decisions with discretion—that is, selecting a course of action once a situation occurs—economists propose enacting credible rules—that is, mandating a predefined action/plan for a given situation. For our shopping example, a cash-only rule or a credit card with a lower spending limit may have prevented a splurge. In the case of the debt ceiling, a balanced-budget rule (as many state governments have) may have prevented the debt ceiling crisis. Using credible rules (e.g., enforcing a strict personal spending limit or a federal debt ceiling that cannot be raised) forces people to commit to certain actions. As a result, they will act in a more time-consistent manner: Their decisions today will take into account their future happiness.

—By E. Katarina Vermann, Research Analyst

1 In contrast, a person with time-consistent preferences chooses what makes him happy today and tomorrow. These choices maximize lifetime utility (satisfaction).

2 The government always has the option of defaulting on its future debt by monetizing the deficit (printing more money) and generating higher inflation. This option would also be suboptimal.

The views expressed are those of the author and do not necessarily reflect the official positions of the Federal Reserve Bank of St. Louis, the Federal Reserve System, or the Board of Governors.
Articles on Time Inconsistency

This article discusses specific ways to overcome procrastination (a time-inconsistent behavior).

This blogpost discusses the time inconsistency of government policy and the need for fixed policy rules.

This article discusses (i) how discretionary policy can lead people to make poor choices in expectation of a government bailout and (ii) the need for policy rules to enable the outcome demanded by the public in the short run to be consistent with that desired in the long run.

Free Resources

<table>
<thead>
<tr>
<th>Resource</th>
<th>Description</th>
<th>Published by</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget Hero</td>
<td>An interactive game that allows the user to decide use of tax dollars based on the budget model and forecasts in the Congressional Budget Office “CBO’s 2011 Long-Term Budget Outlook.”</td>
<td>American Public Media, Minnesota Public Radio</td>
<td><a href="http://minnesota.publicradio.org/projects/2008/05/budget_hero/">http://minnesota.publicradio.org/projects/2008/05/budget_hero/</a></td>
</tr>
</tbody>
</table>