Rules vs. Discretion

The Wrong Choice Could Open the Floodgates

By Jason J. Buol and Mark D. Vaughan

Policy-makers do not want people to build homes in floodplains. To discourage such building, they announce that anyone suffering flood damage is on his own—no disaster relief will be forthcoming. People ignore these warnings and build anyway. Then, the rain comes, the water rises and the homes flood.

The media carry heart-wrenching footage of rooftops poking out of roiling currents. Following a public clamor, policy-makers announce a bailout—100 percent compensation for flood-related damage. This result offers the worst of both worlds—homes are destroyed by floodwater, and victims who ignored warnings are indemnified with taxpayer funds. After the floodwater has receded and the disaster checks have gone out, the cycle starts all over again. How can policy-makers avoid this trap?

Economists Finn Kydland and Edward Prescott were the first to offer a way out.[1] In a classic 1977 article, they introduced a distinction between *time-inconsistent* and *time-consistent* policy. A time-inconsistent policy may make the public happy in the short run but will ultimately fail to produce the long-run policy goal. A time-consistent policy, in contrast, nails the long-run policy goal but does not make people unhappy in the short run. For example, the long-run goal of flood policy is to prevent building in floodplains. In the short run, however, compassion dictates bailing out victims—even those who failed to heed warnings. Bailouts today are time-inconsistent—they implicitly encourage floodplain construction—because people learn to watch what policy-makers do (bail out victims) and ignore what policy-makers say (build at your own risk). If, somehow, threats of no relief could be made credible, people would think twice before tempting Mother Nature. And no floodplain construction today means no need for flood relief tomorrow—a time-consistent outcome.

Kydland and Prescott emphasized the importance of pondering not only the desirable policy for a given set of circumstances but also the framework likely to produce the best policy over time. They went on to argue that rules produce time-consistent outcomes because they make policy-makers' pronouncements credible. Kydland and Prescott's emphasis on the importance of the framework—and the value of credible rules—has profoundly influenced the way other economists think about policy. Indeed, even economists who dislike rules couch their arguments in the Kydland-Prescott framework.

Economists broadly categorize policy-making frameworks as either rules or discretion. In a rules framework, policy responses must follow a pre-specified plan. The plan can be non-activist in nature—the rule may force policy-makers to pursue the same course of action in all circumstances. Or the plan can be activist in nature—the rule may direct policy-makers to respond to different circumstances in different pre-determined ways. The common denominator is that rules are supposed to constrain policy-makers' actions in advance. In the flooding example, a non-activist rule might say: "no flood relief, period." An activist rule might limit flood relief per victim to 10 percent of the pre-flood value of damaged property—no matter where it is located (floodplain or no floodplain). This rule allows a policy response to the flood, thereby making it activist in nature, but that response is pre-defined.

In a discretionary framework, policy-makers have wide latitude to design the best policy response for the given circumstances. In the flooding example, discretion means that policy-makers are free to craft disaster-relief policy anew in each period. Today, before flooding has occurred, they can try to discourage floodplain construction by forswearing disaster relief. Tomorrow, if flooding occurs, they can renege and provide generous compensation for damages. Proponents of discretionary policy note that such flexibility allows policy-makers to respond to unforeseen scenarios. Suppose, for example, a river that seldom floods rises above its banks and sweeps away homes. Under a discretionary regime, policy-makers would have the flexibility to bail out innocent victims. Under a "no bailout, period" rule, all flood victims would be on their own.

Why Does a Rule Matter?

Rules are valuable, Kydland and Prescott noted, because the public observes policy-makers and forms expectations of their likely actions. Policy-makers with discretion can renege on today's pronouncements tomorrow; so, the public may come to discount such pronouncements as cheap talk. In the flood example, bailing out victims is desirable once the water has receded. The public knows this from studying the past behavior of policy-makers. As a consequence, promises that this time will be different—that this time no bailouts will be forthcoming—may not be credible. Only a binding rule that keeps policy-

makers from reneging will convince the public that homes are at genuine risk and, thereby, discourage floodplain construction. Such a rule could be made binding—and therefore credible—in a number of ways, say, by passing a constitutional amendment against flood relief.

Kydland and Prescott were not the first to comment on the value of policy rules. Indeed, economists debated the value of rules in monetary policy for most of the 20th century. In the 1930s, Henry Simons argued that monetary rules reduce uncertainty about the price level and, thereby, facilitate private-sector planning.[2] Later, Milton Friedman extended the argument, noting that real-world policy-makers have imperfect information and imperfect tools; so, even the best-intentioned attempts to combat fluctuations could end up destabilizing the economy. A rule permitting the money supply to grow at *k*-percent, he reasoned, would at least keep monetary policy from doing economic harm.[3] More recently, Geoffrey Brennan and James Buchanan have justified monetary rules on political grounds—discretion, they contend, permits the central bank to generate a higher-than-socially-optimal inflation rate so that it can enjoy the revenue from money creation.[4] Kydland and Prescott's contribution to the rules vs. discretion debate was to show that discretionary policy can produce undesirable long-run outcomes—in the monetary-policy case, higher inflation with no reduction in unemployment— even in a world with little uncertainty, good policy tools and public-spirited policy-makers.[5]

Must It Be a Rule?

This is not to say that discretionary policy is never desirable, even in the Kydland-Prescott framework. As noted, discretion allows policy-makers to respond innovatively to unforeseen problems. This latitude is particularly valuable in an uncertain environment—say when policy-makers don't have a clue about the volume of rain likely to fall or about the rivers likely to flood. And discretion can yield time-consistent outcomes under certain circumstances. If policy-makers are relatively independent from the political process, then they can resist pressure from undeserving flood victims —those who ignored warnings—to renege on threats of no relief. A reputation for following through on commitments might further persuade the public to take such threats seriously. If the director of flood policy is perceived as a person of his word, for example, he could renege on pronouncements of no relief following once-every-millennium floods without unleashing a torrent of floodplain construction.[6]

The rules vs. discretion framework is valuable for analyzing a host of problems, not just flood-relief policy. For example, should bank supervisors be given absolute discretion over bank closings? Supervisors have traditionally closed banks whenever the owners' stake (capital) got dangerously low. If given absolute discretion, supervisors might announce an informal policy of closing banks whenever capital-to-asset ratios fall below, say, 5 percent. But when a ratio does fall below that threshold, supervisors—if they had absolute discretion—could allow the bank to remain open to avoid the costs of liquidating the institution. If bankers believed that closure rules would be loosely enforced, they would be more likely to allow capital ratios to fall in the first place—leading to lower overall capital ratios and higher closure costs. A trigger mechanism forcing supervisors to act whenever capital ratios dipped below 5 percent would spur bankers to maintain high ratios. On the other hand, if the banking environment were volatile, and the informal closure policy were credible—perhaps because supervisory agencies were well-funded and insulated from politics—supervisors might be able to deal with troubled banks on a case-by-case basis without undermining the overall incentive to keep capital ratios high.[7]

Conclusion

Policy can be conducted by rules or discretion. Rules offer time consistency—the outcome demanded by the public in the short run is consistent with the outcome desired in the long run. Discretion may better serve the public interest when the environment is uncertain and policy-maker pronouncements are believable. Modern research on rules and discretion has helped illuminate the tradeoffs inherent in a range of policy questions. The legacy of the Kydland-Prescott work is the recognition that policy-makers must face up to these tradeoffs. Put another way, wise policy-makers must think through the public's likely responses to their responses—just as the public is playing the same game with policy-makers. Only this type of analysis can produce consistently sound policy.

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ENDNOTES

1. They also used a floodplain example. See page 477 of Kydland and Prescott (1977).
2. See Simons (1936).
3. See Friedman (1960). He argued specifically for a rule restricting growth of the M2 measure of the money supply to 3 to 5 percent per year. Friedman did concede, however, that constraints on policy were more important than the numerical target range; so, this policy prescription is often characterized as a *k*-percent rule.
4. See Brennan and Buchanan (1981).
5. They noted that central banks with discretion have an incentive to renege on commitments to price stability. After the public has formed expectations of inflation, the central bank can increase monetary growth to reduce unemployment. The public will anticipate this possibility; so, in the end, inflation will be higher but unemployment will be no lower. Only a binding rule, Kydland and Prescott reasoned, can make the central bank's commitment to price stability credible.
6. See Blinder (1998) for a discussion of the value of discretionary monetary policy expressed in the Kydland-Prescott framework.
7. Before the Federal Deposit Insurance Corp. Improvement Act of 1991 (FDICIA), bank supervisors had almost complete discretion over bank closings. Currently, supervisors have discretion over closings as long as capital ratios are above the prompt-corrective-action thresholds set by FDICIA. When capital ratios fall below these thresholds, however, explicit supervisory responses are required. See Hall, King, Meyer and Vaughan (2002) for more details.

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