Comments on "Tradeoffs in Monetary Policy" by Milton Friedman

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Honor of David Laidler[1]

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I greatly enjoyed reading Milton Friedman's paper and I appreciate the opportunity to offer some comments on it for David Laidler's festschrift conference. The paper's assessment of recent research on monetary policy tradeoffs and rules, as well as the comparison with earlier work, raises important questions and suggests interesting new lines of research. The charts on money growth, inflation, and output variability convincingly document the recent improvement in macroeconomic performance and also demonstrate the role of monetary policy in achieving this improvement. The paper should be required reading for today's students of monetary policy, and indeed I required it of my students in my monetary theory course that I taught this past spring at Stanford.

Let me focus on some of the key points the paper makes about tradeoffs and policy rules.

Milton argues that the tradeoff between the variability of inflation and output, which I first estimated in my 1979 paper—the so-called "Taylor curve"—is not strictly analogous to a Phillips curve because the two curves relate to the data in different ways. I agree that they are conceptually different. One has to transform the estimated regression coefficients from an econometric model to compute the variability tradeoff, while one can obtain the Phillips curve directly from the estimated regression

[1] This is a written version of informal remarks presented by video from San Francisco at the conference in honor of David Laidler, which was held in Canada on August 18, 2006. I thank Milton Friedman, David Laidler, and Robert Leeson for comments on an earlier draft.

coefficients. You can see the Phillips curve—or more accurately the shifts in a Phillips curve—in scatter plots of the data, while you do not see the Taylor curve in scatter plots of the data. One therefore relies on a specific model, or a theory, in the case of the variability tradeoff, while one does not in the case of the Phillips curve trade-off.[2]

I would argue, however, that using theory and a model to compute the variability tradeoff has some advantages. That it is based on theory is one reason why the variability tradeoff has a greater chance of being stable over time, and why it is more useful for policy than the original Phillips curve. To the extent that the theory is accurate, including the use of rational expectations, the variability curve is less susceptible to the Lucas critique. Milton rightly cautions that the variability curve "will be different for every assumed economic model and at its best is based on a rough approximation of the way in which the economy works," and that "Three or four estimated equations are crucial for the Taylor economic model but the economy as a whole is determined by millions of equations." While I agree, I also note that all our theories are approximations; moreover, other researchers with different models (different approximations) have computed these variability curves, and, in my view, they appear to be robust to modeling differences to be useful as a framework for policy analysis.

Another difference between these two curves is that the variability curve is an efficiency frontier. It does not predict that the observed points will only be on the curve, but rather that points should also be above and to the right of the curve. Points closer to

[2] I note, however, that Phillips may have had a model in mind when he originally estimated his curve, though Milton and Ned Phelps later showed that popular policy interpretations (developed later) of the estimated curve had some serious problems. David Laidler (2002) discusses this possibility in his review of Robert Leeson's (2000) collection of Phillips' papers, which contains additional useful references. For a detailed historical review of how the estimated Phillips curve came to be viewed as a policy tradeoff see Laidler (1997).

the curve represent better policy—more efficient policy. The scatter diagram in Chart 1 of Milton's paper illustrates this in my view. It shows that the variability of both inflation and output have come down over time. They represent better—more efficient—monetary policy. That the scatter of inflation and output variability observations is positive sloping rather than negative sloping does not therefore represent a contradiction to the variability curve. If policy were on this tradeoff, then there would be a negative correlation in the data. But if policy was in the inefficient area, which I believe it was in earlier years, there could be a positive correlation.

Milton raises another caveat about the tradeoff curve, namely that "Treating the Fed as having two separate objectives is an open invitation to engage in fine-tuning, something that has almost always proved mistaken practice." I agree that there is a potential danger, but I stress that the practical message in the tradeoff is that one can go too far in trying to keep inflation within a very narrow band. This would require that the central bank move the instruments of policy around too much and would likely increase output variability.

Using the tradeoff, as I originally calculated it, I showed that a fixed money growth rule—a Friedman rule—would have led to better performance than actual policy in the post World War II period up until the time I published that paper. This was an important finding in my view, and I am glad that Milton brings attention to it in his paper. I stressed this point in the final lines of my 1979 paper, while also stating that a money growth rule which responded to economic developments could do even better. Since then I have found that policy rules in terms of interest rates—so called "Taylor rules"—have worked better as practical guidelines for central banks, and Milton mentions one

interesting reason for this which deserves careful study: “The Taylor rule is an attempt to specify the federal funds rate that will come closest to achieving the theoretically appropriate rate of monetary growth to achieve a constant price level or a constant rate of inflation.”

Another issue raised in Milton Friedman’s paper is the relationship between the weight on output in the objective function used to derive the Taylor curve and the weight on output in the Taylor rule. In general, a zero weight on output in the objective function does not imply a zero weight on output in the Taylor rule. The reason is that output is a factor in determining inflation; it even leads inflation according to statistical tests. So an interest rate reaction to output (as well as to inflation) can help stabilize inflation. Even if you had a zero weight on output in the objective function, therefore, it would be optimal to put some weight on output in the Taylor rule.

Finally, let me mention a connection between David Laidler’s research and the work on money growth and interest rate policy rules that we are discussing here. I first got to know David Laidler by attending many monetary policy conferences with him in the late 1970s and 1980s, and I came to respect him greatly for his skills, knowledge, and judgment as a monetary economist. In writing my policy rule paper (Taylor 1993)), I was motivated in part by a concern that practical work on policy rules was being abandoned, stating in the paper that “Even those who have advocated the use of policy rules in the past seem to have concluded that discretion is the only answer,” and I was thinking of David Laidler when I wrote that sentence. Indeed, in my paper, I quoted a remark that David had recently made at a Bank of Japan conference which we both attended: “We are

left, then, with relying on discretionary policy in order to maintain price stability." (Laidler (1993)). That remark made an impression on me.

Since the quote was from a then unpublished piece, I sent a copy of a draft of my paper to David, inquired whether the quote was still accurate, and asked for his comments on my paper. He wrote back, half in jest, "I'm never one to pass up the chance of being quoted in a paper that's likely to be as widely read as yours," but then added on a more serious note that "former supporters of the money growth rule and variations on it, such as myself, could, with your rather broader and more helpful use of the term 'rule' be thought of as still supporting it." (Laidler (1992))

It is a real honor for me both to discuss Milton Friedman's paper on policy tradeoffs and rules and to participate in this conference in honor of David Laidler.

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