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Rational Expectations: the Trade-Off

When a business recession sets in and unemployment rises, we generally turn to government to do something about it. If the government acts — say, by easing credit conditions — the result could be an increased demand for the output of the nation's factories and an increase in employment opportunities. The effectiveness of such stabilization efforts, however, recently has been questioned by some economists and officials. The source of the controversy is a relatively new theory of the inflation/unemployment trade-off, one which combines the notions of rational expectations and the natural-rate hypothesis — the two ideas which were discussed separately in our last two *Weekly Letters*.

The debate has important and far-reaching consequences for economic policy. Proponents of the new view assert that stabilization policies which attempt to "fine-tune" economic activity are ineffective so that, for instance, variations in money growth to combat business cycles are futile. They conclude that the monetary authorities' best course is to aim for a steady rate of growth in the money supply, regardless of current cyclical conditions, so as to minimize public uncertainty about government actions.

Case for stabilization policy

Most economists disagree with this new view that government efforts to stabilize the business cycle are ineffective. One prevalent view among them attributes cyclical changes in inflation and unemployment to people's misperceptions about the actual rate of inflation. These misperceptions are the basis for an "expectations-augmented Phillips Curve" which was discussed in a previous *Weekly Letter*. According to this explanation, people's real spending and work decisions depend upon the relative prices of the goods and services they sell. Thus unemployment and real output are

not altered by inflation — that is, by an across-the-board increase in prices that leaves relative prices unchanged — *provided* the public correctly anticipates the inflation.

The latter is unlikely always to be the case because people have only limited information about economic conditions outside their own markets, and so base their anticipations of inflation largely on their past experience with inflation, adapting their expectations to actual conditions only slowly. Consequently, when the government eases money to combat unemployment, and when inflation accelerates as a result, individuals believe at first that it is the relative prices of the goods and services they sell, and thus their real incomes, that have increased. Consumers then increase their real spending, firms demand more labor, output rises, and unemployment falls. Policy therefore has an impact on real economic behavior. The spurt in activity is only temporary, however, because people eventually learn that price increases have been widespread, and accordingly revise their anticipations and the actions based upon them. Nonetheless, so long as people's anticipations of inflation systematically lag behind actual inflation, stabilization policy can affect the business cycle.

Rebuttal

Rational-expectations theory says that people use all available information, not simply past prices, in making forecasts of inflation and other economic conditions. This notion is really a refinement of older theories of expectations, which were generally based upon the presumption that people forecast in a reasonably sensible fashion. But rational-expectations theory goes further by implying there is no room for stabilization policy to change output and employment even for temporary periods of time. It does

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so by including government stabilization policies as a vital piece of information used by the public in forecasting inflation.

Rational-expectations theory asserts that if monetary policy typically eases when unemployment rises, people will learn to anticipate this pattern. That is, they come to realize that when unemployment increases, money growth and inflation accelerate, while the reverse happens when unemployment is low—and they use this fact in forecasting inflation. Consequently, if we assume the natural-rate hypothesis, it will follow that the government's stabilization policy will cease to affect output and employment because it no longer leads people to misperceive actual inflation. For example, a rise in unemployment will induce labor not to seek lower wages but to demand higher wages in anticipation of higher money growth. Thus to the extent that people correctly perceive policy, actual money changes are incorporated equally in both actual and anticipated prices, with little or no change in output or employment. It follows then that stabilization efforts are ineffective in combatting a business downturn, as the increased money growth resulting from an expansionary policy merely leads to increased inflation.

Hence, rational expectations joined to the natural-rate hypothesis leads to the new view that "fine-tuning" the economy with monetary policy is eventually futile (once policy becomes known), so that the authorities' best course is to increase the money supply at a moderate and steady pace, regardless of the level of unemployment. The virtue of such a policy is that it is predictable and thus likely to be well-understood. Thus people's spending and working decisions will not be impaired by misperceptions about government actions.

Rejoinder

Some critics question the realism of the rational-expectations theory, asserting that it requires individuals to have as much information about the economy as economic experts. Still, individuals need not gather such information themselves, but only have access to it—and many private and public consulting services are available to provide such knowledge. Under such conditions, rational-expectations theory requires no more than practically any other economic theory: namely, that people be well-informed and act rationally.

Thus the crucial question becomes, how correct is the implication that predictable variations in money and prices have no effect upon people's real behavior? Some believe that even predictable changes in monetary policy are likely to have an impact upon output and employment, at least in the short-run, after a policy action is initiated. They assert that institutional factors—such as labor contracts, worker seniority and imperfect competition—prevent wages and prices from adjusting quickly to monetary changes. Because of such market rigidities and sluggish price adjustment, stabilization policy may also affect output and job-market decisions for a time.

The stakes

Although the debate is far from resolved, its outcome promises to have important implications, both for current anti-inflation policy and for the longer-term cyclical role of economic-stabilization policy. If proponents of the new view are correct, "fine-tuning" works only as long as the public is not informed of its details. In the long run, sophisticated individuals seem bound to discover the policy-rule, so that if the new view is correct, monetary policy is best directed at longer-term objectives, and made as steady and predictable as possible. But if, as the opponents contend, a predictable stabilization policy can work because of the existence of "rigidities," then a policy of steady growth becomes less desirable, because it means foregoing opportunities to reduce fluctuations in unemployment and real GNP.

However, the two opposing views do not suggest radical differences in the appropriate policies to be followed for reducing the present rate of inflation. Reducing inflation entails a change in fundamental economic policy, and even rational-expectations theory is vague about how quickly people's forecasting methods will adapt in response. Proponents of the new view argue that to the extent that the public can be convinced that anti-inflation policy is genuine and likely to persist, its costs in terms of sluggish growth can largely be avoided. However, because of the government's sometimes inconsistent and unsuccessful policies for curbing inflation, expectations may not change very quickly. People will not believe the new policy until they have seen it operate for some time. Consequently, perceived wages and prices are not likely to adjust at once to a change in policy, with the result that for a time adjustment falls on output and employment. Critics of the new theory believe that a significant cost in unemployment is the

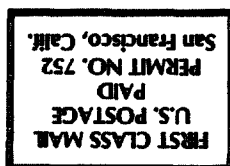
inevitable result of a policy of reducing inflation, even if it is perfectly credible and perfectly anticipated by the public. Both views imply that there will be significant costs to reducing inflation, and both suggest that a gradual, steady reduction is preferable to an abrupt one.

Whatever the final outcome of the debate, rational-expectations theory should leave us with one important lesson—people's expectations, which crucially affect their actions, depend upon their perceptions of official policies. In the past, economists often assessed the effects of prospective policy changes under the assumption that the public would continue to predict economic conditions in the same way as they did under the original policy. Rational-expectations theory implies that such assessments can be seriously misleading. Many economists, even those that do not accept the new view, would concur. Thus an official who wants to know the likely outcome of a new policy must first ask how the public will perceive it. In this way, rational-expectations theory gives renewed emphasis in economic theory to the credibility and the intentions of government officials.

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BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT
 (Dollar amounts in millions)

Selected Assets and Liabilities	Amount Outstanding 6/6/79	Change from 5/30/79	Change from year ago @	
			Dollar	Percent
Large Commercial Banks				
Loans (gross, adjusted) and investments*	127,559	1,462	+ 17,170	+ 15.55
Loans (gross, adjusted) — total#	104,759	1,582	+ 16,256	+ 18.37
Commercial and industrial	30,289	179	+ 3,361	+ 12.48
Real estate	37,518	83	+ 8,107	+ 27.56
Loans to individuals	21,745	131	NA	NA
Securities loans	1,745	31	NA	NA
U.S. Treasury securities*	7,741	43	- 242	- 3.03
Other securities*	15,059	- 163	+ 1,156	+ 8.31
Demand deposits — total#	43,017	831	+ 3,032	+ 7.58
Demand deposits — adjusted	31,336	1,614	+ 1,721	+ 5.81
Savings deposits — total	29,927	193	- 559	- 1.83
Time deposits — total#	49,276	- 767	+ 3,747	+ 8.23
Individuals, part. & corp.	40,441	- 303	+ 4,808	+ 13.49
(Large negotiable CD's)	16,437	- 412	- 1,463	- 8.17
Weekly Averages of Daily Figures	Week ended 6/6/79	Week ended 5/30/79	Comparable year-ago period	
Member Bank Reserve Position				
Excess Reserves (+)/Deficiency (-)	34	12		23
Borrowings	73	202		37
Net free reserves (+)/Net borrowed(-)	- 39	- 190		- 14
Federal Funds — Seven Large Banks				
Net interbank transactions	+ 1,684	+ 373		+ 678
[Purchases (+)/Sales (-)]				
Net U.S. Securities dealer transactions	+ 407	+ 278		+ 565
[Loans (+)/Borrowings (-)]				

* Excludes trading account securities.

Includes items not shown separately.

@ Historical data are not strictly comparable due to changes in the reporting panel; however, adjustments have been applied to 1978 data to remove as much as possible the effects of the changes in coverage. In addition, for some items, historical data are not available due to definitional changes.

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