# Growth and Inflation: Siamese Twins or Odd Couple?

Jerry L. Jordan
President and Chief Executive Officer
Federal Reserve Bank of Cleveland

**Cleveland Business Economists Club** 

Noon
February 27, 1995
Federal Reserve Bank of Cleveland
Cleveland, Ohio

#### NOTES:

- 1. Jerry will be introduced at about 12:45, and the meeting will adjourn at 1:30. So, Jerry has about 30 minutes for the speech and about 15 minutes for Q. & A.
- 2. Reporters are expected to attend.
- 3. Jerry addressed this group on September 23, 1992 on "The Role of Structure in Economic Decisionmaking."
- 4. Jerry addressed this group when they met in this Bank on February 28, 1994. He spoke on two paradigms for managing monetary policy [estimate aggregate supply growth and match aggregate demand growth to it; and estimate money demand growth and match money supply to it], and on the differences in two lists of "bumper stickers."

### I. Introduction

- A. Acknowledge the introduction.
- B. Welcome the Club to the Bank.
  - 1. Club was here last February 28.
- C. My topic is the relationships between growth and inflation.
  - 1. Title is "Growth and Inflation: Siamese Twins or Odd Couple?"
  - 2. Siamese twins are always together, which is how some people think of growth and inflation.
  - 3. In my view, growth and inflation are an odd couple. Sometimes they are seen together, but generally they go their separate ways, and indeed are pretty much incompatible.

### II. Two Basics: Inflation Hampers Prosperity, and the Fed Fights

**Inflation** [Very briefly for this audience of economists]

- A. Inflation hampers prosperity in four ways:
  - 1. It interacts with the tax code to discourage saving and investment.
  - 2. It diverts resources to hedging activities.
  - It shrinks an important unit of measure, wasting resources by making measurement more complicated.
  - 4. It pushes interest rates up, reducing investment and shifting it toward shorter-lived investments.
    - a. This does *not* mean that an interest premium for expected inflation, which increases *nominal* but not *real* interest rates, always reduces investment. Normally, investors are concerned with real rates, not nominal rates. However, there are two ways that inflation expectations *do* reduce investment.
    - b. First, an increase in nominal interest rates can restrict investment by businesses and households that are liquidityconstrained.
    - c. Second, uncertainty about the *amount* of inflation causes lenders to add a *real* premium to interest rates to compensate for the uncertainty, which will reduce investment.
- B. The Fed fights inflation:
  - 1. The FOMC's domestic policy directive says "The Federal Open Market

- Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output."
- 2. Alan Greenspan has told Congress that the mission of the FOMC is to "ensure maximum sustainable growth by pursuing and ultimately achieving a stable price level." (7/22/94)
- 3. Greenspan has told Congress "When it comes to inflation expectations, the nearer zero, the better." (Humphrey-Hawkins testimony, 2/22/94)
- 4. Greenspan also said (2/22/94), "We will be at price stability when households and businesses need not factor expectations of changes in the average level of prices into their decisions."
- 5. Inflation has been brought down by more than 10 percentage points since October 6, 1979. [The CPI rose 13.3% in 1979 (Dec to Dec) and about 2.7% in 1994 (Dec to Dec)]
- 6. The Fed raised the fed funds rate 7 times in the last 13 months.

#### III. Interest Rates and Inflation

- A. Did the Fed really raise interest rates last year?
  - 1. "Everyone" says the Fed raised interest rates last year.
  - 2. But, market forces determine most interest rates.
  - 3. The Fed controls only the discount rate and the fed funds rate.
  - 4. Last year, most long-term interest rates were rising *before* the Fed acted.

- B. Why did the Fed raise the fed funds rate?
  - 1. Not to tighten, but to avoid becoming too easy.
  - 2. The Fed adjusted the fed funds rates to avoid inflationary growth of the money supply.
  - In last year's strong economy, rising demand for funds was pushing interest rates up. If the Fed had provided enough reserves to keep the funds rate from rising, money supply growth would have been faster than what the FOMC judged was consistent with avoiding an increase in inflation. Simply put, the Fed was not so much *tightening* as it was trying to avoid an unwise *easing*.
- C. Raising short-term interest rates can actually *lower* long-term nominal interest rates by reducing inflation expectations.
  - 1. If the Fed had prevented the fed funds rate from rising last year, long bond rates could very well be much higher now than they are.

## IV. Inflation and Real Economic Growth: The Long and the Short of It

- A. The Fed does restrain nominal growth but not real growth.
  - Distinguish between nominal economic growth and real economic growth.
  - Obviously, when nominal growth exceeds real growth, the price level is rising.
  - 3. It is then merely a tautology to say that the Fed must restrain nominal

- growth to restrain inflation.
- 4. But nominal growth is of little consequence compared to real growth.
- 5. The important question is, does the Fed, in restraining inflation, restrain *real* growth? In the most important sense, the answer is "no."
- B. The long and the short of it is that inflation and real growth can be *directly* correlated over the course of a business cycle even though they are *inversely* correlated over the long run. Let me elaborate:
  - 1. The real growth rate can be directly correlated with the inflation rate over a business cycle.
    - a. At some stage in an expansion, prices may rise faster than normal as demand growth outpaces supply growth.
    - b. At some stage in an economic slowdown, prices may fall (or rise at a slower-than-normal pace) if demand growth weakens relative to supply growth. [This wouldn't happen if the contraction were caused by a supply shock.]
    - c. On average, however, price rises that are faster than normal will be offset by those that are slower than normal.
  - 2. However, the correlation in the *short run* does not tell us anything about the *long-run* impact of the *average* inflation rate on real economic growth and standards of living.
    - a. The positive correlation over the business cycle does not prevent higher average inflation from being associated with lower

average growth, or with lower standards of living, in the long run.

- C. Real growth is harmed by inflation over the longer run.
  - 1. Refer to the arguments in section II.A.
  - 2. Some but not all empirical evidence supports those assertions.
    - a. One difficulty with empirical investigations is that all output is considered equally valuable, even if it is activity intended to hedge against inflation or to correct for problems caused by inflation, rather than activity that contributes to improved standards of living.

### V. Is Bringing the Inflation Rate Further Down Good Policy?

- A. The inflation rate is already quite low. Should the Fed try to bring it down even further?
- B. One practical problem for policymakers could be measurement accuracy.
  - 1. This was not important when the inflation rate was high.
  - 2. Now, when the measured inflation rate is low, accuracy becomes an issue if our target is zero.
  - 3. Analogy: Suppose you are sailing north on Lake Erie but want to avoid crossing the Canadian border. Not knowing your exact location is *not* a problem when you are near the Ohio shore, but it *is* a problem when you are far out on the lake.

- 4. However, our Research Department has done work that suggests the biases in the CPI are very small. [Mike Bryan and Steve Cecchetti,
  "The CPI as a Measure of Inflation," *Economic Review*, 1993 Quarter
  4.]
- C. The key issue is net present value of costs and benefits from lowering the inflation rate.
  - 1. Costs of reducing inflation are hard to estimate.
  - 2. Benefits of lower inflation are hard to estimate.
  - 3. However, to argue that there is a net *loss* from *lowering* the inflation rate is the same as arguing that there is a net *gain* from *raising* the inflation rate, unless you also argue that the effects of changing the inflation rate are not symmetrical.
    - a. It is absurd to believe that there are net gains from raising the inflation rate. Countries that have experienced hyperinflation did not experience golden ages of prosperity.
    - b. I have not yet heard an argument that convinces me that the results of lowering the inflation rate would not be the opposite of the results of raising the inflation rate.

## VI. Conclusions

- A. The Fed opposes inflation, not growth.
- B. Restraining inflation is beneficial, not harmful.
- C. Inflation and growth may be Siamese twins within a business cycle, but they are an odd couple in the long run.
- D. Further reduction in inflation is desirable.