

Chapter 4

Monetary History

The *quantity theory of money*—that is, the circle of ideas surrounding the notion that prices tend to move in tandem with the money supply—has a long history going back to the astronomer Nicolaus Copernicus in the fifteenth century. After the onset of the Great Depression in the early 1930s, the new generation of “Keynesian” economists largely rejected the quantity theory, arguing that often, people don’t have strong stable preferences about how much money they hold.¹⁴ Therefore, said the Keynesians, when the authorities inject new money into the system, people might simply hold it, without bidding up prices.

Throughout the 1930s and 1940s, a smattering of economists, notably Henry Simons and Lloyd Mints at the University of Chicago, tended the fires of the quantity theory. When Milton Friedman joined the fray in the 1950s, he sometimes painted himself as simply the recipient of the torch passed by his illustrious predecessors. But it’s widely acknowledged that Friedman’s version of the quantity theory was in fact highly original, far subtler, more insightful, and better designed for empirical testing.

The evidence for the quantity theory is largely to be found in the meticulous 800-page *Monetary History of the United States, 1857–1960*, written by Friedman and his co-author Anna Schwartz. The product of 15 years’ work by the two authors and their countless research assistants, the *Monetary History* was instantly recognized as a modern classic and a work of monumental importance. In fact, the adjective “monumental” occurs repeatedly in dozens

¹⁴ I’ve put the word *Keynesian* in quotes, using it to describe the views of those economists who called themselves Keynesians, without venturing into the delicate territory of how closely their views did or did not conform to those of John Maynard Keynes himself.

of reviews of the book, in phrases like “monumental consistency,” “monumental coherence,” and “monumental ingenuity.”

The empirical findings and scrupulous data analysis in the *Monetary History* came as an earthquake to the Keynesian belief structure that then dominated the economics profession. Here are some of the highlights:

- ♦ Over the 100-year period ending in 1960, there was remarkable stability in the amount of real purchasing power (e.g. “10 weeks’ income”) that people want to hold in the form of money. The demand for real purchasing power does change over the course of that century, but mostly gradually and predictably. For example, when permanent incomes rise by 1 percent, the real purchasing power that people want to hold tends to rise predictably by about 1.8 percent. By contrast, when nonpermanent incomes rise, there is little change in the amount of money people want to hold. This is consistent with a theory that says that people hold money in order to buy things, and that (as we saw in chapter one) they want to buy more things only when their permanent incomes rise. This regularity in the data contrasts with the Keynesian view that the demand for money is erratic and inherently unpredictable.
- ♦ Because of that stability in demand, changes in the money supply do in fact lead to changes in the price level as predicted by the quantity theory. If you produce more money than people want, they’ll try to get rid of the excess and prices will rise. The Keynesians had largely denied this; Friedman and Schwartz demonstrated that the evidence up to that time was on the side of the quantity theory.
- ♦ When new money is injected into the system, it takes a while for prices to rise. Alice sells a paper clip to the government and thereby acquires a newly printed \$5 bill, wants to get rid of it, tries to buy things, and bids up prices—but the process takes time, sometimes as long as two years. In the interim, especially if there happens to be a recession in progress, Alice’s increased demand for goods encourages businesses to produce more goods. (In the absence of a recession, businesses are likely to be near their peak capacities to begin with,

so instead of increased production, you tend to get an accelerated increase in prices.)

- Therefore, an increase in the money supply typically leads to an increase in economic activity (sometimes after a lag of many months), followed by a rise in prices and a return to the old level of activity (typically after a lag of many more months). Once again, this runs counter to the old Keynesian belief that new money is often simply held, and so has little effect on either prices or economic activity.

So you might think that in recessionary times, it would be a good idea to create additional money and get the economy moving again. Unfortunately, those long and variable lags make it essentially impossible to exploit this avenue: By the time your monetary shock starts to bear fruit, the recession is likely to be over, in which case all you've accomplished is a spurt of inflation.

From this, Friedman argued that changing the money supply is largely ineffective (and even counter-productive) as a weapon against short-run problems like recessions, and therefore it's best for policymakers to focus on the long run. And in the long run, as we've seen in the preceding two chapters, the quantity theory of money argues for a low and steady rate of money supply growth. As many economists do, let's call that the "Friedman rule."

What happens when the Friedman rule is violated? We found out in the 1930s, during the disaster we remember as the Great Depression—with unemployment rates ranging between 25 and 35 percent through much of the world, incomes falling dramatically, and, in many places, entire industries (including mining, logging, and construction) shutting down almost completely. Why? Friedman and Schwartz laid the blame squarely at the feet of the monetary authorities who allowed the US money supply to fall by almost one third. This, they argued persuasively, turned a moderately severe recession into a tragedy.

Amazingly enough, *nobody knew this* before Friedman and Schwartz came along. The Keynesians (this time including Keynes) believed that the money supply had been largely stable throughout the 1930s, and offered this as evidence that a stable money supply is impotent against economic catastrophe. Money was being created, according to the Keynesians, and people were simply holding it.

That was simply false. What certainly happened was that the money supply was allowed to shrink dramatically, largely due to bank failures that the authorities did little to prevent or to counteract. (Remember that “money” includes checking account balances, most of which are created by banks, as when your banker gives you a \$10,000 loan by entering a few keystrokes in a computer—or, in the 1930s, a few pen strokes in a ledger—that creates a checking account with a \$10,000 balance. When banks fail, those balances disappear.)

When money disappears, people try to acquire more of it (in the exact reverse of what happens when new money is created and people try to get rid of it). They do this by *not buying things*. In the long run, the only effect is a fall in prices. But in the short run, the effect is a reduction in economic activity. When that reduction in economic activity comes in the midst of an existing recession, and when it leads to additional bank failures and further reductions in the money supply, the disastrous short run can go on for many years.

So for economic policy, the key takeaway is that this history should not be allowed to repeat itself. Academicians and policymakers have taken this very much to heart.

Thanks largely to the policies that Friedman and Schwartz inspired, North America entered a 70-year period of unprecedented economic stability, with many believing that the frequent severe recessions of the past were never to repeat themselves. In 2002, Federal Reserve chairman Ben Bernanke, speaking at Friedman’s 90th birthday celebration, addressed the great economist directly and said:

Let me end my talk by abusing slightly my status as an official representative of the Federal Reserve. I would like to say to Milton and Anna: Regarding the Great Depression. You’re right, we did it. We’re very sorry. But thanks to you, we won’t do it again.

Alas, that optimism faced a serious challenge in 2008, when another series of bank failures in a time of recession threatened to trigger a disaster comparable to that of the 1930s. In fact, the initial stages of the 2008 recession were every bit as severe and ominous as those of the Great Depression. But true to Bernanke’s promise, the authorities took an active role to shore up the

money supply. Although the ensuing recession was painful, it lasted only half as long as the Depression, and (as measured by the fall in output from peak to trough) was only one third as severe. Economists generally agree that the lessons learned from the *Monetary History* played a critical role in preventing the recurrence of a true 1930s-style catastrophe.

There is, of course, a great deal of controversy about whether the Federal Reserve governors did too little or too much in 2008, and about whether they did those things in the best possible way, or in one of the worst possible ways, or somewhere in between. But they clearly understood that it was their mission not to repeat the mistakes of the Depression, and they were able to fulfill that mission because Milton Friedman and Anna Schwartz had done the hard work of discovering, documenting, and explaining to the world what those mistakes had been.

A Postscript

The monetary environment has changed a lot since 1963. For one thing, it's become a lot harder to decide what counts as "money." In 1963, it could take a week to withdraw funds from your savings account. Today, you might make the same withdrawal with a keystroke. Was your savings account a form of money in 1963? Is it today? What about Bitcoins? Or home equity lines of credit? These and other innovations have not only made it harder to define money in the first place; they also appear—by offering so many alternatives to money—to have made the demand for money less stable than it was in Friedman's day.

The regulatory environment has also changed. In 1963, it was illegal to pay interest on checking accounts. Many states disallowed branch banking, so that a given bank could have only one physical location, which you had to visit in order to make a withdrawal. As regulations have eased, people have found new ways to use money, contributing to additional fluctuations in demand.

As a result, the long-run and short-run relationships between money, prices, and economic activity are not as they were in 1963. Most strikingly, the money supply has risen dramatically since the 2008 crisis, but prices have not responded as the old quantity theory would predict.¹⁵

¹⁵ This accords with Keynes's prediction that the quantity theory is particularly likely to fail at a time (such as the years following 2008) when interest rates are very low.

Thus, while many of Friedman's *goals* are well enshrined, many of his preferred *methods* have been superseded. For example, Friedman's goal of slow, steady, and predictable inflation has been widely accepted by monetary authorities around the world. But Friedman's method—slow, steady, and predictable growth in the money supply—has not. That method made sense in Friedman's day, when money demand appeared to be highly stable. It makes less sense in the age of automated bill payments and cryptocurrencies, when the demand for money has become more erratic and the supply of money has become more difficult to control. Therefore today's authorities tend to aim for low steady inflation by controlling not the money supply, but short-term interest rates, with the target interest rate continuously adjusted in response to observed economic conditions.¹⁶ And, far more than Friedman ever envisioned, they attempt to manipulate the *demand* for money.¹⁷

The superficial reading is that by taking their eyes off the money supply, the authorities have rejected Friedman. The deeper reading is that by doing whatever is necessary to control the growth of the price level—keeping it gradual, steady, and predictable—they've been revealed as Friedmanites to the core. They've digested the main message that at least by and large, money matters profoundly for prices in the long run and for economic activity in the short run. Nobody fully appreciated this before Friedman (some might have suspected it, but the statistical analysis to support those suspicions was unavailable). Everybody gets it now, and that knowledge has saved us from more than one catastrophe over the past several decades.

¹⁶ Such policies are generally called Taylor Rules.

¹⁷ Most importantly: Just as you have a checking account at your bank, your bank has a checking account at the Federal Reserve. By adjusting the interest rate on that checking account, the Federal Reserve can influence your banker's demand for money.