

labor force, without reducing the incentive of employers to hire the worker. Left undeveloped in the book is a funding mechanism for what is sure to be an expensive program, and no research or real-world examples are offered indicating how the plan would work.

Ultimately, the book's emphasis on production over consumption reflects a common mistake that can easily warp public policy. Of course, production is a prerequisite of consumption, but consumption is the ultimate aim of production. Production detached from consumption is a form of servitude. If goods and services become more expensive because of restrictions on trade and competition, real wages will be reduced for tens of millions of American households. To favor the producer over the consumer is a recipe for cartels, cronyism, inefficiencies, and exploitation.

Just consider: Should the health care industry exist primarily for the benefit of the providers—the doctors, nurses, the hospital administrators—or for the patients? Should the education system exist primarily for the benefit of teachers, principals, and librarians, or for the students? Ask the same for the automobile, steel, and oil and gas industries, or the retail and restaurant sectors, and the answer should be obvious: public policy should serve the interest of the consumer. And if that is true for each sector, it is true for the whole economy.

The American system of relatively free, open, and competitive markets has delivered opportunity and higher living standards to the large majority of workers over generations. Granted, the system can be improved, and Cass puts forward some useful ideas. But it would be a mistake to fundamentally alter the policy mix of tax reform, deregulation, stable monetary policy—and expanding trade and immigration—that appear to be working for the large majority of American workers.

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A Century of Federal Reserve Monetary Policy: Issues and Implications for the Future

Thomas R. Saving

Hackensack, N.J.: World Scientific, 2019, 294 pp.

To students of monetary theory and policy, especially those working in the monetarist tradition, Thomas Saving stands as one of the

all-time greats. His important scholarly contributions include, but are by no means limited to, his 1967 *Journal of Political Economy* article on “Monetary Policy Targets and Indicators” and his 1971 *American Economic Review* paper on “Transactions Costs and the Demand for Money.” The latter piece, in particular, introduces an optimizing theory of consumer behavior that has been used by various economists many times since to study issues relating to the demand for money and the welfare cost of inflation.

Most famous of all, however, is Saving’s 1967 monograph, coauthored with Boris Pesek and titled *Money, Wealth, and Economic Theory*. That volume presents a detailed analysis of wealth effects in macroeconomic theory, including their role in pulling the economy out of a long-run Keynesian equilibrium with less than full employment, ruling out the possibility of what today is called “secular stagnation.” The 1967 volume also contains a comprehensive discussion, spanning several chapters, of the role that wealth effects play in transmitting monetary policy actions, first to real variables such as output and employment and then to the aggregate nominal price level. The book’s initial impact can be appreciated by observing that it was reviewed by John Hicks in the *Economic Journal* and discussed at length by Milton Friedman and Anna Schwartz in the lead article of the very first issue of the *Journal of Money, Credit, and Banking*. Even today, more than half a century after its publication, it appears as a tour de force.

Unlike his early work, Saving’s latest book, *A Century of Federal Reserve Monetary Policy*, eschews sophisticated mathematical modeling, presenting its arguments verbally and supporting them with data presented in tables and graphs. This approach expands the new book’s audience to include college students and other nonspecialists with an interest in learning more about how monetary policy works. Nevertheless, more experienced readers will greatly appreciate the book as well, as it applies the powerful ideas originally presented by Pesek and Saving to the problems and challenges faced by the Federal Reserve today. The new book illustrates how, like all successful theories, Pesek and Saving’s monetarist framework gains strength from its ability to help us understand events that occur out of sample, that is, outside the realm of the experiences that motivated its design in the first place.

Saving’s book is divided into two parts. Part one, “A Century of Monetary Policy,” traces the gradual evolution of the Federal

Reserve and its policies over its first 100 years. Originally founded in December 1913 “to furnish an elastic currency”—that is, one that would expand to accommodate the sharp increase in the demand for money during banking and financial crises—the Fed failed spectacularly to perform that critical function in 1929, needlessly deepening and prolonging the Great Depression. The Fed was then placed at the service of the United States Treasury during World War II, when it directed its policies at maintaining ceilings on government bond yields. The March 1951 Treasury-Federal Reserve Accord freed the Fed from its wartime obligations but did not completely insulate monetary policy from fiscal pressures. Hence, a brief period of moderate inflation during the 1950s was followed by the longer period of high and volatile inflation that accompanied growing budget deficits during the 1960s and 1970s. Despite continuing federal deficits, the Fed finally succeeded in bringing inflation back to lower levels during the 1980s, where it remained until the onset of the financial crisis and Great Recession of 2007–09.

Saving’s account of the Fed’s first century, with its focus on general themes and trends, is an ideal source for readers—again, especially undergraduates—who wish to gain a broad sense of the political and economic forces that have shaped U.S. monetary history without being overwhelmed by the more detailed analyses of specific personalities and events presented in Friedman and Schwartz’s *Monetary History of the United States* and Allan Meltzer’s monumental *History of the Federal Reserve*.

Saving’s history emphasizes that, despite the Federal Reserve’s celebrated status as an “independent” central bank, it has repeatedly helped finance, through its policies of inflationary money growth, significant portions of the federal deficit. Although, during and since the Great Recession, economists have been preoccupied with the problem of low inflation, Saving’s history reminds us that, with deficits already at record levels and projected to grow still further in the years to come, a return to 1970s-style inflation remains a very real threat.

Throughout his history, too, Saving focuses on the role that interest rates play in Federal Reserve policy. Central bankers almost always see themselves as conducting monetary policy by managing interest rates, and popular discussions of U.S. monetary policy focus invariably on changes in the Fed’s target for the federal funds rate. Yet, as Saving points out, the evidence that the Fed can control interest rates tightly for more than very brief periods of time remains

scant. Monetarist economists, therefore, prefer to view the Fed as conducting monetary policy by managing the supply of base money—currency plus bank reserves—in order to pin down the aggregate nominal price level or inflation as its rate of change.

By reintroducing readers to the “targets and indicators” concepts outlined in his 1967 article, *Saving* illustrates the value of his monetarist framework in understanding experiences from both the distant and more recent past. Most observers interpret an increase in the federal funds rate target as an indication that monetary policy has become more restrictive. *Saving* reminds us, however, that double-digit, short-term interest rates during the 1970s were, instead, a symptom of monetary policy that was much too accommodative, as indicated by excessive growth in the quantity of money. In a similar way, today’s exceptionally low interest rates are often taken to mean that monetary policy is lending its full support to the postcrisis economic recovery. Yet *Saving* points to a number of nonmonetary factors, including demographics, that suggest, instead, that the Fed’s interest rate targets have merely been tracking longer-term rates down.

Part two of *Saving*’s book extends his monetary history, by showing how the same theories that help us understand the past can also help us meet more successfully the challenges of the future. This second part of the book covers a range of fascinating topics, including the rise of Bitcoin and other crypto-currencies as threats to more traditional central bank monies. But the most important chapters from part two are directed at explaining why the Fed’s three rounds of large-scale asset purchases (also known as “quantitative easing”) failed to generate the rapid rise in inflation that many economists predicted.

It is in these chapters that more experienced readers will recognize a reprise of the themes explored originally in Pesek and *Saving*’s 1967 volume. Here, *Saving* starts by taking us back before the financial crisis, when the Fed was not paying interest on bank reserves, and asks us to consider the effects of a hypothetical “helicopter drop” of newly printed base money. Holding the price level fixed, the consumers who catch that newly printed money feel wealthier. They therefore increase their spending, triggering the expansion of aggregate demand that eventually increases the nominal price level to restore the economy to its long-run equilibrium.

Saving then points out that while thought experiments like the helicopter drop help us see how the wealth effect helps underpin the monetarist proposition that money growth causes inflation, in reality,

the Fed expands the money stock via open market purchases of government bonds, not by making lump-sum transfers to the public. When the Fed buys bonds with newly printed money, the consumers on the other side of the transaction simply exchange one asset, the bonds, for another, the money. But unlike bonds, which obligate the Treasury to make regular payments of interest and principal, currency and bank reserves traditionally pay no interest and have no maturity date. A consumer wishing to “redeem” currency at a bank receives only currency in exchange and a bank wishing to “redeem” reserves at the Fed receives only reserves in exchange. Thus, while the Fed’s open market purchases have no direct effect on the value of the public’s holdings of assets, they work, indirectly, to increase private-sector wealth by reducing the future tax burden of servicing and retiring the federal debt. The wealth effect operates just as before, to generate an expansion of aggregate demand that ultimately puts upward pressure on inflation.

Finally, Saving observes that the same wealth effect works, regardless of whether the Fed uses open market operations to buy Treasury bonds or whether it purchases privately issued mortgage-backed securities, as it did during its campaigns of quantitative easing. This is because the Fed is obligated to pass all of its profits back to the Treasury; cash flows from mortgage-backed or any other privately issued security still help offset future tax liabilities. Saving notes, as well, that this wealth effect allows traditional open market operations to affect the economy, even when the federal funds rate remains near zero—restating the monetarist objection to the popular notion that monetary policy becomes ineffective in a Keynesian-style liquidity trap.

But if the wealth effect always follows from open market operations, regardless of the asset purchased and even when the funds rate equals zero, why didn’t the three rounds of quantitative easing, which generated growth in the stock of bank reserves from 2008 through 2015 at a rate of more than 40 percent per year, generate double-digit inflation as well? Saving answers that question through skillful adaptation of the same arguments employed, long ago, in his work with Pesek.

The key to Saving’s argument is that, beginning in 2008, the Fed began paying interest on reserves. Under these new circumstances, open market operations simply swap interest-paying liabilities issued by the Treasury for similar liabilities issued by the Fed, with no consequences for private-sector wealth. Just as, traditionally, one would

not expect a decision by the Treasury to issue more short-term bills and fewer long-term bonds to have direct effects on the price level, one should not have expected quantitative easing, as implemented by the Fed together with its new policy of paying interest on reserves, to have large effects on inflation either.

Although interest on reserves allowed the Fed to intervene massively in U.S. financial markets—particularly the mortgage markets through its purchases of mortgage-backed securities—without fueling inflation, Saving goes on to point out that, by maintaining its oversized balance sheet, the Fed exposes itself—and hence American taxpayers—to significant interest rate risks. Essentially, by financing its purchases of longer-term, fixed-rate assets with very short-term, floating rate liabilities, the Fed is running a gigantic, interest rate carry trade. This trade yields profits for the Fed, on behalf of American taxpayers, so long as short-term interest rates remain low. As short-term rates rise back toward their historical averages, however, those profits will shrink and may even turn to losses, requiring transfers of taxpayer funds from the Treasury back to the Fed.

To guard against this unfavorable outcome, Saving recommends that the Fed gradually reduce the size of its balance sheet. His preferred path back to our “parents’ Federal Reserve” entails a very gradual sale of Federal Reserve assets, coupled with an equally gradual lowering of the interest rate on reserves relative to market interest rates. Then, the widening spread between market rates and the interest rate on reserves will reduce banks’ demand for excess reserves even as the Fed’s asset sales reduce the supply of reserves. This delicate balancing act between shifts in money demand and supply will keep the U.S. economy growing, with inflation near the Fed’s 2 percent target, even as the effects of quantitative easing are unwound.

In January 2019, very soon after Saving must have completed the final draft of this new book, the Federal Reserve announced plans to maintain the very large size of its postcrisis balance sheet and retain its postcrisis practice of paying interest on reserves. Only time will tell if this decision was the wise one, compared to Saving’s preferred asset reduction plan. For now, however, this new book reminds us that the monetarist framework that Saving helped develop more than 50 years ago continues to provide valuable insights into the key problems of monetary theory and policy.

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