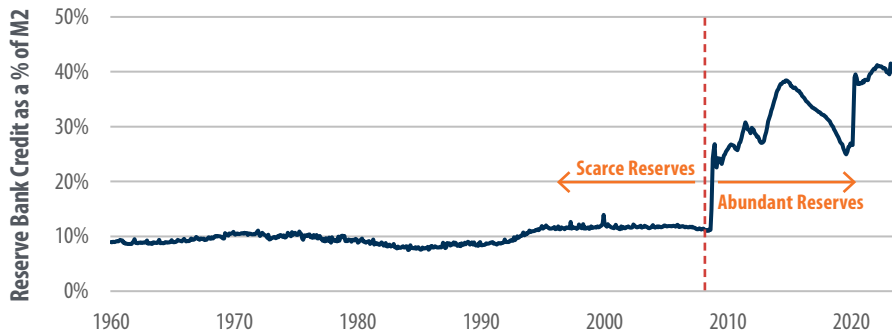


Few people grasp the profound changes our monetary and banking systems underwent when Ben Bernanke was Federal Reserve Chair and Hank Paulson was Treasury Secretary. The 2008 Financial Panic spurred significant transformations, including Quantitative Easing (QE) (which massively expanded both the Federal Reserve's (Fed) and banks' balance sheets), the introduction of interest payments on reserves, prolonged periods of exceptionally low interest rates, and stricter banking regulations. This week's edition of "Three on Thursday" is our attempt to highlight some of these unprecedented actions. Few people discuss it and the press covering the Fed has unfortunately chosen to ignore it, but these changes in policy have had, and will have, profound implications. First, the Fed increased its balance sheet by buying Treasury debt, which allowed government spending to soar. Second, by making reserves abundant, the Fed took complete control of short-term interest rates and held them artificially low, making that increased spending cost less. Finally, the Fed started paying banks interest on reserves in exchange for stress testing them and making them hold more capital and liquidity. At first, this policy didn't mean much; after all, the Fed only paid banks 0.25% per year on their reserves. But the Fed is paying 5.4% on these abundant reserves, which is more than it earns on its portfolio (to read more about this, see our October 12, 2023 "Three on Thursday"). This change in policy is profound. To further the discussion, please explore, and share, the three charts below.

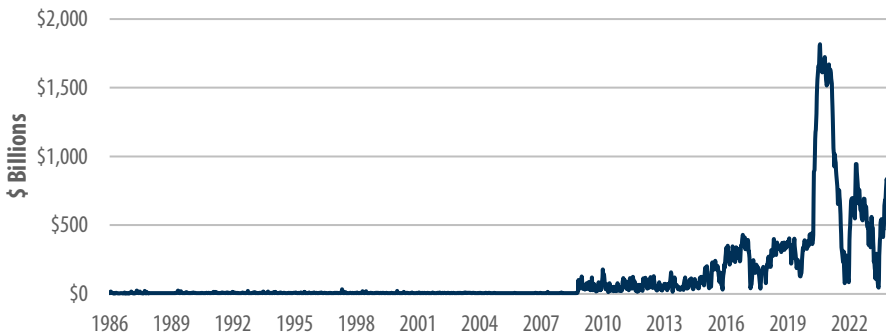
Federal Reserve's Footprint in the Banking Sector



Source: Federal Reserve Board, First Trust Advisors. Monthly data from 1/1960 - 12/2023.

Before the 2008 Financial Crisis, the Fed utilized a "scarce reserve" model to manage monetary policy. The chart shows reserves held at the Fed as a percent of deposits at banks measured by M2. For decades, about 10% of all deposits were held at the Fed and by buying or selling Treasury securities from banks, the Fed could make these reserves more or less scarce. Adding reserves eased monetary policy, while draining reserves tightened it. This all changed when the Fed, through its QE programs, bought bonds by creating money, which filled the banking system with an excess of reserves. This new approach is called the "abundant reserve" model, and instead of 10% reserves, banks now hold roughly 40% of all deposits at the Fed. To keep these reserves from creating inflation by entering the broad economic system, the Fed keeps them bottled up by paying banks interest on them and forcing banks to hold more capital and liquidity against them. Why so few talk about this is a mystery to us.

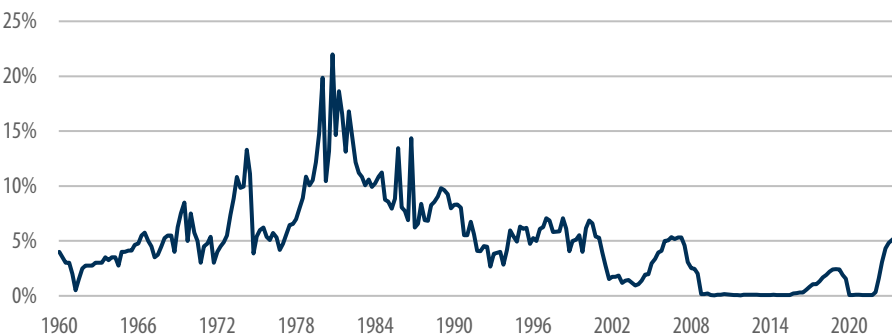
U.S. Treasury General Account



Source: Federal Reserve Board, First Trust Advisors. Weekly data from 1/8/1986 - 2/14/2024.

Under Hank Paulson, the Treasury Department used these changes to boost its holdings of cash. The Treasury has always held cash balances at the Fed in the Treasury General Account (TGA) and before the 2008 Financial Crisis, its balance was small (roughly \$5 billion). But it served the purpose of allowing the Treasury to manage its cash needs without disrupting the Fed's management of scarce bank reserves. But with the expansion of the Fed's balance sheet during the financial crisis, it was no longer as important to prevent fluctuations as bank reserves became so abundant. Consequently, the TGA expanded into a slush fund and today holds \$831 billion. In 2015, the Treasury argued that political battles over spending and the debt ceiling created uncertainty and even though there was no immediate crisis, the TGA should hold enough cash to cover one week's expenses, with a minimum of \$150 billion. These changes have resulted in the Fed's liabilities to the Treasury growing larger and more volatile than pre-crisis levels. Moreover, the Treasury can now drain cash from the economy by borrowing or taxing away bank deposits and then storing them in the TGA. Supposedly, Congress is in charge of spending and the Fed is in charge of monetary policy... but we believe a huge TGA balance makes that less clear.

Federal Funds Rates



Source: Federal Reserve Board, First Trust Advisors. Quarterly data from Q1 1960 - Q4 2023.

When reserves were scarce, banks traded Fed Funds every day and were part of market-based process that determined the level of rates. Today, with abundant reserves, banks no longer trade federal funds, and this interest rate is set by the Fed. This has resulted in a Fed Funds market that is price fixed. A clear distinction can be seen when comparing the volatility in the Fed Funds Rates before and after 2008; they appear as entirely different markets. Without the mechanism of price discovery, we believe there's a large risk of future imbalances and vulnerabilities in the banking system.

This report was prepared by First Trust Advisors L.P., and reflects the current opinion of the authors. It is based upon sources and data believed to be accurate and reliable. Opinions and forward looking statements expressed are subject to change without notice. This information does not constitute a solicitation or an offer to buy or sell any security.