Fed Rate Increases From Behind the Curve: Financial Stresses Current and Historical

Michael D. Bordo and Mickey D. Levy Shadow Open Market Committee April 21, 2023

Fed Tightening, Financial Stresses and History

- Following an over-extended and excessively easy monetary policy, the Fed has been catching up and aggressively raising its policy rate
- The real rate is still slightly negative, thus by historical standards, mildly accommodative
- The Fed's tightening cycle has generated financial stresses, notable bank failures, disintermediation from the regional banking system and tightening credit standards
- Financial stresses are a normal part of the Fed's tightening cycles, as evidenced in recent and past business cycles
- This episode should have been anticipated and not a surprise

A Key Difference from Earlier Episodes: Sticky High Inflation

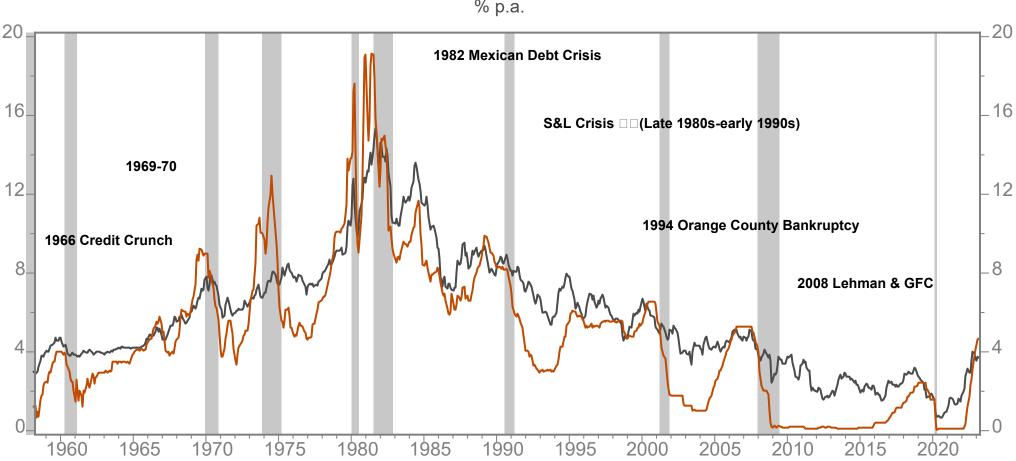
- In past Fed tightening episodes, financial stresses included bank and non-bank failures and credit crunches that harmed the economy and usually ended the Fed's tightening
- A key difference between the current situation and past ones is the persistence of high inflation
- The Fed's challenge: if it relaxes tightening due to financial stability concerns, persistent inflation poises future costs or require future Fed rate increases
- This raises probability that a hard landing is inevitable sooner or later

Historical Episodes of Fed Tightening and Financial Stresses

- The 1966 Credit Crunch
- Martin-led Fed raises rates to dampen inflation pressures while President LBJ leans against rate increases and raising Reg Q rate ceiling, urging banks instead to ration credit supply
- Resulting disintermediation from banks and credit crunch harms economy (near-recession)
- Renewed inflation pressures stemming from guns-and-butter fiscal policy and monetary accommodation set stage for The Great Inflation
- 1969-1970. Fed increases rate and jawbones banks to ration credit facing constraints of Reg Q

10-Year Treasury Bond and Fed Funds Rate





Fed tightening and Financial Stresses

1982 Mexican Debt Default

 The Volcker-Fed aggressive rate increases and high real rates of 1979-1982 result in Mexican debt default that impinge on US money center bank capital in August 1982

1987 stock market crash

- Fed raises rates to halt decline in US dollar, money growth slows, worries about further rate increases set stage for stock market correction
- Late 1980s-early 1990s savings and loan crisis
- S&Ls fail under higher inflation and interest rate environment, legal caps on interest on deposits and web of regulations

Fed Tightening and Credit Stresses

- 1990-1992 Credit restraints. Fed tightening beginning in 1988 in response rising inflation induces a recession
- Tightening credit standards and decline in credit demand in response to unraveling of commercial real estate excesses generate weak economy
- 1994 Fed tightening. Aggressive preemptive rate increases quelled inflationary expectations and orchestrated soft-landing, but higher mortgage rates led to Orange County bankruptcy (and Tequila Crisis)
- This and hit to housing market led Greenspan to be cautious about monetary tightening
- Monetary policy and the dot com bubble. Fed was tentative in raising rates in 1998 (after Russian default) and 1999 (Y2K worries), but higher interest rates and rising bond yields contributed to end of dot com bubble

Factors Preceding the Great Financial Crisis

- Early 2000s. The Fed keeps rates too-low-too-long amid worries about deflation, facilitates debt-finance housing boom and proliferation of complex MBS derivatives
- Monetary tightening in 2004-2006 dampens expectations in housing that unravels MBS products and generates large but unknown capital losses at banks and significant financial institutions
- **GFC**. Shift from risk-taking to risk aversion leads to short-term funding crisis (run on banks) and collapse of Lehman

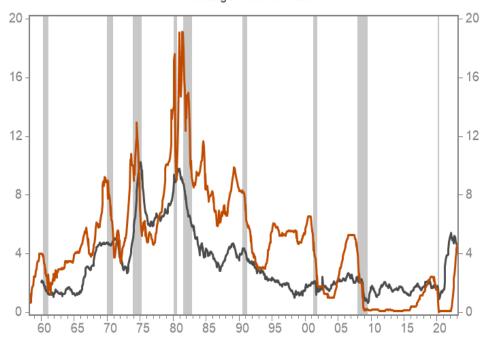
Issues on the Horizon

- In response to the failure of SVB and related bank stresses, the Biden Administration and Fed have urged tighter regulations of banks
- Bank credit quality was not the problem; tighter regulations may be extended to non-banks and private lenders
- In anticipation of more regulatory burdens, banks will tighten credit standards, reducing credit and raising borrowing costs
- This will harm the economy, likely generating a mild recession
- Conditions are far better than the 2008 GFC when a collapse in MBS crippled banks while housing and consumer balance sheets were severely impaired
- Big uncertainties: extent of credit tightening and impact on confidence

Fed Funds Rate and Treasury Yields

Federal Funds [effective] Rate

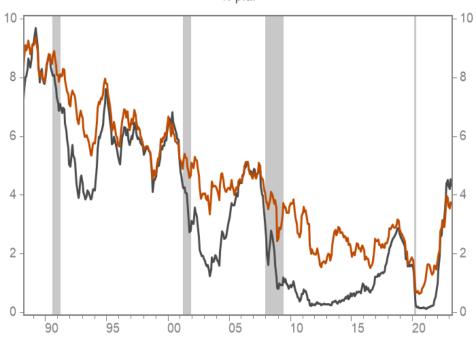
Core PCE Inflation less Food & Energy % Change - Year to Year



Sources: FRB, BEA/Haver

10-Year Treasury Note Yield % p.a.

2-Year Treasury Note Yield $_{\%}^{\%}$ p.a.



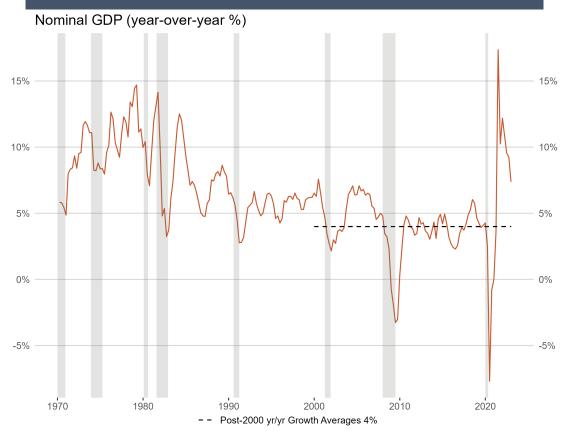
Source: Federal Reserve Board/Haver Analytics

Inflation: Headline Decelerating, Core Sticky High

- Inflation begins to moderate but remains sticky: PCE core inflation 4.6%
- Goods inflation down to 3.6% yr/yr, but services inflation high
- Rising demand for services, wages, and lagging high shelter costs
- Nominal GDP has been growing too rapidly, labor markets are tight and wage gains remain high relative to 2% inflation
- Despite the Fed's significant rate increases the real FFR is still negative, which by historical standards suggests the Fed remains accommodative
- Fed's mistakes (bad forecasts and policies, misleading forward guidance, SVB and questionable bank supervision) puts it on defensive, so it will try to avoid surprising markets

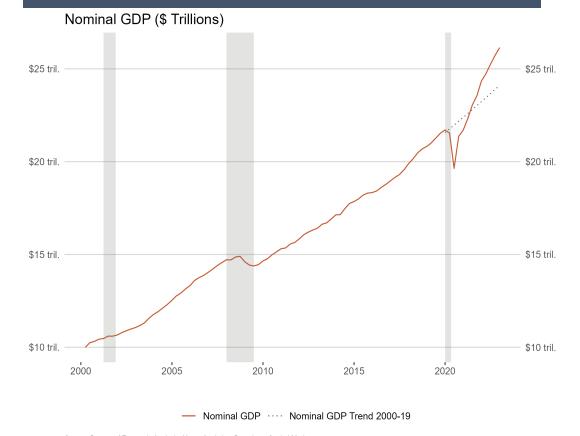
Nominal GDP growth must moderate further to ease inflation

Nominal GDP Growth Remains Robust



Source: Bureau of Economic Analysis, Haver Analytics, Berenberg Capital Markets

Level of Nominal GDP Has Surged Above Pre-Pandemic Trend

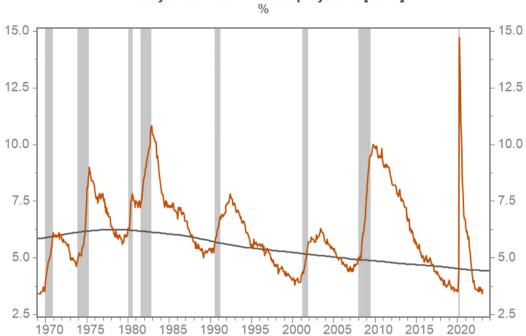


Source: Bureau of Economic Analysis, Haver Analytics, Berenberg Capital Markets

Healthy labor markets: low unemployment rate and strong but easing demand

Unemployment Rate is Significantly Below Natural Rate

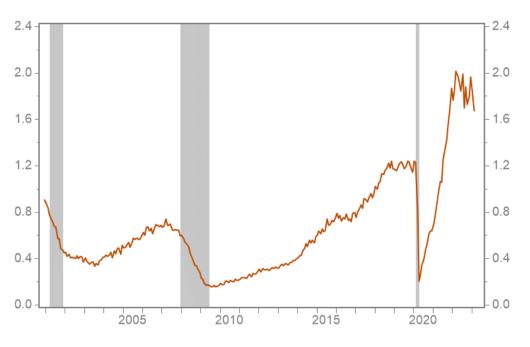
Civilian Unemployment Rate: 16 yr + SA, % Noncyclical Rate of Unemployment [CBO]



Sources: BLS, CBO/Haver

Labor Markets Remain Extremely Tight

Ratio of Job Openings to Unemployment



Source: Haver Analytics

Economy: Resilient to Date but Beginning to Soften

- Rising real disposable incomes (+3.3% yr/yr), buoyed by employment and wage gains; consumer balance sheets healthy
- Labor markets solid without excesses in employment
 - Reduces necessary adjustments as aggregate demand slows
 - Businesses are reducing inventories
- Retail sales and manufacturing production have recently slumped while housing has been hit by the higher interest rates
- Ongoing fiscal stimulus is boosting NGDP and aggregate demand
- The biggest uncertainty: impact of tighter credit

Economic fallout from the banking crisis

Negative impulses:

- Further tightening of bank lending will reduce credit and raises borrowing costs; potential hit to consumer and business confidence;
- Negative impacts on high tech and venture capital
- Bigger impacts on regional banks and small businesses, commercial real estate?

• Positives:

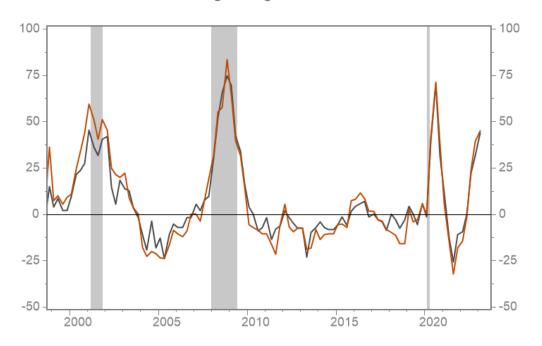
- Costs of floating rate debt and borrowing decline (based on lower Secured Overnight Financing Rate-SOFR-that reflects Fed funds futures)
- Mortgage rates recede
- **Net**: negative for economy, with reduced supply and demand for credit; likely harms business confidence and investment spending

Unrealized losses on securities portfolios, deposit outflows, and tighter regulation to constrict lending

Senior Loan Officer Opinion Survey

Net % of Banks Tightening C&I Loans to Large Firms

Net % of Banks Tightening C&I Loans to Small Firms



Source: Federal Reserve Board/Haver Analytics

Unrealized Losses on Banks' Securities Portfolios

Unrealized Gains (Losses) on Investment Securities (\$ billions)



Assets and Liabilities of Small and Medium Sized Banks

Small and Medium Sized Banks account for 38% of total lending

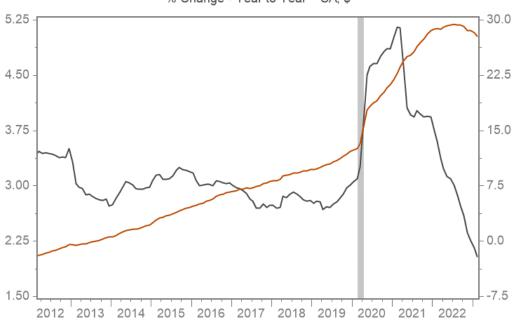
Small and Medium-Sized Bank Share of Outstanding Loans by Type Total 37% Residential Real Estate 38% Other Consumer Loans 48% Credit Cards 19% Commercial Real Estate 67% Auto Loans 15% 0% 20% 40% 60%

Source: Federal Reserve, Haver Analytics

Deposit Outflows from Smaller Banks Accelerated in Q4



Other Deposits: Adj Small Dom Comml Banks → % Change - Year to Year SA, \$



Source: Federal Reserve Board/Haver Analytics

Source: Wall Street Journal

Fed funds rate expectations

- The current Fed funds rate target is 4.75%-5.0%
- Fed estimate of appropriate FFR for year-end 2023 is 5.1% and 4.3% for year-end 2024
- The Fed funds futures implied policy rate projects several rate cuts by year-end 2023

Fed Funds Futures Implied Policy Rate 5.2% 5.2% 5.0% 5.0% 4.8% 4.8% 4.6% 4.6% 4.4% 4.4% 4.2% 4.2% 4.0% 4.0% Dec '23 Jan '24

Source: Berenberg Capital Markets, Bloomberg