The Fed: Bad Forecasts and Misguided Monetary Policy

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Hoover Monetary Policy Conference
May 12, 2023
Introduction and Summary

• In this paper I analyze the Fed’s inflation projections in its quarterly Summary of Economic Projections (SEPs) since 2020
• The key finding is the Fed made large errors that resulted in misguided monetary policies
• As inflation rose higher and higher, the Fed persistently projected inflation would quickly fall toward 2% while dramatically underestimating the rise in interest rates required to achieve its inflation projections
• I analyze three general sources of the Fed’s errors: modeling and analytical, and human (bad judgment) and institutional errors, including not heeding important lessons from history
Summary and Introduction, continued

• The Fed’s poor projections resulted in a costly extension of excessive monetary accommodation and contributed to misleading forward guidance and confusing communications

• This enabled higher inflation and inflationary expectations

• The banks’ poor risk management is to blame for the bank failures and financial stresses, but the Feds actions were complicit

• The Fed’s monetary policy missteps (followed by its lapses in bank supervision) have weakened the Fed’s credibility

• The nature and magnitude of the Fed’s errors call for a major review that addresses flaws and recommends corrective actions
The Quarterly SEPs

- The quarterly SEPs were introduced during the Financial Crisis in 2009.
- They were intended to improve the Fed’s monetary policy deliberations, enhance transparency and improve communications.
- They are closely scrutinized and used as forward guidance.
- The SEPs have not met their expectations and have become a headache.
- The magnitude and persistence of the Fed’s recent projection errors have proved very costly and highlight many problems.
Conditional Aspects of the Fed’s SEPs

- FOMC members ("participants") submit quarterly projections of real GDP (Q4/Q4), unemployment rate (Q4) and PCE inflation (headline and core, Q4/Q4) based on what they perceive to be appropriate monetary policy.
- Year-end Fed funds rate estimates are supposed to be the monetary policy that participants expect would achieve their inflation projections.
- The conditional aspects of the SEPs are frequently overlooked.
- The “Dot Plot”—the participants’ estimates of FFR--does not link participant dots to their inflation projections and the median dot involves an aggregation problem, but is instructive and closely followed.
FOMC’s SEPs of Inflation

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<tr>
<th>SEP Projection Made in:</th>
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FOMC’s SEP Projections of Core PCE Inflation

Sources: Board of Governors of Federal Reserve System, Quarterly Summary of Economic Projections
Notes: Forecasts are for Q4/Q4 percentage change in core PCE inflation for years ending 2021, 2022, 2023, 2024, and 2025; lines between forecasts of annual inflation are for visual convenience and not part of Fed’s forecasts, dotted line is from last inflation observation available to Fed at time of SEP; full data set available on request
### Fed Participants’ Median and Range of Dots

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<th>SEP forecast</th>
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Fed Inflation Projections and Dots, 2021-2024

Sources: Board of Governors of Federal Reserve System, Quarterly Summary of Economic Projections, Bureau of Economic Analysis
Notes: Projections of inflation are Q/Q percentage change for year indicated while Fed funds rate estimate is for year-end
Basic Observations

- The Fed was overly optimistic that inflation would recede rapidly toward its 2% target and significantly under-estimated the Fed funds rate required to achieve its inflation projections.

- These inconsistencies suggest:
  - The Fed relied nearly exclusively on the argument that inflation was due to transitory supply shocks.
  - The Fed did not think it was necessary to raise interest rates above inflation as it had in every prior tightening cycle.

- The Fed maintained this forecast far after the evidence merited.

- The lack of dispersion of FOMC participant projections is striking.
Sources of Projection Errors: Modeling and Analytical

- FRB-US model failed to predict the impact on aggregate demand of the unprecedented fiscal stimulus (deficit spending of $5+ trillion or 27% of GDP) and extreme monetary accommodation
  - Biden’s $1.9 trillion deficit spending American Rescue Plan of March 2021 had little impact on the June SEP projections
  - Minutes of the June FOMC meeting barely mentioned fiscal policy
- Money supply (M2) is one of the variables that affects financial conditions but is not explicit in the FRB-US model, and its 42% surge had little impact
- Model incorporates Fed’s ability to credibly manage inflationary expectations, such that deviations of inflation from 2% regress back to target
- The neo-Keynesian nature of the model incorporates a Phillips Curve
Modeling and Analytical Errors: Inflationary Expectations and Forward Guidance

• The Fed relied heavily on managing inflationary expectations to achieve its inflation objective, and presumed it could do so through forward guidance.
• This presumed that its model for projecting and achieving its inflation objective works and is credible.
• This was challenged and proved incorrect.
• When inflationary expectations rose (both market and survey-based) and became unanchored from 2%, the Fed failed to respond and continued to rely on forward guidance.
• Inflationary expectations receded in 2022 only when the Fed raised rates aggressively.
• Policy actions speak louder than words, revealing the flaws in the Fed’s reliance on managing expectations through forward guidance.
Human and Analytical Errors

• Fed *presumed* that inflation would stay low as it did during the post-financial crisis (GFC) expansion

• This was a short-sighted view of history, but dominated Fed thinking

• Fed attributed low post-GFC inflation to flatter Phillips Curve and did not consider the sharp contrasts between the GFC and pandemic:
  • Much more aggressive post-pandemic fiscal stimulus and open-ended QE
  • Aggregate demand remained slow following GFC but soared post-pandemic
  • GFC crippled banking and housing, and consumer balance sheets were impaired—opposite post-pandemic
  • Impact of Fed operating procedures and IOER on monetary policy channels
Human and Analytical Errors

- Fed’s *presumption* that inflation would stay low drove its assessment of 2021 inflation
- Rise in inflation didn’t fit Fed’s model or preconceived notion
- Fed was quick to blame inflation on “transitory” supply shocks
- *Data misread:* Fed understated surge in demand and the monetary-fiscal stimulus driving it
Inflation Projections and the Unemployment Rate

- Amid accelerating inflation in June and December 2021, the Fed projected inflation to decline sharply while projecting the unemployment rate below its natural rate...
- and simultaneously estimating the appropriate policy rate below the inflation it projected

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<td>2021</td>
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<tr>
<td>Unemployment Rate</td>
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<tr>
<td>PCE Inflation</td>
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<tr>
<td>Fed Funds Rate</td>
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<tr>
<td>Ex-Ante Real Funds Rate*</td>
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Institutional and Human Errors

• **New strategic plan** prioritized employment, favored higher inflation and eschewed preemptive tightening, and contributed to the Fed’s policy errors in 2021-2022

• The Plan was driven by fears of low inflation and effective lower bound and was analytically flawed

• Preemptive tightening was critical to The Great Moderation

• Flexible average inflation targeting (FAIT) favored higher inflation but was overly complex and did not provide any numeric guideline

• Prioritizing maximum inclusive employment led Fed to delay tapering and raising rates until it saw “substantial progress”
Institutional and Human Errors

• Lack of diversity of thinking at Fed
• Narrow dispersion of inflation projections and rate estimates
• No policy dissents in 2021 and only a few in 2022
• Failures of risk management: focus on “best forecasts” without considering alternative scenarios or scenario analysis
  • Governor Waller: “we bet the farm on the transitory story”
• Fed ignored lessons from history: even after it dismissed “transitory”, it maintained negative real rates and focused policy on nominal rates
• Fed’s discretion ignored guidelines provided by Taylor Rule estimates
Observations on the Banking Crisis

- Banks’ poor risk management and risky behavior are to blame for their failures, but the Fed was complicit
- The Fed’s delayed exit and misleading projections and forward guidance followed by aggressive rate hikes and higher bond yields shouldn’t have been a surprise, but they were
- The FDIC estimated $620 billion in unrealized bank losses at year-end 2022 reflecting asset-liability mismatches
- Similar with the FOMC, the Fed’s bank supervisors and stress testers did not consider the impact of higher inflation and interest rates
- The Fed now must reduce inflation and regain damaged credibility
Fed Must Conduct a Review and Address Sources of Its Errors

- **FRB-US**: must better capture fiscal stimulus and reflect outsized deviations in M2 money supply
- Correct flaws in new strategic plan: re-establish preemptive tightening and reinstitute symmetry around its 2% inflation target with numeric bands
- Improve SEPs: clarify conditionality; use Taylor Rule to establish consistency between inflation and FFR projections; introduce alternative scenarios and provide information on its balance sheet
- Encourage diversity of views within Fed and consider ways to avoid inadvertent institutional dampening of views
- Consider ways to better use anecdotal evidence of District banks
- The goal of a review is to improve monetary policy