A Tale of Two Narratives

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Introduction
The St. Louis Fed recently changed its approach to near-term U.S. macroeconomic and monetary policy projections.


An older narrative has likely outlived its usefulness.

A new narrative is replacing the old narrative.

In this talk, I will describe in more detail the differences between the two narratives.
Nature of the old narrative

- In the old narrative, there is, axiomatically, a unique long-run steady state which is essentially an average of the past.
- The economy is converging—all values for key macroeconomic variables are tending toward steady state values.
- Inflation and unemployment gaps are near zero—business cycle dynamics have played out seven years after the end of the recession.*
- Implication: The policy rate would likely rise over the forecast horizon to be consistent with its steady state value.

*For example, see J. Bullard, “Fed Goals and the Policy Stance,” remarks delivered at the Owensboro in 2065 Summit, Owensboro, Ky. July 17, 2014.
In the new narrative, the concept of a single, long-run steady state is abandoned. Instead, there is a set of possible regimes that the economy may visit.

Regimes are viewed as persistent, and switches between regimes are viewed as not forecastable.

Optimal monetary policy is regime dependent.

Implication: The policy rate would likely remain essentially flat over the forecast horizon to remain consistent with the current regime.
The forecast based on the new narrative

- A simple forecast over the next two and a half years:
  - Real GDP growth 2 percent
  - Unemployment 4.7 percent
  - Trimmed-mean PCE inflation 2 percent
  - Policy rate 63 basis points

- Risks associated with this projected policy rate are likely to the upside.

* The June 2016 Summary of Economic Projections reported projections out to the end of 2018.
Previous Narrative and the End of Its Usefulness
St. Louis Fed’s previous narrative

- Typical medium-term forecast during the past several years:
  - Output growth above trend.
  - Unemployment declining.
  - Inflation (net of commodity-price effects) overshoots 2 percent.
  - Policy rate increases to be consistent with the unique steady state.

- Some aspects worked well from the second half of 2013 to the first half of 2015:
  - Average quarterly growth: 2.7% > 2% (trend).
  - Unemployment declined by 2 percentage points.

- However, inflation barely moved.
The usefulness of our previous narrative may have come to an end:

- Output growth has arguably slowed and is currently not far from a 2 percent trend.
- Unemployment may not fall much below current values.
- Trimmed-mean inflation is close to target but not rising rapidly.

If there are no major shocks to the economy, this situation could be sustained over a forecasting horizon of two and a half years.
Real output growth has slowed

Source: Bureau of Economic Analysis, FRB of Atlanta and author’s calculations.
Last observation: 2016-Q1.
Unemployment has fallen to a low level

Source: Bureau of Labor Statistics and author’s calculations.
Last observation: June 2016.
Inflation is closer to target

Source: FRB of Dallas and author’s calculations. Last observation: May 2016.
A New Narrative
A new narrative based on regime switching

- New narrative: We want a manageable expression of the uncertainty surrounding medium- and longer-term outcomes.
- Fundamental factors determine the nature of the regimes:
  1. Productivity growth.
  2. Real interest rate on short-term government debt.
- Optimal monetary policy is regime dependent.
- Regime switches are not forecastable—viewed as “risks.”
- Forecast limited to a horizon of two and a half years—no long-run projections.
Productivity regimes

- One important fundamental is productivity growth.
- Average labor productivity growth has been low since at least 2011, which we view as a “low-productivity-growth regime.”
- We assume that we will remain in the low-productivity (and hence low-real-GDP-growth) regime through the forecasting horizon because regimes are persistent.
- Higher productivity growth was observed in the recent past.
- A switch back to a high-productivity-growth regime is an upside risk.
The low-productivity-growth regime

Last observation: 2016-Q1.
The real rate of return on short-term government debt, $r^f$, has been exceptionally low, which we view as a “low-real-rate regime.”

- Appears to be highly persistent.
- For forecasting purposes, we assume that we will remain in the low-real-rate regime through the forecasting horizon.

The alternative regime has a relatively high real rate.

- A switch to a high-real-rate regime is viewed as a risk.

Interpretation:

- Abnormally high liquidity premium on government debt.
- Real returns on capital are not low.*

Real rate of return on short-term government debt, $r^\pi$

Source: Federal Reserve Board, FRB of Dallas and author’s calculations. Last observation: May 2016.
Another important fundamental is the possibility of recession. Currently we are in a “no-recession” regime, but it is possible that we could switch to a recession state. All variables would be affected, but most notably, the unemployment rate would rise significantly. We have no reason to forecast a recession given the current state of the U.S. economy. The possibility of a recession is a risk to the forecast.
Recession probability is low

The Policy Rate Path
The policy rate path (63 basis points) supporting our output, unemployment and inflation forecasts is regime dependent.

Unemployment and inflation gaps \( \approx 0 \).

A Taylor-type rule collapses to a Fisher equation

\[
i = r^\dagger + \pi^e + \phi_\pi \pi^{GAP} + \phi_u u^{GAP} = r^\dagger + \pi^e
\]

\( i = 0.63\% \) and \( \pi^e = 2\% \) imply \((i - \pi^e) = -1.37\%\)

Very close to \( r^\dagger = -1.41\% \), the one-year ex-post real interest rate on government debt.
Policy rate path

Source: Federal Reserve Board and author’s calculations. Last observation: May 2016.
Risks to the forecast

- Fundamental factors could switch into new regimes, in which case monetary policy would have to react.

- Phillips-curve effects:
  - In our narrative, a strong labor market (low unemployment) does not put significant upward pressure on inflation.
  - A risk is that Phillips-curve effects could reassert themselves and drive inflation higher.

- Inflation expectations:
  - Low market-based measures are at odds with our forecast.

- Asset price bubbles.
Conclusion
St. Louis Fed’s characterization of the macro outlook

\[ r^\dagger = \text{real rate of return on short-term government debt} \]
\[ \lambda = \text{productivity growth} \]

- **Start** → No recession → Low \( r^\dagger \) → Low \( \lambda \) → Baseline forecast
- Recession

Upside risk to the policy rate path
Conclusion

The projected policy rate path is the main difference in the new approach.

Old narrative:
- Steep policy rate path, dictated by convergence to the single, long-run steady state.

New narrative:
- Flat policy rate path, conditional on the current regime.
- If a regime switch does occur, the policy rate path would have to change appropriately—it is still data dependent.