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Evolving Market Perceptions of Federal Reserve Policy Objectives

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Despite varying interpretations of the Federal Reserve's monetary policy mandate over time, the response of long-term interest rates to economic news has remained relatively stable. This stability of market responses suggests that market participants have perceived little change in the objectives of monetary policy under different policy regimes.

"The Federal Reserve is legally accountable to the Congress for two objectives, maximum employment and price stability, on an equal footing. My colleagues and I strongly support the dual mandate and the equal weighting of objectives that it implies." – Ben S. Bernanke, November 14, 2007

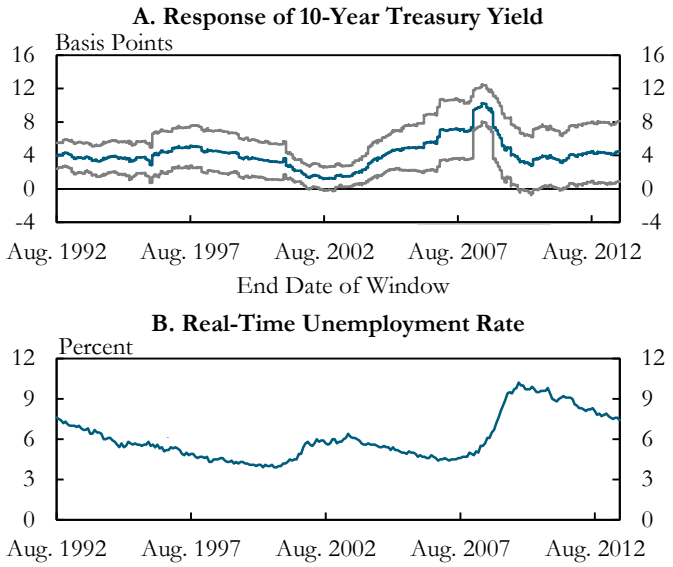
This statement by former Chairman Ben S. Bernanke reflects current thinking about the Federal Reserve's dual mandate—to promote maximum employment and stable prices. In the past, however, policymakers have emphasized the employment and inflation mandates to varying degrees, depending on economic conditions and their understanding of the economy and monetary policy. For example, after high and volatile inflation had plagued the economy throughout most of the 1970s, Chairman Paul Volcker emphasized price stability as a fundamental policy objective, even at the expense of high unemployment. As inflation fell and stabilized, Chairman Alan Greenspan turned to promoting "maximum sustainable economic growth" in the context of price stability. Then, with the onset of the financial crisis and Great Recession, Chairman Bernanke emphasized the duality of the mandate, specifying a longer-run numerical objective for inflation and providing estimates of the unemployment rate that in the long run would be consistent with maximum employment.

Given the rhetoric around Federal Reserve policy objectives, a natural question is whether markets have, over time, changed their perceptions of the way monetary policy is conducted. In particular, have markets changed the way they respond to incoming economic news that might influence policymakers' actions? To answer these questions, we examine the response of the 10-year Treasury yield to the unexpected component of various economic news announcements from August 1987 to August 2013. Changes in the response of the 10-year Treasury yield to economic news about employment and inflation are taken as an indication of changing market perceptions about Federal Reserve policy.

Connecting market responses to economic news and market perceptions of policy objectives relies on two theories: the expectations theory of the term structure of interest rates and the efficient markets hypothesis. In the expectations theory, the interest rate on any government security can be viewed as an average of today's policy rate and the policy rates financial market participants expect to prevail over the life of the security, plus a term premium. Under the efficient markets hypothesis, market rates reflect all currently available information relevant to expected future economic conditions; therefore, at the time of an economic data release, markets react only to the unanticipated news contained in the release. Together, the two theories suggest changes in the response of long-term interest rates to economic news may reflect changes in market expectations of the future path of the policy rate and, potentially, changes in the market's perception of policymakers' weighting of the employment and inflation objectives.

One factor that could lead to changes in the relative importance policymakers attach to one leg of the dual mandate relative to the other might be the state of the economy. We find the market response to unanticipated changes in nonfarm payrolls was in fact stronger when labor markets were weak. Chart 1 examines the response of the 10-year Treasury yield to a surprise in nonfarm payroll employment of roughly 100,000 jobs over successive five-year windows (Panel A) and compares this response to the unemployment rate (Panel B). As indicated by the gray lines in the top panel, the response of the 10-year rate was statistically significant throughout virtually all the estimation periods, with a positive surprise leading to an increase in the 10-year rate of roughly 4 basis points. Furthermore, except for a notable increase in the late 2000s, the response was fairly constant over time. This increase corresponds to a period with an elevated and increasing unemployment rate. Statistical evidence confirms this visual impression: the response of the 10-year Treasury yield to surprises in nonfarm payroll employment is statistically larger when the unemployment rate is above 5¼ percent than when it is below 5¼ percent.

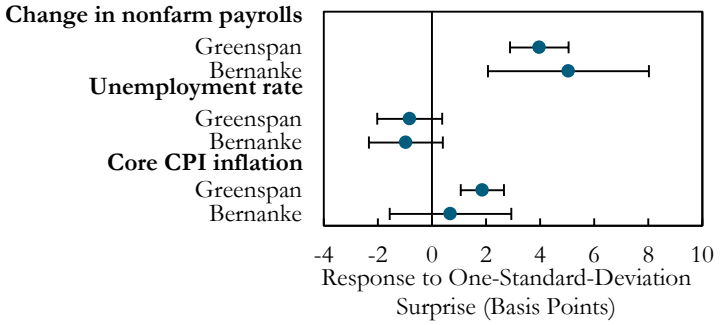
Chart 1
MARKET RESPONSES TO UNANTICIPATED CHANGES IN NONFARM PAYROLLS VS. THE UNEMPLOYMENT RATE



Gray lines represent 95 percent confidence interval.

Chairmen Greenspan and Bernanke faced distinct economic conditions during their tenures, leading them to place different emphasis on employment and inflation objectives. Yet, the response of the 10-year Treasury yield to economic news was remarkably similar during the two chairmanships. As shown in Chart 2, the response of the 10-year rate to a surprise change in nonfarm payrolls was a bit stronger in the Bernanke period than the Greenspan period, while the response to a surprise in core CPI inflation was a bit weaker. The response to an unemployment rate surprise was similar but statistically insignificant in both periods. Moreover, the modest differences in responses to labor market and inflation surprises over the two periods were statistically insignificant. The similarity of responses in the Greenspan and Bernanke periods suggests market participants' perceptions of Federal Reserve objectives were likely stable over the two periods.

Chart 2
MARKET RESPONSES TO ECONOMIC NEWS IN THE GREENSPAN AND BERNANKE PERIODS



Horizontal lines represent 95 percent confidence intervals.

** For more, see Kahn, George A., and Lisa Taylor, 2014. "Evolving Market Perceptions of Federal Reserve Policy Objectives," Federal Reserve Bank of Kansas City, Economic Review, first quarter. The views expressed are those of the authors and do not necessarily reflect the positions of the Federal Reserve Bank of Kansas City or the Federal Reserve System.*