

Would a Texas Central Bank Set Rates Higher?

By Janet Koech and Mark A. Wynne

The Texas economy has outperformed the rest of the nation on several fronts—it did not experience as big a house price run-up prior to the economic crisis, nor was the subsequent housing bust during the crisis as big. Texas entered the recession later than most other states, experienced a milder downturn and recovered its precrisis level of employment and economic activity sooner than most other states.

With such relative economic strength, it is interesting to speculate how interest rates in Texas would differ if the state had its own central banking system. In fact, if Texas were a stand-alone nation, it would rank as the world's 13th-largest economy.¹

Stanford University economist John Taylor has posited that the appropriate monetary policy rate depends on a region's economic output relative to its potential (popularly known as the output gap), and the deviation of inflation from the central bank's inflation target (usually assumed to be 2 percent). The Taylor rule prescribes higher interest rates when inflation is above target and output is above potential—and lower interest rates when output is below potential and inflation is below target.

Computing a Taylor rule rate for Texas offers possible insight into the interest rate path a central bank of Texas

might set in response to regional economic conditions. The implied monetary policy rate for Texas (*Chart 1*) shows a very different path than that set by the Federal Reserve's rate-setting Federal Open Market Committee (FOMC).

While the federal funds rate has been near zero for several years, a monetary policy calibrated to Texas' economic conditions would have called for an interest rate of zero for at most one year and rates of about 2 to 3 percent in 2011 and 2012. Indeed, for the entire period since the mid-1990s, economic conditions in Texas would have called for interest rates higher than the prevailing monetary policy rates. Conversely, as Texas recovered from the 1980s recession, it would have preferred interest rates lower than those set by the FOMC through the early 1990s.

The smaller deviation of Texas' actual output from its potential relative to the nation's performance corroborates the state's better economic performance over the past few years—economic activity in Texas did not fall as far below potential during the recent crisis as it did in the U.S. (*Chart 2*).

However, Texas inflation has been closely correlated with overall U.S. inflation, with an even higher correlation in recent years.² The patterns of these two components of the Taylor rule—the output gap and inflation—suggest that

the preferred path of interest rates in Texas shown in *Chart 1* is driven mainly by output gap differences.

The Taylor rule rate implies that a higher interest rate would be more appropriate for Texas than the current federal funds rate and, thus, the prevailing lower rate might lead to locally higher inflation. But inflation in Texas is broadly similar to inflation in the rest of the U.S. This is largely because the state is fully integrated into the broader U.S. economy. Wage and price pressures are kept in check by the movement of goods and especially workers.

Texas has been the No. 1 destination for domestic migrants—U.S. natives and immigrants relocating to Texas from other states—since 2006.³ In the euro area, the absence of such labor mobility makes living with a one-size-fits-all monetary policy comparatively much more challenging.

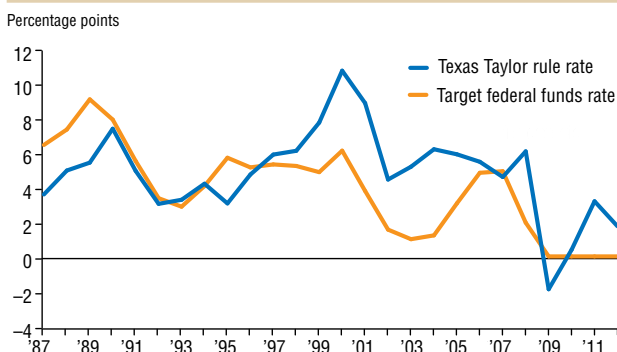
Notes

¹ Texas' gross domestic product (GDP) was \$1.48 trillion in 2013. See "If Texas Were a Nation 2013," Texas Comptroller of Public Accounts, March 2014.

² The correlation between U.S. and Texas consumer price inflation is 0.90 for the 1987–2012 period and 0.99 for 2009–12. The output gap correlation for 1987–2012 is 0.79, compared with -0.61 for 2009–12.

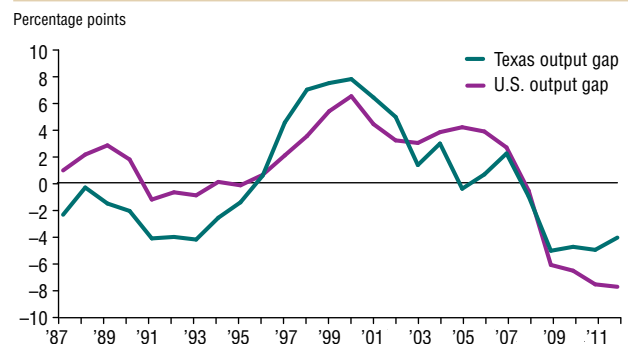
³ See "Gone to Texas: Immigration and the Transformation of the Texas Economy," by Pia M. Orrenius, Madeline Zavodny and Melissa LoPalo, Federal Reserve Bank of Dallas Special Report, 2013.

Chart 1 Texas Taylor Rule Rate Differs from U.S. Rate



SOURCES: Bureau of Economic Analysis; Bureau of Labor Statistics; Federal Reserve Board/Haver Analytics; authors' calculations.

Chart 2 Output Gap Smaller in Texas than U.S.



SOURCES: Bureau of Economic Analysis; Bureau of Labor Statistics; Federal Reserve Board/Haver Analytics; authors' calculations.