

Comments on
"Inflation Dynamics when
Inflation is Near Zero"
by Fuhrer, Olivei and Tootell

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Some Reasons to Care

- With short-term nominal rates virtually at zero, and longer term rates barely above that, forecasting inflation becomes the major problem for forecasting real rates
- Deflation could be bad for a financial system that still has many problems. If firms and workers nominal incomes decline they will be less able to deal with their existing nominal debt and more likely to default.
- Since some have suggested that nearly all of our current unemployment problems are structural, it is also important to understand how to interpret any up tick in inflation (will inflation return quickly to trend rates when the recovery strengthens or would an increase be a sign of inflationary pressures from the labor market?)

Our Unemployment is Not Primarily Structural

- I have a paper that argues:
 - There probably has been an increase in the lowest sustainable rate of unemployment
 - But the increase accounts for only about a quarter of the increase in unemployment above the LSRU
 - Two-thirds to the entire increase in the LSRU can probably be explained by extended unemployment benefits and that will cease to be a problem once unemployment starts to come down
 - (paper will be available on my Brookings web page in a couple of weeks, in the meantime email me at wtdickens@gmail.com if you want a copy)
- Thus if there is an increase in core inflation anytime soon it will have something to do with commodity prices or how expectations are formed and not supply constraints

Big Question Remaining...

- Since it doesn't look like unemployment will reach the LSRU anytime soon, is deflation in our future with:
 - Rising real interest rates
 - Compounded problems for financial institutions
- The good news is that the answer is "maybe not"

From Stock and Watson (2010), "Modeling Inflation After the Crisis"

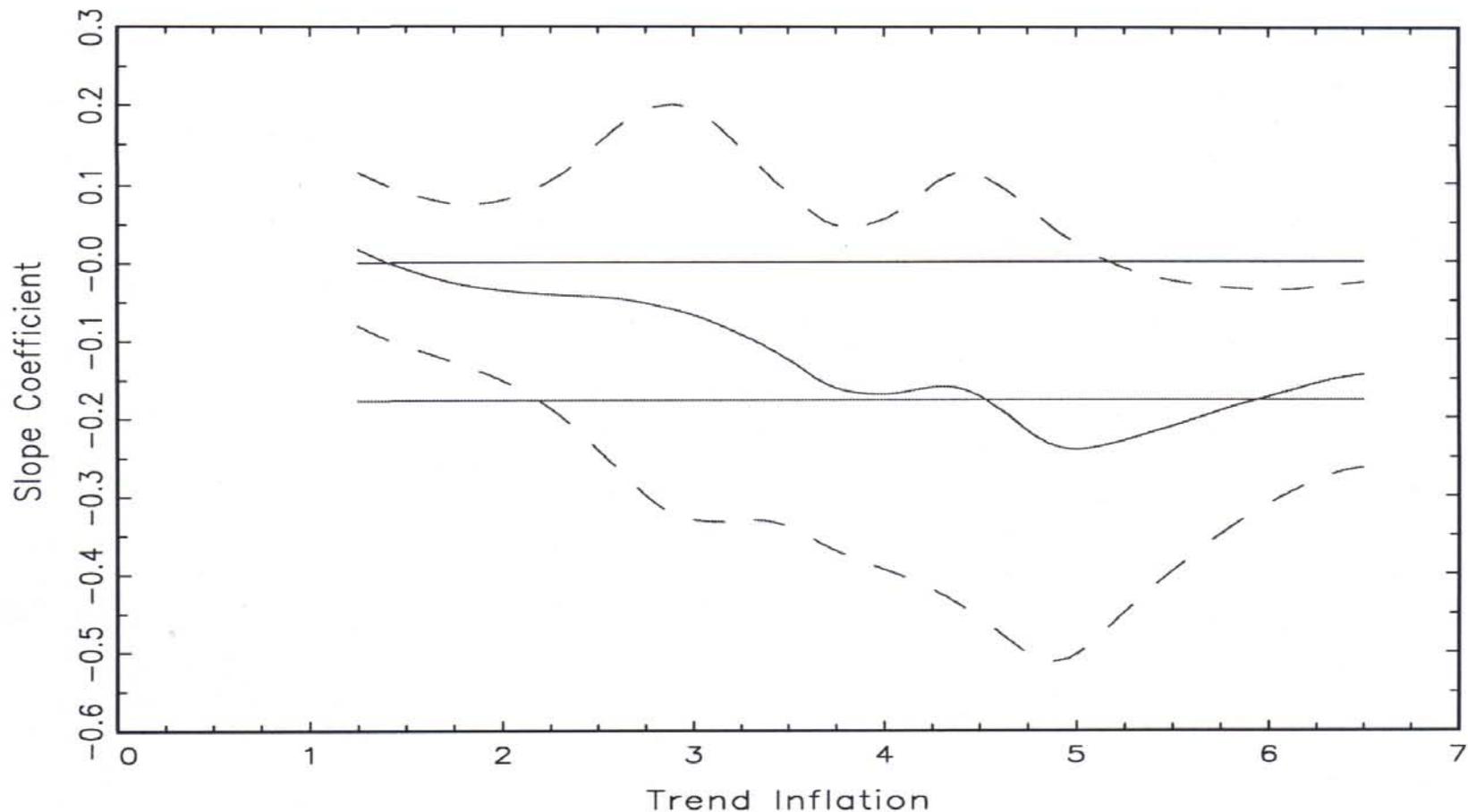
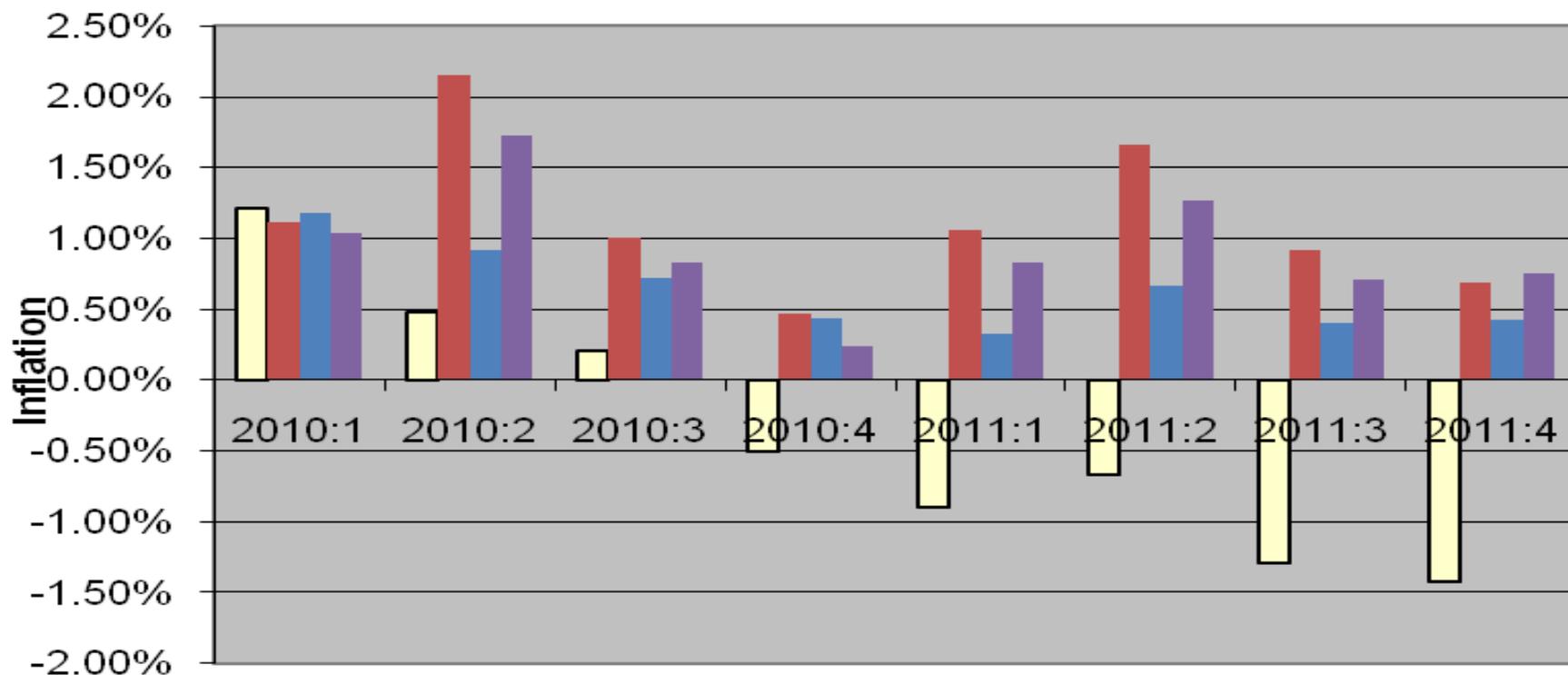


Figure 7. Nonparametric regression (blue solid) and 95% confidence bands (blue dashed) of the slope coefficient γ as a function of the value of trend inflation at date t ($\tau_{t|t}$). Red solid line is the parametric estimate (-0.18, SE = 0.06). Parametric and nonparametric regressions are full-sample.

When Inflation is Low Output Gap Seems to Exert Little Downward Pressure on Prices

- My first reaction is “We told you so!” (Akerlof, Dickens and Perry 1996 & 2001)
 - Due to downward nominal wage rigidity LR Phillips curve becomes nearly horizontal at very low rates of inflation (1996)
 - At low rates of inflation, price and wage setters do not pay attention to inflation and this creates a trade off between inflation and unemployment at low rates of inflation (2001)
- But phenomena could also be explained by “anchored expectations”
 - If inflation is kept close to some target rate for a long time people expect inflation to return to that rate
 - An output or employment gap may of lower inflation, but any improvement in the economy will cause a relatively quick bounce back in inflation towards the expected rate
- Or forward looking behavior that anticipates a recovery could explain behavior

Forecasted Core CPI Inflation From Standard Models and Models with Downward Nominal Wage Rigidity (Annual Rate)



Using Forecasted Unemployment Rates from the Boston Federal Reserve Model

- Standard Model with Backward Looking Expectations
- Standard Model with Anchored Expectations
- Downward Rigidity with Backward looking Expectations
- Downward Rigidity with Anchored Expectations

This Paper Considers All Three Possibilities

- Does not find that forward looking or New Keynesian Phillips curve models perform well
- Finds that best fitting model does a good job for both Japan and US
- Best model has:
 - Little or no weight on long-run expectations
 - A reasonable role for marginal costs
 - A moderate role for error correction (lagged inflation)
 - A major role for one year ahead survey expectations

This Makes Sense

- NKPC models have never had a very good forecasting record
- If you think about the horizon that people are setting prices and wages for, one year ahead forecasts are much more appropriate than five year ahead forecasts
- Since those expectations aren't always going to be correct, and those who guessed wrong are going to want to correct, there should be a role for lagged inflation.
- And of course there should be some effect of current economic slack on price setting

But How Are 1yr Ahead Expectations Formed?

- Other factors may be reflected in those expectations
- They may reflect the importance of trend inflation or long-term expectations if those are important elements in forming short-term expectations
- They may also reflect the importance of downward nominal rigidity if forecasters are adjusting their outlook for such considerations
- But its also possible that using 1yr ahead expectations is a good forecasting tool because it draws on the advantage of crowd sourcing

Two Questions for Authors:

- When you develop your forecasting model for 1yr ahead forecasts did you consider a possible role for longer term expectations or a target rate?
- Did you every check to see if forecast marginal costs (as opposed to realized MCs) added anything to the ability of the one year ahead expectations to forecast?

What About Nominal Rigidity?

- As the authors suggest, there is no straight line between downward nominal wage rigidity and an employer's wage costs—employers have lots of ways to bring their wage bill down without cutting wages (that is why ADP 1996 allowed for 2% nominal decline in the wage bill of firms facing a nominal wage floor)
- A major lacuna in the literature on the effects of downward nominal wage rigidity is analysis of the effects of DNWR on the flexibility of firm's labor costs

What the Authors Do

- Present distributions of changes in wages for job classes within firms
- If there are compositional changes in the workforce (longer tenure workers are replaced with short tenure workers) that will lower the wage bill without lowering the wages of individuals
- Authors show that distribution of such changes show many negative changes, little or no spikes at zero, and symmetry around the mean
- The authors then show that wage changes are lower in recessions and particularly in shrinking firms

Why I'm Not Convinced

- We can see that compositional changes can cause wage changes, but it doesn't mean that employers can use these deliberately to lower costs – laying off better paid senior workers to hire lower cost younger workers would be against the law
- The regression shows that average wage changes are higher in good times than bad times but don't tell us that DNWR isn't binding
- To do that authors would have to show us that effects of distress at the national and firm level are equivalent at all quantiles of the wage change distribution – if they are low or zero at the lower quantiles then DNWR is affecting labor costs