

Update of “The Risk of Deflation”

By John C. Williams

April 6, 2010

This note reports updated U.S. inflation forecasts from the models described in “The Risk of Deflation,” *FRBSF Economic Letter* 2009-12, March 27, 2009; <http://www.frbsf.org/publications/economics/letter/2009/el2009-12.html>. The estimates reported in the original *Letter* were based on data available in March 2009. The updated estimates use data available through early April 2010. The two inflation forecasting models have been reestimated using data through the fourth quarter of 2009.¹ The forecasts for unemployment are taken from the February 2010 Survey of Professional Forecasters (SPF). The upper panel of Table 1 reports the current forecasts for the four-quarter percent change in the core personal consumptions expenditures (PCE) price index, excluding food and energy prices. The February 2010 SPF core PCE price inflation forecasts are shown for comparison. The lower panel of the table reports the forecasts from the original *Letter*.

Core PCE price inflation was 1.5 percent in 2009, 0.4 percentage point *above* the forecasts from the “anchored Philips curve” model and the Survey of Professional Forecasters from a year ago. In contrast, core inflation was 1.2 percentage points above the forecast from the “unanchored Philips curve” model, which had predicted a much sharper fall in inflation.

Both models now predict higher core inflation in 2010 than they did a year ago. The unanchored Philips curve model forecast rose two full percentage points, while the anchored Philips curve model forecast rose only 0.2 percentage points. In contrast, the SPF forecast declined by 0.2 percentage point. The anchored Philips curve model now predicts that core inflation will reach 2 percent in 2011, one-half percentage point above the corresponding SPF forecast.

¹ In the original *Letter*, the estimated coefficients on the two lags of the unemployment rate in the “anchored Philips curve model” were nearly equal and opposite in sign. In this update, this model is estimated imposing this restriction on the coefficients. This restriction is not rejected by the data.

The risk of deflation has fallen significantly according to both model forecasts. Table 2 reports the probabilities of deflation in each year. The forecasts from the anchored Philips curve model and the SPF imply very small probabilities of deflation this year and next. The forecast from the unanchored Philips curve model also implies very little risk of core price deflation this year, but the probability of deflation rises to 18 percent next year.

Table 1: Core PCE Price Inflation Forecasts (Q4/Q4)

	2009	2010	2011
<hr/> Current forecasts			
Unanchored Philips curve model		1.2	0.7
Anchored Philips curve model		1.8	2.0
Survey of Professional Forecasters		1.3	1.5
<hr/> March 2009 forecasts			
Unanchored Philips curve model	0.3	-0.8	N/A
Anchored Philips curve model	1.1	1.6	N/A
Survey of Professional Forecasters	1.1	1.5	N/A

Table 2: Probability of Core PCE Price Deflation (percent; Q4/Q4)

	2009	2010	2011
<hr/> Current forecasts			
Unanchored Philips curve model		2	18
Anchored Philips curve model		<1	<1
Survey of Professional Forecasters		2	3
<hr/> March 2009 forecasts			
Unanchored Philips curve model	28	85	N/A
Anchored Philips curve model	3	3	N/A
Survey of Professional Forecasters	3	3	N/A