Stony Brook conference abstract 2017

The Behavioral Determinants of Downward Nominal Wage Rigidity

Joy Buchanan and Daniel Houser

George Mason University

Downward nominal wage rigidity has been documented empirically in many countries. In some macroeconomic models this feature is generated by Calvo (1983) contracts which do not allow most firms to renegotiation in response to recessions. This paper provides a controlled empirical test of whether managers would cut nominal wages after a recession if menu costs were zero and there were no contracts preventing renegotiation.

Two important ideas have emerged to explain why we observe downward nominal wage rigidity. First, managers are concerned about employee morale (Akerlof 1984; Akerloff and Yellen 1990). A wage cut is believed to lower morale and therefore productivity. Thus, a small wage cut may reduce productivity so much that the company will lose more from lower output than it will gain by reducing the cost of labor. Layoffs are believed to not reduce morale which makes them preferred to wage cuts. This practice contributes to high aggregate unemployment during recessions. Second, many workers do not pay sufficient attention to the inflation rate to notice small real wage cuts. This helps explain why there is some evidence that inflation can lower unemployment in the short run (Schmitt-Grohe and Uribe 2016).

Empirical work has established convincing evidence that wage rigidity exists, but aggregate wage data or even firm-level records of wage contracts cannot reveal workers' attitudes and individual productivity. The reason is that it is difficult to collect accurate and incentivized measurements of managers' beliefs about worker morale, and details regarding how workers' productivity is affected by a wage cut. Fehr and Goette (2005), who find evidence for wage rigidity in a large national dataset, wrote, "The ideal data set for examining nominal rigidity would be a representative sample of firms' personnel files including precise information on wages, individuals' productivity, and other individual characteristics." These data are available, however, in our controlled experiment.

Participants in our experiment are paired with an employer or employee counterpart and play a repeated gift exchange game. In the Recession treatment, surplus shrinks in the middle of the experiment. A worker/firm pair that is cooperating before the recession has good morale. We elicit beliefs held by employers about morale through an incentivized belief elicitation question. Unlike past surveys, some of which have been quite influential (Bewley 1999), we can compare those beliefs to precise measures of actual behavior. Additionally, a laboratory setting allows us to vary the price level exogenously, enabling us to test whether managers avoid nominal wage cuts and yet choose real wage cuts in the event of inflation.

We find that workers who receive a wage cut reduce their effort level significantly, even after controlling for wage level. Interestingly, half of employers do cut wages after the recession. On average, employers who cut wages make less profit in the round following the recession.