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No Wage Change?

Even when prevailing market wages are lower, businesses can find it difficult to reduce wages for their current employees. This phenomenon, often referred to as "downward nominal wage rigidity," can result in rising average wages for incumbent workers despite high unemployment levels. Some economic models predict that a period of subdued wage growth can follow, even as the labor market recovers—a kind of delayed wage-adjustment effect.

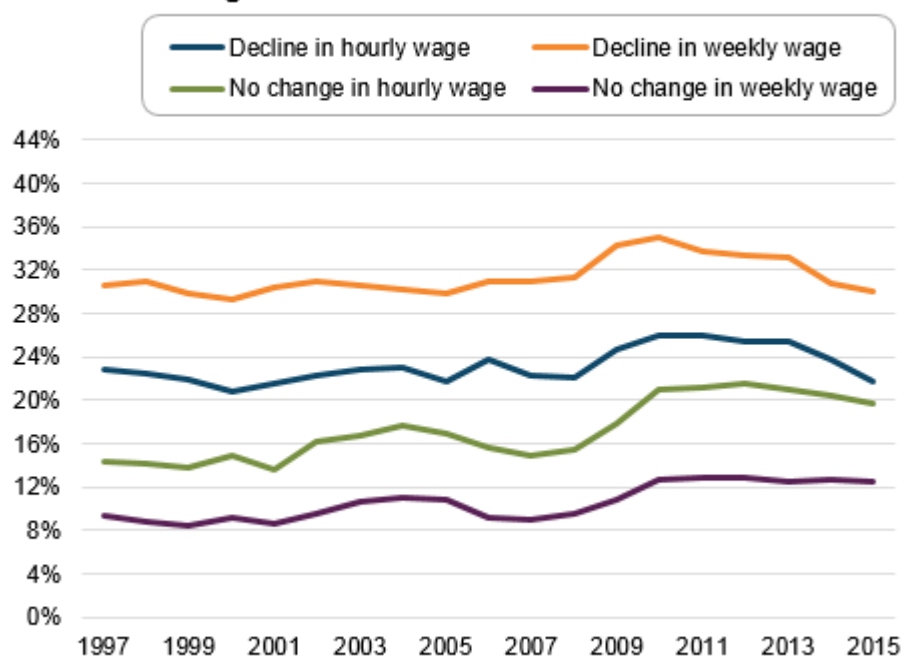
In [her 2014 Jackson Hole speech](#), Fed Chair Janet Yellen suggested this effect may explain sluggish growth in average wages in recent years, despite significant declines in the rate of unemployment.

This *macroblog* post looks at evidence of wage rigidity, particularly a spike in the frequency of zero wage changes relative to wage declines. A comparison is made between hourly and weekly wages and between incumbent workers (job stayers) and those who have changed employers (job switchers).

Chart 1 shows the fractions of job stayers reporting the same or a lower hourly or weekly wage than 12 months earlier. These measures are constructed from the Current Population Survey microdata in the Atlanta Fed's [Wage Growth Tracker](#). They include workers who are paid hourly (accounting for about 60 percent of all wage and salary earners). The measures exclude those who usually receive overtime and other supplemental pay and those with imputed or top-coded (redacted) wages. Weekly wage is defined as the hourly wage times the usual number of hours per week worked at that rate. The data are aggregated to an annual frequency (except for 2015, where the first six months of the year are covered).

Job stayers cannot be exactly identified in the data and are approximated by those who are in the same occupation and industry as they were 12 months earlier and the same job as they were in the prior month. Consistent with other studies (see, for example, the work of our colleagues at the [San Francisco Fed](#)), we find that the incidence of unchanged hourly wages among job stayers is substantial (although some of this is probably the result of rounding errors in self-reported wages). The measured share of unchanged hourly wages rose disproportionately between 2008 and 2010, and it has remained elevated since. Zero hourly wage changes (the green line in chart 1) have become almost as common as declines in hourly wages (the blue line in chart 1).

Chart 1: Share of Job Stayers Reporting the Same or Lower Wage than a Year Earlier

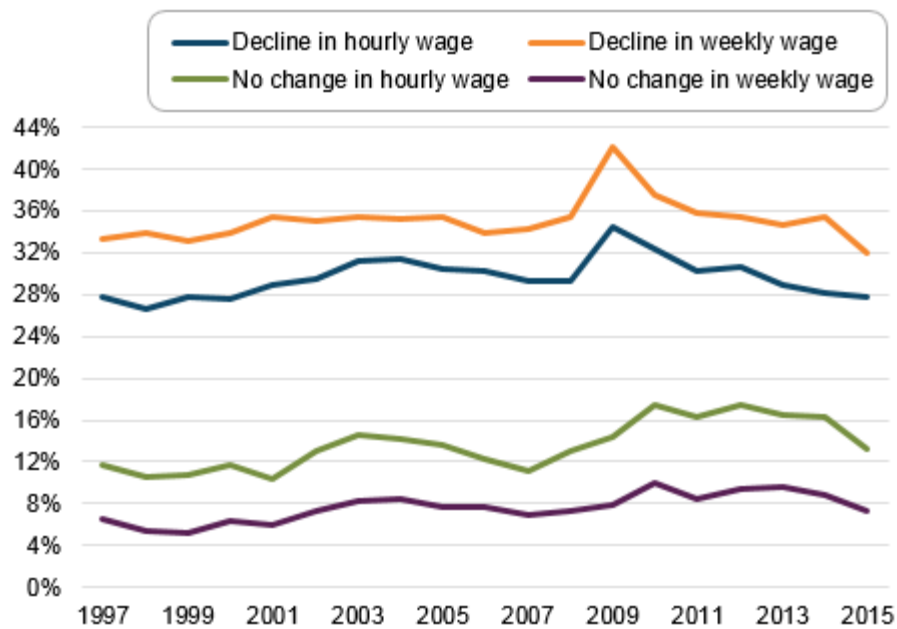


Source: Current Population Survey, author's calculations

Chart 1 also suggests that weekly wages for job stayers show a pattern over time broadly similar to hourly wages. But the fraction of unchanged weekly wages (the purple line in chart 1) is lower. Each year, about 60 percent of those with no change in their hourly wage had no change in their weekly wage (or hours) either. Also, there are relatively more declines in weekly wages (the orange line in chart 1) than in hourly wages—mostly the result of reduced hours worked. On average, a reduction in weekly wages is associated with a four-hour decline in hours worked per week. About 90 percent of those with lower hourly wages also had lower weekly wages, and 20 percent of those with no change in their hourly wage had a lower weekly wage (working fewer hours).

If job stayers show a relatively high incidence of no wage change, we might expect a different story for job switchers, since they are establishing a new wage contract with a new employer. Chart 2 shows the fraction of job switchers reporting the same or a lower hourly or weekly wage than 12 months earlier. Job switchers are approximated by workers who are in a different industry than a year earlier.

Chart 2: Share of Job Switchers Reporting the Same or Lower Wage than a Year Earlier



Source: Current Population Survey, author's calculations

Not surprisingly, a smaller share of workers experience no change in their hourly or weekly wage when switching jobs. But the pattern of zero wage change for job switchers over time is generally similar to that of job stayers. It is also true that a decline in hourly and weekly wages is more likely for job switchers than for job stayers, with a significant temporary spike in the relative frequency of wage declines for job switchers during the last recession.

Taken at face value, this analysis suggests the presence of some amount of wage rigidity. Also, rigidity increases during recessions and has remained quite elevated since the end of the last recession—especially for job stayers. The question then becomes whether this phenomenon has important macroeconomic consequences. A prediction of most models in which wage stickiness has allocative effects is that it causes firms to increase layoffs when faced with a decline in aggregate demand. Interestingly, during the last recession—when wage stickiness appears to have increased substantially—the rate of layoffs was not unusually high relative to earlier recessions. What was atypical was the size of the decline in the rate of job creation, and this decline contributed to unusually long unemployment spells. As noted by [Elsby, Shin, and Solon \(2014\)](#), it is not clear that an increase in wage rigidity would constrain the hiring of new workers more than it constrains the retention of existing workers.

On the other hand, persistently high wage rigidity in the wake of the Great Recession is consistent with the relatively sluggish pace of wage increases seen in most measures of aggregate wage growth via the "bending" of the short-run Phillips curve (as described by [Daly and Hobijn \(2014\)](#)). Interestingly, the [Atlanta Fed's Wage Growth Tracker](#) is an exception. It has indicated somewhat stronger wage growth during the last year than other measures. It will be interesting to see if that trend continues in coming months.



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