Prevalence of Wage Rigidity

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Haefke, Sonntag, Van Rens (JME 2013)

passthrough of productivity into real wages

Elasticity of real wage w.r.t productivity is ~ 0 → sufficient to generate realistic unemployment fluctuations

Highlights

- Construction of a time series for wages of newly hired workers.
- Data are consistent with long-term wage contracting.
- Wages of new hires respond strongly to changes in productivity.
- Elasticity of 0.8 is an appropriate calibration target for search models.
- Wage rigidity not likely to be the sole reason for unemployment volatility.

Table 4. Response of wages to productivity.

• more rigidity for existing workers

less than 1 → rigidity of real wages

	Wage per hour		Earnings per person	
	All workers	New hires	All workers	New hires
Elasticity wrt productivity	0.24	0.79	0.37	0.83
Std. error	0.14	0.40	0.17	0.51
Observations	1 566 161	117 243	1 566 161	117 243
Quarters	83	83	83	83

Elasticities are estimated using the two-step method described in the text. The number of observations is the number of individual workers in the first step. Labor productivity is output per hour in the non-farm business sector from the BLS productivity and cost program. For the hourly wage we use labor productivity per hour and for regressions of earnings per person we use labor productivity per person. The second step includes seasonal dummies.

4.2. Fluctuations in the net present value of wages

The most important observation for the purpose of this paper is that wage setting only matters insofar as it affects the response of the permanent wage $\overline{w}_t$ to changes in permanent productivity $\overline{y}_t$. The fact that the actual wage w_t does not appear in the equilibrium conditions for the job finding rate p_t illustrates that the path at which wages are paid is irrelevant for job creation. This observation, which was made earlier in Shimer (2004), is crucial to the argument in this paper, as well as in the closely related studies by Pissarides (2009) and Kudlyak (2009).

How large is the response of the present value of wages in new jobs to changes in productivity that is implied by our estimates? Since estimated wages in ongoing wage contracts are close to a random walk, the elasticity of the present value of wages is close to the elasticity of the wages of newly hired workers,[24] i.e. $d \log \overline{w}_t / d \log \overline{y}_t = 0.8$. We propose to use this estimate as a calibration target in future research on models with long-term employment relationships.

Real wages are somewhat rigid → elasticity wrt productivity is $0.8 < 1$.