Aggregate Hiring and the Value of Jobs Along the Business Cycle

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The paper asks what governs the representative firm hiring behaviour along the business cycle. This behavior is important for our understanding of business cycles and employment dynamics. The literature on this topic has devoted an enormous amount of attention, for over a decade, to the ability of models to account for the high volatility of job vacancies and unemployment, and has paid much less attention to the counter-cyclicality of the hiring rate from non-employment observed in U.S. data. This paper shows that a model combining labor frictions with capital frictions can account for both the high volatility of job vacancy rates and the countercyclicality of hiring rates from non-employment.

The results are shown to be consistent with well-known business cycle facts, such as pro-cyclical employment and pro-cyclical vacancy and jobfinding rates, as well as job to job flows. The analysis emphasizes the difference between the behavior of current labor productivity and the wider, forward-looking concept of job value.

I look at the optimal hiring decision of the firm, which equates the marginal cost of worker recruitment and the expected present value of the worker for the firm, i.e., the job value. I estimate alternative forms of the equation. Following estimation, I analyze the cyclical behavior and volatility of job values and of the recruiting variables.

The main findings are as follows:

(i) Job values are counter-cyclical in U.S. data. This key finding means that in recessions the value of jobs for firms goes up. Note that this value is a forward-looking expected present value of future labor profitability.

(ii) Correspondingly, hiring rates from non-employment (unemployment + out of the labor force) are counter-cyclical: it is worthwhile for firms to increase hiring rates as job values rise in recessions.

(iii) While the afore-mentioned hiring rates are counter-cyclical, vacancy rates and hiring rates from employment (i.e., job to job flows) are procyclical. The differences between points (ii) and (iii) are explained.

(iv) While point (i), the counter-cyclicality of job values, may appear counter-intuitive, it is consistent with the findings of recent studies looking at the cyclical behavior of the labor share in GDP. It is the dynamic behaviour of the labor share that engenders the counter-cyclicality of the forwardlooking job values.

(v) Points (i) and (ii) do not contradict what we already know about the cyclical features of the labor market, including pro-cyclical employment job finding rates, and wages.

(vi) Moving from cyclicality to volatility, the high volatility of vacancy and hiring rates is explained within the same framework. Part of the explanation has to do with job values and another part with the interaction of recruitment behavior with capital investment behavior. Both determinants have been typically overlooked.

(vii) The secular phenomenon of a reduction in labor market fluidity in the U.S. over time is also accounted for, using the same framework.