Summary for non-specialists
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Fiscal policy and the labour market: the effects of public sector employment and wages

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The majority of macroeconomic models that study the effects of government spending usually view it as "Purchases of goods and services". However, the main component of government consumption is compensation to employees. In the United States the public sector wage bill represents around 60 percent of government consumption expenditures. Government employment is an important aspect of fiscal policy, but it is also a sizable element of the labour market. In the United States around 16 percent of all employees are working in the public sector. Given its relevance, it seems plausible that part of the transmission mechanism of fiscal policy occurs through the labour market.

The aim of this work is to provide a comprehensive, yet simple, framework to study the macroeconomic effects of public sector employment and wages, their role over the business cycle and their welfare implications. I build a dynamic stochastic general equilibrium model with search and matching frictions in the labour market and with both public and private sectors. One of its main difficulties is the calibration of the friction parameters in the public sector. In order to do it accurately, I explore information from several sources from the United States and the United Kingdom.

In steady state, the optimal public sector wage premium depends mainly on the differences of the labour market frictions parameters of the public sector relative to the private sector, for instance the job security. For the chosen calibration, the optimal wage is 3 percent lower than in the private sector. If the government sets a higher wage, it induces too many unemployed to queue for public sector jobs and raises private sector wages, thus reducing private sector job creation and increasing unemployment. Conversely, if it sets a lower wage, few unemployed want a public sector job and the government faces recruitment problems.

Along the business cycle, the optimal government policy consists of a countercyclical vacancy posting and a procyclical wage. If the public sector wages are acyclical, in recessions they become more attractive relative to the wages in the private sector, inducing more unemployed to queue for public sector jobs. This further dampens job creation in the private sector and amplifies the business cycle. Deviations from the optimal policy can entail significant welfare losses. If, for instance, the public sector wage does not respond to the cycle, volatility of unemployment doubles.

The model allows us to disaggregate fiscal shocks into wage and employment shocks and the latter into separation and hiring shocks. The response to the three shocks varies. Paying more to public sector workers raises unemployment through two channels. On the one hand, more unemployed direct their search towards the public sector. On the other hand, as it increases the value of unemployment, it spills over to private sector wages. These two channels are also in place under a separation or hiring shock, but they are offset by the direct effect of increasing public sector employment. All shocks raise the private sector wage and crowd out private sector employment contrary to shocks in government purchases of private goods.