CENTRE FOR MACROECONOMICS

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Public Employment Redux

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Macroeconomists typically view government consumption as goods bought from the private sector. However, the main component of government consumption is compensation to employees. The US government spends 60 percent more on compensation of general government employees than on purchases of intermediate goods and services. While purchases of goods and services operate through the output market, employment and wages operate through the market of inputs -- the labour market. Understanding how employment and wages in the public and private sector interact in the labour market is of first-order importance.

The US government hires 16 percent of all employed workers. However, this number masks sizable heterogeneity across types of workers. The government hires fewer than 5 percent of workers without education beyond the 9th grade. At the very top, the government hires one third of all employed workers with Masters or Professional degree or who hold a PhD. We show that the education bias also holds true within industries and in two thirds of 3-digit occupations that are common across the two sectors. We set up a model to understand why this happens.

Our model provides three possible explanations for why public employment is biased towards educated workers. The first explanation is technological -- governments hire more educated workers because they are more important inputs in the production of their services. A second explanation is related to the wage schedule. A cost-minimizing government constrained to pay a compressed profile of wages (i.e. due to union pressures), shifts its ideal composition from the (relative more expensive) less qualified workers to the (relative less expensive) more qualified workers. The third explanation is underemployment - educated workers performing unskilled jobs. If wages of unskilled public-sector jobs are very high, they attract workers with more qualifications. This last channel amplifies the role of the wage schedule.

We calibrate a variation of the model to match key statistics of the US economy. We find that, in the US economy, the excess hiring of skilled in the public sector is mainly accounted for by technology,

with the wage differential and excess underemployment in the public sector accounting for 15 percent of the education bias.

In our second exercise, we calculate the elasticities of private wages with respect to public wages. During the Euro Area crisis, many governments reduced public-sector wage dispersion by cutting high wages while protecting low-wage workers. We find that the government wage policy is a crucial driver of private wage inequality, but in an counterintuitive fashion -- a more compressed wage schedule in the public sector raises inequality in the private sector. More wage compression alters the skill-mix in the public sector from unskilled to skilled jobs. The skill-mix in the private sector shifts towards low-educated workers, so their wages fall while wages of high-educated workers go up. A one percent increase in unskilled public wages raises skilled private wages by 0.07 percent and lowers unskilled private wages by 0.06 percent. While decreasing wage inequality for workers in the public sector, well-intended policies can actually backfire by increasing wage inequality for everyone else in the economy.