Employment in the Public Sector and Labor Market Volatility

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DESCRIPTION

In both developed and emerging economies, the public sector is the greatest employment. Governments in OECD countries employ 18% of the workforce, according to Behar and Mok. Moreover, the employment procedure in the public sector favors qualified and experienced employees. According to Giordano, in Euro Area nations, the average share of workers with a postsecondary education is 2.6 times higher in the public sector than in the private sector. Mizala reports that in Latin America, the average years of education in the public sector are 3 to 6 years longer than in the private sector. According to Fontain, the public sector employs a bigger percentage of elderly people, accounting for 25% in France and the United Kingdom and 22% in Spain and the United States, but it employs just a tiny percentage of youthful workers.

These facts suggest that public sector employment has a significant impact on the overall performance of the labour market, as the selection of skilled and more experienced individuals into the public sector influences the creation of vacancies by businesses and the job-search decisions of private-sector workers. In this research, we use a public-sector version of the Mortensen–Pissarides search and matching model that includes the stylized facts above to investigate the effects of public-sector hiring policies on private-sector employment and labour market volatility.

For a large group of developing and advanced nations, a cross-country link between the share of public sector employment in the labour force and labour market volatility from 1980 to 2018. The average standard deviation is used to assess volatility in both cases, and the solid line is the best linear fit. The standard deviation of both private employment and the unemployment rate increases as the share of public sector employment increases.

For particular, this link holds when looking at the share of civil servants with a tertiary education, as seen in the bottom panel. As seen in Merz, 1995, and Andolfatto, 1996, households have preferences for consumption smoothing, and individuals are structured into families that pool idiosyncratic risks. Because the economy is closed, changes in aggregate productivity lead to changes in aggregate consumption, which in turn leads to changes in discount rates. Agents' lifespans are unclear, and they only survive with a certain probability from one time to the next. The model can accept disparities in life-cycle earnings growth between private and public workers in a fairly tractable fashion thanks to the stochastic OLG environment.

Two factors influence an individual's productivity growth. To begin with, agents are heterogeneous in terms of ability, which can be defined as pre-market abilities acquired through education. The second component is referred to be human capital or knowledge, and it is accumulated through a learning-by-doing process. We extend on Ljungqvist and Sargent's work by assuming that worker productivity varies over time according to laws of motion that are dependent on whether the worker is employed or not. On average, employed agents see a rise in productivity, whereas non-employed agents see a decrease in production. Moreover, the government employs civil servants to create a public good that contributes to an individual's utility functions. Private companies and the government can target their recruitment efforts by posting job openings for agents with a specific level of education and human capital. In the public sector, job creation is exogenous, and it is calibrated to replicate the reality that the government recruits disproportionately more highly trained individuals. Endogenous shifts in wages and labour market conditions result from the process of human capital upgrading and degradation.

The model system has been calibrated to reflect macro and micro economic data for the Brazilian economy. Brazil is an important test case because the public sector employs a huge number of people and they are mostly skilled and experienced professionals. The separation and job-finding probabilities for each industry, as well as the average income growth of continuously employed people, are all extremely closely matched by the model. Furthermore, public sector vacancy formation is viewed as exogenous and calibrated to match the share of civil servants by income quintile. According to the data, public sector

occupations are concentrated at the right end of the skill distribution in the benchmark model, with civil servants accounting for approximately 42% of the top 20%incomes.

The calibrated model is then used to investigate how governmental employment policies affect employment generation in the private sector and labour market volatility. To that purpose, we'll look at the experiment below. We compute the impulse response function for private sector employment in reaction to an unanticipated 1% reduction in aggregate productivity, starting with the economy at its steady state. The experiment is then repeated in a counterfactual economy in which employment creation in the public sector is less biased towards talented and experienced agents while keeping government

size constant. In comparison to the benchmark economy, we discover that the counterfactual economy's job loss is roughly 35% smaller.

In our model, we show that human capital formation is the major factor driving disparities in employment responses. The government hiring policy has an effect on private sector employment and aggregate variations by lowering the expected return on a match for private sector enterprises. Hiring people is thought to be an investment activity, with costs paid up front and gains accruing over time as workers' productivity rises. This is because the benefits of creating a match are far longer-lasting than the benefits of accumulating human capital on the job.