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Public sector employment and aggregate fluctuations☆

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ABSTRACT

An important stylized fact about public sector employment is that it predominantly hires skilled and more experienced workers. In this paper, we consider a search and matching model with public sector and on-the-job human capital accumulation that incorporates this stylized fact to study how the public sector employment affects the labor market volatility. In the model, public sector employment affects aggregate fluctuations by changing the composition of workers employed in the private sector. Because workers accumulate human capital and become more productive when employed, the flow of benefits from forming a match are spread over time. In this environment, if the flow into the public sector increases with human capital, then the government hiring policy decreases the firm's benefit of hiring and the matching surplus, increasing the responsiveness of labor market tightness to shocks. We calibrate the model for the Brazilian economy and show that this mechanism amplifies the effects of public employment on vacancy creation and private sector employment volatility.

1. Introduction

The public sector is the largest employer in the economy, both in advanced and developing economies. Behar and Mok (2019) report that Governments of OECD countries account for 18 percent of total employment. In addition, the hiring process in the public sector is biased towards skilled and more experienced workers. Giordano et al. (2011) report that the average share of workers with a tertiary education is 2.6 times higher in the public than in the private sector in Euro Area countries. In the case of Latin America, Mizala et al. (2011) report that the average years of education in the public sector are 3 to 6 years higher than in the private sector. Fontaine et al. (2020) show that the public sector represents a larger fraction of employment of older workers, accounting for 25 percent of their employment in France and the UK and 22 in Spain and the US, while it accounts for only a small fraction of total employment for young workers.

These facts indicate that the public sector employment may have important consequences for the overall performance of the labor market as the selection of skilled and more experienced individuals into the public sector affects the vacancy creation of firms and the searching decisions of workers in the private sector. In this paper, we consider a version of the Mortensen–Pissarides search and matching model with public sector that incorporates the stylized facts above to study the effects of hiring policies in the public sector on the private sector employment and labor market volatility.

Fig. 1 presents the cross-country relationship between the share of public sector employment in the labor force and the labor market volatility for a large set of developing and advanced economies from 1980 to 2018. In the top panel, we show in the left

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