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**On the Optimal Size of Public Employment**

**DISSERTAÇÃO DE MESTRADO**

**DEPARTAMENTO DE ECONOMIA**

Programa de Pós-Graduação em Economia

Rio de Janeiro  
April 2013



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**Dissertação de Mestrado**

Thesis presented to the Programa de Pós-Graduação em Economia of the Departamento de Economia, PUC-Rio as the partial fulfillment of the requirements for the degree of Mestre em Economia.

Advisor: Prof. Eduardo Zilberman

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Rio de Janeiro, April 12<sup>th</sup>, 2013.

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### Bibliographic data

Reis, Anna Carolina Saba dos

On the optimal size of public employment /  
Anna Carolina Saba dos Reis; advisor: Eduardo  
Zilberman. – 2013.  
48 f. : il.; 30 cm

Dissertação (mestrado)–Pontifícia  
Universidade Católica do Rio de Janeiro,  
Departamento de Economia, 2013.  
Inclui bibliografia

1. Economia – Teses. 2. Emprego público.  
3. Seguro. 4. Mercados incompletos. 5. Política  
ótima. I. Zilberman, Eduardo. II. Pontifícia  
Universidade Católica do Rio de Janeiro.  
Departamento de Economia. III. Título.

CDD: 330

## Acknowledgments

First and foremost I would like to express my sincere gratitude to my advisor Prof. Eduardo Zilberman for the continuous support of my research, for his patience, motivation, enthusiasm, and knowledge.

I would like to thank the rest of my thesis committee: Prof. Rodrigo Soares and Prof. Pedro Cavalcanti, for their encouragement, insightful comments, and hard questions.

My sincere thanks go to the CNPq and to the PUC-Rio, for the financial support which made this work possible.

I thank my classmates, for all the study and fun we had together, and I thank all the professors and staff at the University for the teachings and the help they provided me with.

Finally, I thank my family and friends for supporting me throughout all my studies at University.

## **Abstract**

Reis, Anna Carolina Saba dos; Zilberman, Eduardo. **On the Optimal Size of Public Employment.** Rio de Janeiro, 2013. 48 p. Dissertação de Mestrado – Departamento de Economia, Pontifícia Universidade Católica do Rio de Janeiro.

A public job can be seen as a source of insurance against income risk. Indeed, many public employees have job stability, which is compounded with a less volatile and more compressed wage distribution. Hence, by increasing the number of public employees, the government enhances the overall degree of insurance in the economy. In this paper, we introduce public employment in a standard incomplete markets model with overlapping generations. The aim is to explore the welfare gains or losses due to a larger government, accounting for this extra source of insurance. In a model economy calibrated to Brazil, where public employment is around 13.5 percent of the workforce, we find that if the government relies on consumption taxes to balance its budget, the optimal size of public employment is nearly flat, ranging from 8 to 12 percent of the workforce. However, if the public employment is reduced from 12 to 8 percent, welfare losses due to a reduction in the degree of insurance are 2 percent, which are compensated by welfare gains due to level and inequality effects.

## **Keywords**

Pubic employment; insurance; incomplete markets; optimal policy.

## **Resumo**

Reis, Anna Carolina Saba dos; Zilberman, Eduardo. **On the Optimal Size of Public Employment.** Rio de Janeiro, 2013. 48p. Dissertação de Mestrado – Departamento de Economia, Pontifícia Universidade Católica do Rio de Janeiro.

O emprego público pode ser visto como uma fonte de seguro contra o risco de renda. De fato, diversos funcionários públicos se deparam com estabilidade de emprego e uma distribuição de salários mais compacta e menos volátil. Assim, por meio de um aumento no número de funcionários públicos, o governo aumenta o grau de seguro da economia. Neste trabalho, o emprego público é introduzido em um modelo padrão de mercados incompletos e gerações imbricadas. O objetivo é explorar os ganhos de bem estar resultantes de um governo maior, considerando essa fonte extra de seguro. Em uma economia calibrada para o Brasil, onde o emprego público responde por cerca de 13,5 por cento da força de trabalho, obtém-se que, se o governo financia seus gastos com impostos sobre o consumo, o tamanho ótimo do governo se situa entre 8 e 12 por cento da força de trabalho. Entretanto, se o emprego público é reduzido de 12 para 8 por cento, ocorrem perdas de bem estar resultantes do menor grau de seguro. Estas são compensadas por ganhos de bem estar resultantes de eficiência e equidade.

## **Palavras-chave**

Emprego público; seguro; mercados incompletos; política ótima.

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