

Document de treball de l'IEB 2009/21

OPTIMAL RISK ALLOCATION IN THE PROVISION OF LOCAL PUBLIC SERVICES: CAN A PRIVATE INSURER BE BETTER THAN A PUBLIC MUTUAL FUND?

Luigi Buzzacchi, Gilberto Turati

Fiscal Federalism

Document de
treball de l'IEB

**OPTIMAL RISK ALLOCATION IN THE PROVISION
OF LOCAL PUBLIC SERVICES:
CAN A PRIVATE INSURER BE BETTER
THAN A PUBLIC MUTUAL FUND?**

Luigi Buzzacchi, Gilberto Turati

The **IEB** research program in **Fiscal Federalism** aims at promoting research in the public finance issues that arise in decentralized countries. Special emphasis is put on applied research and on work that tries to shed light on policy-design issues. Research that is particularly policy-relevant from a Spanish perspective is given special consideration. Disseminating research findings to a broader audience is also an aim of the program. The program enjoys the support from the **IEB-Foundation** and the **IEB-UB Chair in Fiscal Federalism** funded by Fundación ICO, Instituto de Estudios Fiscales and Institut d'Estudis Autònoms.

The **Barcelona Institute of Economics (IEB)** is a research centre at the University of Barcelona which specializes in the field of applied economics. Through the **IEB-Foundation**, several private institutions (Caixa Catalunya, Abertis, La Caixa, Gas Natural and Applus) support several research programs.

Postal Address:

Institut d'Economia de Barcelona
Facultat d'Economia i Empresa
Universitat de Barcelona
C/ Tinent Coronel Valenzuela, 1-11
(08034) Barcelona, Spain
Tel.: + 34 93 403 46 46
Fax: + 34 93 403 98 32
ieb@ub.edu
<http://www.ieb.ub.edu>

The IEB working papers represent ongoing research that is circulated to encourage discussion and has not undergone a peer review process. Any opinions expressed here are those of the author(s) and not those of IEB.

**OPTIMAL RISK ALLOCATION IN THE PROVISION
OF LOCAL PUBLIC SERVICES:
CAN A PRIVATE INSURER BE BETTER
THAN A PUBLIC MUTUAL FUND? ***

Luigi Buzzacchi, Gilberto Turati

ABSTRACT: In this paper we consider the institutional arrangements needed in a decentralised framework to cope with the potential adverse welfare effects caused by localized negative shocks, that impact on the provision of public services and that can be limited by precautionary investments. We model the role of a public mutual fund to cover these “collective risks”. We first study the under-investment problem stemming from the moral hazard of Local administrations, when investments are defined at the local level and are not observable by the Central government that manages the mutual fund. We then examine the potential role of private insurers in solving the under-investment problem. Our analysis shows that the public fund is almost always superior to the private insurance solution.

JEL Codes: H23, H77, G22

Keywords: intergovernmental transfers, private insurer, collective risks.

Gilberto Turati
Università di Torino
Dipartimento di Scienze Economiche e
Finanziarie “G. Prato”
C.so Unione Sovietica 218 bis, 10134
Torino, Italy
Phone +39.011.6706046
Fax +39.011.6706062
E-mail: turati@econ.unito.it

Luigi Buzzacchi
Politecnico di Torino, DISPEA
E-mail luigi.buzzacchi@polito.it

* We wish to thank Timothy Goodspeed, Michele Grillo, Jordi Jofre Monseny, Tommaso Valletti, Claudio Zoli and seminar participants at Catholic University (Milano), the 7th European Conference on Health Economics (University of Roma Tor Vergata), the 13th AIES Conference (Matera), the III Workshop on Fiscal Federalism (Universitat de Barcelona), the 7th iHEA World Congress (Beijing), the 65th IIPF Congress (Cape Town) for insightful comments. Usual disclaimers apply. Research funding from PRIN 2005 (Project no. 2005137858_003) is gratefully acknowledged.

2007

- 2007/1. Durán Cabré, J.M^a.; Esteller Moré, A.: "An empirical analysis of wealth taxation: Equity vs. tax compliance"
- 2007/2. Jofre-Monseny, J.; Solé-Ollé, A.: "Tax differentials and agglomeration economies in intraregional firm location"
- 2007/3. Duch, N.; Montolio, D.; Mediavilla, M.: "Evaluating the impact of public subsidies on a firm's performance: A quasi experimental approach"
- 2007/4. Sánchez Hugalde, A.: "Influencia de la inmigración en la elección escolar"
- 2007/5. Solé-Ollé, A.; Viladecans-Marsal, E.: "Economic and political determinants of urban expansion: Exploring the local connection"
- 2007/6. Segarra-Blasco, A.; García-Quevedo, J.; Teruel-Carrizosa, M.: "Barriers to innovation and public policy in Catalonia"
- 2007/7. Calero, J.; Escardíbul, J.O.: "Evaluación de servicios educativos: El rendimiento en los centros públicos y privados medido en PISA-2003"
- 2007/8. Argilés, J.M.; Duch Brown, N.: "A comparison of the economic and environmental performances of conventional and organic farming: Evidence from financial statement"

2008

- 2008/1. Castells, P.; Trillas, F.: "Political parties and the economy: Macro convergence, micro partisanship?"
- 2008/2. Solé-Ollé, A.; Sorribas-Navarro, P.: "Does partisan alignment affect the electoral reward of intergovernmental transfers?"
- 2008/3. Schelker, M.; Eichenberger, R.: "Rethinking public auditing institutions: Empirical evidence from Swiss municipalities"
- 2008/4. Jofre-Monseny, J.; Solé-Ollé, A.: "Which communities should be afraid of mobility? The effects of agglomeration economies on the sensitivity of firm location to local taxes"
- 2008/5. Duch-Brown, N.; García-Quevedo, J.; Montolio, D.: "Assessing the assignation of public subsidies: do the experts choose the most efficient R&D projects?"
- 2008/6. Solé-Ollé, A.; Hortas Rico, M.: "Does urban sprawl increase the costs of providing local public services? Evidence from Spanish municipalities"
- 2008/7. Sanromà, E.; Ramos, R.; Simón, H.: "Portabilidad del capital humano y asimilación de los inmigrantes. Evidencia para España"
- 2008/8. Trillas, F.: "Regulatory federalism in network industries"

2009

- 2009/1. Rork, J.C.; Wagner, G.A.: "Reciprocity and competition: is there a connection?"
- 2009/2. Mork, E.; Sjögren, A.; Svaleryd, H.: "Cheaper child care, more children"
- 2009/3. Rodden, J.: "Federalism and inter-regional redistribution"
- 2009/4. Ruggeri, G.C.: "Regional fiscal flows: measurement tools"
- 2009/5. Wrede, M.: "Agglomeration, tax competition, and fiscal equalization"
- 2009/6. Jametti, M.; von Ungern-Sternberg, T.: "Risk selection in natural disaster insurance"
- 2009/7. Solé-Ollé, A.; Sorribas-Navarro, P.: "The dynamic adjustment of local government budgets: does Spain behave differently?"
- 2009/8. Sanromá, E.; Ramos, R.; Simón, H.: "Immigration wages in the Spanish Labour Market: Does the origin of human capital matter?"
- 2009/9. Mohnen, P.; Lokshin, B.: "What does it take for and R&D incentive policy to be effective?"
- 2009/10. Solé-Ollé, A.; Salinas, P.: "Evaluating the effects of decentralization on educational outcomes in Spain?"
- 2009/11. Libman, A.; Feld, L.P.: "Strategic Tax Collection and Fiscal Decentralization: The case of Russia"
- 2009/12. Falck, O.; Fritsch, M.; Heblich, S.: "Bohemians, human capital, and regional economic growth"
- 2009/13. Barrio-Castro, T.; García-Quevedo, J.: "The determinants of university patenting: do incentives matter?"
- 2009/14. Schmidheiny, K.; Brühlhart, M.: "On the equivalence of location choice models: conditional logit, nested logit and poisson"
- 2009/15. Itaya, J.; Okamura, M.; Yamaguchi, C.: "Partial tax coordination in a repeated game setting"
- 2009/16. Ens, P.: "Tax competition and equalization: the impact of voluntary cooperation on the efficiency goal"
- 2009/17. Geys, B.; Revelli, F.: "Decentralization, competition and the local tax mix: evidence from Flanders"
- 2009/18. Konrad, K.; Kovenock, D.: "Competition for fdi with vintage investment and agglomeration advantages"
- 2009/19. Loretz, S.; Moorey, P.: "Corporate tax competition between firms"

2009/20. Akai, N., Sato, M.: "Soft budgets and local borrowing regulation in a dynamic decentralized leadership model with saving and free mobility"



U
UNIVERSITAT DE BARCELONA
B

ieb@ub.edu
www.ieb.ub.edu

Fiscal Federalism

Document de
treball de l'IEB