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**VOLUNTARY PARTICIPATION AS A
DETERMINANT OF “SOCIAL CAPITAL” IN
FRANCE:
ALLOWING FOR PARAMETER
HETEROGENEITY**

**Marie LEBRETON
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Voluntary Participation as a Determinant of Social Capital in France: Allowing for Parameter Heterogeneity*

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Abstract

This paper studies the effects of income, education and active memberships in voluntary organizations and clubs on “social capital” by using individual French data and allowing for parameter heterogeneity (Durlauf and Fafchamps, 2003). Survey responses to the questions concerning trust, social norms and individual involvement in the local life are used as proxies of social capital. The model developed in this paper is an Artificial Neural Network model or more precisely the Neuro-Coefficient Smooth Transition Auto-Regressive (NCSTAR) model. It gives a vector of estimates for every observation of the dataset as a nonlinear function of its geographical position and its individual attributes. We show that accounting for parameter heterogeneity considerably improves the fit of the estimated model in comparison with the broadly used multinomial logit model. Our results suggest empirical evidences of significant positive direct and indirect effects of active membership in voluntary organizations on trust (or rather trustworthiness, Glaeser et al, 2000) and individual’s involvement in his or her community’s life. This finding supports the considering of membership in voluntary organizations in France as promoting the values of cooperation and positive tendency towards public issues. However, the studied relationships are not stable across French departments and some regional patterns are detected.

JEL classification: C12, C22.

Keywords: Social capital, Parameter heterogeneity, Neural network models.

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