

**BRIDGING OR BONDING? A MULTILEVEL STUDY ON THE EFFECT OF  
REGIONAL CIVIC ENGAGEMENT IN FIRMS' INNOVATION PROCESS**

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**Abstract:**

Firms increasingly are relying on external information from economic agents outside the organizations. We argue in this research that localized civic engagement through active memberships in civil associations affect a firm's ability to generate product innovations. We combine data from a large-scale data set on innovation activities and performance of more than 5,000 Colombian manufacturing firms (Encuesta de Desarrollo e Innovación Tecnológica – EDIT) with data on active memberships in civil associations at the regional level (Barometro de Capital Social – BARCAS). Based on the fact that the firms are embedded in regions, we employ a multi-level regression analysis in order to account for the hierarchical structure of the data. We find no empirical evidence of a direct effect of civic engagement on the firms' innovation performance. Relying on the differentiation between Olson- and Putnam-type civil associations, however, we observe that the effectiveness for relying on external information sources is contingent upon the region's civic engagement. We find empirical evidence that firms which do not rely on external information sources benefit to a greater extent being located in regions with a high degree of memberships in Putnam-type organizations, hinting at a potential substitution effect between bridging networks at the regional and the firm-level. At the same time, the negative effect of bonding civil associations is larger for firms which rely on external information sources, hinting at a potential lock-in effect. Our research provides important insights for future research: external information can be obtained at different level (e.g. firm and region) and these effects should simultaneously be considered.

**Keywords:** Social capital; Civil Associations; Innovation; Multi-level regression; External Information Sources