Transparency in Local Governments: A Two-Stage Empirical Investigation using Fuzzy Metrics and Spatial Econometrics

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Abstract

Transparency is a vital aspect of good governance that ensures accountability, integrity, and citizen participation. However, its measurement remains a challenge due to the ambiguous nature of human language. Traditional approaches rely on binary or categorical variables to measure transparency, which can lead to limited insights and inaccurate policy decisions. To overcome this challenge, we develop a transparency indicator based on fuzzy metrics. The transparency notion is contrary to the binary principle of having a property or not having it, that is, to be transparent or not. In our case, we apply a novel methodology designed for formative measurement and partially compensatory models using a set of qualitative indicators. This tool provide a measure of how close (observations close to 1) or far (observations close to 0) each observation is from the analyzed concept. This is calculated for each indicator preserving the metric structure. In this setting, this approach captures the complexity of transparency and can better identify areas for improvement in local governments. In a second step, we analyze the political, economic, and social determinants of this transparency index, relying on spatial econometric techniques to account for spatial dependencies and ensure the accuracy of our findings. In this work, we use a novel dataset that comprehensively measures transparency at the municipal level in the Valencian region. As far as we know, this is the first database that covers all municipalities in the region. By capturing the complexity of transparency, our approach can better identify areas for improvement and lead to more effective policy interventions. We argue that traditional approaches that rely on binary or categorical variables may oversimplify the concept, resulting in inadequate policy solutions that fail to address the real challenges faced by local governments.