

ANALYSIS OF AREA DATA APPLIED TO TWO ECONOMIC INDICATORS OF MESOREGIONS IN MINAS GERAIS STATE

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- **ABSTRACT:** *The current work aimed to analyze the spatial distribution of gross domestic product index (GDPI) and the agricultural added value index (ADVI) on the mesoregion metropolitan area of Belo Horizonte (MABH) and South/Southeast Minas areas (SSMA), in Minas Gerais State, in 2004, looking for comprehending the dependence or similarity amongst the municipalities within these regions through those indexes. This understanding may become an important tool for decision making in implanting public policies for regional development. Therefore, the area data techniques was used, detaching the local mobile mean, the global Moran index, the local Moran index, Moran scatterplot and maps (Box Map and Moran Map); as well from the GDPI and ADVI database, produced through Ecological and Economical Zoning of Minas Gerais State, referring to 2004 year, and the softwares GeoDa and TerraView. The results regarding to spatial pattern by the local mobile mean, on both GDPI and ADVI studies, permitted to heed spatial clusters of municipalities for both studied regions, i.e., MABH and SSMA. Also, they brought benefits in reducing the sample variance for the two variables in both regions. The results concerning to the study of GDPI and ADVI variables for the MABH region presented a positive autocorrelation overall, according to Moran global and random permutation test, pointing there are likeness among the municipalities composing this region. It was evidenced also, positive spatial autocorrelation by Moran local index and Moran Map, again showing similarities among the municipalities. Concerning the study of GDPI and ADVI variables for the SSMA region, it has shown positive spatial autocorrelation overall, by both Moran global and random permutation test, suggesting there are resemblance among the municipalities within this region. It was verified spatial autocorrelation in local extension, by Moran local index and Moran Map, again showing similitude among the municipalities.*
- **KEYWORDS:** *Area data; spacial distribution; autocorrelation; dependence.*

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