Inequality in per capita water availability: a Theil’s second measure approach

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Received 5 October 2014; Accepted 16 November 2014

ABSTRACT

This paper puts forward the application of Theil’s second measure in order to investigate international per capita water availability disparities. This index permits disparities to be disintegrated within and between groups of countries in a reliable way. An analysis of 188 countries for the period of 1990–2012 demonstrated three observations: first, decline in per capita water availability disparities is characterized by both within-group and between-group inequality elements; second, between-group inequalities are at present the key contributors of the entire inequality scenario; and third, a comprehensive investigation on within-group inequalities divulges the noteworthy explanatory role played by Middle East countries toward increase in inequalities and countries pertaining to North America and Asia and Oceania toward decline in inequalities.

Keywords: Water availability; Theil index, inequality; Decomposition analysis

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Presented at the International Conference on Business, Economics, Energy and Environmental Sciences (ICBEEES) 19–21 September 2014, Kuala Lumpur, Malaysia

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