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TITLE: SIMSIP SAM: A TOOL TO ANALYZE IOS AND SAMS

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ABSTRACT:

SimSIP SAM is a powerful and easy to use Microsoft® Excel based application with MATLAB® running in the background that can be used to analyze input-output tables (IO) and Social Accounting Matrices (SAM). It was developed at The World Bank, and it is distributed free of charge, together with the necessary MATLAB components. The application can be used to perform various types of analysis and decompositions, and to obtain detailed and graphical results for experiments. The application allows the user to aggregate an existing SAM, to check if the matrix is balanced, and in case it is not, it offers two balancing algorithms: RAS, and stochastic cross-entropy with constraints. In just a few seconds the user can compute the Leontief inverse matrix together with an additive decomposition of the multipliers in transfer, open-loop, and closed-loop effects; three types of linkages, with a graph to identify the key sectors; the multiplier product matrix with an additive decomposition and a graph called economic landscape representing the ranking of forward and backward linkages; the income redistribution matrix with an additive decomposition that describes how the income is redistributed in the economy as a result of an exogenous demand shock; structural path analysis with up to 11 nodes; supply constraints can be imposed to simulate sectors either with no or relatively small excess capacity; trade multipliers (export and import dependence); price model simulations; some tools for structural change (fields of influence, and comparison of economic landscapes) and poverty analysis (poverty impacts of shocks and decomposition of the changes in poverty, as well as changes in income distribution).