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Title : PROJECTING INPUT-OUTPUT TABLE FOR MALAYSIA

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Input-output tables provide detailed accounts of the flow of production and consumption of goods and services from producers to consumers. It serves as a dataset for input-output analysis which provide the tools to perform economic modelling. The construction of the input-output tables based on detailed census or surveys is a complex procedure that requires substantial financial expenditures, large human capital and time. This is the main reason why Malaysia Input-Output Table (MIOT) is produced and published on average every five years. However, for policy makers, the time lag that reflects data from much earlier years is not appropriate to be used for planning and formulating economic policies. Hence, the availability of timely and updated input-output tables is critical for effective assessment of the contribution of industries to the economy. Therefore, projecting input-output table for Malaysia is important as it can provide the latest information for policy makers in national development and budget allocation. The aim of this study is to compare two projection methods for projecting input-output tables for Malaysia. The data for the study are Gross Domestic Product and MIOT for 2000, 2005 and 2010. This study involved three phases. In the first phase of the study, two projection methods, the RAS and EURO method were used to project the MIOT 2005 and MIOT 2010

using the actual MIOT 2000 and MIOT 2005 respectively. The RAS is a bivariate method while the EURO is a stochastic method. The projection of input-output tables involved an intensive iterative procedure using MS-Excel Visual Basic programming. In the second phase of the study, the projection performance of RAS and EURO methods were assessed based on statistical measures and input-output analysis. The three error measures are Mean Absolute Deviation (MAD), Root Mean Squared Error (RMSE) and Dissimilarity Index (DI). The input-output analyses are based on the forward and backward linkages using Rasmussen and Hypothetical Extraction Method (HEM). The projected MIOT 2005 and MIOT 2010 were compared with the actual MIOT 2005 and MIOT 2010. The actual MIOT is considered as "benchmark". The deviation of the forward and backward indices between the actual and the projected MIOT is calculated. The results show that EURO performs better than the RAS method in projection of MIOT. In the last phase, the EURO method was used to project MIOT 2015 and linkages and key sectors were then identified. The Transport & Communication and the Finance & Insurance sectors were identified as a key sector of the Malaysian economy in 2015.