Development of Manpower Projection and Assessment Tool (MPAST) for Labor Market Projection in Malaysia, 2021-2030

Topic: Computable General Equilibrium Modeling and Social Accounting Matrices II (Chair: Mun S. Ho, Harvard University) Author: Mohd Alzaiery Abdul Co-Authors: Chakrin UTIT, M. Yusof SAARI, Muhammad Daaniyall Abd Rahman

Equipping the labour force with the right skills is one of the policy focuses of any country to support sustainable and inclusive growth. The fact that determination of the future skill surplus and shortage is important for a well-informed and evidence-based policy responses that involve multidimensional interventions such as education and training, international migration and economic sectoral interventions. In the absence of an appropriate analytical tool, it is a great challenge for the policy makers to formulate short- and medium-term planning exercise in a systematic and cohesive manner, thus affecting the quality of policies and strategies to attain socio-economic objective of the country. This paper develops a Manpower Projection and Assessment Tool (MPAST) with the aims to forecast medium- and long-term demand and supply of labors in Malaysia. Essentially, MPAST involves three forecasting components namely labor supply, labor demand and labor market balance (differences between labor demand and supply). MPAST is an Excel-based that applies computable general equilibrium and input-output models as core computational "engine―. Because of MPAST involves large structural linkages, various datasets are applied, including macro aggregated and micro data from surveys. The baseline results find that the high-skilled occupations remain the category that projected to have labor surplus while both semi- and low-skilled occupations associate with the labor shortage. The results call for considerable policy interventions to change the economic structure through technological change and upgrading.