Lessons and tools for economic recovery and employment creation from Indonesia

In 2009 Indonesia formulated a Fiscal Stimulus Package worth IDR 73.2 trillion (1.4 per cent of GDP), which included tax cuts, tax subsidies and a substantial increase in infrastructure investment to respond to the Global Financial and Economic Crisis. At this time it was also important for the Government to strengthen policy advisory capacities for analyzing the impact and effectiveness of government investments, such as those associated with the Fiscal Stimulus. The SAMASAMA Project is a joint initiative of the Coordinating Ministry for Economic Affairs and the International Labour Organization that supports this objective and has developed and provided training on a tool called ***Dynamic Social Accounting Matrix (DySAM)***, which can be used to understand how to stimulate sustained economic activity and invigorate job creation.

Analysis from the dynamic model shows that Government stimulus efforts had positive impacts on the economy ….

Findings from applying the model to analyze the fiscal stimulus indicate that overall all the fiscal stimulus instruments had a positive impact on Indonesian macroeconomic indicators, namely sectoral output, labour income, household income and employment by location and gender. The impact of the fiscal stimulus policy was highest for the agricultural sectors, with the stimulus increasing output by approximately 1.4 per cent in each of those sectors. Output from the manufacturing, construction and trade sectors also increased by approximately one per cent due to stimulus efforts. The model estimates that t***he fiscal stimulus created at least 1.2 million new jobs in 2009.*** The fiscal stimulus supported job creation among vulnerable groups, including those in rural areas and the informal sector.

…. this had important multiplier effects for stimulating job creation.

A representative from the Bank of Indonesia remarked that by including up-to-date information, the DySAM model optimizes the use of available data sets. Bappenas observed that the model would be useful for evaluating government strategies and identify areas for public spending in order to effectively increase employment, productivity and reduce poverty. Representatives of the Ministry of Manpower and Transmigration highlighted the importance of the model's employment satellite account, which allow policy makers to directly link simulations with economic and employment outcomes. Statistics Indonesia noted the importance of consistent time series data and how dynamic SAM is a tool that can assist with this.

To strengthen the model further, additional information could be included on the financial sector and disaggregate data by region. Building the capacity of policy analyst for applying the model and analyzing its output was emphasized, as was strengthening policy dialogue on modeling and policy formulation.

Why a dynamic SAM?

A social accounting matrix records all economic transactions between household, enterprises and the Government, therefore providing a framework for documenting and analyzing the socio-economic structure of an economy. It brings together - among others- information on inputs and outputs for production, household consumption, Government subsidies for production and institutions, workers' remittances, exports and imports. A SAM has the strength of explaining the interaction and transmission channels between macro variables, such as external shocks and public policies through a multi-sectoral analysis that includes employment and income distribution considerations.

A SAM usually covers one year of data, which means that it is static and reflects the past. It also implies conditions of fix coefficients and no agent behavior. While the static SAM gives a snapshot of the economy during one year, the dynamic SAM shows the consistent evolution of the economic structure over time and relaxes above-mentioned conditions.

DySAM has been used in combination the SMART Model (a partial equilibrium trade simulation model) to estimate the ***employment impact of a free trade agreement between Indonesia and China***. The findings indicate that overall a free trade agreement would have a positive impact in Indonesia. More jobs are created than lost, but most gains would be in sectors with low productivity and high labour intensity, such as agriculture. Job losses would occur through imports in textile, affecting mostly young workers and female workers.