

Assessing the Impact of COVID-19 Pandemic on Regional Economy with Supply-Driven Interregional Input-Output (IRIO) Approach: The Case of East Java Province

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ABSTRACT

The COVID-19 pandemic mitigation measures have led to supply and demand-side labor shock. By employing the Supply-Driven Interregional Input-Output (IRIO) approach, we estimate the impact of that labor shock on the regional economy. The model is based on the 2020 Indonesian IRIO Table, the updated version of the 2016 IRIO Table with RAS procedures. Referring to our estimation, the labor shock in East Java Province has reduced the output, value-added, and employment in East Java Province by 97 trillion rupiahs, 49.41 trillion rupiahs, and 532.066 labor, respectively. The shock also impacted the regional economic variables in other provinces due to sectoral and regional interrelationships among them. In aggregate, our simulation shows the shock in East Java has reduced national output by 130.02 trillion rupiahs, shrunk the national value-added by 66.37 trillion rupiahs, and forced the 646.999 workers out of jobs.

Keywords: Labor Shock, COVID-19, Supply-Driven IRIO

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