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Measuring Output Multipliers of Energy Consumption and Manufacturing Sectors in Malaysia during the Global Financial Crisis

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Abstract : The strong relationship between energy consumption and economic growth is widely recognised. Most countries' energy demand declined during the economic depression known as the Global Financial Crisis (GFC) of 2008–2009. The objective of the current study is to investigate the energy consumption and performance of Malaysia's manufacturing sectors during the GFC. We applied the output multiplier approach, which is based on the input-output model. Two input-output tables of Malaysia covering 2005 and 2010 were used. The results indicate significant changes in the output multipliers of the manufacturing sectors between 2005 and 2010. Moreover, the energy-to-manufacturing sectors' output multipliers also decreased during the GFC due to a decline in export-oriented industries during the crisis. The increasing importance of the manufacturing sector to the development of Malaysian trade resulted in a noticeable decrease in the consumption of each energy sector's output, especially the electricity and gas sector. Based on the research findings, the Malaysian government released several policy implementations in the form of stimulus packages to enhance these sectors' performance and generally improve the Malaysian economy.

Keywords: global financial crisis, input-output model, manufacturing, output multipliers, energy, Malaysia

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