

ABSTRACT

The growth of Muslim population in the world is directly proportional to the growth of the halal global market size, especially for halal food. Indonesia is a country with the largest Muslim population in the world, and the consumptive level of Indonesia's population in the culinary sector is very high. This is in line with the request of the Indonesian president to develop the Islamic economy. In accordance with the Indonesian Sharia economic masterplan 2019-2024, the government will implement halal food supply chains on food MSMEs in Indonesia, the government finance department is having difficulties and wants to know the effect of halal food supply chains on MSMEs, implementing halal food supply chains requires large costs and risks not yet known, and therefore must be simulated before the implementation of the policy in the real world. The system is difficult to model with a mathematical model because it has actors and diversity of behavior, so agent-based simulation is the right simulation approach because it can accommodate the nature or behavior of each agent. The results obtained are the average level of consumption rate fulfillment before and after the implementation of halal policy, each with a value of 0.1512 and 0.1468, with the paired-t test concluded that the halal policy does not affect the level of consumption rate fulfillment at food MSMEs in the Bandung area.

Keywords: *agent based simulation model, halal food supply chain, MSMEs, consumption rate*