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Assessing the Influence of Energy Consumption and Islamic Financial Development on Indonesia's Economy with Dynamic ARDL Simulations Approach

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Abstrac

The purpose of this study is to evaluate the contribution of energy consumption and Islamic financial development to economic growth in the case of Indonesia. The macroeconomy variable namely gross fixed capital formation also involved in the model as control variables considering its significant contribution to economic growth continuously. The monthly data of economic growth, as dependent variable, represented by industrial price indicator. As independent variables, the data of energy consumption denoted by the amount of primary energy consumption while the data of financial development reflected by Islamic Banking financing consists of the amount of mudharabah and musyarakah financing. Moreover, the variable gross capital formation is chosen as the control variables with consideration that the variable constantly has significance contribution to economic growth and cannot be ignored. An interpolation technique performed for variable with annual range and to equalize all data to be monthly. The method of ARDL and ECM chosen as the suitable method to reach the objectives. The result concludes that energy consumption and Islamic financial development has positive contribution to Indonesia's economic growth. The cointegration exist which means there is a long-run relationship between the variables. Energy consumption and the growth of Islamic finance, as illustrated by musyarakah financing, have a long-term impact on Indonesia's economic growth. The error correction mechanism also found which reflects that there is a mechanism of adjustment when shock happen. This paper presents the latest empirical evidence of the contribution of energy consumption and Islamic financial development to economic growth in the case of Indonesia. The variable of Islamic financial development is breakdown become mudharabah and musyarakah to get deeper analysis. In addition, the involving of capital formation as control variables never been done by previous studies. To the best author's knowledge, the study that discuss this issue is limited especially in the case of Indonesia which use disaggregate Islamic financial development as well as involving capital formation as the control variables for the case study of Indonesia. © 2025, Econjournals. All rights reserved.

Author Keywords

ARDL; Capital Formation; Economic Growth; Energy Consumption; Indonesia; Islamic Financial Development

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