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The Impact of Economic Complexity on Inflation in the Selected Countries of Organization of Islamic Cooperation

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EXTENDED ABSTRACT

INTRODUCTION

high inflation rate is an important economic problem in developing countriesincluding Iran, which, despite its long history of analysis, is still under discussion and is one of the main concerns of politicians and economists. According to the available evidence, inflation has adverse effects on society and economists believe that the costs that inflation imposes on society can be much more serious than the costs of slowing the economic growth. Considering the negative effects of inflation, the effective factors of creating and intensifying inflation have been studied in different schools. In this regard, according to the theoretical issues, inflation has three main sources of 1) increasing demand, 2) cost pressure and 3) structural bottlenecks. One of the most important policies to reduce inflation is to increase the product's supply and growth. In this regard, economic complexity can lead to the formation of oversupply and ultimately reduce inflation in the economy through increasing the capacity of production and diversifying the complex products' production. According to the latest ranking of the Economic Complexity Index reported in 2018 by Harvard University for 133 countries, there is a significant difference between developed and developing countries.

METHODOLOGY

The purpose of this study is to investigate the effect of economic complexity on inflation in OIC member countries based on the inter-country approach during the period 1995-2018. The required information was obtained from the World Bank and the Atlas of World Economic Complexity. The

geographical scope of this study is thirty selected member countries of the Islamic Cooperation Organization, which have been selected due to the statistical limitations of similar data and historical evidence.

Specifying research model
According to the theoretical foundations and experimental studies, the model specified in this study was specified as follows:

$$INF\_it = C + \beta\_1 * INF\_(it-1) + \beta\_2 * (M2gr\_it - GDPgr\_it) \\ + \beta\_3 * NAT\_it + \beta\_4 * ECI\_it + \varepsilon\_it$$

In this model i: country, t: time, C: the width of the origin and β: the coefficients of the explanatory variables (slope coefficients). (INF): Inflation Rate. (INF_{-1}): Inflation of the previous period. ($M2_{gr}$): growth of liquidity. (GDP_{gr}): growth of gross domestic production. (NAT): abundance of the natural resources. (ECI): Index of economic complexity.
The GMM model is selected to estimate this research.

FINDINGS
According to the results of this study, the impact of economic factors on inflation in selected countries was estimated. The coefficient of the main variable of the stipulated model, ie the ECI economic complexity index, is negative and statistically significant at the 5% level. Other explanatory variables of the model, which were significant at the 5% level and all had a positive effect on inflation, are expected inflation, difference between the growth of liquidity and the economic growth and abundance of natural resources.

CONCLUSION
The results of the analysis of the model findings showed that the hypothesis of reducing inflation through economic complexity is established in selected Islamic countries. It was also found that with increasing expected inflation, the difference between the growth rate of liquidity and economic growth and natural wealth, inflation increases. Thus, the results of model estimation show that the estimated coefficients of all variables are signally compatible with theoretical foundations. Therefore it is suggested:
Policymakers and economic decision-makers should consider research on the indicators of complexity and product space, And adopt the necessary policies and measures to pave the way for higher-tech technological products with the aim of diversifying the competitive products of Islamic countries. Of course,

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it is necessary to first identify the technological capabilities of countries in this direction.

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