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Structural Changes, Fundamentals, and Typology of Economic Growth Pattern in Iran: An ARDL Approach

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EXTENDED ABSTRACT

INTRODUCTION

The strategy for successful growth in countries is based on a dual effort: stimulating growth (short-term strategy) and maintaining it (medium to long-term strategy). Stimulating and accelerating economic growth in the short term requires only a few reforms that do not put much pressure on the institutional capacity of the economy. However, in the long term, sustaining economic growth becomes more challenging and requires a smart combination of structural changes and improvements in fundamentals. Iran's historical experience shows that due to the presence of oil and its impact, the economic performance has been somewhat successful in terms of growth in some periods; however, in the medium and long term, it has failed to sustain and stabilize economic growth. Examining the two factors of structural changes and fundamentals in a historical process helps identify their role in shaping the pattern of economic growth. The importance of conducting innovative research lies in determining whether the structural changes in Iran's economy have been a driving force for economic growth. Additionally, what changes have occurred in institutions and human capital alongside the structural changes in the country, and have they contributed to economic

growth? This research combines the neoclassical and dual economy models to analyze Iran's economic growth under the two factors of institutional capacities and structural changes.

METHODOLOGY

In this study, the Autoregressive Distributed Lag (ARDL) model with distributional lags has been used to depict the pattern of economic growth in Iran during the years 1970-2019. The necessary data has been extracted from the Central Bank of the Islamic Republic of Iran, the World Bank, the Statistical Database of the Federal Reserve System, and the Fraser Institute's Economic Freedom Index. Accordingly, the variables used in the econometric model under investigation are as follows:

$$Y = f(FDI, HC, SC, INS)$$

In the above model, Y represents Gross Domestic Product (GDP), FDI stands for Foreign Direct Investment, HC represents Human Capital, SC represents Structural Changes, and INS stands for Institutional Index. In the empirical model, the logarithmic form of variables has been considered as follows:

$$LGDP_t = \alpha_1 + \beta_0 LFDI_t + +\beta_1 LHC_t + \beta_2 LINS_t + \beta_3 LSC_t + \varepsilon_t$$

Here, ε_t represents the error term of the model, which follows classical assumptions.

FINDINGS

According to the results of the model estimation, the behavior of FDI in the Iranian economy does not show a significant correlation with economic growth in the short and long term, which may be due to the structure of the Iranian economy, where foreign investments are not directed towards the country's relative advantages. In the long term, human capital and institutional indices have a positive and significant effect on GDP. In the short term, the institutional index has no significant effect on GDP, indicating that short-term economic growth requires limited reforms that do not put much pressure on the economic institutional capacity. Human capital is a complement to physical capital and a significant share of economic growth in countries

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comes from the development of human capital. The results of the model estimation show that the average growth of years of education and literacy has a positive impact on GDP growth. The coefficient of human capital in the long-term estimate is larger than in the short-term estimate. This is because, in the early stages of economic growth, attention to physical capital is a priority. However, in the long term, attention must be paid to human capital for the continuity and sustainability of the economic growth path. Finally, the effect of structural changes on GDP growth is also positive and significant. Therefore, alongside traditional growth determinants, structural changes also contribute to increasing economic growth.

CONCLUSION

The results of the study show that in the Iranian economy, if structural changes, human capital, and institutional indices grow by 1%, GDP will increase by 2%, 1.06%, and 0.86%, respectively, and the role of structural changes is more prominent than other factors. Additionally, the movements of structural changes in Iran are fluctuating. From the set of these factors, it can be inferred that in terms of structural changes and fundamentals, economic growth in Iran has experienced an uneven and diverse pattern.

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