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Investigating the Effects of Government Fiscal Policies on Iran's Economy: by Method the Computable General Equilibrium Model

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EXTENDED ABSTRACT

In this study, the effects of government financial policies on various sectors of Iran's economy under sanctions were analyzed using the Computable General Equilibrium (CGE) model approach. The parameters of the model were calibrated based on the Social Accounting Matrix (SAM), which was constructed from input-output tables for the year 1390 (2011-2012). The SAM comprised four sectors: agriculture, industry and mining, transportation, and services. The analysis was carried out under three scenarios: a 25% increase in government consumption expenditures, a 25% decrease in government consumption expenditures, and a 25% increase in government capital expenditures.The results of the first scenario indicated that an increase in government consumption expenditures led to a reduction in agricultural and transportation exports, while exports in other sectors grew. Additionally, the value-added across all sectors increased. Exports in the industrial sector saw a rise of 43.6%, and its imports increased by 4.6%. However, investment in the industrial and agricultural sectors decreased by 33.2% and 8.03%, respectively, whereas transportation and services experienced growth in investment. In the second scenario, where government consumption expenditures were reduced by 25%, the industrial sector's exports increased by 10.27%, and imports decreased by 6.62%. Overall, exports from all sectors rose while imports fell. The third scenario, which involved a 25% increase in government capital expenditures, showed that exports in all sectors grew, with the industrial sector recording the highest growth at 8.90%. The value-added in all sectors increased, with the industrial sector demonstrating the largest rise at 18.53%. Investments in the industrial

sector grew by 13.80%, while its production and employment expanded by 7.86% and 7.65%, respectively.Based on the findings, the study recommends that the government prioritize policies that enhance capital expenditures. It concludes that expansionary fiscal policies positively impact economic sectors. Moreover, economic policies aimed at boosting aggregate demand, alongside fiscal strategies, can further contribute to economic growth.

INTRODUCTION

The industrial sector, in the light of strong previous and previous connections with other sectors, plays an important role in the production and productivity of other economic sectors. On the one hand, the industry and mining sector uses the products of other sectors as intermediate inputs, and the growth of this sector's production will help the growth of those sectors' production. On the other hand, it produces intermediate goods and capital needed by other sectors, which in this way may also contribute to the growth of their production and productivity.

In this study, the effects of the government's financial policies on the sectors of Iran's economy in the conditions of sanctions have been investigated with the approach of the Computable General Equilibrium (CGE) model.

METHODOLOGY

In this research, the parameters of the general balance model were calibrated based on the data of the economic accounts matrix and the information of the data-output tables of 2013 was used in the form of the social accounting matrix (SAM). This matrix consists of 4 sectors (fields of activity) agriculture, industry and mining, transportation and services. The analysis of the effect of the government's financial policies has been carried out under three scenarios: a 25% increase in government consumption expenditures, a 25% decrease in government consumption expenditures, and a 25% increase in government investment (capital expenditures).

FINDINGS

The results (scenario 1) showed that with the increase in the consumption expenditure of the government, the export of the agricultural and transportation sectors decreased and other sectors increased. Also, the added value of all sectors has increased. The export of the industry sector shows an increase of 43.6% and the import of this sector has increased by 6.4%. Investments in the two sectors of industry and agriculture decreased by 2.33 and 8.03 percent, respectively, and the two sectors of transportation and

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services witnessed an increase in investment. The results showed that with a 25% reduction in government spending (second scenario), the export of the industry sector increased by 10.27% and the import of the industry sector decreased by 6.62%. In total, exports of all sectors have increased and imports have decreased. Also, the results showed that in the third scenario, the export of all sectors has increased, the share of industry shows an increase of 90.8%, and this increase is more than other sectors, and the added value of all sectors has increased. The increase in added value for the industry sector is 18.53%, which is more than other sectors. The investment of the industry sector shows an increase of 13.80%, and production and employment show an increase of 7.86% and 7.65%, respectively.

CONCLUSION

The variables of government expenditures in Iran are generally in the form of current expenditures, and this factor increases and ultimately increases economic growth. The tax revenue variable has a direct relationship with the real production without oil, in other words, the more the tax revenue of the government increases due to the improvement of income distribution and also the reduction of dependence on oil revenues, it will ultimately lead to economic growth. According to the results, it is suggested that the government implements the policy of increasing capital expenditure in policy making. The research results show the positive effect of the government's expansionary financial policies on economic sectors. Therefore, it can be said that those economic policies that increase the total demand can also provide economic growth along with these policies.

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