A SURVEY ABOUT EXPORT IN IRAN

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ABSTRACT

Nowadays, one of the key factors to develop in each country is export. The paper illustrates the relationship between gross domestic product and export in Iran, during 1982 to 2011. In fact, to determine this relationship is the major purpose of study. This paper explains how the gross domestic product, GDP, and consumption, CONS, effect on the export through customs in Iran. The linear function applies to explain the relationship between variables. It uses Eviews8 and SPSS software by the OLS method. The research uses the annual time series data that has got from Iranian Central Bank and Statistics Center. The results of the indicate show there is a statistically significant and positive relationship between export and gross domestic product, GDP, in Iran during the period 1982 to 2011. The coefficient for this relationship is 0.072. So, it states that when gross domestic product goes up one monetary unit, the export through customs goes up 0.072. The study does not show a statistically significant relationship between export and consumption, CONS, in Iran at that period.

Keywords: Gross National Product, Foreign Trade, Customs and Iran

INTRODUCTION

Export promotion is one of important factors to gain economic development. Due to the importance of reducing dependence on foreign currency earnings from oil exports, in Iran, it is important non-oil export for reducing dependence.

So, it is necessary to investigate the relationship among exports through customs and effective factors. One of the most important factors is GDP which the study examines it.

In order to reduce the Iranian economy on oil revenues, the government tries to increase the export through customs.

It also tries to provide the required structures for competing of Iranian goods and services with other countries (Jalali and Sameni-Keivani, 2013; Sameni-Keivani et al., 2014; Sameni-Keivani et al., 2014; Sameni-Keivani et al., 2013; Sameni-Keivani et al., 2014; Soltani et al., 1998).

There are several studies about export in Iran and the other countries. For examples, some of them are as follows:

In one of study estimated the impact of freedom of trades on efficiency of export in some of developing selected countries.

The results of that study showed there is a significant relationship between freedom of trades and efficiency of export in the countries (Santos-Paulino and Thirlwall, 2004).

Another study reviewed diversification of non-oil export in the conditions of international sanctions on Iranian economy.

That survey examined changes in the exports diversification when the international sanctions have been greater than before against Iran covering data during from 2004 to 2012.

The results showed that diversification of export has a declining and increasing trend for two steps of sanctions, before and new sanctions, respectively (Nematollahi & Garshasbi, 2014).

The ratio of export due to GDP through customs 1982- 2011mis shown in the following histogram (www.amar.org.ir; www.cbi.ir).
According to the figure, the ratio of export due to GDP through customs has gone up in Iran for the period of survey.

The following figure shows the ratio of import due to GDP through customs in Iran’s economy.

As the above graph, the import through customs has not a constant trend from the beginning of the study but it has increased in Iran from 2000.

The following graph shows the trend of import and export through customs, simultaneously (www.amar.org.ir; www.cbi.ir).

The red and blue graphs show the import and export through customs, respectively.
The following figure is shown growth rate of import and export for Iranian economy covering the data of study.

As we can see in the figure, the growth rates of these two variables, import and export, are always positive from 2001 (Razaghi, 2014; Rezvani & Dabiri, 2014).

Due to the export for development of country, the major aim of this paper is to determine the relationship between export through custom and gross domestic product (GDP) in Iran. Finding this relationship assists the Iranian decision makers to make the best decision in the international trade.

The basic hypothesis in this survey is as follows:
There is a statistically significant and positive relationship between export and gross domestic product, GDP, in Iran during the period 1982 to 2011.
MATERIALS AND METHODS
First, the survey used library method to know the similar literature to export and review the previous studies. To achieve this aim applied so many books, papers, electronic books and papers. The necessary data which is using in the study obtained from statistical data of Central Bank of Iran and Iranian Economic Literature & Data Bank (IELDB). To find the relationship between the variables of this study is using the linear function which is estimated via SPSS and Eiews8 Software. The ordinary least squares way (OLS) is applied to determine the function. It is a method to estimate a linear regression model for the unidentified parameters. In this way is minimizing the sum of distances of squared vertical between results predicted by the linear estimation and the observed responses in a set of data. The linear regression model estimates the relationship between exports through customs and gross domestic product at the constant prices in Iran. After determining the function, the significant of it is tested via appropriate statistical tests (Jouzbarkand et al., 2013; Safabakhsh-Ghasemi et al., 2013; Sameni-Keivani et al., 2013; Sameni-Keivani et al., 2014; Sameni-Keivani and Khalili-Sourkouhi, 2014).

The survey uses the following model to investigate the relationship between export and GDP in Iran during the period of study:

\[ \text{EX} = \alpha_1 + \alpha_2 \text{GDP} + \alpha_3 \text{CONS} \]

Where

- \( \text{EX} \) = export through Customs
- \( \text{GDP} \) = gross domestic product
- \( \text{CONS} \) = Private consumption in Iran

The statistical population of the study is Iranian economy. The data are a set of time series which are limited between 1982-2011.

RESULTS AND DISCUSSION
The relationship between two variables such as GDP and export is determined by a linear function using OLS method. The coefficients for variables are shown in the following table:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-11514.18</td>
<td>1503.615</td>
<td>-7.657666</td>
<td>0.0000</td>
</tr>
<tr>
<td>GDP</td>
<td>0.071551</td>
<td>0.028423</td>
<td>2.517392</td>
<td>0.0181</td>
</tr>
<tr>
<td>CONS</td>
<td>-0.029254</td>
<td>0.051480</td>
<td>-0.568249</td>
<td>0.5746</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.844611</td>
<td>Mean dependent var</td>
<td>5601.303</td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.833101</td>
<td>S.D. dependent var</td>
<td>6789.154</td>
<td></td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>2773.595</td>
<td>Akaike info criterion</td>
<td>18.78832</td>
<td></td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>2.08E+08</td>
<td>Schwarz criterion</td>
<td>18.92844</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-278.8247</td>
<td>Hannan-Quinn criter.</td>
<td>18.83314</td>
<td></td>
</tr>
<tr>
<td>F-statistic</td>
<td>73.37871</td>
<td>Durbin-Watson stat</td>
<td>0.212198</td>
<td></td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>0.000000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Research Article

The following model can be written for this study:

\[ EX = -11514.1846036 + 0.0715509058359 \times GDP - 0.029253507626 \times CONS \]

The paper results demonstrate, based on this model, the coefficient of independent variable, gross domestic product, is 0.072. So, it states that when gross domestic product goes up one monetary unit, the export through custom goes up 0.072. The variables coefficients are statistically significant. It can be explained using the ANOVA test, p-value and other tests. The following table shows the result of ANOVA test for this study. The research does not show a statistically significant relationship between export and consumption, CONS, in Iran at that period.

Table 2: ANOVA*

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1128979381.414</td>
<td>2</td>
<td>564489690.707</td>
<td>73.379</td>
<td>.000*</td>
</tr>
<tr>
<td>Residual</td>
<td>207706319.830</td>
<td>27</td>
<td>7692826.660</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1336685701.245</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: EX  
b. Predictors: (Constant), CONS, GDP

The p-value in ANOVA test is zero. Hence, the correlation is significant between the export through the custom and the gross domestic product, GDP; also the t-test approves it. R-Square for this study is 84.5% which shows the contribution of the gross domestic product on export through custom in Iran is 84.5%. The closeness of R-squared and adjusted R-squared displays the Goodness of fit of data. So, the hypothesis is accepted means that, there is a statistically significant and positive relationship between export and gross domestic product, GDP, in Iran during the period 1982 to 2011. But it does not show a statistically significant relationship between export and consumption, CONS.

Conclusion

A linear model using time series data for Iran’s economy covering data from 1982 to 2011 helps the study to determine the impact of GDP on export. The study investigates changes in the gross domestic product how much effect on export through custom in Iran.

The increasing gross domestic product causes to go up the export through custom as the results of this survey show that.

REFERENCES


www.amar.org.ir.

www.cbi.ir.