The evaluation of the impact of income tax on the financial status indicator (current payments and payments for development)

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Abstract: The main objective of this study is the relationship between taxes on the financial status indicator (current payments and payments for Development) in the Islamic Republic of Iran between 1971-2006. In the present study, the hypothesis such as advanced statistical methods like linear regression, VAR, and ECM methods were used. To ensure the reliability of the stationary time series variables, the desired conclusion for this purpose this unit root tests of Dickey-Fuller and Phillips Peron generalized has been used. To determine the option lag length for the model, Schwarz Bayesian Criterion (SBC) have been used and the length of intervals in rows 2 and number 71.71521* were obtained. The results of the R-square analysis showed that the amount of state tax revenue indicators of financial position (current payments and payments of development) there is a positive correlation.

Key words: Taxation; Economic growth; Economic development; Is GDP growth

1. Introduction

Fiscal policy is the most important solutions to this problem that can restore or create favorable conditions to come to the aid of those involved in the economy. The relationship between income distributions of cases that should be emphasized. The income gap filling aspects of social justice, it seems necessary. The distribution of income and resource taxes as important tools for governments is to achieve economic and social goals. On the other hand, as an instrument of state control of the economy are taxes and state taxes can be used as an instrument of economic policy. (Mousavi and Kazemi, 2011). Definition of taxes: VAT is a payment of the purpose payments public spending and fiscal policies in order to maintain economic resources, social and political country under the laws of the State of receipt by the executive administrative levers. Some tax amount know that the persons, companies and institutions, to strengthen the rule of law and that the public costs obtain (Mousavi and Kazemi, 1390). However, for the purpose of financing the costs they require resources, these resources mainly from sales taxes and government services (Joseph, 2005).

Definition of GDP: is the sum of the final value of the change in "gross national product". All goods and services during the fiscal year is the realization of a society’s economic performance. Economic development is “dynamic” process which is essential to economic growth. Although economic growth is a necessary condition but its sufficient condition for economic development is necessary and dynamic transformation and changes between all the constituent and elements of an economic system that promotion and Gross National Product is include the sum value of all final goods and services during a fiscal year is the realization of a society’s economic performance (Marofi, 2011). Incredibly, taxes and tax system have significant influence on trend of country development. We can say that tax administration (a form of revenue for our government) and the equitable distribution of income among individuals will lead the country towards economic development. (Marofi, 2011). Tax calculated based on the notion of program income and national wealth, greater fiscal policy as a tool to balance the macroeconomic level, the finds, in a way that would create the conditions for economic growth and development (Arnold, 2012).

Current payments: includes all government current expenditures during the fiscal period.

Development expenditures: include all payments for civil (construction) works was done during a fiscal period.

Hence can it be concluded that the relationship between taxes on the financial status indicator (current payments and payments for Development) is significant? Or not?

2. Review of literature

Economic growth that has undeniable influence on improve welfare of society and more physical and human capital, implementing new production techniques and contribute new knowledge to the
field which is the base for of the growth process. Taxes, because of it’s the effect on the return of investment in physical and human can influence or decision making on the economy and, ultimately, on the growth rate. During the twentieth century, most developed countries have dramatically increased the level of taxes (taxes ranging from 5 - 10 percent of GDP in early previous century to 20 - 30 percent of GDP at the moment have raised) (Samimi et al., 2001). State exercise taxes as a tool to guide through the impact of the activities of enterprises which can play a key role in the industrial development policy. with the proper administration of the tax system a government can be developed to achieve the goal of development (Mousavi and Kazemi, 2011).

Ali Hassan Zadeh (2001) considered Iran’s economic growth during the 1971-1999 tax effect and following three hypotheses the first hypothesis company effects of tax revenue (direct and indirect taxes) to GDP on the economic growth. The second and the third hypotheses considered relationship between economic growth and growth of taxes. The first hypothesis result that used or the regression model was reached that a small negative growth of taxes proportion direct and indirect to GDP growth, and effect on growth the second and the third hypothesis result that used of Granger causality test. It was concluded that there was a unidirectional relationship from tax growth to economic growth.

Ghorbani (2011), reviewed the relationship between taxes and economic development in the country during the years 1971 - 1991 and based on the information, it is concluded that the reaction of direct tax has more changes on GDP.

Folster and Henrekson, (2000) in article (taxation and development) studied financial data of 82 developing countries and showed a weak but meaningful correlation (at the 5% level) between the tax ratio and the income tax of the countries and the gap between the actual tax system, and tax code have been reduced; there for tax rates reduced.

Robin Brgns and Nicholas Stysrd (1997), in their article (taxation and development) studied financial data of 82 developing countries and showed that a weak but significant correlation (at the 5% level) is between the countries and their income tax, and the gap between the actual tax and the legislature tax system reduced then the top tax rate has been reduced. «minge and morule» through the causal test of Grenger illustrated that between the receipts and the expenditure of 58 percent the states there is, a one-way causal relationship and in 24 percent of the states there is no causal relationship between receipts and expenses.

3. Research hypotheses

Table 1: Unit root test results Dicky - Fuller found

<table>
<thead>
<tr>
<th>Variants</th>
<th>Calculated</th>
<th>Crisis amount1%</th>
<th>Crisis amount5%</th>
<th>Crisis amount10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA1 (I(1))</td>
<td>-3.87</td>
<td>-3.63</td>
<td>-2.95</td>
<td>-2.61</td>
</tr>
<tr>
<td>LA2 (I(1))</td>
<td>-5.02</td>
<td>-3.63</td>
<td>-2.95</td>
<td>-2.61</td>
</tr>
<tr>
<td>LY (I(1))</td>
<td>-4.39</td>
<td>-3.63</td>
<td>-2.95</td>
<td>-2.61</td>
</tr>
</tbody>
</table>

1-There is a meaningful correlation between income tax and financial situation of the state (current payments).
2-There is a meaningful correlation between income tax and financial situation of the government (paid for construction).

4. Study variables

4.1. Methodology and model

Linear regression model was linearly and with the method VAR and ECM’s.

\[ \gamma_t = \alpha_1 \gamma_{t-1} + \alpha_2 \gamma_{t-2} + \alpha_3 \gamma_{t-3} + \alpha_4 \gamma_{t-4} + \alpha_5 \gamma_{t-5} + \gamma_t + \epsilon_t \]

This study is based on empirical analysis which focuses on seven variables. We used variables include: "Y" represents the dependent variables, \(\alpha_1\) payment, \(\alpha_2\) payment of construction, and \(\gamma_t\) represents the virtual variables during 8 years of the war and during the years without war. Time series data from 1971 to 2006 is considered.

Current payments: includes all government current expenditures during the fiscal period.

Development expenditures: include all payments for civil (construction) works was done during a fiscal period.

Total Index (the price of consumer goods and services): includes the cost of all goods and services used during a fiscal period.

Literacy rate: the proportion of literate people to the entire population.

Economic growth is including differences in income tax a year with the next year.

All these tests were performed by the software "Eviews". Islamic Republic of Iran during the years 1971–2006.

The data in this study is based on a library research library and information are collected from articles, books, publications and a variety of economic issues have been examined.

5. Evaluation of static variables in the model

In this study, the for all series before the estimate of regression model. If the time series is not stationary case, there is not the possibility of using regression models, because of the spurious regression problem. For static tests; the unit root tests are used. One of the most common diagnostic tests for unit root test is the Dickey - Fuller test used in this study. According to person criticism to Fuller Unit root test, when there are structural fracture in time series, and consideration of structural fracture are necessary while structural fracture could be carried out.
Tests show that variables the current (1LA) development expenditures (2LA) in the level of are viable error at 10% and based on the Phillips – Person test in the same significant level in the first subtraction state is viable.

<table>
<thead>
<tr>
<th>Variants</th>
<th>Calculated</th>
<th>Crisis amount 1%</th>
<th>Crisis amount 5%</th>
<th>Crisis amount 10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA1</td>
<td>(I(1))</td>
<td>-3.90</td>
<td>-3.63</td>
<td>-2.95</td>
</tr>
<tr>
<td>LA2</td>
<td>(I(1))</td>
<td>-5.07</td>
<td>-3.63</td>
<td>-2.95</td>
</tr>
<tr>
<td>LY</td>
<td>(I(1))</td>
<td>-4.41</td>
<td>-3.63</td>
<td>-2.95</td>
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</table>

<table>
<thead>
<tr>
<th>lag</th>
<th>Log L</th>
<th>LR</th>
<th>FPE</th>
<th>AIC</th>
<th>SC</th>
<th>HQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>-1484.718</td>
<td>NA</td>
<td>4.88e+30</td>
<td>87.6893</td>
<td>87.95868</td>
<td>87.78118</td>
</tr>
<tr>
<td>1</td>
<td>-1208.624</td>
<td>438.503</td>
<td>73.56611</td>
<td>73.56611</td>
<td>75.45162</td>
<td>74.20912</td>
</tr>
<tr>
<td>2</td>
<td>-1081.631</td>
<td>156.8742*</td>
<td>68.21356*</td>
<td>68.21356*</td>
<td>71.71521*</td>
<td>69.40772</td>
</tr>
</tbody>
</table>

As the results of above table shows, Schwartz and Hanan Quick in HQ SC and AIC values is the most minimal in second pulsate. Therefore in this model, the first optimal pulsate is chose pulsate. It should be noted that to choose of optimal pulsate the Schwarz criterion is used in this model. Because this criterion based on the principle of Community Mvnys, offers fewer pulsate and eventually a offers parsimonious model the second pulsate AIC SC and HQ as the above results show, Schwartz and Hanan Quick Heal is minimal compared to other values. Thus, in this model, the first optimal choice. It should be noted that the to choose the number of the optimal and pulsate the Schwarz criterion is used, Because this criterion is based on the Morris Broadband, offers fewer pulsate and eventually a it provides parsimonious model.

As the vector (1) showed, the current payment coefficient is negative and significant; indicating that the current pay is negatively related to income tax. Development expenditures have also negative and significant coefficient on this variable when indicates a negative relationship with tax revenue.

As the vector (2) showed, the index is negative and significant coefficient of income tax that reflects current pay is negatively related to the income tax. Payment of development is positive and significant coefficient that indicates a positive relationship between these variables with construction.

The first step to estimate a vector error correction model is determination the appropriate pulsate length for the subtraction of variables in the models regards that the number of pulsate of (VECM) pattern in sort action of variables is related with the number of pulsate (VAR) in the VAR is pattern Knowing the number of pulsate in the model, the number of variables subtractions in the model in the interval (VECM) is obtained Due to the optimal pulsate in the (VAR) models two-the subtraction of variables in the models (VECM) will be one. In fact, the vector error correction model for inflation as regards that a long-term relationship, and zero pulsate in variables subtractions by taking the and intercept in short and long term could be reached.

6. Verification of the hypotheses

Between the current income tax payments, HO assumption is rejected and there is a positive and meaningful correlation.

Between tax revenue and development expenditures, HO assumption is rejected and there is a meaningful and positive correlation.

7. Conclusion and suggestions

State excise taxes as a tool to indirect guide through the impact on economic activities of enterprises can play a key role in policy the financial status indicator (current payments and payments for Development).With the proper administration of the tax system a government can influence on how to achieve the goal of development .The challenges and problems associated with tax revenues collected should be solved and the traditional and semi-traditional tax collection should be changed with industrial one .traditional and Perhaps the reason for this is that we look at tax as a way to make money for government and we do not notice to its effects on economic development and the achievement of sustainable development .If the tax is paid on time and in place by the government definitely it will significant effects on economic growth and prosperity.

References


in rich countries “, European Economic Review, 82, 924-963.

Ghorbani. ,(2011),The role of taxes and subsidies on the distribution of income and wealth in.


