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Evaluation of Financing Effects Through Direct Taxes on Economic Growth in Iran

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Abstract

In most countries, a major source of government revenue is funded through taxes. Tax share of total public revenues is different among countries and the rate depends on the level of development and economic structure. For this reason, the necessity to understanding of causes, aggravating factors, tax evasion, providing practical solutions and scientific recommendations will be inevitable. According to the current study by using a smooth transition regression (STR) and annual data from 1971-2015, we investigate the effects of direct financing through amendments of direct tax law on economic growth in Iran's conventional model of economic growth. The results of this study, along with the theoretical foundations and the prevailing belief of most economists, showed that the effect of different methods of financing through direct taxes on economic growth in Iran conditional on the state of the economy, in particular in accordance with the results of investment. It means that in the first regime, when the investment share of GDP is became less than 34/05 percent, financed by oil revenues has negative effects and financing through tax revenues had a positive effect on economic growth. But in the second regime, when the investment share of GDP is more than 28/01 percent, the financing of both oil and tax revenues had a positive effect on economic growth. Although in the second regime and by increasing the investment to keep pace with positive impact on the severity funded through tax revenues increased.

Key Words: *Finance, Government Expenses, Amendment to Direct Taxes, the STR Model.*

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1.Introduction

In all the nations, government have responsibility to answer for people to meet some of the needs and wishes of them, including the creation of employment, internal and national security, stabilize prices, effective social security, political stability, economic and cultural improvement of the balance of payments, etc. and to achieve this things we need sufficient financial resources , so from long time ago and the formation of communities, government and taxes is as an argument sovereignty and receive it has become common in various forms and has gradually aspects of their tax. Today the tax revenue is one of the most important sources of income in the budget of most governments particularly developed countries and rose as an economic index ranking in countries. Volume and the amount of tax revenues in the budget resources, is known as representation the economic health of the state and the strength of the economic system of any country, transparency and the health of the economy by relying on resources and tax revenue. However, it is in condition that in undeveloped countries, reliance on government revenues from the sale of natural resources and groundwater, such as crude oil, that is considered as the sale of capital caused structural problems which by fluctuating world price of these natural resources, the budget of the country is affected and cause the problem to achieve the goals in the budget difficult, and gradually the gap become deeper over the years that the result will be unhealthy economy and instability, which increased class differences and consequences the next economic, social, cultural and political it's just a sign of it. Tax that is a sort of paying social life has different definitions, from taxation includes the compulsory funds, non- compulsory and irreversible that government demands for general purposes. In the lay and collect taxes, governments are mobilizing financial resources for the government spending, consolidation of economic and social justice by modifying the inequalities of income and wealth, and thus the tax is as one of the main topics of macroeconomics and a tool and leverage efficient to balance the economy and improving economic indicators such as unemployment, inflation, protectionism. Domestic, investment rate, etc. placed at the disposal of governments for compulsive manner and utilization of financial instruments will contribute to the economic classification.

Following the study of literature created by Romer (1986), Lucas (1988) and Rebelo (1991) can be focused on the kinds of economic policies that lead to growth of a country. A branch of literature was investigated the works of government financing in a growing economy to examine and to respond the questions such as how the government should be spending over time to finance them; by increasing tax revenues or other sources potentially available (Espinosa-Vega and Yip, 2000). Financed public spending by different sources is affect different way to growth. But the question of which source of financing has the lowest distortion and highest adaption to economic growth, is a question that has attracted much attention in these years. However, consensus on the relative importance of financial resources and their impact is not accepted on economic growth.

General government spending on infrastructure, education and health care can be the foundation for growth. Endogenous growth theory shows that productive government expenditures may be long-term underlying economic growth. However, the right strategy for financing these expenditures may depend on the specific situation of financial and budgetary country. For example, the economic effects of additional investment in public infrastructure depends not only on how to finance it may be, but depends on the size of the debt and the current government's investment. According to Easterly study, Erwin and Serven (2007), is expected that financial strategy become vary right between countries depending

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on the amount of income, level and composition of expenditures, debt levels, natural resources, public institutions and a wide range of other features unique by country. Thus, according to the different circumstances of each country, using various methods of financing will have different effects on economic growth.

The government can collect finance to expenditures, revenues in the form of tax and nontax receipts. In the absence of adequate government revenues to cover costs and meet government budget deficit, the government may be using various methods, including borrowing from the (release of debt instruments such as bonds) and borrowing from the central bank (of money) (Jafari Samimi, 2004) . In countries that have significant access to oil and gas revenues, proceeds from the sale of these resources in the form of non-resource revenues that will increase government spending, which could have effects on macroeconomic variables such as economic growth. According to a study Mork (1989), Murray (1993), Hamilton (1996 and 2003), Hooker (1999), Canado and Perez (2003), effects on revenues from oil sales on economic growth. Thus, if government acts on spending financed through the sale of oil, gas and other energy sources, they can be expected to affect macroeconomic variables, including economic growth this fall.

Iran's economy is dependent on oil and gas revenues as an economy dependent on oil revenues, expenditures and government activities in addition to tax revenues. Inefficiency of the tax system and government's inability is provide their expenses through tax revenues and easy access to oil revenues from other special circumstances economics' to any of these features can be interesting results on the effect of using different approaches financing of GDP growth to be followed. Hence, this paper seeks to examine the effects of the methods of financing government expenditures through revenues on the economic growth of the country. For this purpose, the impact of financing costs through tax revenues and economic growth with the impact of financing government spending by oil revenues and other resources available was compared to meet this target model that includes the verge smooth transition regression (STR) will be used to estimate the model.

In the following, after literature review, research methodology introduced and in the next part was done to estimate the models and then paid to the analysis of results. Finally, conclusions and policy recommendations are presented.

2. Literature

As we stated, tax in most countries, especially the developed countries is as the main source of public financing in the budget revenues and covers the significant portion of public expenditure so that in some countries 90 to 95 percent of the general government expenditures will be provided through tax revenues. In the economy of our country because of the lack of income transparency and inability tax system in identifying the correct amount of income, tax amount detection is negligible as it considerable portion of the taxes diagnostic is not accessible and even if receipt the benefit principle in it is not conformed, it means the cost of collection of the tax is higher. About the role of tax in Iran will be discussed on just two indicators.

Early 1990s, issues on fiscal policy primarily related to its functions in the field of economic stabilization, redistribution of income and focused resource allocation. Long-term growth is not usually expressed as an objective and fiscal policy in most cases was not considered a proper option for developing countries. In recent years the debate about the relationship between quality of public finance and economic growth is concentrated (De Wulf & et al., 2010). Thus, according to Christie & Rioja study (2012) we can said that the literature indicates two approaches to the issue of government spending and economic growth:

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The old approach: the studies that have considered the relation between government spending and economic growth.
The new approach: studies that are considered the effect of different methods of financing government spending on economic growth.
In continue we investigate these studies on these two approaches.
A.The old approach: study the relation between government spending and economic growth
Kaldor (1966), in particular, stresses that public sector spending has a positive effect on economic growth. He believes that government intervention affects the long-term growth and productivity. Earlier Myrdal (1960) believed that government intervention in the economy could boost economic growth, because the government may intervene in the economy, reduce social inequality.
Turnovsky & Fisher studies and Fischer (1995), Feltenstein & Ha and (1995), AgNOR Agénor & Neanidis (2006) also arise in the form of old approach. Turnovsky & Fisher (1995) were examined the effect of the combined use of government spending on infrastructure and economy. Feltenstein & Ha (1995) showed that spending on public infrastructure have benefits for other sectors. AgNOR Agénor & Neanidis (2006) were studied optimal allocation of government spending in areas such as health, education and infrastructure.
In general there are two views in the relation between government spending and economic growth:
One view is that any transfer of resources from the private sector to the public sector lead to lower economic growth for two reasons: (1) often the government's performance associated with inefficiency (2) government financing spending that can be done through internal and external resources, imposed costs and adverse effects on the economic system which can hinder economic growth. In other words, sources of funding government spending by non-optimal allocation of resources, providing inefficient public goods, increase the share of current expenditures to development expenditures as well as the effects of anti-motivational that can reduce total factor productivity and the negative impact on GDP growth economy. In general, fans of the vision of centralized decision-making, lack of profit motive and a lack of competition in the public sector as causes of inefficiency of government and the transfer of resources from the private sector to the public sector in order to increase government spending to prevent the accumulation of capital, and promote research and innovation in the private sector, and consequently in the whole economy and believe that increased government spending reduces GDP and economic growth.
The other position consider an important role for government is in the process of economic growth and suggests that increased government role in the economy have a positive impact on GDP and economic growth. One reason for this theory is that the government has an important role in coordinating public and private interests that can provide the groundwork for economic growth. Also, in countries where the monopoly is the characteristics of them and is lack of the developed investment, insurance information, so the government can shape the product market and the factors of production and the creation of appropriate infrastructure, economic, human resources development and improvement of manufacturing, boost performance and field for the private sector to provide efficient activities (Galli, 2003; Kweka & Morrisse, 2003).
B.New approach: study the relation between various methods of financing government spending with economic growth
Theoretically, the impact of financing government spending on GDP and economic growth, we can say that the tax (either as taxes or as total tax revenue) influence on individual choices between work and rest, the allocation of resources through changes in relative pric-

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es as well as the transfer of resources from the private sector to the public sector, , and will be ultimately leads to changes in private sector investment, production capacity, the total supply and economic growth (Gunalp & Gur, 2003). On the other hand, due to the lack of access to variables such as foreign exchange reserves, gold and foreign aid, proceeds from the sale of oil and gas can be considered as an approximation of import capacity (Joseph, 1996).About the impact of oil revenues on GDP growth from the supply side, we can say that usually increase the impact of imports on the import of capital goods is positive. Thus, rising oil revenues increase the imports of capital goods and through import capacity and will be effective on GDP and economic growth (Parvin and Qoli Begloo, 2002). The impact of borrowing from the central bank on GDP growth from the supply side, we can say that borrowing from the central bank as a tax on the allocation of resources through changes in relative prices as well as the transfer of resources from the private sector to the public sector, efficacy leaves and causes changes in private sector investment, production capacity, the total supply and economic growth (Gwartney et al., 1998).

Does the impact of public spending on economic growth depend on the method of financing of these expenditures? This is a question that the new approach follow to respond the issue of government spending and economic growth. The thing that attracted our attention is considerable part of the empirical studies and theoretical that previously involved in identifying the components of public expenditures and infers its relation to growth in different sources of financing government spending on the relation between public spending and economic growth. The issue that is interesting in studies in this area that is not accepted the consensus on the relative importance of financial resources and their impact on economic growth.

Seddiqui & Malik (2001) and Gali (2003) concluded that if funding government spending done by Published in Money (borrowing) then the relation between government spending and economic growth is negative but if financing government spending done through tax, the relation between government spending and economic growth is positive. Parvin and Qoli beglo (2002) in their study found that spending through tax increases can have beneficial effects on economic growth.

On the other hand, Barro (1990) and King and Rebelo (1990) in checking the effect of financing through a tax on economic growth were obtained negative relation between these two variables and suggest that public spending by taxes, especially taxes financing income were negatively affect their growth. Palovos & Yip (1995) in their study of financing government expenditure by published money on a tax-preferred considered and believe that financing has destructive effects on the release of the money funded through a tax on economic growth.

In light of this evidence and in the light of the theoretical debate around the acceptance of partial funding through various methods, asking this question is good that: Is acceptance of partial funding government spending by different methods depending on the stage of economic development and the specific conditions of each country ?

Terenophski (1996) in his study check the effect of financing costs by way of income tax and debt instruments on economic growth test and found that the optimal mix of financing has depends on the level of infrastructure than socially optimal degree of congestion.

Miller & Russek (1997) do detailed discussion about the relative importance of increase government spending financed that by using tax and debt instruments, in promoting economic growth and reported the results to the degree of development varies by country. They stated that in developing countries the increase in public spending that financed by tax leads to higher economic growth, while the increase

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in public spending by means of debt and the budget deficit financed economic growth delays. For developed countries, the increase in public spending that is create due to debt instruments has not effect on economic growth, whereas if the source of the increased tax is expenditures, economic growth is reduced.

Futagami & et al (2008) the effects of different types of financing on growth knows the growth rate as a function of the country. Bose, Holman & Neanidis(2005) in their study, get similar results were based on those in high-income countries, government spending financed by taxes to financing by money creation, economic growth postpone, while in low-income countries increase government spending financed by printing money over the situation that was financed by taxes, economic growth more delays. Chatterjee & Turnovsky (2005 and 2007) as well as knew the effect of finance on economic growth as a function of the key structural features of the countries.

Mehrara and Maki niri (2004) in their paper examined the nonlinear relationship between oil revenues and real output growth in the economy during the period 1960-2007 by means of a threshold error correction model. Based on the results the economic growth response to growth in oil revenues in the regime of low oil revenues is higher than the regime's top oil revenues. They have attempted to identify threshold oil revenues growth in the economy (73 percent) that if growth revenue oil would exceed the threshold, it's lost positive effects and will not have a significant effect on GDP growth. The results confirm the resource curse theory, increase productivity and reduce rent-seeking activities, especially in periods of high oil revenue boom.

Mehrara (2014) by using co-integration methodology Gregory-Hansen (1996) concluded that in long-term the oil revenue has negative effects on Iran economic growth. Economic growth in the short-term response to the oil shock of asymmetric shocks and reduce the price of oil is more intense.

Studies mentioned above, despite differences have a series of common characteristics: Ideally financing public spending in these studies appears to be subject to special conditions countries. There is a prevailing belief among economists that the effect of different methods of financing public spending on economic growth is contingent on the state of the economy. Recent evidence supported this belief. According to Easterly, Erwin and Serven (2007), it is expected that suitable financial strategy vary by country between countries depending on the amount of income, level and composition of expenditures, debt levels, natural resources, public institutions, and a wide range of other features unique. Christie and Riyoja (2012) found that the proper financing productive of government spending depends on the financial situation of the country. Thus, the effect of additional public investment depends on two things: (1) the way of financing and (2) existing levels of debt and different tax rates. They introduced two-endogenous growth model to examine how differences in the composition of government expenditure and financing affects long-term growth. They found that when tax rates are not too high, public investment financed by tax increases may boost long-term growth. If current rates are high taxes, public investment only increases growth by restructuring public expenditures be funded. They also found that additional public investment that is financed by debt instruments may adversely affect long-term growth due to have rising interest rates and debt costs.

Impact of incentive policies in general and tax policies specifically on investment, is considered as growth and employment issues and at the same time challenging in the field of macroeconomics, especially in the area of tax incentives fans and critics, so always is as a subject of study for researchers in different countries of the world. On the one hand the effectiveness of such incentives was worth as compared to the cost of a policy package and

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On the other hand economic theories reducing the cost of investment to put their attention.

The question that arises here is that whether the tax has impact on investment behavior in Iranian industry, how taxes affect along with other costs of investment behavior of investors in various industries, to answers these questions, then Basics speculative investment and the influencing factors will be examined with an emphasis on tax variables and then in the framework of the neoclassical growth model of investment costs will be private sector to investment decisions. In the next section, experimental studies on the impact of taxation on investment behavior are reviewed. In the next section, an econometric model estimate to assess the impact of tax policy on investment in the industries of design.

In this study the effect of taxation on companies to investment behavior in fixed assets in the Tehran Stock Exchange investigated as the representative of Iran's industries. Investment in fixed assets plays an important role in the theory of fluctuations and economic growth as well as in the design of tax policy.

Developed countries and developing uses tax policy to create change in the level, timing, type and structure of investment spending different industries. Changes in tax rates, changes in the rate of depreciation deductions, exemptions granting various tax rebates, etc., includes tax policies that apply in this area. Tax policy would have incentive effects or anti-motivational for companies and various industries. These policies can be used to encourage, restructuring or direction of investment in fixed assets used in different industries and companies. Imposition of tax policy expansion or contraction of the impact on funding company can release resources (in the case of expansionary policy) to stimulate investment or the contraction of policies to reduce the resources available to lead and consequently the impact the investment will lead to lower profitability.

In Iran all private and public companies are taxable on 25% profits. However, repeated in Articles 143 and 143 of Direct Taxation Act and amendments to existing In exchange a series of concessions including 10% tax relief on direct taxes have been given under Article 105 of the law.

Accordingly, this paper within the framework of the second approach pay attention to the problem caused by the effects of financing through direct taxes on economic growth in Iran Amendment economic growth model (knows This issue as a function of financing methods) according to the specific conditions of Iran's economy and its reliance on oil revenues and the situation inefficient tax system, to assess the effects of public funding on economic growth with an emphasis on oil revenues and pay tax.

3. Methodology Research

As mentioned earlier, there are two kinds of models for the study of consumer behavior. The first model was introduced based on the theory of neoclassical investment by Jorgenson; (1963). This theory is widely used to study the behavioral effects of taxation on investment. As mentioned base on the idea of an enterprise up to the point of interest will continue to invest the income from the investment of its capital last unit cost or cost that is equal the use of this additional unit of capital. These models in empirical studies have led to good results. Some researchers recently variables related to cash flow liquidity, firms or industries such as investment in traditional neoclassical models, until find the effect of liquidity constraints caused by information asymmetry between investors and firms.

In this study the neoclassical model is used with an adjustment in its investment. The overall shape of the model used to evaluate the effect of taxes on investment in the industry as follows:

$$I_{it} / K_{i,t-1} = f\,(uc_{it}, y_{it}, x_{it}, \ldots) \qquad (1)$$

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This function indicates that investment decisions in an industry that expressed as the ratio of investment to capital stock at the beginning of the period, as a function of investors costs UC_{it} (costs that suffer the investor in investment and production), sales growth ,x_{it}, y_{it} and other factors affecting investment.

This argument is that the capital cost UC, in fact are affected the effect on the rate of return on investment, investment decisions.

One drawback is entered to this model that the application for the study of changes in investments over time and by using data from the macro level does not lead to good results. Here are additional variables to show the cost or the rate of return on investment models that are not applicable for investment forecast.

However, this model does not have problem in firm-level or industry-level and can explain the changes in investment opportunities and explain the costs associated with it. Studies on the impact of taxes on investment using the cost of investment, has interesting results despite the importance of analyzing the result. The Chrinko, Fazzari and Meyer (1999) studies conducted with macro data cannot lead good estimates of the impact of taxes on investment.

The reason is that they cannot be controlled in these models, or non-homogeneity between firms and synchronization problem. In contrast, studies are carried out by using firm-level data, have not related problems to macro data and can lead to better estimates.

Based on the above description of estimated econometric this model can be expressed as follows:

$$\bar{I}_{it}/K_{i,t-1} = \beta_0 + \beta_1 \frac{\Delta UC_{it}}{UC_{i,t-1}} + \beta_2 \frac{\Delta Y_{it}}{Y_{i,t-1}} + \beta_3 X_{it} + \varepsilon_{it} \qquad (2)$$

In practice, by using equation (2) we cannot measure the exact impact of changes in tax policy on investment. In fact, this model is not clear whether the investment will react to changes in tax policies, changes in economic variables or a combination of these changes. In order to be in the equation above investment costs, UC_{it} decomposed into its components and are separately entered into the model.

To test the effectiveness of non-linear method of financing the government's economic growth following the Terasvirta (2004) and Chen (2015) and based on the model of economic growth, conventional, pattern smooth transition regression (STR) below to review the impact of the nonlinear terms:

$$EG_t = \phi'\omega_t + (\theta'\omega_t).G(\gamma, c, s_t) + u_t \qquad (3)$$

Where EG is GDP real, ω_t vector of explanatory variables, including variables KI (investment share of GDP), PG (population growth); OTG (over oil revenues of GDP), TTG (revenue government tax to GDP), RTG (other than government revenues to GDP) and interruption of variables, including the break-variable is economic growth. Coefficients vectors of the linear $\phi' = (\phi_0, \phi_1, ..., \phi_p)'$ and $\theta' = (\theta_0, \theta_1, ..., \theta_p)'$ nonlinear coefficients vector is the vector. u_t Is disturbing part of this equation that it provides condition. The G function as a logistic function, continuous and bounded between zero and one is to form a smooth transition between the regimes shows:

$$G(\gamma, c, s_t) = \left(1 + \exp\left\{-\gamma \prod_{k=1}^{K} (s_t - c_k)\right\}\right)^{-1} \quad \gamma > 0 \qquad (4)$$

,

In this function, s indicator variable transmission, γ transfer speed parameter and c represents the threshold or regime change or place. K parameter shows the number of regime change.

In general STR model estimated has three ba-

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sic steps. The first step is recognition model. Start this process is by setting a linear AR model that is placed as a starting point for analysis. The second stage involves testing nonlinear relation between variables, selecting and deciding on the frequency of changing the regime. At this stage, to determine the nonlinear relation of LSTR, diagnosis and determine the number of regimes variable transmission, is used the following approximate regression:

$$GS_t = \beta_0'\omega_t + \sum_{j=1}^{3}\beta_j'\tilde{\omega}_t s_t^j \quad (5)$$

Where $\omega_t = (1, \tilde{\omega}_t)'$. If s_t is not part of ω_t, we have:

$$GS_t = \beta_0'\omega_t + \sum_{j=1}^{3}\beta_j'\omega_t s_t^j \quad (6)$$

The null hypothesis of linearity model is $H_0 = \beta_1 = \beta_2 = \beta_3 = 0$ that test statistics used to test the hypothesis of F test statistic. After the assumption of linearity between variables have failed to detect the type of nonlinear model series following tests carried out on the auxiliary 3:

1. $H_{04} : \beta_3 = 0$
2. $H_{03} : \beta_2 = 0 | \beta_3 = 0$
3. $H_{02} : \beta_1 = 0 | \beta_2 = \beta_3 = 0$

Test hypotheses related to the null hypothesis show respectively F_4. If F_2 و F_3 و the hypothesis is rejected, H_{03} the LSTR2 model (LSTR model with twice regime change) or ESTR (model view of transition regime), is confirmed that by testing the null hypothesis can either be selected. In case of hypotheses rejection H_{04} H_{02} and models LSTR1 (LSTR model with a regime change) is selected.

The second step in estimation of STR models is estimate the model that this step includes finding the appropriate values of the model to estimate the non-linear estimation model by using maximum likelihood algorithm that is the Newton- Raphson method.

The final step is the evaluation model of STR. This stage usually includes graphical analysis along with various tests, such as the absence of errors autocorrelation, fixed parameters between the different regimes, absence of residual waste that is non-linear relations. It should be noted for model estimation of smooth transition regression in this study was used software JMulTi.

4. model and analyze results

Before the estimation of research model, we check the variable descriptive statistics features and government finance process. Descriptive statistical properties of the variables in Table 1 and the share of oil revenues, taxes and other government revenues from general government revenues is presented in Figure 1. According to Figure 1 the main source of financing government spending is through the oil revenues, although the process of financing the government through oil revenues over the period 1971-2015, contrary to the trend

RTG	TTG	OTG	PG	KI	EG	
0.02	0.06	0.13	0.02	0.28	0.04	Mean
0.02	0.06	0.11	0.03	0.28	0.04	Middle
0.05	0.09	0.40	0.08	0.40	0.18	Minimum
0.01	0.04	0.03	-0.03	0.20	-0.15	Maximum
0.01	0.01	0.08	0.02	0.05	0.07	Standard Deviation
1.12	0.13	1.68	-0.67	0.86	-0.36	Skewness
3.20	2.20	5.77	7.37	3.99	3.40	Elongation
0.01	0.54	0.00	0.00	0.03	0.56	Statistical probability level Jarek kay do test
42	42	42	42	42	42	Number of Views

Table 1. Descriptive statistical properties of research variables, Source: Calculated based on data from the Central Bank of the Islamic Republic of Iran

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of financing through taxes and other sources has been a downward trend. Meanwhile, the main source of financing the government through tax revenues on average, respectively 56/5 and 32/4 percent of government revenues through the resources provided and an average of only about 11.1% of resources is funded by other sources of income.

After reviewing descriptive statistical properties of the variables at this stage we estimate the model that described above. The first step in estimate the model STR determines the interruption of the variables used in the model. This work is done by using Akaike info criterion, Schwarz criterion, and Hannan-Quinn criterion. According to Schwartz criterion is intended as the criterion for determining the number of observations interruption, that based on this criterion variables included for the model is optimal for a determined investigation.

In the next step should tested nonlinear relationship between variables if nonlinear relationship approved then between the variables used in the model, should be determined variable appropriate transmission and regulations nonlinear model based on the test F_4 و F_3 ،F_2 . The results o/f these surveys are presented in Table 1. According to the probability of the test statistic F reported in Table 2, the null hypothesis of this test rejected based on the linear model, for the first lag of oil revenues to the state's gross domestic product (OTG) and the investment share of GDP (KI) and the assumption of a linear relationship for these variables will be accepted. The next step is choosing the appropriate transmission range of variables to model the nonlinear possible transmission. To select the transfer variable, transition variable priority is to test the null hypothesis that is rejected F. The most suitable variable transmission is determined according to Table 2 for the first lag research investment share of GDP (KI (t-1)). Choose a suitable model for variable transmission according to the statistics, and the next step to estimate a model STR. According to the reported results in Table 2 the proposed model is selected for variable transmission pattern LSTR1 to study the logistic model with a threshold point.

The second step in modeling the model STR is the estimation stage. Due to the nature of the nonlinear model, the initial stage by finding appropriate values starts to estimate the model. By using the initial values, the algorithm was estimate the Newton - Rafson and maximizes ML parameter function, which results have been reported in Table 3.

The final value estimate for Flatnes (γ) is 3/11 and for investment share of GDP

proposed model	The possibility F2 test	The possibility F3 statistics	The possibility F4 statistics	The possibility F statistic	Variable transmission
Linear	0.03	0.08	0.56	0.07	EG(t-1)
Linear	0.09	0.88	0.84	0.71	KI(t)
Linear	0.21	0.08	0.53	0.21	OTG(t)
Linear	0.11	0.71	0.13	0.20	PG(t)
Linear	0.35	0.96	0.94	0.97	TTG(t)
Linear	0.24	0.84	0.34	0.51	RTG(t)
LSTR1*	0.07	0.06	0.04	0.03	KI(t-1)*
LSTR2	0.06	0.05	0.08	0.04	OTG(t-1)
Linear	0.76	0.03	0.22	0.07	PG(t-1)
Linear	0.14	0.77	0.14	0.19	TTG(t-1)
Linear	0.14	0.77	0.17	0.16	RTG(t-1)

Table 2: type of model and transmission variable for research model، Source: computing research

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	estimate	t-stat	p-value
linear part			
EG(t-1)	0.09	3.55	0.00
KI(t)	-0.16	-2.93	0.01
OTG(t)	0.27	4.56	0.00
PG(t)	0.36	2.97	0.01
TTG(t)	0.63	2.62	0.02
RTG(t)	0.03	3.56	0.00
KI(t-1)	0.24	3.93	0.00
OTG(t-1)	-0.28	-4.55	0.00
TTG(t-1)	-0.61	-3.19	0.01
nonlinear part			
CONST	0.12	2.42	0.03
EG(t-1)	-0.05	-1.86	0.07
KI(t)	0.18	2.09	0.04
OTG(t)	-0.46	-3.41	0.00
PG(t)	-0.23	1.72	0.10
TTG(t)	0.38	2.10	0.05
RTG(t)	-0.02	-3.19	0.01
OTG(t-1)	0.59	3.51	0.00
TTG(t-1)	-0.33	-2.34	0.30
R2: 85.73% AIC: -6.28 SC: -5.36 HQ: -5.95			
Test Evaluation 0.73 < p-value F(Test of No Error Autocorrelation) < 0.97 p-value F(Test of No Remaining Nonlinearity) = 0.34 p-value F(Test of Parameter Constancy Test) = 0.03 p-value F(ARCH-LM TEST with 8 lags) = 0.75 p-Value Chi^2(JARQUE-BERA TEST) = 0.57			

Table 3: results of the research model estimation, **Reference: computing research**

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threshold is equal to 28/01 percent. Thus, the transfer function will be as follows:

$$G(3.11,28.01,KI_{t-1}) = (1+\exp\{-3.11(KI_{t-1}-28.01)\})^{-1} \quad (7)$$

With regard to the points mentioned in the research methodology, in the first regime G=0 and the second regime G = 1. So for our first regime:

$$EG_t = 0.09EG_{t-1} - 0.16KI_t + 0.24KI_{t-1} + 0.36PG_t + 0.27OTG_t - 0.28OTG_{t-1} + 0.63TTG_t - 0.61TTG_{t-1} + 0.03RTG_t$$

And for second regime will be:

$$EG_t = 0.12 + 0.04EG_{t-1} + 0.02KI_t + 0.24KI_{t-1} + 0.13PG_t - 0.19OTG_t + 0.31OTG_{t-1} + 1.01TTG_t - 0.94TTG_{t-1} + 0.01RTG_t$$

Based on the estimated regression:

• Because the sum of the coefficients investment share of GDP (KI) in first and second, regime is 0/80 and 0/26, along with expectations that investment can be a positive and

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significant effect on economic growth in both there's regime.

• Population growth coefficient in the first and second regime is 0/36 and 0/13, so a positive and significant effect of population growth rate (as an indicator of the labor force) confirms the economic growth.

• Aspect ratio of oil revenues to GDP (OTG) in the first and second regime is -0/01 and 0/12 respectively, this shows the effectiveness of oil revenues is dependent the level of public and private investment. So that in the second regime, when the investment share of GDP become more than 28/01 percent, the source of financing Unlike the first regime, when the investment share of GDP is less than 1.28 percent, have been studied the positive effect and significant economic growth period.

• Due to the ratio of tax revenues to GDP (TTG) that in first and second regime is 0/02 and 0/07 respectively, it can be stated that by increasing the level of investment in the second regime has strongly increased positive impact tax revenues to GDP. In other words, the impact of government tax revenues as a source of financing of oil revenues is dependent on the level of investment (Ie in line with the theoretical foundations and the prevailing belief of most economists, the effect of various methods of financing public spending on economic growth contingent on the state of the economy, in particular in accordance with the results of this study depends on the investment).

• The impact of other government revenues to GDP (RTGon economic growth according to the coefficients can be expressed in the first and second regime although coefficient 0/03 and 0/01 some of these earnings ratio of government revenue, but in both regimes have a positive effect on economic growth.

The third phase or next stage after the estimation of model is model evaluation phase. Summary results of errors that occurred in the estimate are given in Table 2. Given the level of test evaluation model (errors of autocorrelation, not staying nonlinear relationship in waste model, fixed parameters in various regimes, anisotropy of variance and non-normal residuals) can be nonlinear model estimates the evaluation of acceptable quality.

5. Summary and Conclusions

The failure of the education system in our country, the complexity of rules and regulations, do crafts and traditional matters relating to tax audits and the weak Raiders is the main causes of failure in the country's tax system. Another contributing factor in the weakening of the effectiveness of policies and, ultimately, tax evasion is ambiguity in laws and regulations; it could disrupt the entire system performance alone. Taxation process can be chronologically in terms of the legislation, identify payers, tax diagnosis, and handle objections and ultimately levy classified. According to the explained contents as to increase the efficiency of the system should provide the necessary conditions and remove barriers to the development of the consumption tax compliance effort away.

Paving the way for the strict implementation of VAT law and the immediate inclusion of all actors is another way to improve the system. For operations and favorable conclusion of the system of VAT must be organized, trained personnel and specialized equipment used and the formalities to be avoided. Determine what the appropriate rates of VAT or direct taxes can reduce the incentive to evade tax payers. Stabilize the regulation can contribute significantly to the reduction of tax evasion. On the contrary, the continuous changes in laws and regulations and the lack of stability in this area can exacerbate tax evasion. If you want to have a country that the economy's dependence of oil go to the economy, tax lead in this important partnership serious and comprehensive all members of society to draw and governments to remove barriers to basic measures and effectively conduct the tax revenues replace oil revenues and

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a big step forward for sustainable development and the development and prosperity of the country. Following the study of literature created by Roomer (1986), Lucas (1988) and Rebel (1991), the kinds of economic policies that lead to growth of a country can be focused. A branch of literature, works of government financing in a growing economy to examine and to respond the questions such as this is how the government should be spending over time to finance them; by increasing tax revenues or other sources potentially available? The study has attempted to use annual data 1971-2015 model smooth transition regression (STR) to evaluate the effectiveness of different methods of financing government on Iran's economic growth. The results showed the effectiveness of various methods of financing government spending on economic growth depends on other macroeconomic assumptions, In particular, according to the results of investment Which means that in the first regime, when the investment share of GDP is less than 32/08 percent, financed by oil revenues and negative effects funded through tax revenues had a positive effect on economic growth. But in the second regime, when the investment share of GDP become more than 32/08 percent, the financing of both oil and tax revenues had a positive effect on economic growth. Although the regime keep pace with increasing levels of investment, positive impact on the severity funded through tax revenues increased. Finally, consistent with expectations, a positive effect on economic growth, investment and population growth has approved the review period. Based on these results and aims to create a surfacing positive economic development planners and policymakers level of macroeconomic recommended that the planning and scoping methods of financing the government, considerations of macroeconomic, particularly the level of investment, as a key variable to be fundamentally considered in their funding policies seeking to implement a policy package rather than a specific policy .

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