Research Article

STUDYING THE RELATIONSHIP OF OIL REVENUES AND BUDGET WITH GOVERNMENT PERFORMANCE OVER THE LAST DECADE

***Houshang Heidarian**
Department of Accounting, Hamedan Branch, Islamic Azad University, Hamedan, Iran
*Author for Correspondence

ABSTRACT

The present paper aims at studying the relationship between of revenues and budget with government performance during 1382-1392 (2003-2013). Variables of this study included disposal of nonfinancial assets proportional to government revenue, operating balance, government payments, acquisition of nonfinancial assets, net disposal of nonfinancial assets, and disposal of financial assets, operating and nonfinancial balance and net disposal of financial assets. The related data was gathered from Central Bank of Iran. Pearson coefficient of correlation and prediction of the effect of nonfinancial disposals on other studied variables, linear regression method were used, in order to analyze the relationship between variables. Summary of this study revealed that disposal of nonfinancial assets is significantlyassociated with government revenue, government payments, operating balance, acquisition of nonfinancial assets and net disposal of nonfinancial assets. As predicted, net disposal of nonfinancial assets is significant, but prediction of net disposal of financial assets is not statisticallysignificant. Increasing trend of governmental budget deficit makes the revenues earned from disposal of nonfinancial and financial assets contrary to its defined objectives to reimburse the current costs of government. It may decrease the civil budget and upraise the government debt to the banks as well as increasing the unemployment and inflation rate. Thus, it is required to deem the upward trend of government's current costs as warning for the country, and since now to execute principle 44 of constitutional law and articles 7,138,139,143 and 145 of Fourth Budget Plan Act, it is required besides downsizing the government, to benefit from the government outsourcing in affairs related to disposal of nonfinancial and financial assets for infrastructural affairs to be used by the subsequent generations.

Keywords: Oil Revenues, Disposal of Nonfinancial Asset, Government Budge

INTRODUCTION

The vital roles of governments in reallocation of resources, stabilization, economic fluctuations, production of general commodities, redistribution of revenue and wealth in the society are known by all people in the society. It may be claimed that presence of governments in these contexts is inevitable. In the developing countries, theabove issuecauses along with low national saving rate and capital, shortage of infrastructural resources and installations have emphasized the role of governments in the economy (Mousavi *et al.,* 2008). On one hand, government's economic activities have social goals and effects. On the other hand, government activities have impacts on the private sector. Undoubtedly, increasing the government's role in the economy will limit the presence of nongovernmental sector and their access to the (Mousavi *et al.,* 2008). According to the20-year perspective document, general policies of Principle 44 of theconstitutional law and fourth development plan all focus on downsizing and privatization of government. According to articles 7,138,139,143 and 145 of thefourth plan act, the government shall be downsized and governmental affairs should be assigned to the private sector. However, unfortunately governmental costs aregradually increasing.

Improving the government activities in addition to frequent outcomes and consequences has involved the government into problems for financing needed for fulfillment of its duties.

The budget of a country shows the government position in economy.For example, government's interference in the society and correct administration of government's financial affairs considerably affect theimprovement of economic and administrative system or themanagement of thepublic sector. In relation to development of society, government policies are manifested in formulation course of actions.

Research Article

Allocation of resources and its diversity, relying on revenues earned from export of manufacturing products and sale of technical services is an approach. Also, its relying on export of raw materials particularly as single products is another approach.

Oil as a major supplier of budget income created imaginations which affected the economic budget and growth. The government performs all its financial activities including income earning and payment of costs for execution of various and diverse plans in compliance with budget act. Therefore, the budget indicates all governmental plans and activities and has acrucial role in development of national economics. Whereas our country benefits from enormous oil resources, revenues acquired from these resources are assumed as the most important revenue resources of government (Abbasian & Khatami, 2012).

Economy of Iranextremely depend on oil export and its vulnerability to oil revenues is very high (Report on important activities of Ministry of Oil, After the first oil shock in 1973, dependence of economy of Iranon the incomes provided by oil and gas resources was increased (Sameti *et al.,* 2009).

In general, the government expenses formed 15-25% of theproduction or thenational costs during different years (Central Bank of Islamic Republic of Iran).

A review of government's budget income during the recent decades revealed that these revenues averagely form 54% of public budget costs of the government.

Statistical evidences in economics of Iranindicates that oil revenues in economy of Iranthat have had frequent fluctuations ever is considered as the most important factor affecting the costs of thegovernment.Therefore, the government budget and its costs are assumed as one of the most important oil shocks canals that affects the total demand. In case of non-designing mechanisms for stabilization of government budget, oil shocks will extremelyaffect the government budget. In fact, during moderate increasing of government budget within limited prosperity period, oil revenues provide the required economy, capacity and capability for attraction of extra incomes. Accordingly, national production is increased (Mehrara & Niki, 2006).

According to the studies conducted previously, Kia (2007) studied the stability of financial policy in Iran during1970-2003 and Turkey over 1967-2001 in stochastic and non-stochastic environments. He evaluated budget and financial processes of both countries using co-integration and multiple co-integration. According to some results of this research, financial policy was not sustainable in both countries. Furthermore, financial policy of Iran in case of dependence on oil and gas revenues has not been influential.

In a case study on Nigeria, Sala-i-Martin and Subramanian (2002) emphasized sustainability and significance of negative effect of oil on economic growth through harmful impacts on institutional quality. Based on the results of this study, asthe oil revenuesincreased, governmental investments increasedcorrespondingly and wereallocated toa high share of that country's GDP.

Based on the study applied by Barnett and Ossowski (2012), oil manufacturing countries have faced the challenge of theresourcesbeing finishing and non-relying. According to some results, non-oil balance saliently has been important in financial policy stating. Accumulation of assets throughout total oil production years adequately has been required for protection of financial policy within periods after oil production.

Abbasian & Khatami (2012) determined the taxes optimum path toward reduction of government budget dependence to oil revenues. In this study, an optimum path has been determined for reduction of government's budget dependence on oil revenues, using Bellman equations. Considering the growth rate of tax incomes in the past and comparing itto growth rate of these incomes along the optimum path, the obtained optimum path has been accessible. Increasing trend of this path may be due to budget deficit which leads to obtaining a value bigger than one for ratio of government expenses to tax incomes and intensifying the growth of tax incomes.

Whereas oil revenues directly affect the important variables of national economy, analyzing the impacts of these incomes on supply of state budget will be very attractive, because it will indicate how much oil revenues -which no effort has been taken for their acquisition- affect the performanceof the government.

Research Article

To this end, the objective of this paper is analyzing the relationship between oil revenues and budget and government performance withinthe last decade.

Theoretical Frameworks

Budget and Financial Status of Government

The budget in 1382 (2003) was provided based on thethird development plan and focusing on completion of incomplete projects, notstarting new projects, employment and making the size of thegovernment reasonable. Thisincluded revenues equal to 100622.4 billion Rials, disposal of nonfinancial assets equal to 126851.8 billion Rials, disposal of financial assets equal to71349.2 Rials, sum total of government resources (revenues) equal to 289823.4 billion Rials, cost payments (current) equal to 81350.1 billion Rialsand acquisition of nonfinancial assets (civil payments) equal to81919.7 billion Rials. The meanequal to revenues had been predicted and approved in the budget. However, in practice general revenue of government equaled 78836.6 billion Rials. 26.9% of tax income of government within thelast year in comparison with thelast year out of 80.7% of total incomes was reached to 82.6% in thecurrent year. Among total items constituting tax incomes, excluding corporate tax (6%) and budget was not realized. Inheritance tax has been realized 29% lower and goods and services taxes were found to be52% more than theapproved budget. Out of thetotal incomes within the studied year, 65099 billion Rials (82.6%) of thetax incomes and 17.4% equal to 13737.6 billion Rials were acquired from other government incomes. The above-mentioned rates in last year respectively equaled 80.7 and 19.3%.

Dependence on Public Budget to Oil

Resources arising out of oil have entered into the government's public budget through various rows:

Resources arising from crude oil in row 2110101 are inserted under thetitle of disposal of nonfinancial assets in the budget during 1382-1392 (2003-2013).

The income provided by disposal of nonfinancial assets has upraised 25.1% more than theprevious year (103101.6 billion Rials) and reached 12903.9 billion Rials that out of its related clauses crude oil sale (126653.9 billion Rials) forms 98.2% thereof that is the maximum share of disposal of nonfinancial assets and sale of public buildings and installations in an amount of 23.6 billion Rials provided by the least share of this income group. Furthermore, within the studied year, 54.6% has been reduced comparing tothe last year. Whilst in last year its value equaled 52.1 billion Rials, it has been increased 144.6%more thanthe last year.

Resources acquired from withdrawal of foreign exchange reserve reveal thatit is entered into the budget as disposal of financial assets has a completely oil nature and must be applied altogether to resources provided by oil. Consequently, resources inserted in row 310309 within 1382-1392 are added to the total oil resources of budget.

In the budget applied for 1382, 71349.2 billion Rials was approved as thebudget, but only 77.8% thereof was realized in an amount of 55507.5.Consequently, 15841.7 billion Rials thereof (22.2% of approved budget) was not realized. Out of its two constituting factors, one utilization of foreign resources (0.1%) equal to 76.7 billion Rials that was reduced to73.3% less than thelast year and 5.3% out of the approved budget was realized. The other factor was utilization of local resources that formed 99.9% of financial assets disposal that increased 16.3% more than thelast year (55430.8 billion Rials). Whilst in the approved budget, its value had been assumed 699081 billion Rials. In practice, 79.3% thereof (55430.8 billion Rials) was realized. It is notable that in this section, surplus of realization equal to 68.4% in comparison with approved budget for rejected payments of thelast years. Moreover, receiving principal foreign loans of government (3%), receiving principal local loans of government (25.8%), using foreign currency reserve account (0.8%) and amendment of Article 60 of Third Budget Plan Act (5%) have been realized out of thesurplus approved budget.

Considering the performance of revenues, expenses, disposal and acquisition of nonfinancial assets, operating balance and net disposal of nonfinancial assets in 1382 (2003), they faced a budget deficit equal to 31370.6 billion Rials that has been grown 54.5% in comparison with similar value of thelast year. The mentioned value was realized 12.4% less than the approved budget value. This value that may be assumed as thegovernmental budget deficit was fully supplied from net disposal of financial assets. In the studied

Research Article

year, disposal of financial assets equaled to 55507.5 billion Rials and acquisition of financial assets equaled to 24136.9 billion Rials.

In 1382 (2003), the debtor balance of foreign currency commitments reserves account has been increased for 3652.7 billion Rials. A part of thedepressed increase of foreign currency commitments reserves account is arising out of maturity of debts prior to 1372 (1993) and another part is arising out of exemption of non-exempted debts of thegovernmental companies and thenongovernmental sector that the government has accepted to pay for it and Central Bank represented by thegovernment has paid for it.

In consideration of the foregoing, 298823.4 billion Rials of government budget had been anticipated and approved thefinancial resources that 64.4% thereof equal to 192422 billion Rials was realized and 10640.4 billion Rials equal to 35.6% of approved budget was not realized.

The government uses of 2998823.4 Billion Rials were approved of which 88% was realized.Asthe result 263375 billion Rials was spent.

35553.7 billion Rials in budget had been approved as thepayment for acquisition of financial assets.However, upon realizing 67.9% thereof, it was reached to 24136.9 and indicated a decrease of 12.7% in comparison with thelast year. It displayed nonpayment of government debt to insurance and pension funds due to non-realization of collection related to disposal of governmental companies which has been decreased 97.2% less than the last year, and reached from 7306.7 billion Rials in thelast year to 204.3 billion Rials. In the approved budget, this value was 11000 billion Rials of which 204.3 billion Rials equal to 1.9% of thebudget was realized.

Until 1383 (2004), public revenues of government included 60-70% of oil revenues. In 1383 (2004), the governmental revenues were going to increase with an almost 45 degree gradient that shows an increase of 30-40% in comparison with thelast years. One of its major causes has been disposal of financial assets within this year.

In 2005, Nonoil revenues have been almost doubled compared to the last year, whilst oil revenues have been increased 23% more than last year. It may be due to other government revenues caused by revenues provided by the government acquisition and considerable increase in the profit of public companies (about 7.2 more than last year). Each year, oil revenues are decreased less than the last year whilst thenonoil revenues are increased.

In 1388 (2009), oil revenues were decreased 27% less than the last year, nonoil revenues were increased 22% which is due totax revenues that has been grown 25.1% more than thelast year and direct taxes have been realized with the surplus value of 1.6% and other incomes has been increased 15% more thanthe last year.

Disposal of nonfinancial assets has been reduced 24% less than thelast year, due to applying clarification of energy carriers and petrol imports in the value of 1387 (2008). The share of resources arising from oil out of total public resources of budget was 49.3%.

In 1389 (2010), governmental revenues decreased 18% less than thelast year, whilst oil revenues were increased 17.4% which may be due to resources acquired from oil and oil products, comparing to thelast year, centralization of fund remitted to treasury from revenue earned from crude oil export in this row in 1389. In the same year, tax revenues have been decreased, its cause may be the new definition of government with National Iranian Oil Co and thatthose revenues were omitted from governmental revenues in this year. Other revenues were reduced 40% due to applying government's in advance profit of crude oil manufactured in 1388 (2009-10). Oil resources share out of total public budget resources was approximately 49%.

The government costs during 1385 and 1386 (2006-2007) were reduced and in 1387 (2008) increased and in 1389 (2010) were doubled.

In 1388 (2009), oil revenues supplied 27% of the government costs whilst in 1382 (2003) met these costs for 72%. The government costs were increasing regardless of oil revenues. For example, the governments not only took measures for reduction of their costs proportional to reduction of oil revenues, but also increased it. The negative operating balance of government has been increased each year more than thelast year. Only in 1386 (2007), this value has been reduced 34% less than the previous year.

Research Article

The minimum gap between revenues and costs of 1380 (2001) in an amount of 123150 billion Rials and the maximum gap in 1390 has been 903140 billion Rials that has been increased 7.4 times more than 1380 (2001). Always, the current costs have been more than the general revenues. Only in 1385 (2006), it was otherwise. The government revenues have ever covered 57% of government costs so that its variation rage was 40% to 70%.

In 2010 that government revenues were reduced extremely, not only any change was made in the government costs, but also the costs were increased. As agreed, nonfinancial assets are acquired from nonfinancial assets means that oil revenues were spent for oil revenues, while averagely 50% of oil revenues have been allocated to civil budgets to compensate the budget deficit of government.
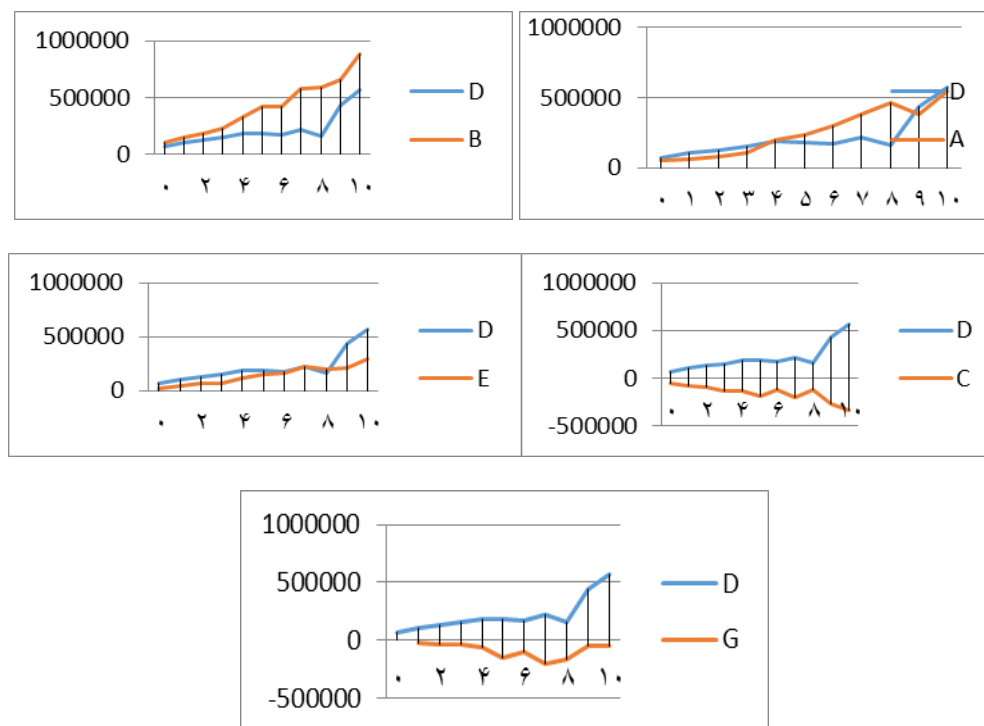

Figure 1: The relationship between disposal of nonfinancial assets and other variables

MATERIALS AND METHODS
Methodology
Based on its objective, the present research is a descriptive and correlative study. Thedata regarding the period 1382-1392 (2003-2013) was obtained from theCentral Bank of Iran.In order toanalyzethe relationship between disposal of nonfinancial assets and government revenue, government payments, operating balance, acquisition of nonfinancial assets, net disposal of nonfinancial assets, operating and nonfinancial balance, disposal of financial assets and net disposal of financial assets have been used. Ultimately Pearson correlation test and linear regression have been used for data analysis.

RESULTS AND DISCUSSION
Results
According to the data displayed in Table 1, correlation between nonfinancial assets and government revenue, government payments, operating balance, acquisition of nonfinancial assets and net disposal of nonfinancial assets is significant. However, thecorrelation between disposal of nonfinancial assets and operating and nonfinancial balance, disposal of financial assets, acquisition of financial assets and net disposal of financial assets was not significant. Furthermore, therelationship between disposal of nonfinancial assets and government revenue, government payments, acquisition of nonfinancial assets

Research Article

and net disposal of nonfinancial assets was positive. However, this association with operating balance was negative and significant.

Table 1: The correlation between variables and nonfinancial assets

Variables	Correlation Coefficient	Significance
Government revenue	0.75**	0.007
Government payments	0.86**	0.001
Operating balance	-0.95**	0.00
Acquisition of nonfinancial assets	0.81**	0.002
Net disposal of nonfinancial assets	0.84**	0.001
Operating and nonfinancial balance	0.12	0.722
Disposal of financial assets	-0.21	0.546
Acquisition of financial assets	-0.46	0.181
Net disposal of financial assets	-0.12	0.722

Reference: Findings of the study

The results obtained from regression analysis in Table 2indicated that the effect of disposal of nonfinancial assets of government is significantly effective on prediction of government revenue, (p>0.05t=3.43 Beta=0.75)
$Y=67324.14x_1+0.75$
Prediction of perating balance (p>0.05t=5.09 Beta=0.86)
$Y=109174.85x_2+0.86$
Prediction of acquisition of nonfinancial assets (p>0.05t=4.16 Beta=0.46)
$Y=-41850.721x_3+-0.95$
Prediction of net disposal of nonfinancial assets (p>0.05t=4.75 Beta=0.53)
$Y=38042.17x_5+0.84$.
Moreover, according to Table 2 disposal of government's nonfinancial assets is not significantly effective on theprediction of operating and nonfinancial balance (p>0.05t=0.36 Beta=0.12)
$Y=101690.14x_6+0.12$
Prediction of disposal of financial assets (p>0.05t=-0.63 Beta=0.21)
$Y=143417.67x_7+0.21$
Prediction of acquisition of financial assets (p>0.05t=-1.46 Beta=-0.46)
$Y=41727.570x_8+-0.46$
Prediction of net disposal of financial assets (p>0.05t=-0.36 Beta=-0.12)
$Y=101690.10x_9+-0.12$

Table 2: Summary of regression analysis of disposal of nonfinancial assets predictor variable for prediction of other variables

Predictor variables	Nonstandard coefficient	Standard error	Standard coefficient	t value	Significance level
Government revenue	0.86	0.25	0.75	3.43	0.007
Government payments	1.40	0.27	0.86	5.09	0.001
Operating balance	-0.53	0.05	-0.95	-10.12	0.000
Acquisition of nonfinancial assets	0.46	0.11	0.81	4.16	0.002
Net disposal of nonfinancial assets	0.53	0.11	0.84	4.75	0.001
Operating and nonfinancial balance	0.05	0.15	0.12	0.36	0.722
Disposal of financial assets	-0.10	0.16	0.21	-0.63	0.54
Acquisition of financial assets	-0.05	0.03	-0.46	-1.46	0.181
Net disposal of financial assets	-0.05	0.15	-0.12	-0.36	0.722

Reference: Results

Research Article

Conclusion and Suggestions

In this study, Pearson coefficient of correlation and regression analysis were used in orderto analyze and predict the effect of oil revenues on government budget and performance, the relationship between disposal of nonfinancial assets and government revenue, government payments, operating balance, acquisition of nonfinancial assets, net disposal of nonfinancial assets, operating and nonfinancial balance, disposal of financial assets and net disposal of financial assets.

In terms of reviewing the macroeconomic indices within the recent years, it is concluded that economy of Iranwithin this period has been efficient encountering major problems including unemployment, poverty and inequality. Nonetheless, considering the growth of public budget costs of government, we may claim that the major problem of economy of Iran is thebudget of thewhole country. Thisbudget has rooted in the body of economy of Iranlike a cancer tumor and is growing through using oil and upon making the smallest disorder in its nutrition may disturb the economy of Iranand involve the applicable political system in unpredictable challenges and crises.

The increasing trend of government's budget deficit causes the revenues acquired from disposal of nonfinancial and financial assets against its defined goals to be spent for compensating the current costs of government. It may lead to reduction of civil budget and increase in government debt to the banks and upraising the unemployment rate and inflation. Thus, it is required to deem the upward trend of government's current costs as warning for the country. Now, in order to execute Principle 44 of constitutional law and articles 7,138,139,143 and 145 of theFourth Budget Plan Act, besides downsizing the government, it is requiredto utilize the government outsourcing in affairs related to disposal of nonfinancial and financial assets for infrastructural affairs to be used by the subsequent generations. The experience of other countries such as Japan, USA and Britain revealed that following government downsizing trend and actual privatization, the values related to unemployment and inflation rate areto be lowered subsequently and employment isto be increased.

REFERENCES

Abbasian Ezzatollah and Khatami Tayebeh (2012). Determination of the optimum path of taxes for reduction of governmental budget dependence to oil revenues. *Quarterly Journal of Quantitative Economics, Circulation* **9**(1) 87-111.

Barnett S and Ossowski R (2002). Operational Aspects of Fiscal Policy in Oil-Producing Countries. IMF Working Paper, Fiscal Affairs Department.

Central Bank of Islamic Republic of Iran (2006). Government size in Iranian Economics, Economic Analysis and Policy Department.

Kia A (2007). Fiscal Sustainability in Emerging Countries: Evidence from Iran and Turkey. Finance and Economics Department, Utah Valley University.

Mehrara Mohsen and Nikioskouei Kamran (2006). Oil price shocks and its dynamic effects on macroeconomic variables. *Journal of Commercial Research, Circulation* **9**(40) 1-32.

Mousavi Jahromi Yeganeh and Zayer Ayat (2008). Analysis of the effect of governmental budget deficit on consumption and investment of private sector in Iran. *Quarterly Journal of Economic Researches, Circulation* **8**(3) 1-19.

Oil and development, Report on important activities of Ministry of Oil (1997-2000), Public Relation Dept of Ministry of Oil.

Pilehforoush Meysam (2012). Oil Trace in Budget. *Quarterly Journal of Economic New Topics* **136** 48-50.

Sala-i-Martin X and Subramanian A (2003). Addressing the natural Resource Curse: An Illustration from Nigeria, NBER Working Paper Series.

Sameti Morteza, Khanzadi Azad and Yazdani Mehdi (2009). Effects of oil revenues and its injection into the economics on revenue distribution: Case study: Iran. *Quarterly Journal of Quantitative Economics, Circulation* **6**(4) 51-72.

Summary of State Economic Developments within 2004-2009, Publications of Central Bank of Islamic Republic of Iran.