

# Effect of Iran Oil Revenues on Liquidity and Ways to Manage It

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## ABSTRACT

Monetary authorities each economy assesses the need of the money. Due to the change in the cash directly sometimes has an effect in production, income, employment and inflation. Affecting factors for these changes is highly desirable for economic and deficiencies caused by the country's deteriorating liquidity necessary and always part of the most important topics among economists country. As theoretic several factors may affect the liquidity of the country, but According to Iran's oil revenues, the country's major foreign exchange revenue and the budget is always set on it, this hypothesis is based on the fact that the liquidity of country have direct effect. In this case, another question is given that the amount of foreign income outside the Iranian economy, How could base on different policies and the volatility of oil prices and production and oil-importing countries, impact on country's liquidity which solely be based on demand and it's situation of the banking system and generally based on country's infrastructure managed. In this case, it was optimistic that its cash flow is adjusted based on the economic capacity of the country and the flood of liquidity that has been seen in recent years, wouldn't causing chaos, economic instability and devaluation of the national currency.

**Keywords:** Liquidity, Oil Revenues, Foreign Exchange Reserves, Liquidity Management.

## Introduction

Central Banks has Complex functions in their countries. Determine the interest rate, the amount of money in circulation, accounting and control inflation, and then calculate the important parameters of some functions of Central Banks in the world.

In some countries, especially the developed countries to perform these tasks can be completely independent from government, and especially the amount of money in

circulation is performed and acts independently and free from government control. Independence or dependence of the intensity of the central bank distinct in different countries, but in some countries like Iran Central Bank is entirely dependent and In fact is a monetary arm of state.

Usually, central banks for changes and control of liquidity changes use tools of change in interest rates which is an

important part of monetary policy tools, and can also refuse lending to commercial banks to improve their liquidity. Borrowing from the Central Bank is part of the liabilities of banks and by strengthening monetary base increases liquidity.

For this reason and to avoid increasing the liquidity and control, in 2007 the head of Iran's central bank announced news of prevent of lending to these banks titled as a "Three locked of the central bank.

There may be several reasons for this, including other important factors that strengthen or weaken the monetary base and finally liquidity; it cannot be evaluated quite effective for the inhibition of liquidity .

### **Problem Statement**

Liquidity rules in money market and the economy have various impacts on economic variables, and if not properly managed causing a lot of problems in economy. Task Facilities Payment (required), Facilities to quick impact firms, forcing the liquidity in the Government's economic plan and such issues cause problems such as increasing unemployment rate and inflation.... Growth of money supply and liquidity are very effective role in the rate of inflation. On the other hand, the main cause of changes in the monetary base is the main reason for growth of money level and liquidity.

Changes in the monetary base could be mainly due to the increase in foreign exchange of government (Changes in crude oil exports) and government debt to central bank (Because of budget deficit). This relationship has led to fundamental changes in international oil prices, and due to high dependence of state budget on exports of crude oil, it transferred to budget, and as mentioned, this expanded the monetary base and the money supply which finally lead to Liquidity growth. Growth of the monetary base and money supply in the economy due to supply-side problems,

which mainly Instead of directed to the manufacturing sector, led to demand and cause an increase in the general price level. As it was said the government for its financial needs, Exchange earnings from crude oil sales, sold with high price on the market. One of the most important policies of the central bank in each country is set monetary policy. One essential component of this policy is to regulate liquidity level. In fact, central banks can set the optimal level of liquidity in the country's macroeconomic objectives, Such as protection of domestic production growth, job creation and hence will lead to inflation control and generally provide a suitable environment for this. Budget deficit has always been one of Iran's economic problems and it's a major factor for growth of liquidity. Because its cause increases of government debt (borrowing) to central bank, or increase withdraw from the reserve account and the subsequently liquidity and inflation increased.

Obviously, if the liquidity is less than the required amount, then the production, income and employment have declined, and inflation as recession inflation occurs during this time and at the same time production decreased and due to a shortage, prices are also start to increase, That is why the variable who affect the liquidity should be seen carefully and put them under Control. One of those important variables is the Income of Oil.

### **Research Background**

There are much survey about liquidity and its components and other economic variables which is effective to it as well. In a survey (Rahmani, 2013) it has been investigated that the oil income some time can cause some failures and difficulties in the country. Then he has resulted that when the management of the Oil income revenue is in the hands of a weak government it could be resulted in a very great problem in economy.

Then he investigated the reduction and increasing the income of oil sale effect and also wrote about the effects of injection of oil income Dollar in 9<sup>th</sup> and 10<sup>th</sup> government of Iran.

In another survey Darghahi (2013) give the analytical answer to the question "why the Oil Dollars cannot be resulted to Growth of production and employment?"

In another survey named "the effect of liquidity growth and export on macroeconomic indexes with emphasize to the Oil industry sector- the Role of state in economy of Iran" (Teyyebi, Sameti & Heydari) showed that the increase rate of oil price have positively effects the state revenue but not effective the Inflation. Totally government with huge revenue of Oil sale income has not been able to play its role efficiently .they suggested state by supporting none oil export and removal subsidies program could play efficient role in improvement Iran growth rate.

### Research Aims

The government to meet its financial needs, sell and sold foreign exchange earnings from crude oil with high prices in the market. This leads to the devaluation of the national currency.

As mentioned previously, one of the most important policies of the central bank in each country is to set monetary policy. One essential component of this policy is to regulate liquidity level.

In fact, by Setting the optimal level of liquidity in Optimal level, led country towards Macroeconomic objectives Such as protection of domestic production growth, job creation.

So it will be very important to know the economic variables which effect the liquidity and put them under control, verify the most

important and effective so that the Central bank is able to prevent liquidity fluctuating.

### Research Hypothesis or Questions

The heavy dependency of Budget to Oil Income, and Economic reform plans of Iran detail, lead to increasing the liquidity of Iran. Indeed, the government would give the oil revenues which are in foreign exchange to the Central Bank and would receive Rial from him in exchange, the Central Bank will sell the foreign exchange in the market for providing Rials or they would be spent on imports, or Central Bank would give Rials to the government and thus would increase the monetary base. The Foreign Exchange Market of Iran is not able to absorb this volume of foreign exchanges. During the recent years the government tried to spend this amount of foreign exchange for import until he can sell these foreign exchanges to customers and so convert them to Rials. But despite of these some of the foreign exchanges would remain in the Central Bank, which would cause the increase of liquidity. At this survey it will be investigated the role of Dollars come to country oil revenue and the relaying country's budget severity to Oil Income to verify how much it effects the liquidity when store as reserve at the Central bank of Iran.

### Research Methodology

With using the statistics of time series of Oil income and Central bank reserve, and monetary base and some other effective variable to the liquidity and related charts we investigate the situation:

A glance to variation of some variables which affect the liquidity, during last four decades, will be occurred. Time series statistics will be compared and the trend of them will be seen in descriptive statistic study. Theoretical studies and the literature I need will be done. I try to apply statistical

analysis for answering the questions and show the variables situation in Iran. For any inferences and analysis statistical and econometrical technique will be used by SPSS software. For this propose I will used the time series information of last 30 to 36 years which have been gathered or produced by the Central Bank of Iran.

### Monetary Base

Monetary base or high powered money which is prepared in accordance with central bank balance sheet is one of the most important money variables. Monetary base is equal to the sum of currency in circulation (notes and coins in the hands of individuals and non-bank financial institutions and bank notes and coins and Non-bank credit institutions) and bank deposits with the Central Bank (Bank visual deposits with the Central Bank + deposits with the Central Bank Act) thus:

Monetary base = Currency (Notes & Coins) outside banking system (central bank & banks) (C) + Banks Legal Deposits with Central Bank (R) + excess reserve (E) or Namely:  $M_0=C+E+R$

Based on the balance sheet of the central bank base money is calculated in two ways: usage (how to use the base) and resources (factors that will determine the monetary base). It is evident that both methods lead to the same results.

### Components of Monetary Base

1. Currency with Public
2. Currency with Other Depository Corporations
3. Other Depository Corporations

### Monetary Base (1+2+3)

### Sources of Monetary Base<sup>2</sup>

1. Central Bank Net Foreign Assets
2. Central Bank Net Claims on Public Sector
3. Central Bank Claims on Banks
4. Other Items (Net)

### Monetary Base (1+2+3+4)

In economy, monetary base is a related term for (and not equal) supply (or existing) money, and means the amount of money in the economy that is highly liquid, which can be explained by considering its components. Thus the monetary base is called high-powered money which change in the monetary base usually leads to much more change for money and credibility<sup>3</sup>.

### Liquidity

Liquidity is the main money variable. Whatsoever the financial markets in countries expand, more institute causing more liquidity. In Iran these institutions are central banks, financial institutions and commercial banks. Main components of Currency (Notes & Coins) outside banking system (Central Bank & banks) (C) and Total none Public Sector Deposits with the Banks (D).

### Theoretical Foundations Money Multiplier

Money multiplier (which is also called the credit and multiplier coefficient), is a measure of the size of the money creation and in another word shows effect of injection of money by bank and money ability to enter the market by commercial banks. Multiplier is a measure that shows the power of money creation in the banking system, and causing money supply growth beyond growing in monetary base, in other word, this is coefficient which show increase in the money stock base on activities of commercial banks. In other words, this

<sup>2</sup> Hassanzadeh -Ali, Mojtabeh- Ahmad (1999) Money & Banking and Finance Institution, Tehran ,Monetary & Banking Research Academy(affiliated to Central Bank)

<sup>3</sup> <http://moneyterms.co.uk/m0/>

shows that in each monetary base per unit, how much money will change.

Divided by ( $M_2$ ) According to the definition of the monetary base and liquidity, the liquidity coefficient is equal to the liquidity.

This relation says the money multiplier changes the amount of money ( $M_0$ ) :

$$m = \frac{M_2}{M_0}$$

(liquidity) is caused by changes in the monetary base.

It is simply contrary to legal reserve

$$m = \frac{1}{R}$$

Money multiplier =

Now, to clarify the factors affecting the liquidity component of the monetary base and the money multiplier, we provide a full definition of the monetary multiplier and the monetary multiplier elements is denoted:

### Liquidity Multiplier Elements

1- Ratio of Currency (Notes & Coins) outside banking system (central bank & banks) (c), This Ratio (c) (Also called the ratio of current currency deposits), indicate of what proportion of the money and checking deposits is used by people, means how much money and written value (check) they use to do deals. If people decide to save more of their money in cash (Similar to situation occurred in society in the end of the year Feast. In this way the lower portion allocated to visual deposit and banks use fewer resources for lending and creating credit money reproductive and consequently, money level will be lower. In other words, if people decide to save more of their money in banknote and cash, fewer part of their saving remains for current accounts, and in this situation because ratio is done base on of currency and Coin in People's hands with total volume of investment, money level in bank decrease network and Increase the share of total bank liquidity, and consequently, the money multiplier influence of these two ratios will reduce, and

the ratio of the volume of currency bank deposits increased, but if people do not save their save money by himself, the mentioned ratio of bank due to the increase in the denominator (total deposits) and shrinks it (The coins and currency with people) will be decrease, And therefore resulting in an increase in monetary power of bank and Lending power ,which leads to the increase in money supply, the velocity of money and multiplier increase which means boom of market and economy. In this case, the banks are able to pay the loan and more facilities.

2- Required Reserves Ratio or Legal reserves relative to total deposits (**r**)

If the central bank increases price of its legal reserves<sup>4</sup>, Lower part of the deposit remains with the bank, and therefore commercial banks have a fewer resources for lending and money creation and in this decrease the amount of money.

3- Ratio of excess reserve

If for any reason commercial banks for each amount of visual deposits holds more excess reserves, smaller amount of resources obtained through the visual deposits spend for loan, and less credit and loans spend on borrowers. Changes in the excess reserve rate are due to the following factors:

A - Market interest rate (r), means the increase in the opportunity cost of excess and unemployed or stagnant reserves in commercial banks.

B - Rate decrease (rd), or the central bank lending interest rates to commercial banks, which in the past it was the re-discount rate.

C - Lack of liquidity risk, the risk index and concerns for facing liquidity shortages in all commercial banks.

In summary, we can say the decrease of market interest rate, the discount rate and an increased risk of a liquidity shortage led to increase of excess reserve rate, which causes reduce of money creation coefficient

<sup>4</sup> Legal reserve rate is the percentage of attracted deposits which banks put into Trust in the Central Bank.

and decreases of money level. Unlike the above, cause increase multiplier of money level and money creation.

Now regarding the concept of the money multiplier and the definitions of coefficient, we formulize this coefficient. We must also consider the different methods for calculating this ratio which ends with the exact same results: Based on liquidity and high powered money (the monetary base), we have:

Money

$$\text{Multiplier} = m = \frac{\text{Liquidity}}{\text{Monetary\_Base}} = \frac{M_2}{M_0}$$

And  $M_2 = C + D$ ,  $M_0 = C + E + R$

Where:

D = Total none Public Sector Deposits with the Banks

C = Currency (Notes & Coins) outside banking system (central bank & banks)

E = excess reserve

R = Banks Legal Deposits with Central Bank

So "m" will be

$$m = \frac{\text{Liquidity}}{\text{Monetary\_Base}} = \frac{M_2}{M_0} = \frac{C + D}{C + E + R} = \frac{\frac{C}{D} + \frac{D}{D}}{\frac{C}{D} + \frac{E}{D} + \frac{R}{D}} = \frac{c + 1}{c + e + r}$$

Where:

D = Total none Public Sector Deposits with the Banks

c = Ratio of Currency (Notes & Coins) outside banking system (central bank & banks)

(Or the proportion of their money customers keep as cash)

e = Ratio of excess reserve

r = Required Reserves Ratio

Now by definition of liquidity and its components (the monetary base and the money multiplier) and component parts, it can be concluded that the components of each factor change money component and liquidity multiplier Coefficient, liquidity of society will change. The government cannot control the size of the monetary base and this in turn is the key topics in monetary policy, which government could increase monetary base by issuing notes and coins. Purchase of government bonds by the central banks in open market operations are the other tools.

The country's foreign exchange revenues from exports, mainly due to the sale of oil. So that more than 80 percent of Iran's foreign currency <sup>5</sup> income includes income and Budgeting is done by help of this Revenues in the country. Iran at some point in time effectively spent its oil revenues and opulent Revenues due to the time spent for development projects and infrastructure, and for that reason the report of the International Monetary Fund (IMF) in 2004, the Iranian economy years 1976 - 1960 (1355 - 1339) had the fastest growth rates in the world, with an average annual growth of 8/9 per cent and stated average annual growth of 7 percent. In this period in 1956 GDP at fixed-rate is about 5 times higher than that in 1960. But this was not due to oil price increases, because by proportional Increasing, price adjustments have been made.

In a situation in which prices and oil prices increased, financial resources and revenues

<sup>5</sup> THE ISLAMIC REPUBLIC'S ECONOMIC FAILURE, <http://www.proconservative.net/PCVol10Is232ClawsonIransEconomicFailure.shtml>

increased. Since the government for its ongoing capital expenditures are required IRRials, the IRR could be converted into foreign exchange earnings from oil sales. Foreign inputs from the sale of crude oil, among the factors that most influence the central bank's foreign assets and the current status of oil revenues in a way that is oil currencies delivered to the central bank, and because even the highest demands of the foreign exchange market, cannot absorb all the dollar; the remaining assets as foreign currencies of the central bank is one of the main items of the monetary base and increase liquidity.

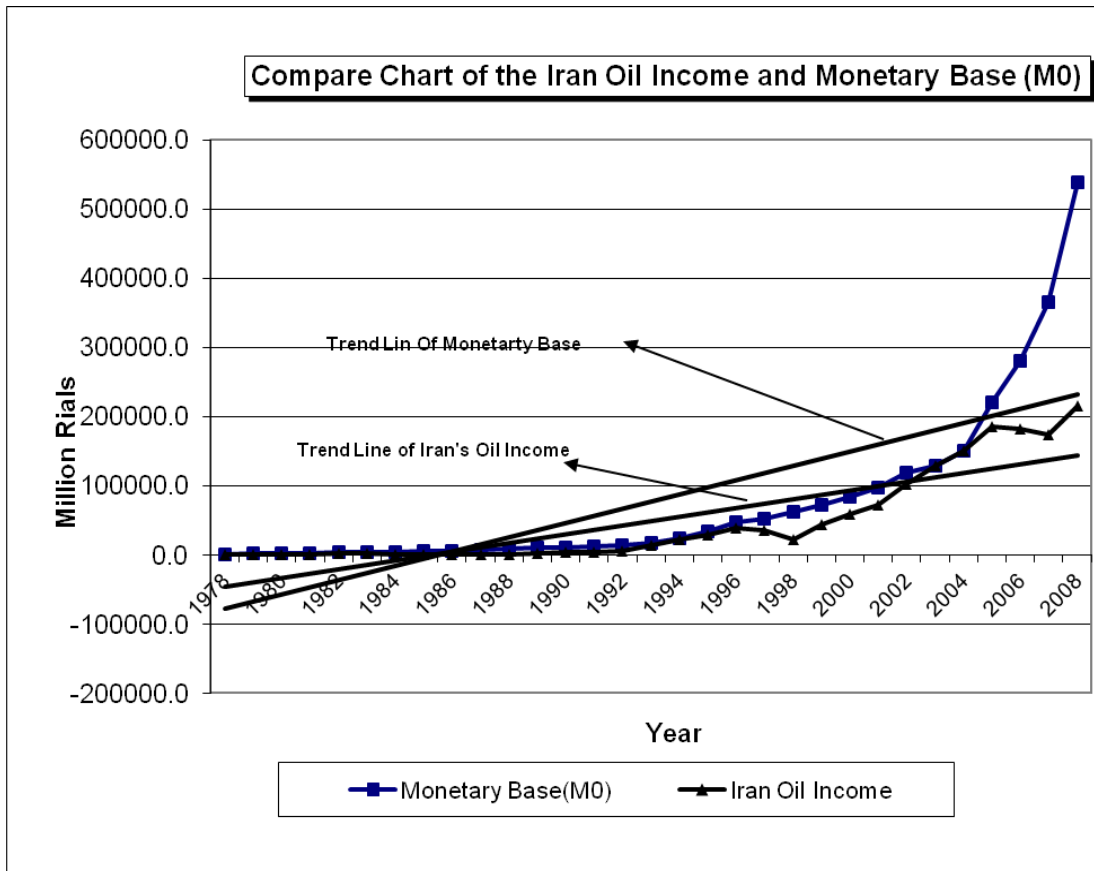
Due to the economic situation we can conclude foreign exchange in recent years the country has had a significant role in increasing liquidity. The more important question is how severe the impact, and strictly speaking, each dollar of cash inflow

from the sale of oil to the country, has added a few dollars, we assume that the liquidity function of Iran oil revenue:

$$M_2 = \text{liquidity} = f(\text{oil income})$$

Iran's oil revenues are an exogenous variable<sup>9</sup>. Exogenous variable is an independent variable that can without any effect of model effect that model.

A production methods and quality characteristics doesn't have a relationship with the manufacturer. in other words, the money supply, price and demand for oil and oil quota does not affect oil revenue, and is a variable that often out of the hands of Iran's economy because of the oil revenues are influenced by OPEC policies, world economy and world production and consumer, sanctions, military and political situation in the region and so on.



9-Exogenous Variable (or extraneous variable)

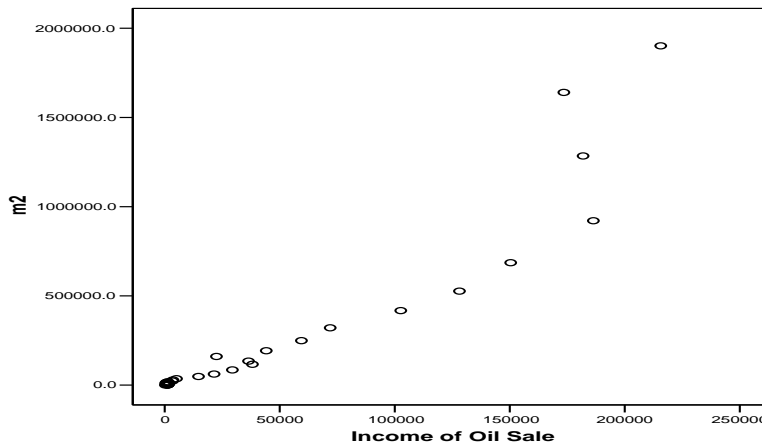
The above diagram shows Iran's oil revenue and the monetary have same trend, and slightly different symptoms that the monetary base also has been affected by another factors and therefore its slope is slightly larger than Iran's oil revenues trend.

Now, the level of dependence and its severity investigated by Econometrical methods and the objective is to determine the influence of

Iran's oil revenues to the liquidity-related variables and to specify the components of the monetary base.

As it mentioned, the assumption is to introduce the models of oil revenues as an independent variable on the dependent variable is assumed to be influence on monetary. This subject will be investigated by time series statistics of the last 32 to 36 years produced or collected by the central bank:

Scatter Plot of the Income of Oil Sale & M<sub>2</sub>



The Scatter Plot of oil revenues and liquidity represents the strong correlation and linear

relationship between two variables and this claim is easily verifiable by statistical tools:

**Model 1 (Coefficients (a))**

Model		Unstandardized Coefficients		Standardized Coefficients		Correlations			Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-38,701.199	32,571.162		-1.188	0.243					
	Income of Oil Sale	6.853	0.427	0.940	16.053	0.000	0.940	0.940	0.940	1.000	1.000

a. Dependent Variable: m<sub>2</sub>

In this model is not significant according to the t-values and then remove it again the following model is obtained:

**Regression**

	Mean(a)	Root Mean Square	N
m <sub>2</sub>	248,448.875	527,098.9013	36
Income of Oil Sale	41,903.15	76,298.166	36



**Correlations (a)**

		m2	Income of Oil Sale
Std. Cross-product	m2	1.000	0.952
	Income of Oil Sale	0.952	1.000
Sig. (1-tailed)	m2	.	0.000
	Income of Oil Sale	0.000	.
N	m2	36	36
	Income of Oil Sale	36	36

In the above table, there is a strong correlation - which is statistically significant and confirmed.

**Model Summary**

Model	R	R Square(a)	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.952	0.906	0.903	164,274.2443	0.906	335.636	1	35	0.000

Liquidity Changes largely explained by the independent variables, in other words, according to adjusted R<sup>2</sup> almost 90 percent of

the oil revenue variable could be explained by changes in liquidity.

**ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9,057,486,107,220.590	1	9,057,486,107,220.590	335.636	0.000
	Residual	944,510,956,725.718	35	26,986,027,335.021		
	Total	10,001,997,063,946.300	36			

As expected, a significant F value indicates a linear relationship between these two

variables and the regression is significant and valid.

Coefficient after removing constant value:

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	Income of Oil Sale	6.574	0.359	0.952	18.320	0.000	5.846	7.303	1.000	1.000

Given the significant regression equation, the following equation in the case of two variables:

$$\text{Liquidity} = 6.574 * \text{Income\_of\_oil\_Sale}$$

According to the ratio of oil revenues can be said, for every unit increase in oil revenues,

liquidity extraordinary increase roughly 6/6 times. The expected result should be examined more closely. This means Iran's oil revenues stimulates what monetary variables that directly target and increase its liquidity. To answer this question, the effect of

independent variables on each of the country's oil revenue for dependent variables.

1 - Currency (Notes & Coins) outside banking system (Central bank & banks)

2 -Excess reserves

3 - Banks Legal Deposits with Central Bank

4- Public Sector Deposits with the Banks and

5 - Central bank clime on Public Sector

Models 2 to 6 are separately investigation:

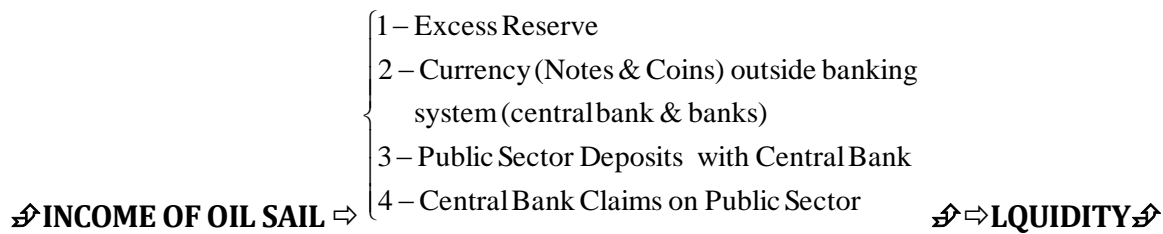
**Monetary Base Components**

Model	Dependent Variable	Predictors	Standardized Coefficients(Beta)	t	Sig.	Tolerance	VIF	Collinearity Statistics	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
2	Banks Legal Deposits with Central Bank	(Constant)	31246.36													
		Income of Oil Sale	<b>0.688</b>	3.345	0.002	1.000	1.000		0.473	0.460	53,455.44848	0.473	36.843	1	41	0.000
3	excess reserve	(Constant)														
		Income of Oil Sale	<b>0.908</b>	-0.101	0.920	1.000	1.000		0.825	0.819	12,390.89215	0.825	141.122	1	30	0.000
4	Currency (Notes & Coins) outside banking system (central bank & banks)	Income of Oil Sale	<b>0.941</b>	11.879	0.000	1.000	1.000		0.886	0.882	12,940.12796	0.886	240.347	1	31	0.000
5	Public Sector Deposits with Central Bank	Income of Oil Sale	<b>0.946</b>	15.503	0.000	1.000	1.000		0.894	0.891	20,462.336	0.894	296.144	1	35	0.000

6	Central Bank Claims on Public Sector	Income of Oil Sale	<b>0.948</b>	17.627	0.000	1.000	1.000	0.899	0.896	21,182.032	0.899	310.725	1	35	0.000
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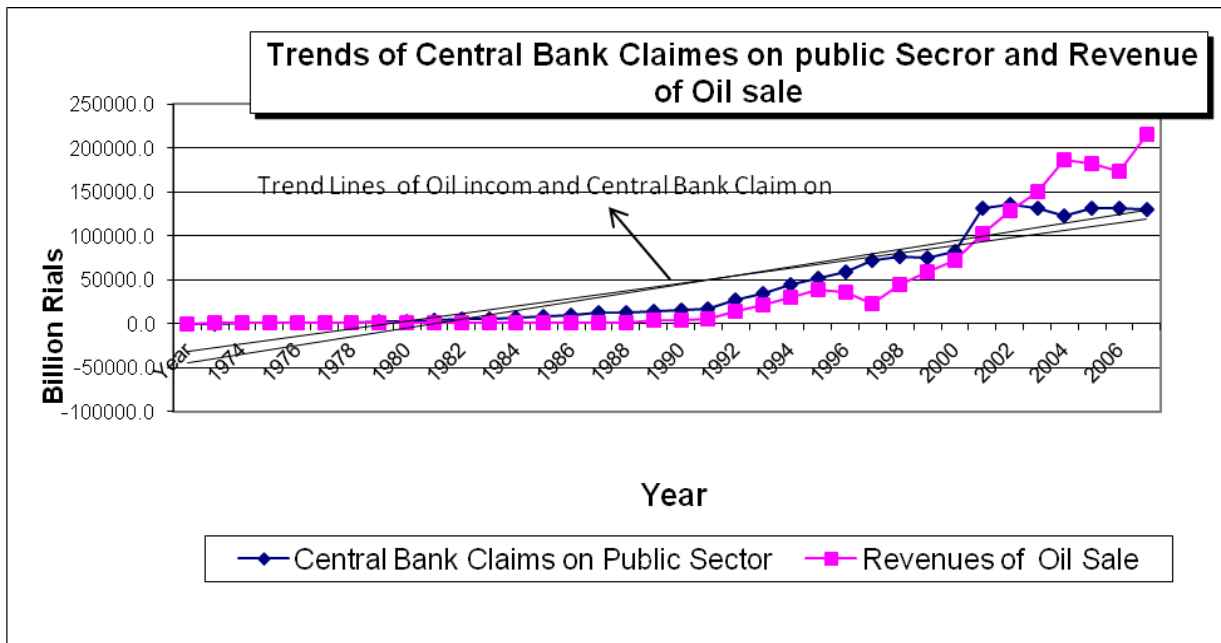
As seen in model 2 regarding to R square and F amounts, there could not be a linear relationship between *Banks Legal Deposits with Central Bank* and *Income of Oil Sale*, so the model is not statistically significant. The models 3, 4, 5 and 6 are significant. Because the constants of models 2, 3, 4 are not statistically significant, we rebuild the models without constant. The coefficients of the variable *Income Of Oil Sale* in each model shows that this variable notably affect the

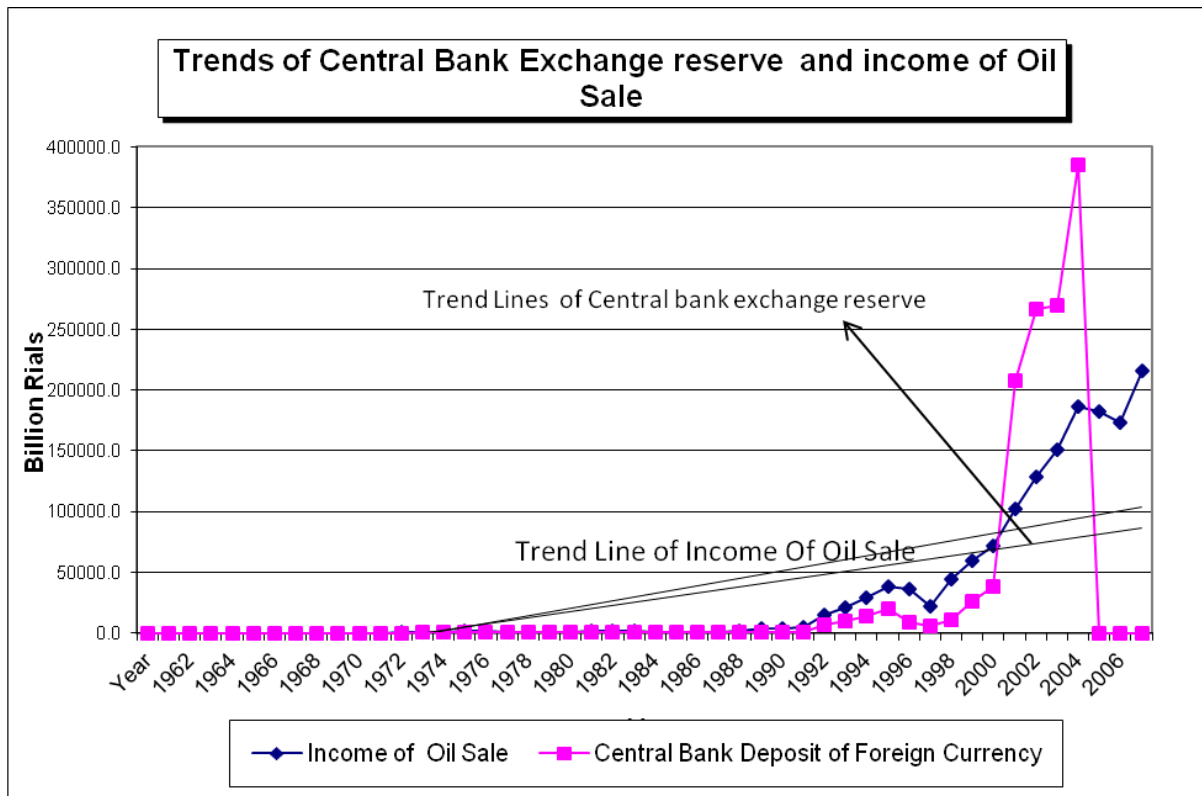
variables *Excess Reserve*, *Currency (Notes & Coins) outside banking system (central bank & banks)* and *Public Sector Deposits with Central Bank*, *Central Bank Claims on Public Sector* Separately. So any increasing of *Income of Oil Sale*, causes increasing in *Monetary Base* and *Public Sector Deposits with Central Bank* and *Central Bank Claims on Public Sector* which itself cause the increasing *Liquidity*. SO based on above model it has been proved that:



This issue is easily visible which shows the high positive dependency of the two variables of Central bank claims of the Public

Sector and Revenue of Oil Sales revenue in the following Chart:





Source:

<http://tsd.cbi.ir/IntTSD/EnDisplay/Display.aspx>, the data before 1972 cited from <http://64.130.220.74/ISNA/PicView.aspx?Pic=Pic-1327938-11&Lang=P>

In the above diagram, the positive impact of increasing oil revenues on foreign reserves of central banks is clear. As is apparent from the table during the 1960 decade foreign exchange reserves of the central bank very limited and the process has been relatively stable. And this is indicative of the fact that the role of oil revenues in Iran's economy is completely different than the next decades. In this decade, Foreign exchange mainly used in economic projects and investment.

From 1992 onwards, after increasing 25 times the official exchange rate, the central bank saw a sharp 577.7 percent increase in foreign exchange reserves ( year 1993 ), which also witnessed increase in oil prices. With decrease of oil prices in 1997, Witness a sharp drop in foreign exchange reserves of

the Central Bank (-53.3 percent). This decrease has continued since the rise in oil prices in 1998, but increased again in 1999, and in 2002 experienced unprecedented growth of 440.7 percent over the previous year.

In fact, all this confirms the importance of the increase in oil revenues increased foreign exchange reserves in the bank, and this in turn strengthened the monetary base and increase the liquidity.

### Conclusions and Suggestion

Huge Income of oil export causes disordered imports and change this income to liquidity as well, causes to the tendency for mass consumption and absorption of any imported commodity which have contracted economy of Iran with the Dutch disease.

The income of oil sale as a exogenous variable which is under effect of global market and economy and mainly due to OPEC policies affects the liquidity of Iran and

by Government policies and regarding to high dependence of the Iran Central Bank, The Central Bank does not have an efficient role in cash flow management.

In this regard, the following recommendations for preventing the uncontrolled impact of oil revenues on liquidity are provided:

1 - Reduction of reliance of government budget on oil incomes and considering the monetary fiscal discipline in financial and budget policies. And lead this huge amount of income to production and productive investment, instead. The necessity of intact making of financial structure of government should be considered.

Decreasing the high dependence of sources for government budget on the oil incomes is very important, because it has caused the highest share of the increase in Central Bank Foreign Assets, which in the annual growth of monetary base.

2- Avoiding the issue of drafts for withdraw from currency reserve fund for foreign exchange or providing the budget by the government. Also a serious intention to keep some amount of Oil Income to the currency reserve fund to control the variation of Oil price in global market as exogenous variable to control the oil sale income variation. In this case it could be have an attention to the limitation of capacity for the currency absorption in international market and long term targets of economic growth.

3- Controlling the disordered imports and lead oil income to investment and infrastructure of economy for development in productive industrial, agricultural and service sectors and not for increasing the Liquidity.

4- One of the most important factors of increase in monetary base is the Central Bank Net Foreign Assets which has a remarkable rule in increase in liquidity.

5-Reserve account that the name was in next government changed to the currency reserve

fund for foreign exchange, is the name of the state reserve account, which launched in 2000 after surpassed the shock of the reduction of oil revenues. Reserve account proceeds objectives such as stabilization in the amount of the sale of crude oil, change assets into other types of reserves and develop production activities and investment and Provide part of the required credits for Production Plans and entrepreneurial of non-governmental sector, and takes into account envisaged activities in the programs. Under the rules of the third and fourth development, the government is allowed to withdraw from this account, when the revenue from oil exports decline to expected numbers. Also Withdraw from non-oil revenue reserve account to meet the deficit caused by public funds is prohibited. Main important thing is that the philosophy of creation this account is to adjust pressures of oil prices fluctuate on the national economy to create

Savings account for the future generations of the country and the government's attitude on authorities' perspective and country planning in how this influenced the account directly.

Fluctuations in oil prices, especially the fall in oil prices during 1370 and the sharp reduction in government foreign exchange earnings and was not achieved Budget to establish foreign exchange reserves for absorbing increased cross section and the temporary oil revenues and prevent the effects of oil price fluctuations on the state budget and the national economy.

Under the Parliament Act, the government was obliged from year 2000 to keep a surplus of foreign exchange earnings from the export of crude oil in the government deposit in the Central Bank. According of Amendment under paragraph (c) of Article 60 of the Third Plan, the government was allowed to use a maximum of fifty percent of the resources in the reserve account funds needed for investment and financing of entrepreneurial projects and manufacturing industry, mining,

agriculture, transport and technical - engineering services of non-government parts which their technical and economic justify confirmed by the specialized ministries, as a facilities and adequate ensure through the domestic banking system and Iranian abroad banks.

According to the objectives and situation of the reserve fund, that part of the reserve currency of the Fund or of the liquidity will not increase. Using these funds due to the changes of world oil price would be manageable in issue of liquidity.

6. Consistent with what was on the reserve fund, the price (and ultimately oil revenues) as well as production quotas (and ultimately sales) as exogenous variables outside the control of government.

Some oil revenue reserve fund in any way, either through the store or through investment in production and infrastructure projects, should be kept out of the government reach. The important point is that the price of oil and the oil revenues as an exogenous variable and completely beyond the control of the Iran government and the economy. It is better to spend a share of oil revenues for future generations and So obviously the Reserve Fund was established in Norway's oil revenues, and Norway government has only holdings a third of its. Kuwait during 1990, allocated \$12 billion of surplus oil revenues to infrastructure investment. In this regard, the Norway's model is a good example of successful experience can be named Reserve Fund of Norway's oil revenues. In 1977, Norway faced highest level of debt in the history which means 50 percent of the country's GDP. With the decline in prices in the late 80s, the Norway government decided to reduce its economic dependence on the oil price fluctuations by impose restrictions on how use of oil revenues. This led to the formation of the Norwegian Parliament in 1990 approved foreign exchange reserves to ratify.

The Fund formally in 1996 began his job and since then has caused a great development in the Norway's economy. In terms of legal this fund is a Norway's krone account currency at the Central Bank of Norway, which is named the State Oil Fund. Fund Management firstly was responsible of the Ministry of Finance, but from October 1997 responsibilities of Ministry of Finance of the State Oil Fund conceded to Norges central Bank. By law, funds of funds in foreign financial instruments, bonds, shares, money market instruments, securities investment and fund essential changes should be discuss and evaluated in Parliament. Transparency of fund expenses, fund performance and degree of risk taking, every three months a report made by the Central Bank of Norway informed to public. The quarterly fund reports regularly placed on the website. Parallel to that, the regular meetings of the members and officials of fund with the Ministry of Finance are arranged for a press conference about the current performance. Remarkably, at the Fund's annual report listing all investments of property and earnings are announced.

According Haralsen the General Manager of Technology and Industry of Norwegian Ministry of Petroleum and Energy, all surplus funds of Norway's oil invested exclusively in other countries.

Given these facts, and the economic effects of this fund in the past year that mentioned later, the dramatic differences between the fund in Norway and its role in our country are felt.

Establishment of Reserve funds and policies of the Norwegian oil and gas field exploration and development by domestic and foreign public and private companies led to:

1 - The total revenue from the sale of oil as a natural resource belongs to all generations of the Norwegian people's should be remaining for all generation and all of them benefit from it.

2-All activities, including the development and current activities comes mainly from the state tax revenues, and resources from the sale of the country's wealth not in the hands of the government, so due to the need for people to pay the Costs government must be held accountable for their actions.

3-Because the administration community is done primarily through taxes, people to promote the welfare of the community are working more to earn more income and pay higher taxes.

4 - Norway's oil boom has caused many job opportunities to be created directly and indirectly

5 - Numbers of professionals and technicians in the fields of oil and gas in Norway have been trained to work in other countries; even the oil reservoirs can generate income and capital and bring to Norway.

Mentioned things are part of a large share of foreign exchange reserves in the Norway's grown economy. According to the general discussion of the fund's reserve account several important differences between Iran and Norway reveals.

For example, all Norway's oil and gas revenues are deposited into the account and do not have any right to withdraw from primary and grabbed are permitted only for investment out of Norway, while in Iran the potential revenues in excess of the ceiling on the annual budget of anticipated revenues to be deposited into this account, and when government revenues from oil sales be less than the amount projected in the budget, the government has the right to take the Differentials from the Fund. Another important use of funds to create incentives for investment that operated for the development of the oil fields. Norway has been able to courage investors trying to apply them to the world's latest technology and innovative techniques to increase the recovery factor and double the oil fields .in this way Recovery of the oil fields of Norway

is about 70 percent, whereas the corresponding figure for most of our vessels exceeding 30 percent. In other words, a Norway's oil field extracted oil more than twice in other parts of the world. One of the important features of the Norway's reserve fund is a role in the country's pension funds, And Profit from investment reserve fund is used to meet long-term commitments in the Government Pension Fund of Norway, And appropriate Practice of this Pension fund in recent years make it most effective in the world. Although Norway's third largest oil exporter in the world after Saudi Arabia and Russia, but only 20 percent of its oil revenue comprises currency revenue and the remaining 80% is related to advanced electronic exports. Appropriate policies by the Norwegian government over its oil revenues in 31 March 2006 led Norway's stock of foreign exchange reserves reach to 234 billion. In recent years, oil revenues supply 20% of GDP and 44 % of Norway's export and export of 3 million barrels per day not only cause economic dependence on oil revenues , but also forming foreign exchange reserves as an obstacle to entry unbridled revenues to the Norway's economy. Government of Norway plans for spending its oil revenues is the best model for oil-exporting countries in the world and our country also can use this experience.

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