

# Effect of Price of Petroleum Products on Macroeconomics Parameters

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## ABSTRACT

Whereas the oil has a key role in Iranian economy and it has had important effects on Iranian macroeconomics. Thus the aim of this study was study the effect of price of petroleum products on macroeconomics parameters in Iran. Results showed that in 2005-2006 wholesale price index with producer price index and has a minimum correlation with consumer goods and services price index with wholesale price index. In 2007-2008 wholesale price index with producer price index 91.1% and has a minimum correlation with consumer goods and services price index with wholesale price index 62.8%. Correlation between the changes of the price indices specified that it has maximum correlation with wholesale price index with producer price index 91.1% and has a minimum correlation with consumer goods and services price index with wholesale price index 62.8 % (year 2009/10). Also results showed that In study of changes in price indices in (2014/15) export goods price index with  $-0.5\%$  change has the minimum change and the consumer goods and services price index with  $15.6\%$  change has the maximum change and Producer Price Index have also  $14.6\%$  change.

**Keywords:** Iranian economy, macroeconomic, oil price.

## 1. INTRODUCTION

Oil has always had an important role, especially on the economic and life in Iran during the Iran research oil issuance receiving oil revenues was encountered with sanctions and the Iranian economy clear and effective on lives whose lives which created problems for the country and warned once that Iran must abandon from the dependence on oil revenues. Economy in monoproduct countries relies on the product and in Iran relies on oil revenues that include at least 60% directly of the state budget which the sanctions offered by the United Nations, Europe and America because of Iran's nuclear program beginning since 2006 and

reduced oil incomes in Iran and was also reduced government revenues which forced the government to borrow Central Bank and other banks which has its consequences for the Iranian economy, inflation and unemployment. Sanction against Iran's oil is the subject of global macroeconomic meetings. And sanction against sale of petroleum has led to increase in its global price and it is a tangible subject today. What is more interesting is that the most optimistic state of current situation is that global petroleum price become more expensive and it will have its negative effects on Iranian macroeconomics which may have also more dangerous and more important consequences in the region and the world. Even there is a possibility for regional war for oil. Increase in oil revenues provide an opportunity for our country which leads to increase in foreign exchange revenue, but on the other hand, management of such resources is among severe challenges of government. Iranian economy is based on revenues resulting from sale of petroleum products and any change in macroeconomics indexes such as following items: National income, investment, government expenses, employment and unemployment, inflation, economic growth, and considering the current situation of Iran with regard to sanction from western countries as well as not selling Iran's oil to some countries and that some countries do not buy Iranian oil due to sanctions and not receiving the money or even the sale of oil may have some effects on the aforementioned economical indexes. The goal of this study is to review how the price (income) of petroleum products in Iran affects the macroeconomics parameters and how much the macroeconomics parameters and the price of petroleum products are dependent to each other and if the petroleum incomes change, what changes may occur in macroeconomics parameters, and how was the correlation between these two items up to now in order that we can draw a clear picture for future about the effects on the following items: National Income, Investment, Government's Expenses, Employment and Unemployment, Inflation, Economic Growth. This research is a useful research for the society because everyone knows how sale of fuel materials can affect macroeconomics of Iran. If for some reasons, the sale of petroleum products cuts, how it may affect the macroeconomics of our country and its maximum and minimum effects are on what parameters of macroeconomics in order that we can neutralize the negative effect of lack of petroleum material sale through a long-term programming and to provide the next generation with more hope resulted from this knowledge that the state macroeconomics scheme can promote without the effect of fuel materials sale. Considering the great dependency of state macroeconomics for oil and whereas the oil is not a permanent resource and someday it may be finished and there is possibility of stoppage in revenues resulted from petroleum products sale due to some controlled or uncontrolled reasons. We have tried to study the correlation between important indexes of macroeconomics and petroleum. This study is important because it has investigated the increase, decrease or stoppage of oil price and its effect on macroeconomics.

## **2. LITERATURE REVIEW**

A glance at the prospects of oil and new world technology shows how oil has led to the development of the world's countries, and why the development in major industrial countries is indebted to plundering, looting, and in fact the failure of the Third World. Large countries have moved the cheap raw materials to their manufacturing workshops and factories with giant ships; and after long years of plundering, the oil producing countries at last realized that some of the oil revenues should be used in the development affairs. Waking of thoughts and social developments in recent years have also contributed to this. Throughout the Middle East, Iran perhaps is the first country where oil was discovered and industry was founded. According to Darcy concession, Iran had an average income of about 17 cents per barrel (1901). Oil has been one of the

important factors in providing the necessary capital to increase our country's macroeconomic indicators, so that the most part of the country's exchange credits have been provided from oil exports. steel, petrochemical, aluminum, machine building, shipbuilding, and gas pipelines industries, as well as, Tehran, Isfahan, Shiraz and Tabriz refineries (Abadan refinery in 1911 and Kermanshah refinery in 1935) were constructed with the oil revenues. Also electrical industries, power plants, consumer industries (such as cement, textile and metal), food industries (such as sugar and pharmaceuticals), general facilities and machinery, as well as transport industries were created, so that about 85 percent of the country's consumption requirements was produced in the country, and covered by the same industries with the reliance on oil revenues. Indeed oil functions influentially in Iran's macro economy; it seems that its function is very influential for the development of macro economy. In average, in last 20 years, 16% of GDP has been dependent on oil income, may be due to reduced public operations. Most important oil function is that inevitably 85 % of state's currency incomes are gained through oil sale, consequently, other economic sectors are dependent on oil sales to satisfy their import requirements, beside 98 % supplied energy. Shortages of oil export to foreign states or its deficient domestic utilization impacts general budget, consequently state's economic recession or development is largely dependent on oil. Oil functions remarkably to balance general budget in last 20 years, 54% of general budget has been dependent on oil although it may indirectly affect tax incomes and others, generally reduced incomes of oil export may result in state currency deficiency, lower production and import while decreased investment increases inoccupation, decreases supply of good and service delivery process that may have negative impact on social welfare. Reduced oil income decreases incomes of general budget, imbalances state's budget, it may increase inflation and available money; accordingly, production growth, investment for occupation; inflation and social welfare are directly dependent on oil industry.

### **Consumer Goods and Services Price Index (CPI)**

Consumer goods and services price index is one of the most important price indices and as an important symbol for evaluating inflation rate and state domestic money purchase power are the most important tools for economic planners for determining state economic situation in different times and a guidance for determining financial and monetary policies.

### **Wholesale Price Index (WPI)**

Wholesale price index is one of the price indices that as an economic symbol calculate changes in general level of prices in wholesale. During previous years the most developed countries across the world stopped using this index and instead use Production Price Index (PPI), but in Iran due to differences between the above said WPI with PPI and also for maintaining chronological order of wholesale price index, decided to continue producing the said index.

### **Producer Price Index (PPI)**

Producer price index is one of the price indices that has a special importance with regard to development of new economic theories, using this index both as an important economic symbol and having a more useful application in domestic accounts in terms of concept.

For calculating this index, we shall calculate changes in goods in different process of production (raw material, intermediate goods and manufactured goods) in important economic parts.

## Export Price Index (XPI)

Producer price index is one of the price indices that has a special importance with regard to development of new economic theories, using this index both as an important economic symbol and having a more useful application in domestic accounts in terms of concept. For calculating this index, we shall calculate changes in export goods production (raw material, in important economic parts.

## Purpose and Objectives of Study

Whereas sale of petroleum products has several effects on Iranian macroeconomics, we tried in this study to review the effect of petroleum products on important indexes of Iranian macroeconomics as follows:

1. To determine the correlation between petroleum incomes and government's expenses
2. To determine the correlation between petroleum incomes and gross document product (GDP)

Researches with library methodology check the numbers cultivars related to the years 2000 till 2014 deals then the dependence of the parameters of the state budget, inflation and production of GDP each year, with the oil products revenues per year, compared with using software analyzed statistically and outcome finally to that finds and then to submit reform proposals presented. In general, the whole research looks at the following 3 major topics:

1. Petroleum and petroleum product price (sale price) has affected Iran's inflation in recent years.
2. Petroleum and petroleum product price (sale price) has affected gross domestic product in recent years.
3. Petroleum and petroleum product price (sale price) has affected the government expenses.

## 3. RESULTS

In study of changes in price indices in 2005-2006, wholesale price index and Producer Price Index with 9.5% change has the minimum change and the export goods price index in rustic regions with 16.2% change has the maximum change and Consumer Goods and Services Price Index have also 12.1 % change (Table 21.1).

**Table 21.1**  
**Percentage change in the price index in (2005/06)**  
**compared to the previous year**

<i>Major groups</i>		<i>Specified groups</i>		<i>Main groups</i>		<i>Selected minor groups</i>	
<i>Title</i>	<i>%</i>	<i>Title</i>	<i>%</i>	<i>%</i>	<i>Title</i>	<i>%</i>	
CPI	---	Services	15.8	Medical care	19.3	Fruits & vegetables	15.7
WPI	Export goods	Agriculture, animal husbandry & fishing products	10.1	Chemicals and petrochemical	16	Agriculture products	13.2
PPI	---	Services	13.6	Education	20.6	---	---
XPI	---	---	---	Mineral products	37.6	---	---

**Table 21.2**  
**Monthly maximum and minimum changes in price index**  
**(Compared to the same period last year)**

<i>Price index</i>	<i>Maximum</i>		<i>Minimum</i>	
	<i>Month</i>	<i>%</i>	<i>Month</i>	<i>%</i>
CPI	May and June	15.7	March	9.5
WPI	May	15.3	July and August	1
PPI	April	16.7	August	9.5
XPI	February	4.3	August	2.7

Monthly study of the index shows that maximum change of this index in (2005/06) was in May and June which was 15.7% and the minimum change was in August with .4% that their change range is close to each other (Table 21.2).

**Table 21.3**  
**Correlation between the change of the price indices**

<i>Price indices</i>	<i>CPI</i>	<i>WPI</i>	<i>PPI</i>
CPI	---	62.8	73.9
WPI	62.8	---	91.1

In calculating its correlation coefficient mentioning the indices it was specified that it has maximum correlation with wholesale price index with producer price index 91.1% and has a minimum correlation with consumer goods and services price index with wholesale price index 62.8% (Table 21.3).

**Table 21.4**  
**The inflation rate in terms of geographical areas**

<i>Geographical areas</i>	<i>Maximum</i>	<i>Minimum</i>	<i>The name of the province with the highest rate</i>	<i>The name of the province with the least rate</i>
State	15.7	12.1		
Capital	11.1			
Provincial	15.3	9.3	Kourdestan and khozestan	(E.A) Tabriz
Urban	14.1			
Rustic	12.2			

In study of changes in price indices in (2006/07), wholesale price index and Producer Price Index with 9.5% change has the minimum change and the export goods price index in rustic regions with 16.2% change has the maximum change and Consumer Goods and Services Price Index have also 12.1 % change (Table 21.4).

Monthly study of the indices shows that maximum change of this index in (2006/07) was in March which was 13.6% and the minimum change was in August with 8% that their change range is close to each other (Table 21.5 and Table 21.6).

In calculating its correlation coefficient mentioning the indices it was specified that it has maximum correlation with wholesale price index with producer price index 91.1% and has a minimum correlation with consumer goods and services price index with wholesale price index 62.8% (Table 21.7).

**Table 21.5**  
**Percentage change in the price index in (2006/07)**  
**compared to the previous year**

	<i>Major groups</i>		<i>Specified groups</i>		<i>Main groups</i>		<i>Selected minor groups</i>	
	<i>Title</i>	<i>%</i>	<i>Title</i>	<i>%</i>	<i>Title</i>	<i>%</i>	<i>Title</i>	<i>%</i>
CPI	---	---	Services	15.8	Medical care	19.3	Dairy products and eggs	17.6
WPI	Export goods	19	Construction materials	19.9	Manufactured goods according to raw materials	16.1	Metallic	31.8
PPI	---	---	Agriculture, animal husbandry, forestry and fishing	13.1	Mining and quarrying	34	--	
XPI	---	---	---	---	Mechanical appliances and electrical equipment	67.8	---	---

**Table 21.6**  
**Monthly maximum and minimum changes in price indices**  
**(Compared to the same period last year)**

<i>Price index</i>	<i>Maximum</i>		<i>Minimum</i>	
	<i>Month</i>	<i>%</i>	<i>Month</i>	<i>%</i>
CPI	March	13.6	June	10.3
WPI	March	12.1	July	7.1
PPI	March	12.2	August	8

**Table 21.7**  
**Correlation between the change of the price indices**

<i>Price indices</i>	<i>CPI</i>	<i>WPI</i>	<i>PPI</i>
CPI	---	62.8	73.9
WPI	62.8	---	91.1

**Table 21.8**  
**The inflation rate in terms of geographical areas**

<i>Geographical areas</i>	<i>Maximum</i>	<i>Minimum</i>	<i>The name of the province with the highest rate</i>	<i>The name of the province with the least rate</i>
State	15.7	12.1		
Capital	11.1			
Provincial	15.3	9.3	Kourdestan and khozestan	(E.A) Tabriz
Urban	14.1			
Rustic	12.2			

In study of changes in price indices in (2007/08), wholesale price index Price with 14.9% change has the minimum change and the consumer goods and services price index in urban regions with 18.4% change has the maximum change (Table 21.8).

**Table 21.9**  
**Monthly maximum and minimum changes in price index**

<i>Price index</i>	<i>Maximum</i>		<i>Minimum</i>	
	<i>Month</i>	<i>%</i>	<i>Month</i>	<i>%</i>
CPI	March	18.4	April	12.8
WPI	August and November	15.6	April	13.3
PPI	April	12.2	July	7.8

Monthly study of the index shows that maximum change of this index in (2007/08) was in March which was 18.4% and the minimum change was in July with 7.8% that their change range is close to each other (Table 21.9).

**Table 21.10**  
**Correlation between the change of the price indices**

<i>Price indices</i>	<i>CPI</i>	<i>WPI</i>	<i>PPI</i>
CPI	---	62.8	73.9
WPI	62.8	---	91.1

In calculating its correlation coefficient mentioning the indices it was specified that it has maximum correlation with wholesale price index with producer price index 91.1% and has a minimum correlation with consumer goods and services price index with wholesale price index 62.8% (Table 21.10).

**Table 21.11**  
**The inflation rate in terms of geographical areas**

<i>Geographical areas</i>	<i>Maximum</i>	<i>Minimum</i>	<i>The name of the province with the highest rate</i>	<i>The name of the province with the least rate</i>
State	15.7	12.1		
Capital	11.1			
Provincial	15.3	9.3	Kourdestan and khozestan	(E.A) Tabriz
Urban	14.1			
Rustic	12.2			

In study of changes in price indices in (2008/09), wholesale price index and export goods Price Index with 13.9% change has the minimum change and the Consumer Goods and Services price index with 25.4% change has the maximum change and Producer Price Index have also 21.8 % change and export goods Index have also 16.3 % change (Table 21.11).

**Table 21.12**  
**Percentage change in the price index in (2008/09) compared to the previous year**

	<i>Major groups</i>		<i>Specified groups</i>		<i>Main groups</i>		<i>Selected minor groups</i>	
	<i>Title</i>	<i>%</i>	<i>Title</i>	<i>%</i>	<i>%</i>	<i>Title</i>	<i>%</i>	
CPI	---	---	Housing, water, electricity, gas, and other fuels	27.9	Food and beverages	30.2	Bread and cereals price	57.3

	<i>Major groups</i>		<i>Specified groups</i>		<i>Main groups</i>		<i>Selected minor groups</i>	
	<i>Title</i>	<i>%</i>	<i>Title</i>	<i>%</i>	<i>%</i>	<i>Title</i>	<i>%</i>	
WPI	Export goods	17	Building materials	19	Manufactured goods according to raw materials	31.2	Metallic	22.4
PPI	---	---	Agriculture, animal husbandry, forestry and fishing	27.9	Fishing	31.2	---	---
XPI	---	---	---	---	Animal or vegetable fats and oils	36.4	---	---

**Table 21.13**  
**Monthly maximum and minimum changes in price index**  
**(Compared to the same period last year)**

<i>Price index</i>	<i>Maximum</i>		<i>Minimum</i>	
	<i>Month</i>	<i>%</i>	<i>Month</i>	<i>%</i>
CPI	January	25.9	April	19.1
WPI	August and November	15.6	April	13.3
PPI	March	22.4	April	17.3

Monthly study of the index shows that maximum change of this index in (2008/09) was in January which was 25.9% and the minimum change was in April with 17.3% that their change range is close to each other. (Table 21.12 and Table 21.13).

**Table 21.14**  
**Correlation between the change of the price indices**

<i>Price indices</i>	<i>CPI</i>	<i>WPI</i>	<i>PPI</i>
CPI	---	62.8	73.9
WPI	62.8	---	91.1

In calculating its correlation coefficient mentioning the indices it was specified that it has maximum correlation with wholesale price index with producer price index 91.1% and has a minimum correlation with consumer goods and services price index with wholesale price index 62.8% (Table 21.14 and Table 21.15).

**Table 21.15**  
**The inflation rate in terms of geographical areas**

<i>Geographical areas</i>	<i>Maximum</i>	<i>Minimum</i>	<i>The name of the province with the highest rate</i>	<i>The name of the province with the least rate</i>
State	25.9	25.4		
Capital	26.7			
Provincial	26.7	19.6	Tehran	kerman
Urban	14.1			
Rustic	26.7			



In study of changes in price indices in (2009/10), wholesale price index and export goods Price Index with -6.8% change has the minimum change and the Consumer Goods and Services price index with 10.8% change has the maximum change and Producer Price Index have also 7.4 % change and export goods Index have also 16.3 % change (Table 21.16 and Table 21.17).

**Table 21.16**  
**Percentage change in the price index in (2009/10) compared to the previous year**

	<i>Major groups</i>		<i>Specified groups</i>		<i>Main groups</i>		<i>Selected minor groups</i>	
	<i>Title</i>	<i>%</i>	<i>Title</i>	<i>%</i>	<i>%</i>	<i>Title</i>	<i>%</i>	
CPI	---	---	Sercices	17.3	Medical care	17.7	Maintenance and repair services	22
WPI	Export goods	17	Building materials	19	Manufactured goods according to raw materials	31.2	Metallic	22.4
PPI	---	---	Agriculture, animal husbandry, forestry and fishing	11.8	Social & personal service activities	24.8	---	---
XPI	---	---	---	---	Vegetable products	17.6	---	---

**Table 21.17**  
**Monthly maximum and minimum changes in price index (Compared to the same period last year)**

<i>Price index</i>	<i>Maximum</i>		<i>Minimum</i>	
	<i>Month</i>	<i>%</i>	<i>Month</i>	<i>%</i>
CPI	April	24.5	March	20.3
WPI	August and November	15.6	April	13.3
PPI	April	20.3	March	7.4

Monthly study of the index shows that maximum change of this index in (2009/10) was in April which was 24.5% and the minimum change was in March with 7.4% that their change range is close to each other (Table 21.17).

**Table 21.18**  
**Correlation between the change of the price indices**

<i>Price indices</i>	<i>CPI</i>	<i>WPI</i>	<i>PPI</i>
CPI	---	62.8	73.9
WPI	62.8	---	91.1

In calculating its correlation coefficient mentioning the indices it was specified that it has maximum correlation with wholesale price index with producer price index 91.1% and has a minimum correlation with consumer goods and services price index with wholesale price index 62.8% (Table 21.18).

In study of changes in price indices in (2010/11), export goods price index with 11. % change has the minimum change and the producer price index with 16.6% change has the maximum change (Table 21.19).

**Table 21.19**  
**The inflation rate in terms of geographical areas**

<i>Geographical areas</i>	<i>Maximum</i>	<i>Minimum</i>	<i>The name of the province with the highest rate</i>	<i>The name of the province with the least rate</i>
State	24.5	10.8		
Capital	11			
Provincial	14	7.5	Qom	Boushehr
Urban	24.5			
Rustic	10.3			

**Table 21.20**  
**Monthly maximum and minimum changes in price index**

<i>Price Index</i>	<i>Maximum</i>		<i>Minimum</i>	
	<i>Month</i>	<i>%</i>	<i>Month</i>	<i>%</i>
CPI	March	3.4	May	3.4
PPI	Janvery	15.3	June	0.1
XPI	October	4	July	-1.9

Monthly study of the index shows that maximum change of this index in (2010/11) was in Janvery which was 15.3% and the minimum change was in July with -1.9% that their change range is close to each other (Table 21.20).

**Table 21.21**  
**The inflation rate in terms of geographical areas**

<i>Geographical areas</i>	<i>Maximum</i>	<i>Minimum</i>	<i>The name of the province with the highest rate</i>	<i>The name of the province with the least rate</i>
State	12.4	8.8		
Capital	10.4			
Provincial	15.9	9.3	Sistan and Bluchestan	Tehran
Urban	12.4			
Rustic	20			

In study of changes in price indices in (2005/06), wholesale price index and Producer Price Index with 9.5% change has the minimum change and the export goods price index in rustic regions with 16.2% change has the maximum change and Consumer Goods and Services Price Index have also 12.1 % change (Table 21.21).

**Table 21.22**  
**Percentage change in the price index in (2005/06) compared to the previous year**

	<i>Major groups</i>		<i>Specified groups</i>		<i>Main groups</i>		<i>Selected minor groups</i>	
	<i>Title</i>	<i>%</i>	<i>Title</i>	<i>%</i>	<i>%</i>	<i>Title</i>	<i>%</i>	
CPI	---	---	Services	15.8	Medical care	19.3	Fruits & vegetables	15.7
WPI	Export goods	19	Agriculture, animal husbandry & fishing products	10.1	Chemicals and petrochemica	16	Agriculture products	13.2
PPI	---	---	Services	13.6	Education	20.6	---	---
XPI	---	---	---	---	Nineral products	37.6	---	---

**Table 21.23**  
**Monthly maximum and minimum changes in price index**

<i>Price Index</i>	<i>Maximum</i>		<i>Minimum</i>	
	<i>Month</i>	<i>%</i>	<i>Month</i>	<i>%</i>
CPI	May and June	15.7	March	12.1
WPI	April	2.9	July and August	1
PPI	April	1.3	August	.4
XPI	February	4.3	August	2.7

Monthly study of the index shows that maximum change of this index in (2005/06) was in May and June which was 15.7% and the minimum change was in August with .4% that their change range is close to each other (Table 21.22 and Table 21.23).

**Table 21.24**  
**Correlation between the changes of the price indices**

<i>Price indices</i>	<i>CPI</i>	<i>WPI</i>	<i>PPI</i>
CPI	---	62.8	73.9
WPI	62.8	---	91.1

In calculating its correlation coefficient mentioning the indices it was specified that it has maximum correlation with wholesale price index with producer price index 91.1% and has a minimum correlation with consumer goods and services price index with wholesale price index 62.8% (Table 21.24).

**Table 21.25**  
**The inflation rate in terms of geographical areas**

<i>Geographical areas</i>	<i>Maximum</i>	<i>Minimum</i>	<i>The name of the province with the highest rate</i>	<i>The name of the province with the least rate</i>
State	15.7	12.1		
Capital	11.1			
Provincial	15.3	9.3	Kourdestan and khozestan	(E.A) Tabriz
Urban	14.1			
Rustic	12.2			

In study of changes in price indices in (20011/12), export goods price index with 14.2% change has the minimum change and the Producer price index with 34.2% change has the maximum change and Consumer Goods and Services Price Index have also 21.5 % change (Table 21.25).

**Table 21.26**  
**Maximum growth of price index**

<i>Specified groups</i>		<i>Main groups</i>		<i>Selected minor groups</i>	
<i>Title</i>	<i>%</i>	<i>Title</i>	<i>%</i>	<i>Title</i>	<i>%</i>
CPI Goods	41.8	Tobacco	82.5	Fish and seafood	62.5
PPI Agriculture, animal husbandry, forestry and fishing	38.2	Fishing	53.9		
XPI	=	Mineral products	181	-=	=

**Table 21.27**  
**Monthly maximum and minimum changes in price index**

<i>Price Index</i>	<i>Maximum</i>		<i>Minimum</i>	
	<i>Month</i>	<i>%</i>	<i>Month</i>	<i>%</i>
CPI	February	5.2	June	1
PPI	October	8.2	December	.2
XPI	October	104.8	December	-4.3

Monthly study of the index shows that maximum change of this index in (2012/13) was in March which was 30.5.5% and the minimum change was in April with 21.5% that their change range is close to each other (Table 21.26 and Table 21.27).

**Table 21.28**  
**The inflation rate in terms of geographical areas**

<i>Geographical areas</i>	<i>Maximum</i>	<i>Minimum</i>	<i>The name of the province with the highest rate</i>	<i>The name of the province with the least rate</i>
State	30.5	21.5		
Capital	26.5			
Provincial	34.9	26.5	N.Khorasan	Tehran
Urban	25.2			
Rustic	33.8			

In study of changes in price indices in (2013/14) price index with 21.8% change has the minimum change and the consumer goods and services price index with 34.7% change has the maximum change and Producer Price Index have also 31.9 % change (Table 21.28).

**Table 21.29**  
**Maximum growth of price index**

	<i>Specified groups</i>		<i>Main groups</i>		<i>Selected minor groups</i>	
	<i>Title</i>	<i>%</i>		<i>%</i>	<i>Title</i>	<i>%</i>
CPI	Goods	41.8	Tobacco	82.5	Fish and seafood	62.5
PPI	Agriculture, animal husbandry, forestry and fishing	38.2	fishing	53.9		
XPI	_ =	=	Plastic and articles thereof, rubber and articles thereof	181	- =	=

Monthly study of the index shows that maximum change of this index in (2012/13) was in March which was 30.5.5% and the minimum change was in April with 21.5% that their change range is close to each other (Table 21.29).

In study of changes in price indices in (2014/15) export goods price index with -.5% change has the minimum change and the consumer goods and services price index with 15.6% change has the maximum change and Producer Price Index have also 14.6 % change (Table 21.30, Table 21.31 and Table 21.32).

**Table 21.30**  
**The inflation rate in terms of geographical areas**

<i>Geographical areas</i>	<i>Maximum</i>	<i>Minimum</i>	<i>The name of the province with the highest rate</i>	<i>The name of the province with the least rate</i>
State	40.4	34.7		
Capital	26.1			
Provincial	39.2	32.2	Qazvin	Tehran

**Table 21.31**  
**Maximum growth of price index**

<i>Specified groups</i>		<i>Main groups</i>		<i>Selected minor groups</i>	
<i>Title</i>	<i>%</i>	<i>Title</i>	<i>%</i>	<i>Title</i>	<i>%</i>
CPI Goods	41.8	Tobacco	82.5	Fish and seafood	62.5
PPI Agriculture, animal husbandry, forestry and fishing	38.2	Fishing	53.9		
XPI	=	Footwear	30.1	=	=

**Table 21.32**  
**The inflation rate in terms of geographical areas**

<i>Geographical areas</i>	<i>Maximum</i>	<i>Minimum</i>	<i>The name of the province with the highest rate</i>	<i>The name of the province with the least rate</i>
State	32.5	15.6		
Capital	27.5			
Provincial	16.9	14.1	Qum and Lorstan	Zenjan and S.Khorasan

#### 4. DISCUSSION AND CONCLUSION

In study of changes in price indices in 2005-2006, wholesale price index and Producer Price Index with 9.5% change has the minimum change and the export goods price index in rustic regions with 16.2% change has the maximum change and Consumer Goods and Services Price Index have also 12.1 % change. In comparing consumer goods and services price index in urban and rustic regions we can conclude that in both groups, services price index had the maximum change and from among urban and rustic regions, the changes in rustic region is more than changes in urban regions and the goods price index has also more changes in rustic region in comparison with urban regions. changes in price indices in (2007/08), wholesale price index Price with 14.9% change has the minimum change and the consumer goods and services price index in urban regions with 18.4% change has the maximum change . In comparing consumer goods and services price index in urban and rustic regions we can conclude that in both groups, services price index had the maximum change and from among urban and rustic regions, the changes in rustic region is more than changes in urban regions and the goods price index has also more changes in rustic region in comparison with urban regions. changes in price indices in (2008/09), wholesale price index and export goods Price Index with 13.9% change has the minimum change and the Consumer Goods and Services price index with 25.4% change has the maximum change and Producer Price Index have also 21.8 % change. and export

goods Index have also 16.3 % change. Comparing of consumer goods and services price index in urban and rustic regions we can conclude that in both groups, services price index had the maximum change and from among urban and rustic regions, the changes in rustic region is more than changes in urban regions and the goods price index has also more changes in rustic region in comparison with urban regions. changes in price indices in (2009/10), wholesale price index and export goods Price Index with –6.8% change has the minimum change and the Consumer Goods and Services price index with 10.8% change has the maximum change and Producer Price Index have also 7.4 % change. and export goods Index have also 16.3 % change. In comparing consumer goods and services price index in urban and rustic regions we can conclude that in both groups, services price index had the maximum change and from among urban and rustic regions, the changes in rustic region is more than changes in urban regions and the goods price index has also more changes in rustic region in comparison with urban regions. In comparing consumer goods and services price index in urban and rustic regions we can conclude that in both groups, services price index had the maximum change and from among urban and rustic regions, the changes in rustic region is more than changes in urban regions and the goods price index has also more changes in rustic region in comparison with urban regions. In comparing consumer goods and services price index in urban and rustic regions we can conclude that in both groups, services price index had the maximum change and from among urban and rustic regions, the changes in rustic region is more than changes in urban regions and the goods price index has also more changes in rustic region in comparison with urban regions. Results showe that in both groups, services price index had the maximum change and from among urban and rustic regions, the changes in rustic region is more than changes in urban regions and the goods price index has also more changes in rustic region in comparison with urban regions. changes in price indices in (2010/11), export goods price index with 11. % change has the minimum change and the producer price index with 16.6% change has the maximum change. In comparing consumer goods and services price index in urban and rustic regions we can conclude that in both groups, services price index had the maximum change and from among urban and rustic regions, the changes in rustic region is more than changes in urban regions and the goods price index has also more changes in rustic region in comparison with urban regions. changes in price indices in (20011/12), export goods price index with 14.2% change has the minimum change and the Producer price index with 34.2% change has the maximum change and Consumer Goods and Services Price Index have also 21.5 % change. changes in price indices in (2013/14) price index with 21.8% change has the minimum change and the consumer goods and services price index with 34.7% change has the maximum change and Producer Price Index have also 31.9 % change. In comparing consumer goods and services price index in urban and rustic regions we can conclude that in both groups, services price index had the maximum change and from among urban and rustic regions, the changes in rustic region is more than changes in urban regions and the goods price index has also more changes in rustic region in comparison with urban regions. Results showed that the both groups, services price index had the maximum change and from among urban and rustic regions, the changes in rustic region is more than changes in urban regions and the goods price index has also more changes in rustic region in comparison with urban regions.

### *References*

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, No. 3: p. 1-19;

- Abbasian, Ezzatollah and Khatami, Tayebah (2012), Determination of the optimum path of taxes for reduction of governmental budget dependence to oil revenues, *Quarterly Journal of Quantitative Economics*, circulation 9, No. 1, p. 87-111;
- Oil and development, Report on important activities of Ministry of Oil (1997-2000), Public Relation Dept of Ministry of Oil, June 2001.
- 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, No. 4: p. 51-72.
- Central Bank of Islamic Republic of Iran (2006), Government size in Iranian Economics, Economic Analysis and Policy Dept..
- Mehrara, Mohsen and Nikioskouei, Kamran (2006), Oil price shocks and its dynamic effects on macroeconomic variables, *Journal of commercial research*, circulation 9, No. 40: p. 1-32.
- A, Kia. (2007), Fiscal Sustainability in Emerging Countries from Iran and Turkey. Finance and Economics Department, Utah Valley University.
- X, Sala-i-Martin .& A. Subramanian. (2003), Addressing the Natural Resource Curse: An Illustration from Nigeria, NBER Working Paper Series.
- S, Barnett & R. Ossowski. (2002), Operational Aspects of Fiscal in Oil-Producing Countries. IMF Working Paper, Fiscal Affairs Department.
- Pilehforoush, Meysam (2012), Oil Trace in Budget, *Quarterly Journal of Economic New Topics*, No. 136, p. 48-50.
- Summary of State Economic Developments within 1383-1388, Publications of Central Bank of Islamic Republic of Iran.
- Mehdiyan R "Review the functioning of the foreign exchange reserve account" Strategic research in Iran's economic development (1). Nobakhat. M.B. (Tehran: Expediency council, Center for Strategic Research, Research Institute 2009).
- Mehdiyan, R. "Review the functioning of the foreign exchange reserve account" Strategic research in Iran's economic development (1). Nobakhat. M.B. (Tehran: Expediency council, Center for Strategic Research, Research Institute 2009).
- Mehdiyan, R. "Review the functioning of the foreign exchange reserve account "Strategic research in Iran's economic development (1). Nobakhat. M.B. (Tehran: Expediency council, Center for Strategic Research, Research Institute 2009).
- Mehdiyan, R. "Review the functioning of the foreign exchange reserve account" Strategic research in Iran's economic development (1). Nobakhat. M.B. (Tehran: Expediency council, Center for Strategic Research, Research Institute 2009).
- Mehdiyan, R. "Review the functioning of the foreign exchange reserv account" Strategic research in Iran's economic development (1). Nobakhat. M.B. (Tehran: Expediency council, Center for Strategic Research, Research Institute 2009) P97.
- Gholami, S. "Pathology economic development program of the country after the Islamic Revolution" Strategic research in Iran's economic.

