

IRAN ECONOMIC POTENCY FOR THE TREATMENT OF DUTCH DISEASE

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Abstract

One of the features of petroleum economies is incidence of Dutch disease in them which by increasing oil prices and oil revenues, the country wealth will be increased. The increase in wealth causes reinforcement of non-tradable sector of economy and decline in tradable sector of economy. In this case, some activities like services and construction will develop and instead, the activities such as industry will stagnate. The Dutch disease will happen in this case. The main aim of this research is the survey of Dutch disease in Iran economy for its treatment. In other words, the result of investigation demonstrates the existence of Dutch disease in Iran economy.

keywords: Dutch disease, exchange relationship, investment of petroleum economies

Introduction

Dutch Disease, is a known sign in economy which several countries particularly those with single product economy tangle with it in the last 100 years. Iran economy is depended so much to the oil export revenues, as approximately 80% of export revenues and% of government revenues in annual budget are due to oil exportation revenues. On the average, the added value proportion of oil from GDP during 1970 – 2001 is approximately 20%. Therefore, every shock to global oil market will influence significantly on Iran economy structure (Farzanegan and markwardt 2009). One of the common and so dangerous outcomes of this phenomena is that in country with single product economy, when the global price of its only important export (for example oil in Iran) reduce or due to incorrect government policies, the foreign currency of increase oil price doesn't spend for substructure reinforcement and spend for other government expenses and the government encounters with budget deficit, the government simply neglect investing for substructure reinforcement of economy single product and exploitation installations (petroleum) in Iran. So, due to the neglect and inappropriate investment of oil revenues, the exploitation substructures and oil refining in Iran will be worn-out and we can guess the result in current competitive market (oil) or when the oil price in global markets goes up again. Finally, there will be a country completely dependent to single product export which isn't able to produce and export the strategic single product in optimum and sufficient manner due to wear and tear

and its substructures backwardness .One of the features of petroleum economies is the incidence of **Dutch Disease** in them. The increase in oil price and revenues will enhance country wealth and it cause reinforcement and growth of **non-tradable sector** and decline economy tradable sector, it means activities such as services and construction which isn't exposed to international competition will develop but the activities like industry which trade widely in international markets will decline (Bruno and Sachs , 1982).

The Dutch Disease background in Iran

The Dutch Disease entered in Iran during the time of Pahlavi for the first time . In 1970, due to Arab battle with Zionist regime , Arab cut off the sales of oil to Europe and America due to their support of Zionist regime and the oil price has suddenly increased four times as a result of its severe decline in global market . In 1984 , general budget of country went up twice as a result of oil price 4 times increment . The Pahlavi government , increased the general expectations by slogan of free education and price reduction of substantial goods. But during 1976-1978, an economic stagnation period started by imports increment and domestic products decline along with 14% decline of oil revenues and country annual inflation rate averagely amounts to 35% until 1978 due to liquidity increment. Whereas the government obligated itself to spend general enormous expenses at that time and oil revenues decline due to oil price decrease caused reduction of government practical ability in accomplishing general demands. At present, there is a bilateral trade model with exclusive competition and efficiency increase (Krogman.1979). The analysts of political economy issues believe that excessive growth of government foreign currency consumptions of oil sales , pave the way once more for development of Dutch Disease in Iran economy .

Dutch Disease and Iran economy

The foreign currency revenues will be increased by oil price increment and oil revenues . National revenue and economic growth will be increased in this case and cause increasing life standards . But in other hand it can disrupt the balanced growth of economy sectors . It means the non-tradable sector (the sector which its products is not exposed to international competition) will be developed and tradable sector will be weak . This phenomena called Dutch Disease in economic literature (Ismaeil, 2000) .

Dutch Disease is an economic concept describing how spending the revenues of natural resources (for example oil revenues in our country) causes decline in production . It is entitled for production decline in the Netherlands after natural gas exploration in 1977 during 1960s. Dutch Disease is in fact an economic concept explaining the relationship between exploitation from natural resources and production decline . The increase in natural resources advantages (like oil and gas) rises exchange rate and decline production in a country's economy. We can't always say the disease cause decline in production by all means, the other parameters may be operative.

The labeling has been done because it happened in the Netherlands for the first time. In 1977 , one of london magazines “ Economist “ used Dutch Disease for the first time for describing this strange phenomena which infected some of countries like UK. For explaining simply , this will occur when a country revenue suddenly increase as a result of seasonal parameters and macroeconomic caretakers (government) assume that this revenue is permanent and infuse it into society. Well , nothing happened until this moment . The revenue of country increased and the

money has been transferred to the society . But by increasing revenue , the demand will be also increased . If the demand increases suddenly, supply will not be in charge and the supply and demand balance will unsettle, therefore, the prices will increase.

The prices go up in a natural process and the production will increase with delay and at last after a while supply and demand will return to previous balance. But Dutch Disease occurs since the government comes into battle as macroeconomic caretaker and try to keep the prices low artificially and via the way except increasing production.

It is worth mentioning that incidence of Dutch Disease was not due to the exploration of natural gas and as Corden and Neary mentioned , the disease can occur by another reasons like :

The international price increase of tradable goods (trade)

Demand increase for tradable goods (Switzerland)

Technology development in business sector (Japan & Ireland)

Exploration of natural resources (England)

Bauxite industry (Jamaica)

Oil industry (Venezuela) and gold explorations (Australia) , increase in price of coffee (Colombia).

What is the effect of Dutch Disease in economy ?

For surveying the effect of Dutch Disease , we consider the economy in 3 sectors . A profitable sector (for example oil) which all of its products will be exported , industrial and manufacturing sector and finally non-tradable goods manufacturing sector in international level . So we'll encounter with 2 sectors including tradable and non-tradable goods .

If export sector becomes bullish , the first effect is revenue increase in this sector which leads to increasing domestic demand for tradable and non-tradable goods. The excessive demand for tradable goods will be met by increasing the imports. Demand increase causes price increase for non-tradable goods. In this case, proportional price of non-tradable goods will be increased rather than tradable goods. It will transfer tradable goods' resources towards non-tradable goods. Increase in non-tradable goods' prices leads to value increase and losing competitiveness in real exchange rate. It will also decrease the proportional price of imports goods as export prices for foreign users will increase. It will intensify transfer of manufacturing resources and domestic demand from manufacturing to non-tradable sector because resources like capital and work will be transferred to non-tradable goods manufacturing sector and oil sector for increasing domestic demands. Both transitions decrease manufacturing rate in traditional export which is interrupted at present and leads to a procedure called Deindustrialisation in the economy of industrialized country and whole process is known as the effect of resources' transition.

There are several researches regarding Dutch Disease and its effects on structure and different sectors of economy . We'll consider some of studies in the shape of foreign and domestic researches.

Foreign researches

Adnar & Vachschi (1998) worked on the effects of foreign aids on real exchange rate in Burkina Faso, Sahel Aj, Senegal, Tugo during 1992-1998. The real exchange rate is a function of real GDP , the difference of development rate of AM countries and industrial countries' trade relationship and the level of foreign aids. Then, They estimated the model using panel data method. The

researches interpret negative relationship between foreign aids and real exchange rate as Dutch Disease .

Ismaeil (2005) examined incidence of Dutch Disease in Saudi Arabia's economy via impressiveness of export price index on products of tradable and non-tradable sectors during 1980-2001. He initially specified regression model for each economy sectors. The results confirmed incidence of Dutch Disease in Saudi Arabia's economy. Some regulations are used for controlling subject qualities in all regressions. (Kafman and colleagues , 2010).

In recent studies like : Sosunov , Zamulin (2007) , Lartey (2008) , Battery and colleagues (2008) , Agousta and colleagues (2009), Lama and Medina (2010) used DSGE models for evaluating positive effects of foreign shocks in economy.

Domestic Researches

Bakhtiari and Haghi (2001) worked on the signs of oil revenues increase on agriculture sector in Iran economy during 1961-1998. They used the method of two-phases least squares in the survey. The result showed that Dutch Disease in Iran economy has been appeared as anti-agriculture phenomena. As a result, it leads to decrease in added value shares of agriculture sector and proportional price increase in service and industry sectors.

Dargahi (2008) worked on the relationship between economic growth with plentitude of natural resources in Iran economy. The most important challenge of Iran economic development is the function of mechanisms which changes resources blessing into inauspiciousness of Dutch Disease resources. The research results demonstrate decrease in competitiveness of Iran economy during oil prosperity period which influence significantly on quantity and combination of exports and imports. In other words , Iran economy got involved in Dutch Disease.

Abbasi nejad and Yari (2009) worked on identifying effective parameters on housing sector emphasizing connection between oil shocks and house price increase during 1973-2005. The results demonstrate the effect of population growth rate function , liquidity growth rate, Maskan Bank interest growth and positive and negative shocks on house price growth , are significant and the effect of inflation rate on house price growth is insignificant . The result of these researchers' study demonstrate incidence of Dutch Disease in Iran economy as well.

Preventive measure against Dutch Disease

The incidence of Dutch Disease in an economy has different outcomes like : (Senior Sophister, 1988, 7)

Proportional increase of tradable goods prices , changing combination of production , price change of decrease parameters of export of unprofitable sectors, imports increase and changing in combination of savings and investments.

The classic model of Dutch Disease has developed more by assumption of assets movement between sectors and asset international movement. (altamirano, 1999) .

As we mentioned, irrepressible inflation, imposed inefficiency in allocation of exchange resources and consumed behavior particular to Dutch Disease to the Netherlands' economy. later, Norwegians profited and by establishment of oil exchange reserves fund , saved crude oil export revenues instead of calculating them in annual budget and didn't get involved in Dutch Disease.

Global bank gives a few words of advice to oil exporter governments with exchange reserve fund in recent years . First , They should manage revenues obtained from country national wealth chronologically and distribute among generations in a way that they won't incur a loss.

Secondly, these funds should be competent in exchange rate stabilization and preventing from shocks due to exchange rate fluctuation or rate quantity in a country. Global bank advise the countries which established the funds that there should be complete transparency from income and expenditure in funds management point of view so that at present the fund management in Norway acts perfectly.

Corden and Nieri offered a theoretical analysis for explanation of the phenomena . They assumed a small open economy which composed of two sectors : tradable and non-tradable. Two kinds of goods , energy and industrial goods , are produced in tradable sector and the price of these goods is considered excretory as their prices are determined in global markets. There are two manufacturing parameters labor force and assets. Labor force is sole ambulatory parameter among sectors.

Corden and Nieri sort out the effects of energy prosperity (oil) on economy sectors : the effect of movement of manufacturing parameters and expenses effect . The effect of movement of manufacturing parameters means by flourishing energy (oil), manufacturing parameters transferred from industry and service sector to energy(oil) sector. The result is decrease in manufacturing tradable sector of industry and non-tradable sector of service . In other words, the effect of manufacturing parameters movement directly leads to Deindustrialisation (Bruno and Sachs,1982)

Conclusion

The impressiveness of fluctuations of trade relationship on economy function became one of most important subject of international economy. from the viewpoint of so many economists, the disorders in trade relationship considered as a fundamental parameter in economic instability. One of characteristics of oil economies is incidence of Dutch Disease .

One of the features of petroleum economies is incidence of Dutch disease in them which by increasing oil prices and oil revenues , the country wealth will be increased . The increase in wealth causes reinforcement of non-tradable sector of economy and decline in tradable sector of economy . The result of research confirms Dutch Disease in Iran economy .Therefore , economic caretakers should understand negative consequences of the phenomena and reach the undesirable effects of disease to minimum by adoption the policy of export diversity and development of non-oil exports .

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