Original Article: Investigating the Effects of a Government Oil Policies on the Iranian Economy

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ABSTRACT

With the knowledge of oil and its various applications in the social, industrial, and economic fields, the land of Iran found a unique situation and experienced significant changes. Oil has been influential in how the people and the government communicate in Iran over the last hundred years. For various reasons, mainly related to policy-making, Iran's economy produces small products in the industrial and agricultural sectors, exports them to the outside world, and relies heavily on crude oil exports to meet its import needs. More than 80% of the country's foreign exchange resources and more than 70% of the general budget resources are provided by the oil sector. Thus, oil as a supplier of material resources and political structures and stimulating socio-political incentives in creating socio-cultural changes and the composition of wealth and income has played an influential and critical role despite its ups and downs. Without a doubt, oil in the future will be able to create structural changes in various economic, social, and cultural dimensions in Iranian society.

Introduction

very economic system produces products and exports them to the outside world, and in the long run, it meets its import needs. Naturally, the more diversified export items are, the

less vulnerable the economy is to global market fluctuations and the more stable it will be in the external dimension. For many years, the dependence of the country's economy on crude oil exports has been considered a reprehensible phenomenon, and perhaps the main reasons for

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the reprehensibility of this phenomenon can be summarized around the following axes [1-3]:

- 1- Vulnerability of the country's main primary source of income from international fluctuations.
- 2- The most important economic variable is out of control and, as a result, the impossibility of targeting the key macroeconomic indicators.
- 3- Having an easy source to run the country and not having enough effort to use and activate the internal strengths of the economy [4].

When combined with state ownership of oil, Relying on oil strengthens the ability of governments to take power independently of the will of the people. As can be seen, most oilexporting countries are run in a not-sodemocratic manner [5]. The presence of oil in developing countries, especially in recent years. has motivated the great world powers to expand their dominance over these countries to make the most of cheap energy resources. The formation of such things in the minds of decision-makers and policymakers has led to the growth of the oil sector in any form, a reprehensible and anti-sporting phenomenon. Accordingly, and in response to the Pahlavi regime's policy of producing more crude oil and based on a specific understanding of preserving the next generation's interests, crude oil production decreased significantly after the victory of the Islamic Revolution and subsequent investment. In exploration, it was reduced to a deficient level [6]. The Islamic Republic of Iran's share of OPEC fell to less than a third of the previous figure. Countries such as Saudi Arabia quickly increased their share to more than one and a half times the previous figure by one leap, and the rich foreign exchange earnings from It was a sudden increase in price and a painless increase in production give their country. Continued lack of investment in the oil sector and lack of interaction with the outside world, due to the suspicion of pursuing colonial goals on the one hand and the rapid growth of technology and management knowledge in industrialized countries, on the other hand, caused Iran's technological distance from the world to deepen [7].

Strategic importance of oil and gas reserves of the Islamic Republic of Iran

Today, the energy sector is essential in the Iranian economy, especially oil and gas. Oil is the primary source of national income and the main factor of Iran's international presence in the world arena. In its natural position and with the discovery of substantial enormous oil and gas fields. Iran is the second-largest holder of these vast energy reserves globally [8]. OPEC ranks second. On the other hand, the importance of natural gas in global energy markets is overgrowing. The share of natural gas in world primary energy demand has increased from about 19% in 1980 to about 23% in 2002. According to the International Energy Agency, by 2030, about 90% of global natural gas demand will increase. Due to its relatively clean and efficient combustion, gas is becoming the fuel of choice for various uses, especially electricity generation. Natural gas is predicted to have the fastest growth among significant energy sources in the coming decades, and its consumption will almost double by 2030. In the next few years, gas will overtake coal and be introduced as the second most crucial energy source, while it can surpass oil by 2050 and be in the first place. In the field of the oil economy, the scope of Iran's authority depends on the following factors:

- 1- World oil price
- 2- Future demand for Iranian oil in the world market
- 3- The amount and capacity of Iranian oil production in the coming years
- 4. Domestic consumption of petroleum products and what remains for export
- 5- Possible amount of gas production and export

Since 2000, Iran's national income and global power level has depended on high world oil prices. Because the country's crude oil production capacity has remained stable over the past decade and domestic consumption has overgrown. It is predicted that the role of the Islamic Republic of Iran as an essential and influential player in the global oil market will

gradually diminish. Therefore, the Iranian oil industry is facing concerns and worries that make the need to design or review the main policies regarding this industry inevitable [9].

Government Investment and Oil Revenues

In Iran, oil revenues have always been considered capital, and sympathetic intellectuals and politicians have opposed its use for current affairs. Dr. Hassan Musharraf Nafisi, Minister of Consulting and Deputy Prime Minister in 1326, has justified the allocation of oil revenues to the first development plan as follows: Basically, oil revenues are not something that can be given as income and used for current purposes [10]. This money that the oil company gives to the Iranian government is about wealth that is diminishing day by day, and there will come a time when not a drop of it will be left for the use of future generations. This money should be spent in such a way that instead of wealth that gradually disappears, it can be said that Iran's planning system and planning economy, which was formally and legally established six decades ago, was the product of the understanding that oil is a nonrenewable resource and a wealth that must be spent if extracted. Invest and create alternative capitals and wealth that are continuously profitable. The current generation also provides the country's future generations with the capacity for livelihood, work, and employment. This approach to oil as an intergenerational asset, in development programs until the early 1972s, was the main focus of development measures and the country's infrastructure and production sectors. The use of oil revenue sources to cover the government's current budget deficits was institutionalized in the 1970s. The needs of the current budget overshadowed the allocation of oil revenues for development. The rest of these resources were allocated to development [11].

Nevertheless, during the last 60 years, "investor government and not just the consumer" has always been mentioned in the planning and budgeting of the country. In this paradigm, governments before and after the change in their annual budgets have always

devoted part of their budget credits and resources to invest in infrastructure and production projects. However, in practice they have never One hundred of that section has not been allocated. Often a significant portion of it has been transferred to current expenditures in budget amendments [12].

Background and legal and economic bases of foreign exchange reserve account in Iran

Paying attention to oil revenues in infrastructure and development investments and avoiding current financing expenses from this place was the feature of Iran's first plan. In subsequent programs, oil revenue considered a national treasure that should not be spent. However, as the government grew more prominent and influential, the ideal became practically weaker. In the first and second programs, significant resources should be needed for the oil revenues. One of the problems of Iran's economy is its strong dependence on crude oil export earnings. One of the main challenges of such an economy is the out-of-control fluctuations in prices and foreign exchange earnings from oil exports. Whenever oil revenues decline, the government's economic programs and development plans are halted or slowed down. Has been implemented with a waste of time and financial resources, and whenever oil revenues have increased; Extra currencies are spent quickly and with waste. To counteract this trend and its detrimental effects and create a steady flow of foreign exchange earnings from surplus foreign exchange resources and crude oil exports, the Third Development Plan 2004-2002 created a system that created unexpected fluctuations for planners. Stability in revenue sources allocates government budget and capital formation in the non-governmental sector. The practical principles and administrative rules of this system to achieve proper efficiency and create the stability that sustainable development needs are as follows:

A. Observing the principle of preventing the disruption of foreign exchange earnings

- B. Observing the principle of generating resources in the foreign exchange reserve account
- C. Observing the principle of separation of surplus resources from all foreign exchange resources of the country
- D. Observing the principle of liquidity when needed
- E. Observing the principle of legalism and respecting the country's development plan

Creating oil funds is one of the ways to manage oil wealth in oil-rich countries. The experience of countries (with a few exceptions) has shown that these funds are often part of the problem, rather than being part of the solutions to countries' fiscal and development policies and the challenges posed by their rich oil revenues. When the government's oil revenues fall, it either has to cut current expenditures or construction costs, both of which detrimental in the short term and unpleasant to the general public. As a result, governments often try to cover the budget deficit in other ways instead of cutting costs and inevitably borrow if they do not have financial assets. When oil revenues increase or reserves of past oil revenues are available, they find the solution easier. And unplanned spending. One of these misdeeds is accepting any plan implemented when oil prices and revenues increase and stopping when oil revenues decrease. The foreign exchange reserve account was opened in the Central Bank of the Islamic Republic of Iran under the name of the Treasury of the Islamic Republic of Iran by article 60 of the amendment to the law of the third economic, social and cultural development plan

- A. Stabilizing the number of revenues from the sale of crude oil in the third development plan
- B. Conversion of assets from the sale of crude oil to other types of reserves
- C. Developing the investment of the nongovernmental sector and providing the possibility of fulfilling the program forecasts

The government was obliged to keep the surplus of foreign exchange earnings in the foreign exchange reserve account of the central bank every year compared to the figures approved in the law of the third plan, under article 60 of the third amendment development law approved (7/19/2000) and a maximum of 50% of this account for investment and provision of part of the credits required for production and entrepreneurship projects of industrial, mining, agriculture, transportation and technical engineering services of nongovernmental sector, whose technical and economic justification has been approved, through the banking network in the form of facilities with use a sufficient guarantee. According to article 60 of the third development plan law, the government can withdraw from the foreign exchange reserve account if the government's foreign exchange earnings from crude oil exports decrease. The performance of the foreign exchange reserve account in the private sector of the Iranian economy shows that the industrial sector has more than 95% of the payment facilities of this account due to the two characteristics of welcoming the private sector to invest and foreign exchange formation in this sector. Investment projects in this sector are not limited to non-oil industries. Still, several investment projects in the petrochemical and downstream sectors of the oil and petrochemical industry in the private sector have used foreign exchange reserve account facilities (more than 746 \$ million). More They went through the process of approving and concluding contracts with the banks operating the foreign exchange reserve account, but for various reasons did not reach the stage of opening credit and payment until the end of the third development plan, which indicates the complexity of this industry and its problems with the country's banking system.

The situation of energy investment in Iran

Oil-rich countries may be thought to have a significant advantage. Still, it must be said that if not properly planned, the oil may be a black curse because countries whose economies rely on oil do not pay much attention to exploiting other resources. And there is mismanagement in this area. Among the countries that have oil and gas resources, few countries pay attention to the principle of investing in other fields. Iran is no

exception to this rule and spends its capital. For example, it extracts and consumes oil but does not invest in widely exploited profits. In the last ten years, investments in the oil and gas and petrochemical industries have been made as follows:

National Iranian Oil Company US 62 \$ billion 20 Billion US National Petrochemical Company National Iranian Gas Company US 5 \$ billion

Petroleum Products Distribution and Refining Company US 1.5 \$ billion

By the horizon of 2025, 180 \$, 100 \$, 15 \$ billion, and 50 \$ billion, respectively, would need to be invested in national oil, gas, refining, and distribution companies and petrochemical companies.

In any case, the oil industry needs considerable investments to implement investment projects and technology transfer and development. All governments and enterprises of the world provide capital resources in investment projects in all sectors, especially in the oil and gas sector, by using a small number of their resources to equip external resources from lending, foreign direct investment, and capital markets. They pay. Investing in parts of the production chain the oil industry market, such as exploration - is risky and therefore has high profitability or heavy losses financed by high-risk capital markets. Other sectors, such as mining, are so profitable that governments and corporations, by providing domestic resources, refuse to share with others, including banks and foreign capital markets. Although the oil sector accounts for less than 20 % of Iran's GDP, its role is to provide more than 80 percent of the country's foreign exchange earnings and meet import needs from this place and provide about 98 percent of the required energy. The country is much larger than its share of GDP. Another essential role of the oil sector at the macroeconomic level is to provide about 54% of public revenues in the government budget from oil export revenues in the last twenty years. The indirect impact of the oil sector's performance on tax and other government revenues is undeniable. In addition to its essential role in the domestic economy, the oil sector is also essential in the international

dimension in providing part of the energy needed by the world. The unique position of this sector in providing the currency needed by the country, the rotation of the wheels of industries, power plants, and transportation, creating employment, and providing Rial resources for the government to invest and provide public services is of great importance. In the last twenty years, the investment growth in the oil and gas industry has been apparent in line with Iran's economic growth rate. The average annual investment growth rate in Iran's oil and gas industry from 1971-1977 was equal to 44%, and the Iranian economy has also had significant economic growth. Average annual growth of investment in. The oil and gas industry during the period 1977-1989 was negative and equivalent to -10 percent that the country's economy has not had significant growth. In 1982-1998, the growth rate of investment in Iran's oil and gas industry fluctuated between 5 to 15 percent annually. There was a significant correlation between this growth and the country's economic growth rate. Iran needs an economic growth rate of at least 6% per year to maintain the minimum livelihood of a population with a growth rate of about 2% per year, and achieving this growth requires adequate investment and production in the oil sector as well as in other economic sectors of the country. In recent years, the cost of investing in the oil industry has risen globally, putting pressure on oil producers. The Oatari Minister of Oil announced that the cost of oil exploration and production projects has almost tripled. The increase in costs in the upstream sector is very high. The executive features of oil and gas industry projects, the prolongation of project implementation due to the government budget deficit due to unrealistic forecasts of revenues in the annual budgets, and thus reducing the allocation of investment funds are mentioned. The reason for the formation and prevalence of this financial structure is related to the low profits of the upstream oil and gas sector, which increases the incentive for domestic financing to make more profit. In other words, companies and governments raise the cost of investing in the upstream sector from domestic sources so that they can reap its rich benefits alone and not have to share it with others. The volume of investment in the oil and gas industry of the Middle East and North Africa will increase significantly in the coming years.

Conclusion

Rising oil prices on the world market, which intensified after the victory of the Islamic Revolution in the second oil shock, provided the revolutionary government with favorable revenues. Still, soon the country suddenly faced the Iraq war and 8 years of devastation and conflict. Thus, after the victory of the Islamic Revolution, oil affected the economy with two components: first, national industries and factories were built mainly on oil revenues, and second, current revenues from the sale and export of oil and petroleum products. Within the framework of the constitution, especially article 44 and other related principles, it should lead to the production of national wealth and the development and expansion of social justice. By evaluating the performance of the last three decades, we can test how to achieve the goals of this principle and other related principles. The need to change the structure and role of government, from direct ownership management of enterprises to policy-making, directing, and monitoring, has long been considered by experts, economists, politicians, and managers of government agencies. By communicating the general policies of article 44, In June 2005, the Islamic Republic entered a new phase. About 80% of Iran's economy is stateowned. Iran is currently trying to take Iran's economy out of the state-cycle cycle by defining the public sector and amending one of the most important articles of the constitution. By implementing the general policies of article 44 of the constitution, the privatization program will be pursued in a broader context and by amending the laws and creating appropriate environmental conditions. According to article 44 of the Constitution, Iran's economy is divided into public, cooperative, and private sectors.

References

[1]B. Barmasi, *J. Eng. Ind. Res.*, **2020**, *1*, 161-169 [Crossref], [Google Scholar], [Publisher]
[2]A. Bozorgian, *J. Eng. Ind. Res.*, **2020**, *1*, 1-18 [Crossref], [Google Scholar], [Publisher]
[3]E.A. Mahdiraji, M.S. Amiri, *J. Eng. Ind. Res.*, **2020**, *1*, 111-122. [crossref], [Google Scholar], [Publisher]

[4] F.E. Sadr, Z. Abadi, N.E. Sadr, M.M. Fard, *Ann. Romanian Soc. Cell Biol.*, **2021**, *25*, 6839-6852 [crossref], [Google Scholar], [Publisher]

[5]I.M. Zeidi, H. Morshedi, H.R.A. Otaghvar, *JPMH*, **2020**, *61*, E601 [crossref], [Google Scholar], [Publisher]

[6] K.L. Han, *J. Eng. Ind. Res.*, **2020**, *1*, 123-133 [Crossref], [Google Scholar], [Publisher]

[7]P. Atef Vahid, M. Hosseini, H.R.A. Otaghvar, A. Tizmaghz, G. Shabestanipour, *J. Clin. Diagn. Res.*, **2016**, *10*, PC19–PC22 [crossref], [Google Scholar], [Publisher]

[8] E.A. Mahdiraji, *J. Sci. Perspect.*, **2020**, *4*, 245-254 [crossref], [Google Scholar], [Publisher]
[9] E.A. Mahdiraji, S.M. Shariatmadar, *Adv. J. Sci. Eng.*, **2020**, *1*, 27-31. [crossref], [Google Scholar], [Publisher]

[10] E.A. Mahdiraji, S. Shariatmadar, International Journal of Smart Electrical Engineering, 2019, 8, 143-148 [Google Scholar], [Publisher]

[11] E.A. Mahdiraji, S. Shariatmadar, *International Journal of Smart Electrical Engineering*, **2019**, *8*, 51-58 [Google Scholar], [Publisher]

[12] E.A. Mahdiraji, M.S. Amiri, *Adv. J. Sci. Eng.*, **2020**, *2*, 42–50 [crossref], [Google Scholar], [Publisher]

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