

Regulating Iran's Bunkering Industry

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Highlights

- The development of the bunkering industry in Iran requires the coordination and cooperation of relevant institutions in the field of setting comprehensive and coordinated regulations.
- The issue examined herein is that the regulations governing Iran's bunkering industry need to be compiled by an extra-organizational authority in order to integrate the policies adopted by the institutions related to this industry.

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Abstract

Downstream oil and gas industries were handed over to the private sector by regulating the general policies of Article 44 of the Constitution Law. Bunkering industry or supplying fuel to the ships is identified as one of the downstream industries of oil and gas. Despite having opportunities, such as abundant sources of high-quality fuel, Iran has not been able to play a key role in bunkering industry in the Persian Gulf. Notwithstanding the emphasis of the laws on supporting the private sector, many of the policies have problems in implementation. Expanding the activity of the private sector by analyzing the necessity of creating an independent regulatory body, which will follow the single governance at the same time as removing government monopolies, is the main goal of this work. The findings show that the bunkering value chain is still under the control of the government, and regulation in the bunkering industry should be performed with an integrated and supportive approach with the participation of organizations related to this industry and private sector activists.

Keywords: Bunkering industry, Downstream oil and gas industries, Private sector activists, Regulatory body

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1. Introduction

The ultimate purpose of the general policies of Article 44 of the Constitution Law was to reduce the role of state-owned companies and expand the activities of the private sector. According to Section 2 of the Law of the Implementation of General Policies of Article 44 of the Constitution, downstream oil and gas industries should be handed over to the private sector. Despite the transfer of a major part of the downstream oil and gas industries to the private sector, a proper supervising and controlling body has not yet been established to organize this important part of the economy.

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Bunkering industry or supplying fuel to ships is one of the downstream industries of oil and gas. Despite having high advantages, such as high traffic of ships throughout the year (high market for fuel sales), abundant sources of high-quality fuel, excellent location by being on a very convenient route in the international waterway, Iran has not been able to play a key role in this industry in the Persian Gulf region. More than 50% of the world's bunkering is performed in the Persian Gulf region; the Fujairah port of the United Arab Emirates (UAE) accounts for 85% of which, and Iran has only 10% of the region's bunkering share and between 2%–3% of the global share.

In Article 131 of the Law of the Fifth Development Program and Clause b of Article 48 of the Law of the Sixth Development Program, the government is obliged to increase fueling services for ships while providing the necessary support to the private sector for the development of the bunkering industry in such a way that the country's share of the bunkering market in the Persian Gulf region grows at least 10% annually. According to Article 62 of the Seventh Development Plan Law, the Ministry of Petroleum is obliged to produce and deliver low-sulfur (< 0.5%) fuel oil to the companies providing bunkering services and to facilitate the processes of import. Priority should also be given to allocating export fuel oil to bunkering companies, and the Ministry of Petroleum is obliged to prepare the required executive regulations within 3 months in cooperation with the Ministry of Roads and Urban Development and submit them to the cabinet for approval in order to regulate the operation of fuel companies.

Examining support policies implemented by the Ministry of Oil in terms of regulations indicates that due to the lack of coordination with other organizations relevant to the bunkering industry (including the Ports and Maritime Organization, the Ministry of Roads and Urban Development, the Customs of the Islamic Republic of Iran, and the Bunkering Association), it has not been successful in encouraging the nongovernmental sector to form a hub for bunkering in the Persian Gulf. In such a way, this is considered one of the most important damages in the development of the country's bunkering industry. The experience of developed countries such as the United States and the United Kingdom in handing over the downstream oil and gas industries to the private sector shows that these governments first created an institution in the framework of which regulatory tools play the main role in supporting the private sector.

This work will examine the nature of regulatory tools and institutions and their importance in the process of handing over parts of the bunkering value chain to the private sector. In this context, the following questions should be answered:

- What are the regulatory tools in Iran's economy and in the bunkering industry?
- How much has the country paid attention to establishing a regulatory body with the cooperation of organizations related to this industry and private sector activists before handing over parts of this industry?

2. Methodology

2.1. Research methods

This research was done with a descriptive–analytical method. First, the basics and nature of regulatory tools were extracted using the documentary method and libraries: extensive studies through articles, research projects, books, and different websites. Then, with the help of the theoretical framework obtained from the previous section, the experience of the developed countries, the analysis of laws and regulations (especially the Law of the Implementation of General Policies of Article 44 of the Constitution), the reports of the privatization organization, and the regulations approved by the Board of Ministers, we evaluate the regulatory body and use it for Iran's bunkering industry.

In the following, it is necessary to address why this work uses the descriptive–analytical method, so it is included in the category of qualitative research. The most important reason for choosing this method was the nature of the research question. In the qualitative method, research questions usually start with the words *how* and *what*, so it should be shown what the condition or phenomena is in their answer (Bazargan, 2017:31–32). The nature of the subject of the present work, which is supposed to be what the tools and regulatory bodies and their position in Iran's bunkering industry are, requires that a qualitative method be used. Another point that should be mentioned in this section is that the impact of a significant part of factors on this research area cannot be quantified.

2.2. Literature review

The literature review in this work can be divided into two groups: the first is dedicated to the regulating and regulatory bodies apart from the bunkering industry. Among the most important published works in this group, we can mention the work of Yavari (2014), examining the legal concept of regulation and concluding that today, apart from the government, other actors such as associations and nongovernmental organizations play a regulating role in the administration of public affairs. Another noteworthy work is Walsten's (2003) book entitled *Regulation and Privatization in Renewal Structure*, concluding that countries with an independent regulator before privatization experience a transition process from the state economy to the market-based economy with many favorable results.

The second group of studies is related to regulating the energy market. In an article entitled "Explaining the Duties and Functions of Regulation in the Field of Oil and Gas and Studying the Experiences of Selected Countries", Khajawi (2018) generally explained the principles, duties, and functions of regulation in the field of oil and gas and briefly concluded that, due to the optimal activities of the regulatory body, the necessary balance between the interests of the private sector, government, and consumers was achieved. Jafari (2015) in a research entitled "Legal Analysis of Monopoly and Competition in the Energy Market with Emphasis on Gas and Electricity Industries" examined whether the energy sector was capable of accepting competition and concluded that although the energy industry, electricity production, and gas might be under the control of the government, their transmission and distribution can be managed by the private sector under certain regulation and can be competitive in the free market.

2.3. Novelty and innovation of research

The first group of works mentioned above deal with the importance of regulation and its tools. This leads to the formation of a theoretical framework through which we can evaluate the regulation of Iran's bunkering market.

In the second group, the issue of the legal obligation of the government to play the regulatory role in order to increase competition and assign the oil and gas downstream industries to the private sector has not been thoroughly examined in national works. Regarding international studies, although works have been conducted in the field of regulation and privatization, due to Iran's different economic and legal system, they cannot be applied to Iran's market. Such features distinguish the current research from other works. There are some studies about the regulatory body conducted locally, but they are mostly done in the form of reports, not scientific work. In addition, most have been done in the fields such as telecommunication, transportation, insurance, and banking, so none have addressed the oil and gas downstream industries, especially bunkering industry.

In total, the characteristics mentioned for these types of industries have led to a justification for the general state monopoly of these industries in the last decades; nevertheless, in recent years, a hypothesis has gradually been raised that some sectors are competitive in the network industries. Therefore, the

discussion of separating these industries has been raised. In some of these industries where there is a possibility of competition, competition rights are applied; sectors such as transmission lines, where there is still no possibility of competition, are controlled by the government's sector-specific regulatory tools (Mathias and Szklo, 2007).

3. Place of regulation in good governance of oil and gas industry

Reducing government intervention does not necessarily lead to the better performance of the economic sections. Good governance requires the application of a set of methods to achieve development and increase competitiveness and accountability of the government. United Nations Educational, Scientific, and Cultural Organization (UNESCO) defines good governance as structures and processes designed to ensure accountability, transparency, rule of law, stability, and fairness. Regulation means setting rules to guide and correct behavior in a market. A regulatory body is a responsible government center or nongovernmental organization with authority to enforces the principles and control regulation of an industry or an economic sector. It can supervise the activities of the companies within that industry and arbitrate in disputes. Further, the Organization for Economic Cooperation and Development (OECD) reports define regulation as enforcement laws by the government to improve the behavior of economic market actors.

In a study by the Chatham House Institute (2007), four basic functions of good governance in the oil and gas sector are presented as follows:

3.1. Policymaking

Public policy usually includes a set of goals, laws, programs, political actions, and standard behaviors aimed at securing the national interest. Since oil and gas are considered national resources, their exploitation requires a policy that brings the most profit to the country. Public policy may also affect the oil and gas sector and can include incentive measures for private sector participation.

3.2. Strategy making

The function of strategy is related to how the goals are met by the oil and gas sector. Sometimes it is difficult to distinguish between strategy and policymaking.

3.3. Operational decision-making

Operational decision-making involves managing the more short-term on-the-ground industry operations within the strategic framework. There is sometimes confusion as to which decisions are operational and which are strategic when responsibilities are unclear.

3.4. Monitoring and regulation

The monitoring and regulation function ensures that policies are followed and national goals are achieved. Monitoring and regulation include financial and technical supervision, auditing data, and holding agencies to account. It may also include setting industry standards and guidelines. Therefore, it is clear that regulation is one of the elements of good governance that can lead to effective management in the oil and gas sector along with other factors because it can attract investors by creating a transparent environment, increasing competition, and causing the growth of the oil and gas sector in line with providing national interests.

4. Fields of regulatory tools in Iran's legal system

It is first necessary to determine the position of regulatory tools in Iran's legal system to evaluate regulation in Iran's oil and gas industry. Currently, numerous governmental and nongovernmental organizations and centers are active in Iran that, in a way, fulfill the duties and roles of regulatory institutions. These centers include the Central Bank of the Islamic Republic of Iran, the Securities and Exchange Organization, the Competition Council, the Radio and Communications Regulatory Authority, and the Medical System Organization. Looking at the country's approved laws in the oil and gas sector reveals that the establishment and launch of a regulatory body in this sector have been emphasized in upstream documents. The country's National Energy Strategy Document considers the lack of an independent regulatory body in the energy sector as one of the challenges of the country's energy sector.

Articles 53–84 of the Law of the Implementation of General Policies and Article 44 of the Constitution define the "Competition Council" as a law enforcer and specify structure, duties, and powers and types of executions for the prevention of anti-competitive activities. Therefore, in Iran, competition council has been established as the trans-sectional regulatory body that provides the basis for achieving healthy competitive conditions by recognition anti-competitive procedures and prevention of monopolistic behaviors. One of the most important tasks of this council is to intervene in markets with natural monopoly characteristics. The competition council can propose forming a sector regulatory body to the council of ministers for approval in the field of a specific product or service the market of which is an example of a natural monopoly.

According to Iran's basic documents in the oil and gas sector, the duties of the Ministry of Petroleum in the field of regulation establishment are explained to facilitate the business environment, create competition, and remove monopoly. Article 13 of the Law of Duties and Powers of the Ministry of Petroleum obligates the Ministry of Petroleum to improve business environment in the oil, gas, and related industries, create a healthy and transparent competition environment between the economic operators of this sector, and prevent monopolies from formulating and regulating the necessary mechanism with the participation of the Competition Council.

Therefore, these legal documents confirm that there is a legal obligation regarding the establishment of a regulatory body for Iran's oil and gas market. However, the Ministry of Oil has not been able to fulfill its duties so far and has delegated the power to the National Iranian Oil Company (NIOC) due to the following reasons: the lack of financial independence from the National Iranian Oil Company, the lack of direct access to information, the lack of expert ability to verify the technical information and costs of companies, the lack of transparency and accountability, and the lack of a mechanism for private sector participation in its decisions.

Currently, the regulatory institutions of Iran's energy sector are completely governmental and do not have a reliable and strong legal base. Since the foundation of the establishment of these institutions was not the laws approved by the parliament, they were not formed based on the original legislation, and they were formed according to the internal instructions and regulations of the ministries and within the industry, they are known as one of the sub-departments of the ministry, engaged in the task of setting regulations. Outside the industry, they are not recognized as an institution independent from the government structure. Basically, the ministry has delegated part of its regulatory duties to one of its internal units, while the legal capacity is available for establishing these institutions in the subgroup of the Competition Council as a regulator of trans-sectoral regulations.

5. Restructuring process

The bunkering industry is one of the downstream industries of oil and gas. According to Section 2 of the Law of the Implementation of General Policies of Article 44 of the Constitution, downstream oil and gas industries should be handed over to the private sector. Restructuring is a process in which a series of planned and sequential actions are carried out to transform an enterprise or industry with monopoly characteristics and with state ownership into an enterprise or industry with competitive characteristics and with private ownership. If this process is designed and implemented inappropriately, the intended results of restructuring will not be achieved (Neely, 2011, p. 67).

It should be considered that a significant part of the natural monopoly will remain in the hands of the governments due to network characteristics or the necessity of economic savings. Although the process of restructuring in all industries has difficulties and design complications, the complications will be greater in industries with network characteristics, such as the bunkering industry, due to the need to coordinate the entire value chain in an integrated manner. Nevertheless, the successful experience of restructuring and privatization along with economic efficiency and development in developed countries proves that, despite the complications, it will be possible to create competition for private enterprises in network industries.

In most studies, three stages before restructuring are listed: the separation of business or industry sectors, the development of competition in the areas where competition is possible, and the establishment of a regulatory body to set regulations in noncompetitive areas.

In network industries, it is necessary to freely access transmission and distribution networks to develop competition in the downstream and upstream parts. The presence of the private sector in competitive activities requires guaranteeing this access, and this issue states the necessity of the presence of the regulatory body.

In addition, examining the restructuring of the gas industry in Latin America, especially in Brazil, Szklo and Mathias concluded that at least in two parts of the natural gas value chain, i.e., retail distribution and production and refining, it is possible to create and develop competition. Nevertheless, transmission will remain in the realm of natural monopoly due to the necessity of creating relatively irreproducible and expensive physical networks. Regarding the sequence of stages of the restructuring process, the value chain should be separated first, activities with natural monopoly characteristics should be controlled by regulations, and other sectors should be gradually liberalized and handed over to the market mechanism. In this regard, along with the creation of a regulatory body, regulations for free access to exclusive networks are established by this body (Mathias and Szklo, 2007).

In 2008, the Privatization Organization was obliged to hand over some government companies to the private sector in order to implement the general policies of Article 44 of the Constitution and the Law of the Implementation of General Policies of Article 44. In this regard, it was decided to deliver the downstream oil and gas industries to the private sector. In some of these companies, privatization was conducted without taking into account the inherent characteristics of this industry, and some delivered industries were not successful; finally, the handed over part was owned by the government again. This situation indicates that the privatization organization, without taking into account the restructuring steps such as separation and regulation, has only paid attention to the transfer of the ownership in the restructuring process.

5.1. Principle of free access of third parties to network

One of the most basic measures to implement the first stage of the restructuring process is implementing the principle of free access of third parties to noncompetitive transmission and distribution networks.

According to the principle of free access of third parties to the network, arrangements for the separation and competitiveness of the oil and gas industries will be provided.

Based on this principle, the owner of the transmission and distribution networks must create nondiscriminatory use for other competitors and not just for its own interests. If the infrastructure is only owned by the government sector, due to government monopoly, the fair price will not be realized. Formulating the principle of free access alone is not enough, and its implementation should be done by a regulatory body that can provide nondiscriminatory conditions for all competitors regarding the use of infrastructure facilities. Experts in the oil and gas industry generally cite the experience of the telecommunications industry as an example. They believe that when all telecommunication infrastructures were in the hands of the "first mobile" operator as the only government operator, unfavorable conditions, including high tariffs and low quality, were imposed on consumers due to government monopoly. Nonetheless, when the conditions changed such that other operators such as Rightel and Irancell were also able to use the infrastructure facilities in nondiscriminatory conditions based on the principle of free access provided by the Radio Communications Regulatory Organization, we saw serious competition between operators, which has finally led to the improvement in services and reduction of tariffs.

The doctrine of third party access refers to the rights given to energy suppliers or consumers so that they can use the infrastructure that is under the control of the government and have their own business (Hellwing, 2008, p.8). For this reason, the owner of essential facilities must consider the interests of infrastructure users (competitors) and not just its own interests in the decisions made. Thus, in the conditions where natural monopoly prevails due to the nature of networked industries, the principle of free access of the third party should be applied so that the buyer can choose the energy supplier freely. Usually, the realization of this right (access of third parties) is dependent and accompanied by concluding and implementing a contract with the party that creates and controls the infrastructure.

5.1.1. Basics and philosophy of principle of free access of third parties to network

The necessary investment to create the mandatory infrastructure for the production of low-sulfur fuel oil, huge storage tanks, high-capacity docks for refueling, providing ancillary services to ships is highly costly. It is possible that the investment cannot be returned or used for other industries due to the proprietary nature of the assets. Hence, it is first necessary not to establish extra infrastructures, and laws should be established so that the owners of the competitive sector can benefit from these infrastructures, as referred to in the topic of third-party access. Due to two main reasons, exclusive access against free third-party access causes inefficiency: proliferation and market exclusion (Roberts, 2014, p. 51)

5.1.2. Proliferation

If any of the private sector activists wants to establish the infrastructure, there will be a risk of the proliferation of infrastructures, leading to inefficiency.

5.1.3. Market exclusion

It is possible that companies want to participate and invest in certain sectors of the bunkering industry but do not have the ability to afford the costs related to the establishment of infrastructures for production, processing, transfer, or storage. Therefore, these companies will not participate in the market due to the lack of the legal framework required for access by third parties.

Some parts of the network industries have natural monopoly characteristic, so first the competitive and noncompetitive areas should be determined. Therefore, if competition is applied in the competitive

areas, it is necessary to provide market participants access to noncompetitive sectors according to the theory of “necessary facilities”; otherwise, it will not be possible to make these industries competitive.

The concept of “concentration” can be used to better understand noncompetitive areas from competitive ones. Concentration is one of the concepts used in both legal claims and theoretical discussions. In fact, to measure the degree of monopoly and competition, attention is paid to the number of firms and companies active in the market and the distribution of the market share among them. The smaller the number of companies is and the larger the sector becomes at the disposal of a limited number of companies, the closer the market structure is to monopoly.

6. Identifying regulatory challenges of Iran’s bunkering industry

The regulatory body should be based on the review and analysis of the specific needs and conditions of each sector and country and cannot be done and implemented in a developing country by modeling the regulatory structure of a developed country with the same scale. In order to design a suitable institution for the regulation of Iran’s oil and gas industry, we need to identify the existing and possible challenges; therefore, through comparative studies and document reviews, a list of the most important challenges has been prepared, as follows.

6.1. Multiplicity of decision-making centers in bunkering industry and lack of a systemic approach

The most important goal of regulatory bodies is the expansion of competitive markets in a way that provides rights of the three main pillars of economic markets: the government, the private sector, and consumers. The regulation and its tools in the oil and gas industries will be effective if we consider this sector as a coherent unit. In other words, regulation, should be under the authority of the governing policymaking unit. In the United States, the Federal Energy Regulatory Commission (FERC), as a regulatory body in the field of energy and an institution under the United States Department of Energy, is responsible for the overall policy, coordination, and management of the energy sector in the United States. In Norway, this duty is under the responsibility of the Ministry of Oil and Energy, and in Japan, it is under the responsibility of the Ministry of Industry and Foreign Trade (Qayyumi, 2008, p. 1).

Despite the developed countries, the absence of a centralized governing body, examining the oil and gas industries in an integrated manner, is one of the central challenges of Iran’s energy sector. In fact, in these industries, there are multiple decision-making bodies, which has caused each to pursue allocating budget and credit separately every year and having different goals.

The presence of various organizations in the process of decision-making in this sector has given this field three characteristics:

- Inconsistency in policymaking;
- Failure to amend and update laws;
- Slowness in decision making (Mazareti, 2001, p. 368).

The current structure of the bunkering industry in Iran shows that not only a specific institution does not perform the policymaking task at the top of the pyramid, but also the policymaking task and executive activities are not separated in the sub-sectors and take place between ministries and their subsidiaries.

6.2. Lack of financial independence of regulatory body

Financial independence means that providing financial resources should be in such a way that the members of the regulatory body do not feel dependent on any particular organization or system. In other

words, most of the costs of this institution are provided by companies, consumers, clients, or related industries, and tax or government resources do not play a role in providing costs. For example, the US Federal Energy Regulatory Commission as a regulatory body is financially self-sufficient and is financed through the annual charge and tariff that the regulated industries pay.

6.3. Lack of political independence of energy regulatory body

The political independence means separating the officials of the regulatory body from the politicians in such a way that the politicians and their policies do not interfere in the decision-making process of the regulatory. Hence, the regulatory body can create very favorable conditions for investors and consumers by granting political independence to it (Prosser, 1997, 15). Therefore, independence means the independence of the regulatory body from interventions and political situations on the one hand, and staying away from the control of the industry on the other hand.

Although, with the approval of the new Statute Law of the National Iranian Oil Company, the responsibility of management was transferred to this company and, with the approval of the Law of the Duties and Powers of the Ministry of Oil, the governance duties were transferred to the Ministry of Oil, the regulating duty by the Ministry of Oil has not been successfully done due to the government structure of this ministry. Because when it is decided that the National Iranian Oil Company is supervised by the Ministry of Petroleum as a regulatory body, but the people appointed to supervise this company are from the company itself, this regulatory mechanism will fail.

One of the reasons for the weakness of the Ministry of Oil as a regulatory body is the organizational structure and statutes of the National Iranian Oil Company. According to this statute, after the oil minister is elected by the president and receives a vote of confidence and approval from the parliament, the oil minister is immediately appointed as the chairman of the board of directors of the National Iranian Oil Company and all the ministerial powers are placed at the service of the decisions of the National Iranian Oil Company. As a result, the supervisory structure of the Ministry of Oil has emerged as a redundant, so the decision-making process is totally concentrated in the National Iranian Oil Company.

6.4. Lack of deep connections between oil and gas industry and private sector

Governments, like the markets, face failure in formulating the appropriate format and framework for regulation. However, regulation is not rejected as a subject, but the composition of people participating in the field of regulation changes. Therefore, the issue of organized participation of civil society in the form of specialized regulatory institutions and independent from the policies of government agents is raised.

One of the reasons for not forming a good connection between the oil industry and the private sector is the absence of the private sector in the decision-making process. Basically, in the developed and successful countries, the regulator should use the opinions, justifications, and explanations of the private sector in the field of the regulations being drafted during decision-making and drafting regulations.

7. Providing good regulatory standards

This section addresses what standards with what priority will create a favorable regulation. It should be kept in mind that these standards have been proposed by the authors for different industries in various countries, and these standards should be adapted to the conditions of Iran's downstream oil and gas industries, especially bunkering industry.

7.1. Political independence

This standard refers to the separation of the officials of the regulatory institutions from the political officials of the country in such a way that the government's policies will not play a role in the decision-making process of these institutions (Gilardi, 2008, p. 5).

7.2. Financial independence

This standard indicates that financial resources should be provided in such a way that the officials of the regulatory body do not have the feeling of being dependent on a particular organization or system. In other words, most of the costs of this institution should be provided by the relevant industries, partners, clients, or consumers, and government resources should not play a role in providing the costs.

7.3. Legal independence

Legal independence means that the independence of the regulatory body is recognized from the legal aspect. In order to fulfill this standard, the existence of a law that specifies the role of the regulatory body and the necessary legal arrangements to change the officials of this body is very effective. By recognizing this independence, the regulatory bodies can resolve their disputes and deal with the violators legally (Gilardi, 2008, p. 6).

7.4. Responsiveness

This standard states how this institution should be supervised. In other words, to whom should this institution be accountable? Granting independence requires accountability from the regulatory body regarding the activities carried out by the institution. In fact, this issue represents one of the defects of the constitution, which does not recognize any other responsibility except the political responsibility of the government and ministers. The next problem is that the decisions made by the Competition Council are final, and there is no judicial supervision; this is against international standards because, in developed countries, the decisions made by similar councils are under the supervision of the institution democratic laws.

7.5. Proportion

The Competition Council in Iran is made up of 15 members selected from economic sectors and the three branches of the government. The member composition of the Competition Council is not proportional because only two members are from the private sector; also, no provision is made for the presence of specialized civil institutions and their vote.

8. Current regulation of bunkering industry in Iran

It should be noted that the development of refinery capacity and the completion of the value chain of the oil industry are important ways to deal with sanctions and foreign pressures, which is also mentioned in Paragraphs 13 and 15 of the General Policies of the Resistance Economy. Article 131 of the Law of the Fifth Development Program obliges the Ministry of Oil to support the nongovernmental sector by designing and implementing a comprehensive bunkering plan in order to increase fueling services to ships and ancillary services in the Persian Gulf and the Oman Sea. Subsequently, in order to improve Iran's position in the bunkering industry of the region and the world, in Paragraph b of Article 48 of the Sixth Development Program Law, the Parliament has obliged the government to increase fueling services for ships while providing the necessary support to the nongovernmental sector in such a way that the country's share of the ship refueling market in the Persian Gulf region grows at least 10% annually and reaches at least 50% at the end of the program. Based on this legal obligation, the Ministry

of Petroleum regulated and implemented the comprehensive plan for bunkering services in the border waters of the Islamic Republic of Iran in the Persian Gulf, the Oman Sea, and the Caspian Sea in 2014.

Reviews show that the support policies used by the Ministry of Oil in the form of regulations were mainly in the form of financial incentives (especially including the determination of the contractual maturity period of 45–60 days compared to the conditions of 20–30 days for settling the value of export shipments). Due to the lack of formulation of a comprehensive bunkering plan in coordination with other relevant institutions, support policies have not been effective.

Paying attention to the value chain of bunkering in Iran demonstrates that all the upstream sectors, including the exploration, production, and exploitation of fuel oil and gas oil, are concentrated in the National Iranian Oil Company. Iran's National Oil Products Refining and Distribution Company carries out downstream activities, including refining, preparation, transfer, and distribution. Therefore, due to the dominance of the National Iranian Oil Company over the entire value chain of bunkering products, it can be stated that it is exclusively controlled by the government.

Restructuring steps to transfer Iran's bunkering industry from monopoly to competition include separation, regulation, release, and transfer of ownership. The creation of a regulatory body is considered one of the most important prerequisites for ownership transfer. As mentioned in the previous sections, the precondition of separation as the first step of the process of restructuring is the implementation of the principle of free access of third parties to noncompetitive transmission and distribution network. Only if the principle of free access to third parties to the distribution network is provided, serious competition between companies will be formed. Of course, this principle must be implemented through the regulatory agency that provides nondiscriminatory conditions for all competitors regarding the use of infrastructure facilities. Therefore, in spite of the creation of competition rights and sector regulation tools in Iran's law and the existence of a favorable ground for regulating the oil and gas downstream industries, serious actions on restructuring have not been carried out yet.

9. Conclusions

This work analyzed the position of regulation in the bunkering industry privatization process with the help of theoretical literature after providing a definition of regulatory and its place in good governance. It then evaluated regulation in Iran's oil and gas industry. Although based on the implementation of general policies of Article 44 of the Constitution Law, large downstream oil and gas industries should be delivered to the private sector, the transfer of downstream oil and gas industries to the private sector has failed, and the transferred sectors have finally returned to government ownership. This low performance shows inattention to the restructuring process and regulation as the most important stage of it in network industries. This is despite the fact that there are legal regulatory tools in both competitive and noncompetitive sectors.

The first proposed solution in the restructuring process is to separate noncompetitive from competitive sectors. Sectors such as exploration, production, refining, and retail sales that have competitive features should be regulated through competition law tools. Nevertheless, the transmission and distribution networks are part of noncompetitive sectors and must be controlled through regulatory tools.

The optimal regulation for the bunkering industry should be achieved with the participation and coordination of decision-making centers, including the Ports and Maritime Organization, the Ministry of Oil, the Central Bank, the Customs Organization, private bunkering companies, and Iran's Bunkering Industry Association. The Ports and Maritime Organization evaluates and issues the bunkering licenses

for the applicant companies, and the National Iranian Oil Company allocates the appropriate fuel quota based on the licenses issued by the Ports and Maritime Organization.

Nomenclature

FERC	Federal Energy Regulatory Commission
IMO	International Maritime Organization
LNG	Liquefied natural gas
NIOC	National Iranian Oil Company
OECD	The Organization for Economic Co-operation and Development
UAE	United Arab Emirates
UNESCO	United Nations Educational, Scientific, and Cultural Organization

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