

Sanctions and Iran's Oil Industry

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Abstract

Since the Islamic Revolution in 1979, Iran has been affected by economic sanctions imposed by Western countries especially the U.S. From 2006 and with increasing Iranian nuclear standoff with P5+1 group, the United Nations has frequently imposed economic and financial sanctions against Iran. As a result of these international restrictions and their management by an international organization, Iran's exports have been heavily reduced. Given the sanctions on the oil industry in Iran and the lack of a comprehensive model of export performance of Iranian petroleum products in the sanctions period, this research can help improve and develop this industry in international markets. The research method is phenomenological and the statistical population includes export and marketing managers and oil

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industry experts. Non-probable sampling and snowball sampling method was used in this research. In this qualitative study, semi-structured in-depth interviews were used to gather information and 7 in-depth interviews on saturation law were conducted. Structural, internal, interpretive and descriptive validity were used for validation. For surveying reliability, revision while coding and surveying by another informed person were used to insure correct coding. This research uses a qualitative study to determine the effect of returning sanctions on the export performance model of Iranian petroleum products. After open, pivotal and selective coding and the use of Atlas quality software, the background of Iran's oil products export performance in sanctions are: market orientation, company resources, marketing mix, macro environment and items of Iranian oil products export performance in sanction includes: financial performance, customer satisfaction and customer retention in sanction situation. Most of the previous studies have focused on positivism and quantitative research methodology while we used the qualitative and mixed method in this research.

Keywords: Export Performance, Market Orientation, Company Resources, Marketing Mix, Macro Environment, Sanction

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Introduction

Exporting activities enhance organizational capabilities, which, in turn, generate additional resources that boost the firm's performance. Hence, a robust understanding of exporting is much called for by researchers, managers, and policy-makers. Over the past 50 years, significant advances in export performance research have shown great progress in this area. In this study, export performance is defined as the outcome of a firm's activities in export market. (Chen, Sousa & He, 2016: 630).

Nowadays, international developments have made an inevitable link between foreign policy and the economy. Therefore, it is impossible to have a dynamic and global economy without active, interactive and effective foreign policy. Meanwhile, energy is a special issue as one of the most important variables of the global economy, especially in Iran, which is not only an important factor in politics, but is also of crucial importance for Iran as one of the world's major oil and gas producers (Rohani, 2010: 30).

Today's the developing world is improving rapidly based on a strong and intelligent economy; Thus, the interactions of fundamentalism and international relations, whether political or commercial, are largely dependent on the economic power of the countries and without it, there will be no effective foreign policy to guide foreign developments. On the other hand, achieving a strong economy based on production and exports requires an interactive foreign policy. Therefore, a country's economy and foreign policy cannot be separated and they will always converge with each other. (Rohani, 2010: 30).

One of the key economic factors in economic development is energy security, which is one of the most fundamental issues in foreign policy. Therefore, oil and gas are a special issue for many international interactions and Iran, as one of the main players in the oil economy and policy, will be affected by this role. (Rohani, 2010: 30).

The need for this research in the oil, gas and petrochemical industries is that studies in different countries on the impact of predecessors on export performance have not reached a general consensus result and there is the question that more attention to the factors affecting the performance of exports in developing countries, especially Iran, will achieve the expected results. Regarding oil industry in the 20-year vision and due to the lack of a comprehensive model of Iranian oil products export performance, this research can be a good solution for the international development of this industry.

I- Oil Products and Export limitations

Oil products are highly used materials from crude oil that are processed in an oil refinery. Oil products include gas oil (gasoline), kerosene, plane fuel (ATK), liquid gas, fuel oil, sulfur, hydrogen and carbon (petroleum coke).

Through field research and exploratory interviews, international restrictions on the export of petroleum products have been implemented due to the sanctions, some of which are listed below. Environmental factors such as war have a great impact, the more tension, the higher and the costs. Today, some ships do not enter Iran and the ships that come are not allowed to go to other countries due to their age and inadequate facilities, so we have to move twice. These unsuitable ships cost more. All of these factors, in addition to delaying time, cause more costs. In fact, we are involved in security/political factors such as interfering in environmental tensions or the sinking of a ship in Fujairah, the missile attack on an Iranian tanker in the Red Sea and so on which creates a lot of risks for insurance companies. (Kh.

Mohammadzadeh, personal interview, 2020).

Another issue is the ban on trade with other countries due to opposition from the US government. Therefore, any country that has trade relations with Iran must accept the rejection of other countries. Today, due to sanctions, we do not negotiate directly with importers and try to do it differently.

One of the most important issues in trade with Iran is payment. The export products are sold in foreign currency and this currency must be paid to the acceptable system of exchange in Iran recently launched Nima¹ system, but due to the sanctions, we have to use third companies. We get guarantees from exchange companies, but this is not a specific bank account, and unfortunately money laundering happens through this system. We are no longer able to trade with LC and customers have to pay cash by exchange companies. All these factors reduce prices compared to Qatar and Saudi Arabia (N. Pajang, personal interview, 2020).

Another issue is transportation problems, the best container lines such as Ever Green do not ship containers to Iran and the only option for transporting cargos and containers to Iran is the Islamic Republic of Iran shipping lines, which are currently unable to function properly due to the severity of international sanctions. For example, there is no central hub in Iranian factories, so there is a delay in transporting products to most destinations.

Economic war is the next problem. For example, the United States has recently gained enormous capacity from oil resources and exported petroleum products at low prices to Turkey, China, etc. thus upsetting the market balance and also causing low prices for Iran.

One of the most important problems in Iran's export performance is exchange rate instability. In general, sanctions are an influential issue in Iran's exports because they affect marketing, sales, transportation and logistical issues, etc. (K. Farokhzadi, 2020).

1. Iran's domestic Forex Management Integrated System (locally known as NIMA)

According to the research needs of companies exporting Iranian petroleum products to improve export performance, the strategic importance of the oil industry in Iran, globalization of companies and international export restrictions, we try to provide a comprehensive model of the export performance of Iranian petroleum products to achieve maximum utilization and minimum cost.

In this research, after setting goals and collecting materials, reviewing the literature, designing a protocol in a qualitative manner and conducting in-depth interviews, Qualitative data analysis is performed by coding as well as achieving results by providing a comprehensive model. Then, data analysis was performed using SPSS and AMOS software and also data collection was done through a questionnaire.

Sanctions on the Oil Industry: The economic sanctions of the world powers to achieve political goals and putting pressure on the Iranian economy have been pursued for many years. Iran's post-revolutionary economic sanctions can be divided into two main periods: 1) From the beginning of the Islamic revolution until 2005; 2) From June 2005 until 2012. The US trade ban in the first period was generally unilateral, with only the United States imposing a trade ban on Iran until 2006. But since 2006, trade bans have been imposed on Iran by European countries, Canada, Australia and some Asian countries. Violators of the US trade ban have also been subject to severe economic penalties since 2006. In addition, non-governmental economic actors have been sanctioned since 2006 in addition to state-owned economic actors (Nademi & Hassanvand, 2019: 154).

Following the Iran nuclear talks, the agreement on a Joint Comprehensive Plan of action (JCPOA¹) and the date of implementation of this agreement between Iran and 5 + 1² countries, the International Atomic Energy Agency (IAEA) approved a plan to meet Iran's nuclear commitments, therefore

1. 14 July 2015

2. The United States, France, the United Kingdom, China, Russia and Germany

nuclear sanctions against Iran were suspended. In January 2016, the European Union lifted its nuclear sanctions against Iran. Following the EU, the United States lifted or suspended secondary sanctions against Iran the same year.

With the implementation of JCPOA, the European Union and the United States removed many Iranian individuals and legal entities from the list, especially designated Nationals and Blocked Persons (SDN). This was particularly important for non-US companies trading with Iran, which led to numerous trade agreements and investments during the lifting or suspension of sanctions. (Post- JCPOA) (Razavi & Zeinodini, 2018: 38). With the new US administration in office in 2016, the new president (Donald Trump) announced that he was not going to ratify the nuclear deal between Iran and the P5 + 1 countries. According to the Iran Nuclear agreement Review Law, this law was adopted in May 2015 (INARA). The US president had to reaffirm Iran's commitment to the JCPOA every four months, and if not approved, the US Congress was allowed to schedule a 60-day period to re-impose US sanctions on Iran. First, on October 13, 2017, the US President announced that he would not endorse Iran's actions through its commitments to the JCPOA. Thus, nuclear agreement with Iran was not in the national interest of the United States any more. The approval set a 60-day deadline for the US Congress to pass a new law to reinstate US secondary sanctions against Iran. But in the end, the US Congress did not take any decision to return the sanctions due to the disapproval of European countries. (Razavi & Zeinodini, 2018: 39).

Therefore, returning sanctions through INARA had no effect. On May 8, 2018, Donald Trump the then president of the United States, announced its country's withdrawal from the JCPOA and re-imposed all sanctions against Iran. The US president issued a note titled "National Security Presidential Memorandum" (NSPM). He announced in the memo that the United States intends to reinstate economic sanctions and repeal these four laws: Iran Sanctions Law, Iran Security Threat Reduction Law, National Defense

Authorization Law, Iran Freedom and Anti-Proliferation Law.

In this study, the effects of sanctions on the export performance of Iranian petroleum products are examined. It is obvious that production in this industry has a vital role in the country's economy due to Iran's dependence on oil revenues. (Mofidian & Keshavarzian, 2015: 30). Based on this approach, the researcher tries to identify the variables and factors affecting the performance of Iran's petroleum products in sanctions with the help of interviewees and their lived experiences. (Mansoorian) This research has a basic purpose because we are looking for records of the export performance of Iranian petroleum products under sanctions and we do not have definitive hypotheses.

II- Data Collection Method

In this study, the study of scientific documents and in-depth interviews with experienced people has been used to determine the variables and the history of Iranian petroleum products export in sanctions. The statistical population of the study is managers, marketing experts, Iranian Petroleum Exporters Association who has been selected by improbable and purposeful sampling method. After selecting the first person and conducting the next person interview, the interviews continued at her suggestion until after 7 interviews, there were repeated answers and theoretical saturation. The information obtained is as follows: (table 1):

Table 1. Interviews Information

column	company	name	education	work experience (years)	Interview time (min)
1	National Iranian Oil Refining and Distribution Company	Homa. Aziz mohammadi	MA	17	75
2	Banagstar Karaneh	Khashayar. Mohammad zadeh	MA	5	45

3	Mehr petrochemical	Navid.Pajang	MA	6	60
4	Hesarmehran refinement	Mohammadali. Shahsavand	Bachelor	7	55
5	Siahfam	Negin.Rezae	MA	6	50
6	Jey Oil	Behnam. Tahernia	MA	13	45
7	Persian Gulf Apadana Petrochemical Plant	Keivan. Farokhzadi.	PhD	10	60

The next research approach is a descriptive-survey study and is in fact a conclusive research. Survey hypotheses are an ultimate research goal. (Malhotra, 2014: 7).

We have applied probable sampling and random sampling method in the second study of this project. In this study, standardized questionnaire was used which summarizes the information in the table below and a sample of questionnaire is mentioned in the appendix with 57 items. We had 548 samples of experts in order to fill questionnaires in this research.

Table 2. Questionnaire Structure of Quantitative Study

Row	Variable name	Variable role	Scale developer	Data type	Scale	Number of items
1	Market orientation: cultural market orientation (customer orientation & competitor orientation) and behavioral market orientation (information	independent	Jaworski and Kohli, 1993 Narver and Slater, 1990	Sequential	Likert	12

	generation & responsiveness)					
2	Marketing mix: product, price, distribution, marketing research	independent	Freeman, 2009	Sequential	Likert	15
3	Firm's resources: human resources, physical resources, organizational resources, location resources and financial resources.	independent	NJERU, 2013	Sequential	Likert	12
4	Macro environment: economic, legal, political and technology factors	independent	Freeman, 2009	Sequential	Likert	9
5	Export performance: financial performance, customer satisfaction, customer retention	dependent	NJERU, 2013	Sequential	Likert	9

III- Iran's Oil Industry and Secondary Sanctions

The system of sanctions imposed on Iran has been the most prominent and special one in terms of its application and lifting. The imposition of severe economic sanctions for three years, its lifting or suspension for two and a half years and the reinstatement of some of these sanctions have created a new and special legal situation for trade and investment in Iran.

Before JCPOA, imposing sanctions and limitations against Iran were just related to oil and gas industry, but secondary US sanctions were also applied to energy fields such as electronics and renewable energy.

The return of US secondary sanctions created a new situation

for Iran's petroleum products industry. The return of oil sanctions took place in the second period of these measures (Razavi & Zeinodini, 2018: 43).

Oil contracts with Iran were banned for non-US companies from November 4, 2016. According to National Defense Authority Act (NDAA). Every 180 days, the President of the United States must receive a report on the price and supply of crude oil in countries other than Iran. Due to the reduction or non-reduction of oil purchases from Iran, the buyer of the oil company, the facilitator of banking transactions and the government which import oil from Iran should be subject to sanctions and restrictive measures. Therefore, governments that buy Iranian crude must reduce their purchases from Iran by at least 20 percent every 180 days to be exempted from US sanctions.

Also, with the return of the Sisada law, the import and sale of petroleum products to Iran has been banned. Therefore, oil and gas investment sanctions have been reinstated by Sisada law. If non-US companies do not comply, they will be penalized by the US government (Razavi & Zeinodini, 2018: 48).

IV- Sanctions and Iran`s Petroleum Products

Model search in data is called qualitative data analysis. In this research, Heidegger's hermeneutic phenomenology model is used to analyze the data (Van Manen, 1990: 352). Phenomenological analysis is the most extensive research method according to its philosophical dimensions (Mohammad Pour, 2016). Coding is an essential step for analyzing qualitative data (Heidarzadeh & Norouzi, 2015: 152).

After each in-depth interview, the transcript of the interview was entered into the Atlas Qualitative Data Analysis software for open coding and analysis, and then the researcher proceeded to subsequent interviews. Open coding is an analysis process to identify subtopics, their features and dimensions (Strauss & Corbin, 2018). At this stage, the text of the interview was read several times, the main sentences were recognized and recorded as

text code, then similar concept codes were placed in some groups, 838 open codes were identified in this research.

Axial coding was the next step related to the topics. In fact, the categories were related in terms of features and dimensions (Strauss & Corbin, 2018). In this step, primary codes of open coding which were related to each other were put in a common axis; Continuous comparison of codes was performed to ensure the existence of different categories; Selective coding was performed by repeating this method and the main variable was identified.

According to the results of this study as shown in the table below (table 3), the records of Iranian oil products export performance in sanctions were: Market orientation, Firm's resources, Marketing mix and Macro environment which is the most important item of political issues; also, customer satisfaction, customer retention and financial performance were some of the export performance of Iranian petroleum products under sanctions.

Table 3

Category	Theme	Subtheme
Market orientation	Cultural market orientation (customer orientation & competitor orientation) and behavioral market orientation (information generation & responsiveness)	Internal completion, competitive advantage (price, product, service), Porter competitive strategies (price, differentiation, concentration), competition structure (enter & exit barriers), services (communication with customers, responsiveness), external competition, competitive environment (competition intensity, environmental uncertainty), commercial communication, destination identification
Marketing mix	Product, price, distribution, marketing research	international marketing research, export marketing strategy, pricing strategy, shipping strategy, distribution channels, product quality & quantity, relationship marketing, products standardization, product improvement & variety
Firm's	Human resources,	Management (target, experience, foreign language,

resources	physical resources, organizational resources, location resources and financial resources.	international knowledge, motivation, taking risks, understanding the export market, commitment, public relation), company competence, staff experience & commitment, technology, production capacity, resources availability
Macro environment	Economic, legal, political and technology factors	Tariffs, standard, customs & ..., export limitations & barriers, technology & religious variables, security decisions, sanction, payment mechanisms, foreign currency exchange, war & tension
Export performance	Financial performance, customer satisfaction, customer retention	Strategic performance, export volume, staff & customer satisfaction, target market, export rate & sale, export sale development, export market countries, entering new markets, customer retention, effectiveness and productivity, success rate

V- Findings

After the interview and qualitative analysis, we came to 5 categories and 20 topics that you can see in the table above and the details are listed below. Export performance is the main category, the main concept of this research and its examples in interviews are as follows. "Initially, we consider financial issues to measure export efficiency, revenue from exporting the product to target markets" (National Iranian oil Refining and Distribution Company). "Measuring customer order time to shipping time (delivery time), production to sales ratio (sales efficiency), customer satisfaction that is done every 4 months, following claims and complaints through a committee to solve problems and back payment "(Mehr Petrochemical Company). When it comes to interviews and quality export performance, the topics are customer satisfaction, customer retention and financial performance. Proposition 1: The export performance of Iranian petroleum products includes customer satisfaction, customer retention, and financial performance. Market orientation is the first antecedent of export performance which includes cultural market orientation and behavioral market orientation; also, it has 4

subthemes such as, customer orientation, Competitor orientation, information generation and responsiveness. Half of informants in the interviews have mentioned this variable such as below.

"The most important export product is ship fuel. In this regard, quality, delivery time and delay were not very important, but today these issues have become more important, because we do not currently have a source of fuel oil. So, we have to be active in other issues to attract the market" (Banagstar Karaneh Company).

"One of the most important factors for success in the export market is the interaction of employees with customers to gain a competitive advantage" (Mehr Petrochemical Company).

Regarding this research forecast, the following suggestion is made. Proposition 2: Market orientation is one of the backgrounds of Iran's petroleum products export performance, which includes cultural market orientation, (Customer orientation and competitiveness) and behavioral market orientation (information generation and responsiveness).

The marketing mix is the third prerequisite and is mentioned in more than half of the interviews by informants. Some of the interviews are listed below. "All kinds of export facilities (distribution of products and their proximity to borders, road and rail transportation), as well as transportation facilities have led to costs" (National Iranian oil refining and distribution company). "We are the largest private refinery company in the Middle East in terms of product diversity. Instead of buying from different companies and paying more for shipping, the customer chooses our company with all these products" (Hesarmehran refinement company).

After conducting interviews with experts and managers, 4 topics in this research such as product, price, distribution and marketing research have been obtained. This proposition is suggested regarding this research prediction.

Third suggestion: Marketing mix is one of the antecedents of Iran's petroleum products export performance, which includes

product, price, distribution and marketing research. The next antecedent of export performance is the company's resources. Several examples are given in the interviews. "Employees' skills and experiences in the field of export, ability to negotiate and bargain, knowledge of petroleum products and its market, familiarity with pricing strategies, training on operational issues are significant issues" (National Iranian Oil Refining and Distribution Company).

"This company has continuous resources, which is a sustainable competitive advantage and can meet the needs of countries for materials on a regular basis" (National Iranian Oil Refining and Distribution Company). Firms' resources have 5 themes such as: human resources, physical resources, organizational resources, location resources and financial resources. Regarding this research prediction, the following proposition is suggested.

Proposition 4: Firm's resources is one of the antecedents of Iranian oil products export performance which includes human resources, physical resources, organizational resources, location resources and financial resources.

The last antecedent of export performance is macro environment in this research and it has been recognized as the most effective factor in all interviews; here are some examples of interviews.

"It is very confusing for brokers to set domestic rules and change them constantly, which creates an unstable and unpredictable situation" (Mehr Petrochemical Company).

"Lack of similar rates for foreign currency exports that mean exporting at foreign exchange rates and receiving Nima currency from the government. This exchange rate difference is very detrimental to our financial issues." (Hesarmehran Refinement Company).

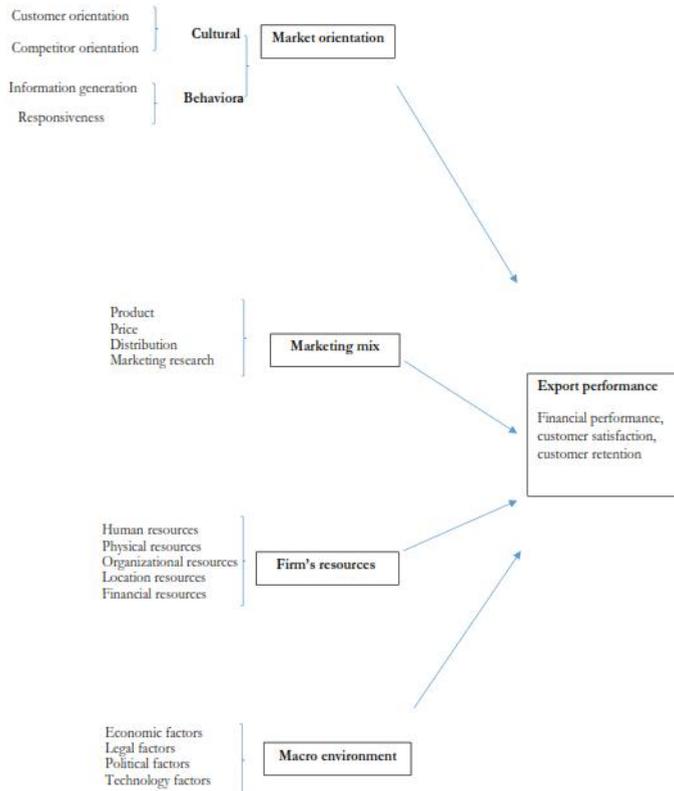
"Political issues are the most influential factors such as sanctions, foreign currency exchange, exporting ban to some countries and lack of movement of foreign ships to the Persian

Gulf' (Siahpham Oil and Gas Company).

This category has 4 themes such as economic, legal, and political and technology factors. This proposition is suggested regarding this research prediction.

Proposition 5: macro environment is one of the antecedents of Iranian oil products export performance, which includes economic, legal, political and technological factors.

Using a new marketing research method and reviewing the existing literature on export performance in sanctions; also, reviewing qualitative research, opinions of managers and experts; objectives, backgrounds and performance variables of Iranian petroleum products exports and their relations in critical situations such as sanctions were recognized. (Chart 1):



Exploratory factor analysis, confirmatory factor analysis and structural equation modeling have been used to analyze quantitative data. For this purpose, two software such as AMOS and SPSS have been used. Table 4: Results of model fit indices

Table 4

abbreviation of fitness index	Suggested threshold	Proponents	Model value
GFI	≥ 0.80	Forza and Filippini (1998, p. 14)	.896
NFI	≥ 0.80	Forza and Filippini (1998, p. 14)	.891
CFI	≥ 0.90	Jun et al. (2006, p. 803)	.971
IFI	≥ 0.90	El-Adly AND Eid, (2016. P. 225)	.971
PNFI	≥ 0.50	Kaynak (2003, p. 422)	.782
PGFI	≥ 0.50	Kaynak (2003, p. 422)	.759
RMSEA	≤ 0.08	Jun et al. (2006, p. 803)	.024
X2/df	≤ 5.00	El-Adly AND Eid, (2016. P. 225)	1.325

According to the results of the structural model, all antecedents have direct and positive effect on Iranian oil products export performance. Details of test results and indicators, regarding coefficient indicators impact, co-efficiency of determination, test statistics and the level of significance are calculated and mentioned in the table below.

Table 5. Test the Coefficients and Factor Loads of the Relationship Between Variables in the Structural Equation Model

Components and items			Impact factor		Test statistics and detection coefficient			
component	direction	item	standard	Non-standard	Standard error	critical test	Probability of error	Coefficient of Determination
E.P	--->	TE	.109	.057	.026	2.205	.027	.985
E.P	--->	LP	.122	.078	.029	2.692	.007	
E.P	--->	EE	.091	.063	.029	2.215	.027	
E.P	--->	MR	.101	.052	.023	2.286	.022	

Components and items			Impact factor		Test statistics and detection coefficient			
component	direction	item	standard	Non-standard	Standard error	critical test	Probability of error	Coefficient of Determination
E.P	--->	DIS	.117	.067	.033	2.014	.044	
E.P	--->	PRI	.097	.055	.027	2.032	.042	
E.P	--->	PR O	.117	.074	.031	2.371	.018	
E.P	--->	FR	.113	.054	.022	2.399	.016	
E.P	--->	LR	.090	.054	.026	2.069	.039	
E.P	--->	OR R	.094	.043	.020	2.189	.029	
E.P	--->	PR	.095	.053	.027	1.990	.047	
E.P	--->	HR	.086	.043	.021	1.986	.047	
E.P	--->	R	.074	.040	.020	2.032	.042	
E.P	--->	IP	.108	.066	.028	2.350	.019	
E.P	--->	RO	.091	.059	.029	2.023	.043	
E.P	--->	CO	.111	.048	.019	2.542	.011	
CR	--->	E.P	.729	1.253	.112	11.20 1	***	.532
CS	--->	E.P	.746	1.323	.115	11.47 0	***	.557
FP	--->	E.P	.643	1.000				.413

According to the structure and measurement of research, structural equation model or SEM Technique is a suitable method for conceptual model analysis. Covariance-Based SEM technique has been used to investigate the research model of structural equation. We have 16 records in this concept model and export performance as a core concept. Therefore, there are 16 hypotheses as follows and all of them have been confirmed in this project.

H1: Market Orientation Improves the Export Performance of Iranian Petroleum Products Companies.

H1-1: Customer orientation has a positive effect on the export performance of Iranian **petroleum** products companies.

H1-2: competitor Orientation has a positive effect on the export performance of Iranian **petroleum** products companies.

H1-3: information generation has a positive effect on the export performance of Iranian **petroleum** products companies.

H1-4: responsiveness has a positive effect on the export performance of Iranian **petroleum** products companies.

H2: Firm's Resources Improve the Export Performance of Iranian Petroleum Products Companies.

H2-1: human resources have a positive effect on the export performance of Iranian **petroleum** products companies.

H2-2: physical resources have a positive effect on the export performance of Iranian **petroleum** products companies.

H2-3: organizational resources have a positive effect on the export performance of Iranian **petroleum** products companies.

H2-4: location resources have a positive effect on the export performance of Iranian **petroleum** products companies.

H2-5: financial resources have a positive effect on the export performance of Iranian **petroleum** products companies.

H3: Marketing Mix Improves the Export Performance of Iranian Petroleum Products Companies.

H3-1: product has a positive effect on the export performance of Iranian **petroleum** products companies.

H3-2: price has a positive effect on the export performance of Iranian **petroleum** products companies.

H3-3: distribution has a positive effect on the export performance of Iranian **petroleum** products companies.

H3-4: marketing research has a positive effect on the export performance of Iranian **petroleum** products companies.

H4: Macro Environment Improves the Export Performance of Iranian Petroleum Products Companies.

H4-1: economic factors have a positive effect on the export performance of Iranian **petroleum** products companies.

H4-2: legal /political factors have a positive effect on the export performance of Iranian **petroleum** products companies.

H4-3: Technology factors have a positive effect on the export performance of Iranian **petroleum** products companies.

Table 6. The Role of Variables, Zero and Opposite Hypotheses and the Final Results of Research Hypotheses

Main hypothesis	Sub-hypothesis	Hypothesis items		zero hypotheses	opposite hypotheses	Test result
		independent	dependent	$\beta \leq 0$	$\beta > 0$	
Hypothesis 1	H 1-1	Customer orientation	export performance	×	✓	positive & direct effect
	H 1-2	competitor Orientation	export performance	×	✓	positive & direct effect
	H 1-3	information generation	export performance	×	✓	positive & direct effect
	H 1-4	responsiveness	export performance	×	✓	positive & direct effect
Hypothesis 2	H 2-1	human resources	export performance	×	✓	positive & direct effect
	H 2-2	physical resources	export performance	×	✓	positive & direct effect
	H 2-3	organizational resources	export performance	×	✓	positive & direct effect
	H 2-4	location resources	export performance	×	✓	positive & direct effect
	H 2-5	financial resources	export performance	×	✓	positive & direct effect
Hypothesis 3	H 3-1	product	export performance	×	✓	positive & direct effect

	H 3-2	price	export performance	✗	✓	positive & direct effect
	H 3-3	distribution	export performance	✗	✓	positive & direct effect
	H 3-4	marketing research	export performance	✗	✓	positive & direct effect
Hypothesis 4	H 4-1	economic factors	export performance	✗	✓	positive & direct effect
	H 4-2	legal /political factors	export performance	✗	✓	positive & direct effect
	H 4-3	technology factors	export performance	✗	✓	positive & direct effect

Conclusion

In this article we sought to address some of the opportunities and threats with the full implementation of secondary sanctions by the US government. Non-compliance of European countries and dealing with new economic sanctions by updating the US Sanctions Bloc Law, issuance of new instructions to guarantee financial activities in Iran by "European Investment Bank", attempting to connect Iran to Swift and establishment of independent European financial institutions, were presented as existing opportunities. Also a gradual change in the attitude of companies the importance of access to the US market due to trade disputes between the US and other trading partners, are opportunities facing the Iranian economy.

Immediate and unilateral application of all restrictive and sanctions imposed on the Iranian economy over several years, showed the situation is becoming more difficult for the Iranian oil industry, especially in financial fields. The US government's monopoly on banking and the closure of banks that were collecting and transferring funds from the sale of Iranian crude oil show a difficult situation in generating oil revenues as well as access to resources from the sale of crude oil, gas condensate, oil

and petrochemical products.

According to this study, the most important solution to deal with export barriers to sanctions is to have a strategic and comprehensive plan for exports and its implementation in any situation.

In qualitative studies, product analysis is a process of conceptualization and has an interpretive nature. The choice of each analysis method should be appropriate to the research methodology, to be done in a specified range and has some limitations too. Since qualitative research on export performance has not been conducted in Iran, less scientific analysis has been done in this field; therefore, the most important limitation of this research was the localization of literature review. The other limitation is different interpretations of this phenomenon. In fact, this interpretation is only one of the acceptable interpretations. Another limitation of the research was the political behavior of the interviewees.

References

- Chen, J., Sousa, C.M.P. and He, X. (2016), "The determinants of export performance: a review of the literature 2006-2014", *International Marketing Review*, Vol. 33 No. 5, pp. 626-670. <https://doi.org/10.1108/imr-10-2015-0212>.
- El-Adly, M. I., Eid, R. (2016). An empirical study of the relationship between shopping environment, customer perceived value, satisfaction, and loyalty in the UAE malls context. *Journal of Retailing and Consumer Services*, 31, 217-227.
- Freeman, J. M. (2009). Factors contributing to successful export performance of regional and metropolitan SME exporters.
- Forza & Filippini, R. (1998). Tqm impact on quality conformance and customer satisfaction: a causal model. *International journal of production economics*, 55(1), pp.1–20.
- Heidarzadeh, Kambiz, & Norouzi, Abdullah (2015). Providing a model of antecedents and consequences of in-store experiences: mixed method, Islamic Azad University. (In Persian)
- Jun, M., Cai, S. and Shin, H. (2006). TQM practice in Maquiladora: antecedents of employee satisfaction and loyalty. *Journal of Operations Management*, 24 (6), 791-812.
- Kaynak, H. (2003). The relationship between total quality management practices and their effects on firm performance. *Journal of Operations Management*, 21(4), 405-435.
- Kohli, Ajay K., Bernard J. Jaworski, & A. Kumar (1993), "Market: A Measure of Market Orientation", *Journal of Marketing Research*, 30(4),77,467.
- Malhotra, Narshki. (1393). *Marketing investigation*. Second Edition, Translators: Bahar Teymourpour, Kambiz Heidarzadeh, Tehran: Mehraban Publishing Institute. (In Persian)
- Mansoorian, Yazdan (2014). *Research Method in Information Science and Knowledge*, First Edition, Tehran: Samt. (In Persian)
- Mofidian, Sharareh, & Keshavarzian. (2015). Investigating the economic-legal effects of sanctions on Iran's oil industry. *Journal of Energy Economics*

- Studies*, 11 (45), 29-50. (In Persian)
- Mohammad pour, Ahmad (2016). *Qualitative research methodology anti method. Volume 2*, Second Edition, Tehran: Jamee shenasan. (In Persian)
- Nademi, Younes, & Hassanvand. (2019). Intensity of sanctions and poverty in Iran: needing to lift sanctions from a human rights perspective. *Strategic Studies in Public Policy*, 9 (31), 153-171. (In Persian)
- Njeru, W. G. (2013). Market orientation, marketing practices, firm characteristics, external environment and performance of tour firms in Kenya. *Unpublished PhD Thesis, University of Nairobi*.
- Razavi, Seyed Mohammad Hassan, & Zeinodini. (2018). Returning Impact of Secondary US Sanctions on Iran's Oil and Gas Industry: Opportunities and Threats. *Energy Law Studies*, 4 (1), 37-60. (In Persian)
- Rouhani, Hassan (2010). Foreign Policy and the Future of Oil and Gas. *International Quarterly Journal of Foreign Relations*, 2 (7,) pp.7-37. (In Persian)
- Strauss, Anselm L, & Corbin, Juliet. (2018). *Basics of qualitative research: grounded theory procedures and techniques*. Fourth Edition. Translator: Ibrahim Afshar, Tehran: Ney Publishing.
- Van Manen, M. (1990). From meaning to method. *Qualitative Health Research*, 7 (1): 345-369. <https://doi.org/10.1177/104973239700700303>. (<https://www.foreignaffairs.com/articles/iran/2017-10-03/iranian-nuclear-deals-sunset-clauses>)

Appendix

Questionnaire

MARKOR MEASUREMENT SCALE (Jaworski and Kohli, 1993)						
Intelligence generation						
1	We are slow to detect changes in our customers' product/service preferences.	1	2	3	4	5
2	We survey end-users at least once a year to assess the quality of our product and service offerings.	1	2	3	4	5
3	We are slow to detect fundamentals shifts in our industry (e.g., competition, technology, regulation).	1	2	3	4	5
Responsiveness						
4	For one reason or another we tend to ignore changes in our customers' product or service needs.	1	2	3	4	5
5	We periodically review our product development efforts to ensure that they are in line with what customers want.	1	2	3	4	5
6	If a major competitor we to launch an intensive campaign targeted at our customers, we would implement a response immediately.	1	2	3	4	5
MKTOR MEASUREMENT SCALE (Narver and Slater, 1990)						
Customer Orientation						
7	We constantly monitor our level of commitment and orientation to serving customers' needs.	1	2	3	4	5
8	We give close attention to after-sale service.	1	2	3	4	5
9	We measure customer satisfaction systematically.	1	2	3	4	5
Competitor Orientation						
10	Our top managers from every function regularly visit our	1	2	3	4	5

	current and prospective customers.					
11	We rapidly respond to competitive actions that threaten us.	1	2	3	4	5
12	Top management regularly discusses competitors' strengths and strategies.	1	2	3	4	5
FIRM'S RESOURCES (Freeman, 2009)						
Location resources						
13	There is not a lot of domestic competition within our firm's immediate location.	1	2	3	4	5
14	Our firm's location is a major advantage when exporting compared to our main domestic competitors.	1	2	3	4	5
15	It is not important for our firm's export business to cooperate with other firms in the same industry in which we are operating.	1	2	3	4	5
Physical resources						
16	Our firm incorporates the latest technology in our manufacturing processes.	1	2	3	4	5
17	Our firm is recognized in our main export country for products that are technologically superior.	1	2	3	4	5
18	Our firm has sufficient manufacturing capacity to meet export orders.	1	2	3	4	5
Human resources						
19	Our key people, responsible for our main export country, have extensive knowledge of this country.	1	2	3	4	5
20	Our key people, responsible for our main export country, have extensive export experience.	1	2	3	4	5
21	Our firm is experienced in exporting.	1	2	3	4	5
Organizational resources						
22	Exporting is the key to our firm's future success.	1	2	3	4	5
23	We proactively identified and acted upon opportunities in our main export country.	1	2	3	4	5
24	We planned extensively in advance before entering our main export country.	1	2	3	4	5
Financial resources						
25	Our firm can offer competitive credit terms to overseas	1	2	3	4	5

	buyers in our main export country.					
26	Our firm has working capital to finance export business in our main export country.	1	2	3	4	5
27	Our firm can meet competitive prices of other domestic and overseas suppliers in our main export country.	1	2	3	4	5
MARKETING PRACTICES (NJERU, 2009)						
Product practices						
28	We have the ability to develop new products.	1	2	3	4	5
29	We develop new products to exploit research and development (R&D) investment.	1	2	3	4	5
30	We ensure that product development efforts are responsive to customer needs.	1	2	3	4	5
Pricing practices						
31	We use pricing skills and systems to respond quickly to market changes.	1	2	3	4	5
32	We do an effective job of pricing our products.	1	2	3	4	5
33	We monitor competitors' prices and price changes.	1	2	3	4	5
Distribution (place) practices						
34	We have a strong working relationship with our distributors.	1	2	3	4	5
35	We attract and retain the best distributors.	1	2	3	4	5
36	We provide high levels of service support to our distributors.	1	2	3	4	5
Marketing Research practices						
37	Our marketing research abilities helps us to find customers.	1	2	3	4	5
38	We use our marketing research information effectively.	1	2	3	4	5
39	Our marketing research expertise help us to develop marketing programs.	1	2	3	4	5
EXPORT MARKET ENVIRONMENT (Freeman, 2009)						
Technology Environment						
40	The technology in our main export country is different from the technology in our domestic market.	1	2	3	4	5
41	The technology in our main export country is changing rapidly.	1	2	3	4	5

42	Changes in technology in our main export country are easy to predict.	1	2	3	4	5
Political/Legal Environment						
43	The political/legal environment in our main export country is different from the political/legal environment in our domestic market.	1	2	3	4	5
44	The political/legal environment in our main export country is changing rapidly.	1	2	3	4	5
45	Changes in the political/legal environment in our main export country are easy to predict.	1	2	3	4	5
Economic Environment						
46	The economic environment in our main export country is different from the economic environment in our domestic market.	1	2	3	4	5
47	The economic environment in our main export country is changing rapidly.	1	2	3	4	5
48	Changes in the economic environment in our main export country are easy to predict.	1	2	3	4	5
EXPORT PERFORMANCE (NJERU, 2009)						
Customer Satisfaction						
49	We have more loyal customers in our firm.	1	2	3	4	5
50	We often receive complimentary phone calls/ letters/emails from our customers.	1	2	3	4	5
51	We hardly receive complaints about our service offering.	1	2	3	4	5
Customer retention						
52	We don't have repeat customers in our firm.	1	2	3	4	5
53	We promptly respond to our customer needs.	1	2	3	4	5
54	We enjoy more committed customers in our firm.	1	2	3	4	5
Financial Viability						
55	Our firm monitors finances on a regular basis.	1	2	3	4	5
56	Our staff are among the best paid in this industry.	1	2	3	4	5
57	We pay our suppliers on time.	1	2	3	4	5