

The Role of the Iran Navy in providing Security of Maritime Transportation and Its Impact on Economic Security

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Received: 10 January 2024 Accepted: 19 May 2024 Published: 26 June 2024

Abstract

Background and Theoretical Foundations: Economic security, which is one of the most important requirements for the country's economic growth and development, is highly dependent on foreign trade and maritime transport. Maritime transport plays a key role in the development of the country's foreign trade with other countries. Currently, Iran owns approximately one percent of the world's maritime transport fleet, and Iran has the twenty-second largest shipping fleet in the world. In the last few years, about 80 to 90 percent of the country's exports and imports have been carried out through maritime transport. On the other hand, one of the main factors disrupting maritime security in the world's waters is the phenomenon of piracy, which today has advanced to hijacking ships and taking their crews hostage.

Methodology: This research is applied in terms of purpose and descriptive-analytical in terms of method, and aims to investigate the role of the Islamic Republic of Iran Navy in ensuring maritime transportation security.

Findings: The findings of this study indicate that, given the phenomenon of piracy, the role of the Navy in securing Iran's shipping lines and international trade is very important, and ensuring the security of the country's maritime transport will play a very important and vital role in the country's economic stability and the resilience of the national economy. In a world that is constantly involved in war and violence, increasing military power is a necessary and

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essential condition for ensuring security for every country, and security is recognized as a necessary condition for economic growth and development. Estimates by international organizations such as UNCTAD are that one of Iran's most important tools for resisting US sanctions is this large maritime transport fleet.

Conclusion: Economic security, which is one of the most important requirements for the country's economic growth and development, is highly dependent on foreign trade and maritime transport. Maritime transport plays a key role in the development of the country's foreign trade with other countries. Currently, Iran owns approximately one percent of the world's maritime transport fleet, and Iran has the twenty-second largest shipping fleet in the world. In the last few years, about 80 to 90 percent of the country's exports and imports have been carried out through maritime transport. On the other hand, one of the main factors disrupting maritime security in the world's waters is the phenomenon of piracy, which today has advanced to hijacking ships and taking their crews hostage. Therefore, considering the phenomenon of piracy, the role of the Navy in ensuring the security of Iran's shipping lines and foreign trade is very important, and ensuring the security of the country's maritime transport will play a very important and vital role in the country's economic stability and the resilience of the national economy. In a world constantly engaged in war and violence, increasing military power is a necessary condition for ensuring security for every country, and security is recognized as a necessary condition for economic growth and development. Estimates by international organizations such as UNCTAD are that one of Iran's most important tools for resisting US sanctions is this large maritime transport fleet. This research is applied in terms of purpose and descriptive-analytical in terms of method, and aims to investigate the role of the Islamic Republic of Iran Navy in ensuring the security of maritime transportation. The results of this research show that the Navy, by supporting the country's communication and shipping lines, can play an important and decisive role in the country's trade turnover and also have positive effects on regional and global trade and maritime transportation.

Keywords: Economic security, maritime security, maritime transport, maritime trade, navy.



1. Introduction

The strategic role of the armed forces in establishing national security is the basis for progress in the economic, scientific, cultural and social spheres, and in this regard, the production and establishment of security by the armed forces is of great importance. The most important motivation for countries in allocating financial resources to defense spending is their need for security, and security is recognized as a necessary condition for the economic growth and development of countries. Historical experience has proven to all nations and governments that the sustainability and efficiency of all economic, cultural and social measures depend only on security, and without security, no effective human activity can be carried out. Therefore, from the past to the present, strengthening and promoting military power (as the main source of security production) has become one of the main and important goals of countries.

In today's world, seas and waters, especially international waters, have played a very valuable role in ensuring global security and gaining power, and as a result, presence in the sea and dominance over international waters have become one of the most important concerns of powerful countries. The political and military developments of the international system in the 20th century, especially after the discovery of oil, have once again proven that the era of forgetting sea power is over and the priorities of sea power that were once raised by Alfred Mahan and many other scientists have been reproduced. Today, countries have realized that the sea area, especially open waters and international waterways connected to strategic points, have high capacities and lower costs in the process of pursuing strategic goals, and finding conditions for competition or hegemony in this regard can create a kind of stability in regional and global power (Azami, Mousavi Zare, 2016).

The Strait of Hormuz and the Persian Gulf are considered a unique geopolitical unit in the world as a center of convergence and sharing of interests of its eight coastal countries. Regarding the importance of the Persian Gulf and the Strait of Hormuz, it has been stated that oil is the life blood of modern industry, and the Persian Gulf is the heart that pumps this

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blood, and the sea routes are the arteries through which this vital blood passes, and the Strait of Hormuz is considered the vital artery of the economy of the West and the East. Iran's access to open waters and its location in an important region in economic and political terms have made Iran's economy enjoy a very high level of maritime transport. Iran's maritime border is connected to the global economy through 17 commercial ports through the waterway, so that more than 80 percent of Iran's foreign trade is carried out by sea. Also, Iran has the largest maritime transport fleet in the Persian Gulf. Therefore, given the importance of maritime transportation in the Iranian economy, the role of establishing maritime transportation security by the Strategic Navy of the Islamic Republic of Iran Army is very vital and important. By supporting the country's communication lines, the Navy can provide a secure maritime economy for the country and pave the way for sustainable economic growth and development for the country.

This article examines the strategic role of Iran's naval forces in securing maritime transportation and analyzes the profound interdependence between maritime security and the nation's economic stability. By exploring Iran's geopolitical significance in global maritime geography, evaluating the Navy's strategies to address traditional and emerging threats, and assessing the economic implications of these efforts, the study aims to shed light on how naval capabilities shape Iran's resilience amid evolving challenges and opportunities. In fact, the main question of the research is "How does Iran's naval force contribute to maritime transportation security, and what is the relationship between its maritime capabilities and Iran's economic stability amid regional and international challenges?"

2. Theoretical Framework and Literature

2.1. Security

In the encyclopedia of social sciences, security means the ability of a nation to protect its internal values against a transnational threat. Also, a country is secure when it is not forced to abandon its legitimate interests to prevent war and is able to even enter war to maintain its legitimacy (Mbago and Sokoto, 2011). Security at the national level has various dimensions, and



for various reasons, economic security is at the top of the priorities of national policymakers (Mirmohammadi, 2005).

Achieving high economic growth and development is the primary goal of all economic systems and the desired point of all efforts to regulate the economic affairs of societies. For years, economists have always sought to explain the differences between different countries in the world in terms of economic growth and development and have proposed various factors for this difference. Initially, economic factors such as savings rates, investment, growth in production factors, human capital, etc. were considered to explain the differences in the level of development of countries, but with more extensive studies, it was found that in addition to economic factors, non-economic factors such as security are also effective in the differences in the level of development of countries. Numerous studies show that security is one of the most important factors affecting the growth and development of countries. In other words, security is the main cornerstone of the economy on which the foundation of all civilizations and cultures throughout history has been based. There are numerous studies that show the direct and indirect impact of security and, consequently, peace on economic growth. In fact, security is one of the most important factors affecting the economic growth and development of countries. Creating security is one of the important platforms for economic growth, and the most important economic effects of security are reflected in the phenomenon of investment and economic growth. Security and peace reduce risk and uncertainty and have a positive effect on the accumulation of physical and human capital. In addition, a secure environment leads to increased labor and capital productivity, improved good governance, increased foreign tourist arrivals, and effective performance of institutions, and is indirectly effective in improving the economic environment (Santirasgram, 2008).

Economic growth always occurs in an environment where security is dominant in all dimensions, including economic, political, military, social, etc. Experts believe that there is an interaction and mutual relationship between development and security. At the same time, while peace and

stability are created under the shadow of security, sustainable growth and development also find meaning and significance (Rouhani, 2010).

In fact, the first stage in economic cognition in order to achieve sustainable development is economic growth, and the necessary condition for achieving economic growth is ensuring security. Classical theory, as the most basic lesson of economics, considers the most important task of governments to be ensuring security. Therefore, security can be included in the scope of public goods in the economy. Defense spending is one of the main concerns for many countries in the world due to its vital and security aspects. Therefore, defense economics is considered as one of the branches of the public sector in economics to examine the relationship between defense issues and the economy, the most important of which is examining the relationship between defense spending and economic growth. Therefore, creating security in countries is considered essential, and this is why a secure economic environment is a fundamental factor in economic growth and sustainable development in developing countries.

The experience of the eight-year war for the Islamic Republic of Iran has led to the conclusion that defense spending, in addition to ensuring security for economic activities, also serves as a deterrent against any external threat. Therefore, given the importance of this issue, the country's defense sector was strengthened by spending. The majority of the spending in this sector was in the field of research and development and innovation, because the Islamic Republic of Iran wanted the defense sector not to be dependent on foreign countries.

2.1.1. The role of the armed forces in establishing security

In a world that is constantly involved in war and violence, increasing military power is considered a necessary and essential condition for ensuring security for every country. Security is known as a necessary condition for economic growth and development; therefore, the defense spending of each country is also of special importance in terms of economy in addition to security aspects. The most important task of governments in economics is known to be ensuring security. Therefore, economists are



mainly interested in reducing government ownership in other economic sectors and increasing government spending in the country's defense sector. Controversies about security have entered academic circles since the end of World War II. (Darvishi 2010). The security of countries, which is generally referred to as national security, has various military, political, economic, social, geographical, etc. dimensions. Certainly, military power is one of the most important dimensions of power and perhaps the most obvious. According to many experts, the ultimate measure of national security is military capability, because countries live in an environment where their security is subject to numerous and constant internal and external threats. Therefore, the effectiveness of their coercive weapons is considered the ultimate measure of a country's power and is very important for their hegemony (Zarghani, 2010).

In fact, security is a public good and governments try to ensure their security by spending on defense. According to the annual reports of the Stockholm International Peace Research Institute, world military spending has increased by 50 percent compared to the previous decade. Military spending is carried out with the aim of increasing the production of military products and maintaining national independence, as well as preventing the import of military products and the dependence of military industries on foreign countries (Molaei et al., 2014). Given the government's limitations in allocating budgets to defense and non-defense matters, examining the impact of defense spending on other economic variables, especially economic growth, is of great importance. Military equipment and weapons are characteristics of military power, and military power is a fundamental requirement for the political and economic authority and security of any independent country. Every country acquires weapons to secure its authority and national interests and demonstrates its authority in various fields. Increasing military spending can indirectly increase economic growth by increasing security.

2.1.2. The role of the Navy in establishing security

Naval forces play a critical role in safeguarding national and regional security, particularly in maritime domains that are vital to global trade, energy flows, and geopolitical stability. Indeed, Naval forces are

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indispensable to national and global security, bridging military, economic, and diplomatic objectives. For Iran, its navy not only protects critical chokepoints like the Strait of Hormuz but also reinforces its role as a regional power. By balancing deterrence, diplomacy, and innovation, navies worldwide ensure that maritime domains remain secure, stable, and open to peaceful commerce. Below is an overview of the key roles navies fulfill in establishing and maintaining security:

1. Protecting Sovereignty and Territorial Waters. Navies are responsible for defending a nation's maritime borders, exclusive economic zones (EEZs), and territorial waters. This includes:

- Deterring foreign intrusions: Preventing unauthorized entry of foreign military or commercial vessels. (Till, 2013)
- Countering illegal activities: Combating piracy, smuggling (drugs, weapons, humans), illegal fishing, and environmental crimes.
- Securing strategic assets: Protecting offshore infrastructure (e.g., oil platforms) and islands (Cordesman & Al-Rodhan, 2006).

Example: Iran's naval presence in the Persian Gulf and Strait of Hormuz ensures control over its waters and deters external threats.

2. Securing Maritime Trade Routes. Over 80% of global trade relies on sea routes. Navies ensure the safe passage of commercial vessels by:

- Anti-piracy operations: Patrolling high-risk areas like the Gulf of Aden.
- Escorting merchant ships: Providing security for vessels in conflict zones or choke points (Murphy, 2007).
- Collaborating internationally: Participating in multinational coalitions to maintain open sea lanes.

Example: Iran's role in securing the Strait of Hormuz, through which 21% of global oil passes, directly impacts global energy security and Iran's economy.

3. Countering Security Threats. Navies address both conventional and asymmetric threats:

- Terrorism: Preventing terrorist groups from exploiting maritime routes for attacks or smuggling.



- Geopolitical rivals: Countering the influence of foreign powers in contested waters (Holmes & Yoshihara, 2008).

- Hybrid warfare: Responding to cyberattacks, drone threats, or sabotage targeting maritime infrastructure.

4. Deterrence and Strategic Posture. A credible naval force acts as a deterrent against aggression:

- Advanced capabilities: Deploying submarines, missile systems, and surveillance technologies to project power (Friedman, 2016).

- Strategic presence: Maintaining a visible presence in international waters to signal readiness.

Example: Iran's development of anti-ship missiles and midget submarines enhances its deterrence in the Persian Gulf.

5. Supporting Economic Security. Secure seas are essential for economic stability:

- Energy exports: Protecting oil and gas shipments, which are lifelines for energy-dependent economies.

- Trade resilience: Ensuring uninterrupted imports of food, medicine, and essential goods.

- Port security: Safeguarding commercial hubs like Bandar Abbas, which drive national revenue (Bueger, 2015).

6. Humanitarian and Disaster Relief. Navies contribute to global security through non-military missions:

- Disaster response: Delivering aid, evacuating civilians, and providing medical support during crises (e.g., tsunamis, earthquakes).

- Search and rescue (SAR): Assisting distressed vessels or aircraft in international waters (IMO, 2021).

7. Strengthening Diplomacy and Regional Influence. Navies serve as tools of "soft power" and geopolitical leverage:

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- Joint military exercises: Building trust with allied nations (e.g., Iran’s drills with Russia or China).
- Port visits: Demonstrating presence and fostering diplomatic ties.
- Regional leadership: Leading security initiatives, such as counter-piracy task forces (Bueger, 2015).

The role of the Navy in establishing security is shown in Figure 1:

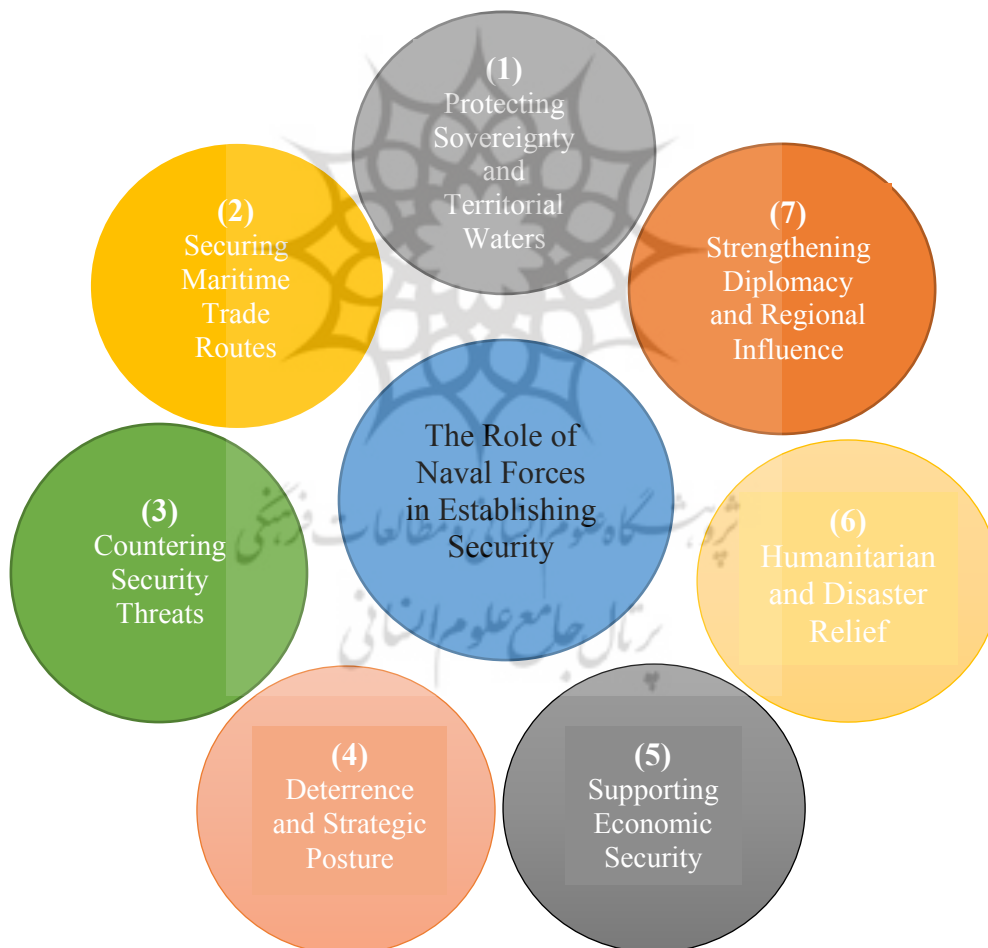


Chart 1: The role of the Navy in establishing security



3. Maritime transport

The use of the sea for transportation has a very long history, and societies have used this method of transportation as a main method of transportation in global transactions (Chuen and Lee, 2011). So that the age of this type of transportation can be considered as old as the formation of human societies (Emraei, 2015). Since ancient times, waterways have been the most economical way to transport goods, and for this reason, maritime transport has enjoyed a high advantage over other methods of transportation, especially for heavy cargo (Keshavarziyan, 2018). Throughout history, due to increasing awareness and human needs, important developments have occurred in the maritime transport industry. The late 19th century was accompanied by the replacement of steamships with sailing ships, which is considered a tremendous development. In the 1950s, advances in maritime technology brought about a transformation in the maritime transport industry comparable to the transformation of steamships from sailing ships in the late 19th century, resulting in a 65–70% reduction in maritime transport costs (Lundgren, 1996). Container trade with ships with a capacity of 226 TEU began in 1957, enabling the rapid and efficient movement of products in international transport chains (Mikhailo et al., 2000). In the 1960s, container transport began in its current form (Saffarzadeh et al., 2006) and is still growing today. The development of the mass production system in the early 20th century was initially based on road transport; but since the end of the century, the transport network and the communication network have been interacting with each other to serve the mass production system and the maritime sector has been increasingly contributing to this system (Rodrigo et al., 2013). Maritime trade has effectively allowed for the availability of vast resources and has facilitated the widespread distribution of resources (Bukhari, 2013).

The existence of water borders has paved the way for the expansion of markets and has brought distant places within the reach of various domestic industries in terms of the provision of raw materials, production equipment and the supply of goods. This industry has undergone significant changes in recent decades due to the globalization of economic activities (Saltmo, 2001). As a large part of world trade is carried out using maritime transport

(Mikhailo et al., 2000). Environmental considerations are also among the drivers of increasing demand for this sector (Benito et al., 2003; Kovak et al., 2005).

Maritime transport has advantages and challenges compared to other transport methods. The advantages of this transportation method include low shipping costs, suitability for large and heavy goods, usability in natural disasters such as floods and earthquakes, facilitation of foreign trade, and high importance as a line of defense. Low speed and high risk are also among the challenges of this method, which has been reduced in recent years due to advances in meteorology and ship design, and shipping companies are also required to comply with a set of rules in loading, unloading, and transporting goods, which reduces the risks of the cargo being transported. Puig (2019) lists low cost, low energy consumption, low pollution, high security, and low accident volatility as advantages of maritime transportation. According to calculations by English and Hoxton (2013), the efficiency of a given amount of fuel in the maritime transport industry for moving cargo is more than 8 times that of road transport and 1.7 times that of rail, and the pollution generated in this type of transport is also much lower than that of the other two forms of transport. The most important advantage of maritime transport over other forms of transport is its economic efficiency (Saffarzadeh et al., 2006). Despite all the known and unknown dangers, the sea route is the easiest and cheapest method of transport (Mahan, n.d.).

Different types of transportation methods have different cost functions depending on the service distance. For short distances, road transportation, for medium distances, rail transportation, and for long distances, sea transportation are the appropriate choices for transportation. Sea transportation is of much greater importance in heavy industries for the movement of raw materials and products. Accordingly, in the field of global trade, where we often face long distances, sea transportation is the most economical method of transportation, which is the most important advantage of sea transportation compared to other forms of transportation (Saffarzadeh, 2006).



The advantages of sea transportation in the increasing expansion of global trade have made sea transportation the most important method of transportation in global trade. According to UNCTAD, since 1970, maritime trade has experienced an average growth of 3%, and more than 80% of world trade by weight and 70% by value is carried by sea (10.7 billion tons, almost half of which is tanker trade). Accordingly, maritime transport is at the focal point of the global distribution of goods and raw materials (Rodrigo and Bruen, 2002).

Along with the increase in maritime transport, the share of different regions of the world in maritime transport has also changed. In a way, the share of Asian countries, especially East Asia, has increased significantly (Brooks and Fawcett, 2018), the main reasons for which have been the industrial growth of this region of the world and the increase in the ability of Asian countries to be present at sea. The capacity of the maritime transport fleet has also experienced high growth in recent decades.

3.1. Iran's Maritime Transport

The country of Iran, being located in the vicinity of the Persian Gulf, the Sea of Oman, the Makran coast and the Caspian Sea, has extraordinary geopolitical and geostrategic features. As Iran is historically located on the Silk Road, due to its location between the countries of Central Asia and the Caucasus and the Persian Gulf on the one hand, and also being located between Asia and Europe on the other hand, it is the shortest route for the passage of highways and railways from north to south and the passage of oil and gas pipelines from Central Asia to Europe.

After the collapse of the Soviet Union, 8 countries in the Caucasus and Central Asia became landlocked countries. Given its favorable geographical location, Iran is considered a desirable transit country for these countries and can best transport the oil and gas production of Kazakhstan, Turkmenistan, and other countries to the open seas and even to Europe through Turkey by sharing its docks and port piers. The axis of the Persian Gulf, which forms the deepest shipping channel and naturally encompasses the route of the main shipping lines from east to west, is close

to the coasts of Iran. The creation of sea lanes in territorial waters gives coastal countries the right to monitor the movement of international vessels and provides appropriate benefits to their respective countries (Malkotian, 2004).

Iran's maritime transport has the largest maritime transport fleet in the Persian Gulf. Iran has 524 km of water border in the north and 2106 km of water border in the south, which constitutes more than 30% of Iran's borders (Motalabi Karbakandi and Kafili, 2010). Access to open waters and also being located in an important region in economic and political terms have caused Iran's economy to have a very high level of maritime transport. Iran's maritime border is connected to the global economy through 17 commercial ports through water channels (Comprehensive Statistical Yearbook of National Transport, 2015), so that more than 80% of Iran's global trade is carried out by sea. Today, transportation, especially maritime transport, is considered one of the important components of the national economy and, due to its infrastructural role, has a great impact on the country's economic growth process. The Islamic Republic of Iran is one of the countries that enjoys good transit advantages due to its very favorable geographical location, and by expanding its transportation network and reliable and efficient communication, it can use these advantages to increase foreign exchange earnings and enhance its strategic position in the region in a desirable manner. Therefore, given the importance of maritime transportation in the Iranian economy, the role of establishing maritime transportation security by the Strategic Navy of the Islamic Republic of Iran Army is very vital and important.

3.2. Iran's maritime transport position in the international arena

In analyzing the position of Iran's maritime transport in the international arena, the linear shipping connectivity index has been used to compare the performance of this industry in Iran. This index has been calculated annually since 2004 for countries with maritime borders by UNCTAD. The purpose of calculating this index is to create an index indicating the level of connectivity of a country to the linear shipping network. This index consists of five components: number of ships; container capacity of ships;



maximum size of ship; number of services; number of companies that provide services to container ships.

For each of the above components, the value corresponding to each country is divided by the maximum value in 2004. The average of the five components is calculated and divided by the maximum average in 2004 and multiplied by 100. The country with the highest average in 2004 adopts the number one hundred, which is China.

Geographical conditions have made it possible for Iran to have access to water borders in the north and south. Iran has about 0.36 percent of the world's water borders, which is second in the Persian Gulf (after Saudi Arabia). Although the northern water borders are not connected to open waters, the large number of neighbors and Iran's relatively stable relations with its neighbors have allowed for communication with neighboring countries by sea. The importance of the southern borders in terms of transportation is much greater than that of the northern borders due to access to open waters and the possibility of establishing extensive international connections.

According to UNCTAD statistics in 2022, 0.38 percent of the world's ships (in terms of tonnage) were sailing under the Iranian flag on the world's waterways (Table 1). As can be seen from the figures in Table 1, the share of tonnage of ships sailing under the Iranian flag has been increasing in the world until 2022.

Table 1: Share of Iranian ship tonnage in the world (Source: UNCTAD)

| Year | 2020 | 2021 | 2022 |
|------|--------|--------|--------|
| Iran | % 0.32 | % 0.35 | % 0.38 |

Also, from 2020 to 2022, Iran has controlled approximately 1% of the world's maritime transport fleet (Table 2). 21.9% of Iran's maritime transport fleet is sailing under the Iranian flag and the rest under the flags of other countries (more than 77% under the Panamanian flag).

Table 2: Number of Iranian ships and their share in the world (Source: UNCTAD)

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| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Iran | 542 | 559 | 633 | 704 | 726 | 732 | 794 | 796 | 802 | 924 | 934 | 942 |
| World | 83283 | 84709 | 86668 | 87950 | 90470 | 92095 | 93521 | 95653 | 97136 | 100151 | 101419 | 102899 |
| Share | 0.65 % | 0.66 % | 0.73 % | 0.80 % | 0.80 % | 0.79 % | 0.85 % | 0.83 % | 0.83 % | 0.92 % | 0.92 % | 0.92 % |

The growth trend of the number of Iranian ships during the years 2011 to 2022 is shown in Figure 2:

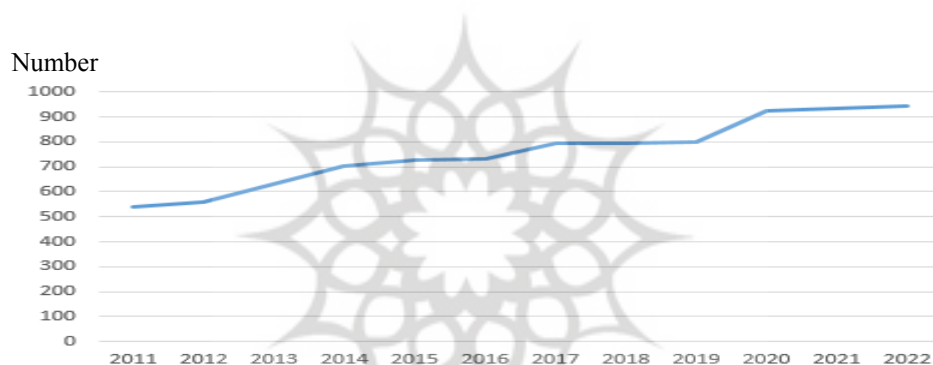


Chart 2: Growth trend in the number of Iranian ships during the years 2011 to 2022

Also, based on the type of ship, the number of ships with the Iranian flag is given in Table 3:

Table 3: Number of Iranian ships by ship type (Source: UNCTAD)

| 2022 | 2021 | 2020 | 2019 | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | |
|------|------|------|------|------|------|------|------|------|------|------|------|-------------------|
| 942 | 934 | 924 | 802 | 796 | 794 | 732 | 726 | 704 | 633 | 559 | 542 | All Vessels |
| 83 | 85 | 83 | 17 | 18 | 27 | 18 | 17 | 16 | 14 | 15 | 15 | Oil Tanker |
| 32 | 32 | 32 | 31 | 31 | 32 | 34 | 36 | 37 | 18 | 6 | 9 | Bulk Carrier |
| 393 | 392 | 394 | 371 | 372 | 364 | 341 | 339 | 327 | 292 | 263 | 240 | General Cargo |
| 31 | 31 | 27 | 26 | 26 | 29 | 28 | 28 | 27 | 21 | 4 | 17 | Container Carrier |
| 403 | 394 | 388 | 357 | 349 | 342 | 311 | 306 | 297 | 288 | 271 | 261 | Other types |

The share of Iranian ships in the world (percentage) based on ship type is given in Table 4:



Table 4: Share of Iranian ships in the world (percentage) by ship type (Source: UNCTAD)

| 2022 | 2021 | 2020 | 2019 | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------------------|
| 0.918 | 0.971 | 0.957 | 0.218 | 0.225 | 0.362 | 0.273 | 0.263 | 0.273 | 0.173 | 0.060 | 0.154 | All Vessels |
| 2.430 | 2.555 | 2.578 | 0.056 | 0.063 | 0.487 | 0.161 | 0.082 | 0.090 | 0.023 | 0.031 | 0.069 | Oil Tanker |
| 0.212 | 0.220 | 0.228 | 0.231 | 0.238 | 0.251 | 0.268 | 0.285 | 0.299 | 0.146 | 0.036 | 0.069 | Bulk Carrier |
| 0.952 | 0.957 | 0.959 | 0.978 | 0.991 | 1/014 | 0.978 | 0.979 | 0.949 | 0.863 | 0.457 | 0.766 | General Carrier |
| 0.597 | 0.621 | 0.421 | 0.423 | 0.444 | 0.494 | 0.462 | 0.494 | 0.520 | 0.436 | 0.033 | 0.408 | Container Carrier |
| 0.159 | 0.167 | 0.170 | 0.081 | 0.080 | 0.081 | 0.081 | 0.083 | 0.082 | 0.071 | 0.066 | 0.073 | Other Types |

The share of Iranian ships in the world (percentage) based on ship type is shown in Figure 3:

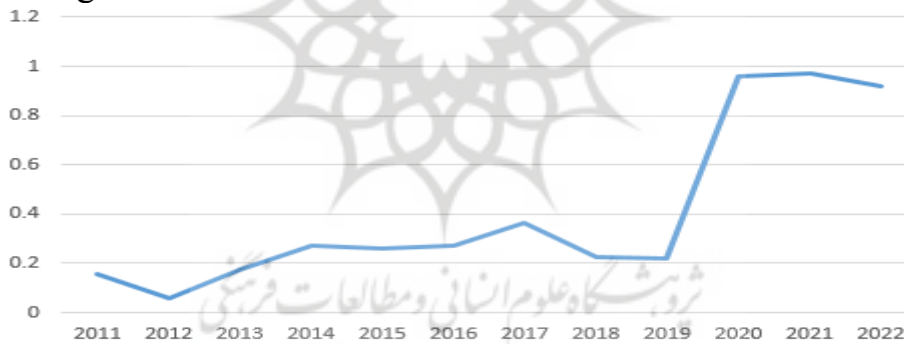


Chart 3: Share of Iranian ships in the world (percentage) by ship type

As can be seen, the number of Iranian-flagged ships has increased 5-fold since 2020, which is related to a 400% growth in Iranian-flagged tankers. Iran also holds 0.41% of the world's total container port capacity. In terms of container port capacity, the trend for Iran has been fluctuating, rising from 36th in the world in 2010 to 49th in the world in 2020 (Table 5).

Table 5: Iran's ranking in the world based on container port capacity (Source: UNCTAD)

| 2020 | 2019 | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | year |
|------|------|------|------|------|------|------|------|------|------|------|-----------------------------|
| 49 | 47 | 46 | 42 | 43 | 43 | 43 | 43 | 41 | 36 | 36 | Iran's ranking in the world |

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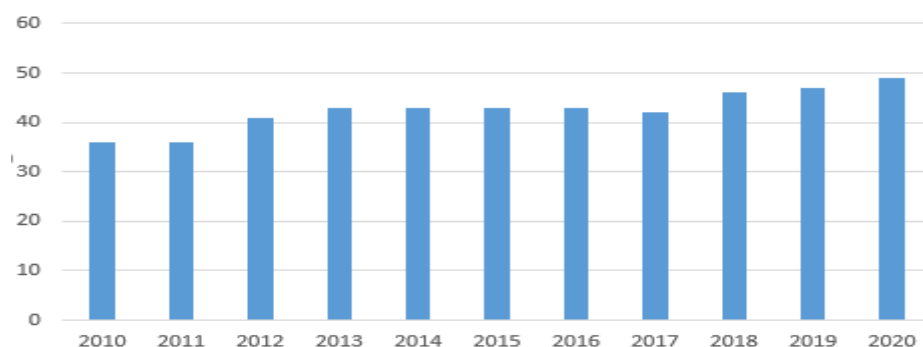


Chart 4: Iran's ranking in the world based on container port capacity

Iran's liner shipping connectivity index has also fluctuated and has decreased in the last two years, but has remained higher than the average for countries with coastal borders in recent years (Table 6 and Chart 5):

Table 6: Iran's liner shipping connectivity index ranking in the world (Source: UNCTAD)

| 2022 | 2021 | 2020 | 2019 | 2018 | 2017 | 2016 | year |
|------|------|------|------|------|------|------|-----------------------------|
| 60 | 61 | 77 | 73 | 53 | 47 | 46 | Iran's ranking in the world |

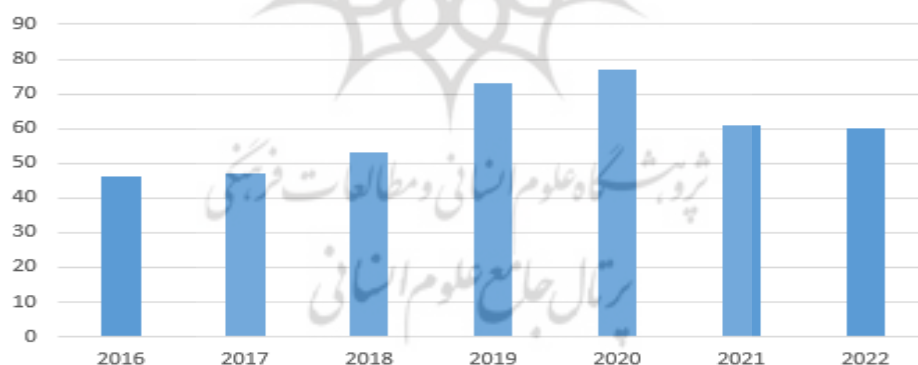


Chart 5: Iran's liner shipping connectivity index ranking in the world

3.3. The role of maritime transport security in the country's economy

Among the factors that can lead to economic growth is the strengthening of transport infrastructure (Beiranvand et al., 2017). In the field of domestic economy, transport, like the capillaries of the trunk of the economy, connects different members, and in the field of foreign trade, it provides the basis for meeting domestic needs and accessing export markets. Targeting



Khuzestan ports in the early stages of the war was aimed at cutting off foreign trade and increasing domestic pressures due to the shortage of necessities, which resulted in the activation of passive defense in the field of maritime transport and the use of the capacity of other ports. Given the emphasis of His Highness on Iran's maritime nature and the existence of strategic benefits at sea (Statement of the Supreme Leader at the First Naval Base in Bandar Abbas, 2011), this section examines the role of maritime transport security in the country's economy:

- Increasing competitiveness in the global arena: Access to diverse markets and low cost are among the factors that affect a country's competitive power. Given that more than 80 percent of Iran's foreign trade volume is carried out by sea and Iran's most strategic export commodity (oil) is exported by sea, achieving competitiveness in the global arena for the Iranian economy requires efficient and safe maritime transportation.
- Diversifying imports: Given the obstruction of Western countries and the United States in the supply of imported goods, it is necessary to first point out the need for import substitution and secondly to diversify the sources of import supply. Given the access of maritime transportation to a wider area of the world geography, diversifying imports is clearly possible through safe maritime transportation.
- Export expansion: Comprehensive support for exports, expansion of foreign trade services, and formation of new markets require safe maritime transportation. Countering the vulnerability of oil and gas export revenues by selecting strategic customers, increasing gas exports, increasing petrochemical exports, and increasing oil product exports is possible largely through safe maritime transportation.
- Launching the North-South Corridor: Developing strategic ties and expanding cooperation and partnership with countries in the region and the world, especially neighbors, may be realized through various channels. Among the methods of creating common interests and strategic linkages is the launch of the North-South Corridor, which connects the Indian subcontinent to Russia and Europe through Iran and the Caspian Sea. Activating this route and ensuring its security will not only allow Iran to

expand its trade, but will also create common strategic resources between Iran and the countries active on this route.

The above-mentioned cases indicate the importance of maritime transportation security and its role in the country's economy. The use of the phrase "strategic" for the naval force (Leadership statements at Nowshahr University of Marine Sciences, 2009) also indicates the high importance of maritime transportation security in the national economy.

4. Conclusion

This article first discussed the role of security in the economy, and then examined the role of the navy in establishing this security. Iran's economy has a very high level of maritime transport, and the Iranian shipping fleet is a large maritime fleet that operates on all international routes in the world with advanced ocean-going ships. Currently, Iranian shipping lines travel to most of the world's major ports to transport various goods, and by providing modern services, they have dedicated a large part of their capacity to transporting various goods on different routes in the world. As mentioned, in the last few years, Iran has owned approximately one percent of the world's maritime transport fleet, and Iran has the twenty-second largest shipping fleet in the world. Estimates by international organizations such as UNCTAD indicate that one of Iran's most important tools for resisting US sanctions is this large maritime transport fleet. More than 80 percent of Iran's foreign trade is carried out by sea, so the important and vital role of the Iranian Navy in ensuring maritime transportation security was discussed, among its effects and consequences were increasing competitiveness in the global arena, diversifying imports, expanding exports, and launching the North-South corridor, which will lead to sustainable economic growth and development in Iran.

In addition, it was noted that in recent years, piracy has been organized in a modern way and has become one of the most profitable criminal activities. Especially on the coast of Somalia towards Oman and the Gulf of Aden, the components threatening security in the waters are more numerous, and therefore the role of the strategic naval missions of the Islamic Republic of Iran in combating pirates and establishing maritime transport security has



had a direct and significant impact on Iran's foreign trade and, consequently, on the health and stability of the Iranian economy. By supporting the country's shipping and communication lines, the Navy has been able to provide a secure maritime economy for the country and has an important and decisive role in the circulation of trade exchanges in the country, as well as having positive effects on regional and global maritime trade and transport. If the security of Iran's shipping and communication lines is disrupted, this could face the Iranian economy with a very serious crisis.

Iran's economic security, heavily reliant on oil exports and the import of essential goods, hinges on its naval capability to ensure safe navigation and mitigate disruptions. The Iranian Navy's efforts to neutralize threats, expand strategic presence in international waters, and foster regional cooperation reflect a deep understanding of the symbiotic relationship between maritime security and economic resilience. However, challenges such as international pressure, technological constraints, and competition from extra-regional powers necessitate continuous modernization of defense strategies and enhanced maritime deterrence capabilities.

By transforming threats into opportunities, Iran's naval forces act not only as a shield for the national economy but also as a catalyst for positioning Iran as a key security stakeholder in the Persian Gulf. This role reinforces Iran's capacity to pursue sustainable economic development while navigating complex global dynamics. Moving forward, Iran's economic security will depend on sustained investment in naval modernization, proactive international partnerships, and adaptive strategies to address emerging risks. Such an approach will not only preserve national sovereignty but also solidify Iran's standing as a regional maritime security hub, demonstrating the inseparable bond between security and prosperity in an increasingly contested world.

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