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The Iran–United States Strategic Rivalry and the Geopolitics of the Strait of Hormuz and Bab el-Mandeb: Assessing Implications for Global Energy Security, Maritime Trade, and Supply Chain Resilience

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ABSTRACT

The Iran–United States strategic competition is now increasingly shifting the focus from the chokepoints for the maritime world to the chokepoints of global energy markets, for maritime trade and for supply-chain resilience. The Strait of Hormuz plays a special role since it is used by a significant percentage of seaborne oil and LNG traffic and links the Red Sea with the Gulf of Aden, and acts as a vital maritime gateway between the Indian Ocean and the Mediterranean Sea. Recent events show that the precarious situation of these shipping routes can lead to shipping delays, increases in shipping and insurance prices, increased energy-market volatility, and cascading supply-chain vulnerabilities (International Energy Agency [IEA], 2026; Ulrichsen & Krane, 2026). The aim of this qualitative study was to explore the geopolitics of the Strait of Hormuz and Bab el-Mandeb in the context of the Iran–U.S. strategic rivalry, and the geopolitical risks this creates for global energy security, maritime trade, and the resilience of supply-chains. Following an interpretivist approach, the research uses qualitative documentary analysis of academic peer-reviewed research, policy reports, institutional publications and authoritative secondary sources, mainly from 2020 to 2026. Thematic analysis is used to identify recurring patterns related to the maritime coercion, chokepoint vulnerability, energy insecurity, trade disruption, geopolitical competition and adaptive supply-chain strategies. The analysis suggests the two chokepoints must be viewed as part of a larger maritime-security framework with the potential for economic repercussions across regions as a result of regional competition. New research also indicates that such extended disruptions may reveal vulnerabilities in the globally integrated supply chain and push for greater diversification, alternative logistics paths, strategic stockpiles, and supply chain agility (Bahgat, 2026; Childs, 2026). Theoretically, the study links geopolitical rivalry and maritime chokepoint theory with the energy-security and supply-chain-resilience frameworks, and it gives weight to the concept of diversification of routes, strategic energy reserves, maritime cooperation, and joint mechanisms for the management of a crisis. It finds that maritime choke points must be viewed not only as geographical passages but also as strategically contested infrastructures, if their disruption can increase risks to economic security.

Keywords: *Iran–United States rivalry, Strait of Hormuz, Bab el-Mandeb, energy security, maritime trade, supply-chain resilience, geopolitical chokepoints, maritime security.*

INTRODUCTION

In an international system that is becoming more and more contemporary, geopolitical competition, strategic geography and the fragility of economic networks that are spread worldwide play an increasingly significant role in shaping the international system. No relationship in the region is a better example of such interdependence than the longstanding adversarial relationship between Iran and the United States. The relationship has become a multi-dimensional security competition since the breakdown of relations

after the Iranian Revolution in 1979 and especially due to disagreements over Iran's nuclear program and the sanctions, military presence in the Gulf and regional alliances. The competition in maritime geography is at the heart of this conflict, as Iran is located next to the Strait of Hormuz, while the region's wider conflict and security dynamic reaches into the Gulf of Aden and Bab el-Mandeb. Therefore, the developments that come from the Iran–U.S. confrontation can't be seen as only bilateral or regional security concerns, but they can also have consequences for energy markets, shipping routes, trade costs and global supply chains.

The strategic importance of the Strait of Hormuz is mainly due to its being the main sea route linking the Persian Gulf to the Gulf of Oman and Arabian sea. It plays an outstandingly high role in global energy security. About 20.9 million barrels per day (b/d) of crude oil, condensate, and petroleum products flowed through Hormuz in the first half of 2025, which is roughly one-fifth of global petroleum liquids consumption and accounts for over one-quarter of global seaborne oil trade. (U.S. Energy Information Administration (EIA), 2026) The Strait also plays a significant role in liquefied natural gas (LNG) trade, accounting for over 20% of all LNG trade passing through during the same period, the majority of which has been exported from Qatar (EIA, 2026). (U.S. Energy Information Administration) The flows are not just geographic: they are a key infrastructure node in the global energy system. The perception of a threat to its security can thus cause market uncertainty even if there is no actual disruption.

An alternative, but analytically separate, maritime choke point is the Bab el-Mandeb Strait. Bab el-Mandeb, a strait that connects the Red Sea to the Gulf of Aden and the Indian Ocean, is a key link between the energy exporting heart of the Middle East, the Suez Canal, European markets, and Asian manufacturing hubs. Bab el-Mandeb is also a strategic chokepoint for seaborne trade, with the UN Trade and Development (UNCTAD, 2024) estimating that it handles some 8.7% of global seaborne trade volume in 2023, including significant volumes of oil products, crude oil, vehicles and containers. It came to the fore after attacks on commercial shipping in the Red Sea since the end of 2023. Shipping was more and more diverted around the Cape of Good Hope, with the consequence that voyages from Asia to Europe were significantly lengthened. UNCTAD (2025) then declared that due to geopolitical issues, voyages were longer and freight prices were higher, causing delays and stress on the reliability and resilience of supply chains. (UNCTAD)

The fact that the two chokepoints, Hormuz and Bab el-Mandeb, are located in strategic proximity is significant, as a disruption at one of the points can disrupt traffic at the other. The two waterways are in different geographical locations, but as part of a complex maritime network that connects the Persian Gulf, Indian Ocean, Red Sea, Mediterranean and the global markets with energy and manufactured goods. The Red Sea crisis is a good example of this systemic dimension. Research based on maritime shipping-network data shows that the crisis had a profound impact on the movement of ships and a large number of vessels avoided the Red Sea, while maritime shipping networks proved to have some adaptation capacity (Zhang et al., 2024). UNCTAD (2024) also highlights that combined chain disruptions to key maritime trade lanes can have an impact on inflation, food security, energy security and global trade. The importance of these "chokepoints" is not only in the amount of goods that flow through them, but also the ability to spread geopolitical shocks across geographically distant economic systems.

In this backdrop, the central research issue is the lack of integration between geopolitical rivalry and maritime chokepoint vulnerability, energy security, and resilience of supply chains into one analytical framework. Previous scholarship has produced vast knowledge on Iran–U.S. strategic competition, maritime security, energy geopolitics, and impacts of Red Sea disruptions on shipping.The scholarly work that has already been undertaken has yielded significant insights into Iran–U.S. strategic competition, maritime security, energy geopolitics, and the consequences of disruption in the Red Sea on shipping. But these works of literature are often studied individually. Energy-security studies tend to highlight

petroleum flows and market vulnerabilities, maritime-security studies tend to focus on maritime competition, attacking vessels, or freedom of navigation, and supply-chain research tends to give special attention to logistical adaptation, rerouting, inventories or network resilience. This segmentation may lead to a lack of appreciation for how strategic competition creates interconnected risks in maritime, energy and economic areas.

New data confirm the need for an integrated approach. According to UNCTAD (2025), maritime transport accounts for over 80% of the trade in internationally traded goods, and geopolitical disruptions have been changing shipping routes and costs, as well as the reliability of the supply chains. The Red Sea experience also shows that rerouting is not a "no-cost" solution – extra vessel capacity is required, transportation costs and emissions will be higher, and congestion will arise at alternative ports and routes (UNCTAD, 2024, 2025). However, much less focus has been placed on the impact the Iran–U.S. rivalry could have on the perceptions of risk in Hormuz and the wider strategic picture that includes Bab el-Mandeb, and the resulting vulnerability in global supply chains.

This research fills this gap in research with an interpretivist qualitative approach. The research conceives maritime insecurity as socially and politically elaborated as a process of contestation of state narratives, strategic perceptions, institutional responses and vulnerabilities. The study utilizes qualitative documentary research which uses peer reviewed scholarships, international organisation reports, energy assessments, policy documents and other authoritative secondary sources. Thematic analysis is employed to uncover commonalities and connections within the documentary data, especially on the issue of strategic competition, chokepoint challenges, energy security, disruptions to maritime traffic, trade shifts, and supply chain flexibility.

Therefore, the aim of this research is to critically review the impact of the Iran – US strategic rivalry on the geopolitics of the Strait of Hormuz and the Bab el-Mandeb and to analyze the implications for the world's energy security, maritime trade and supply-chain resilience. How does Iran/United States strategic rivalry and situation affect the geopolitical and security situation of Strait of Hormuz and Bab el-Mandeb?What are the effects of the Iran/United States strategic rivalry and situation on the geopolitical and security situation of the Strait of Hormuz and Bab el-Mandeb, from the perspective of qualitative research? The questions are: (2) What are the vulnerabilities at these maritime chokepoints that impact global energy security and international maritime trade and (3) What are the geopolitical disruptions at these chokepoints that reveal vulnerabilities within, and drive adaptation of, global supply chains? The study aims to go beyond the narrow definition of chokepoints as geographical bottlenecks and to define them as “strategic infrastructures” that can be part of a web of infrastructures that can spark cascading global economic repercussions in the context of geopolitical competition.

LITREATURE REVIEW

Understanding the Iran–U.S. Strategic Rivalry and Middle East Geopolitics.Understanding of the Iran–U.S. Strategic Rivalry and Middle Eastern Geopolitics

The Iran – US strategic competition is more accurately seen as a multi-dimensional geopolitical competition, with the military dimension, economic sanctions, nuclear diplomacy, regional alliances, proxy networks and control over strategically important areas. The rivalry is not really a bilateral one, but rather a regional security complex involving the Persian Gulf, Iraq, Yemen, the Red Sea, Israel and Gulf Arab states. The rivalry is especially significant from an interpretivist point of view because the significance of maritime areas is being shaped by rival perceptions of threat, deterrence, sovereignty, and freedom of navigation. Iran's geographical location endows it with an asymmetric ability to affect maritime security in the Strait of Hormuz, and the United States has far-reaching naval power and

alliances to ensure maritime access and protect commercial shipping. The detention and harassment of merchant vessels is a type of incident that is an example of the commercial navigation that is a part of the larger geopolitical bargaining (U.S. Navy, 2023). (U.S. Navy)

The literature, however, shows an important analytical dichotomy. While conventional strategy focuses on the military power of Iran and U.S. interests in freedom of navigation, critical geopolitical thinking highlights the influence of competing narratives of legitimacy and regional alliances, and the role of sanctions, on maritime behaviour. A military balance of power approach to the rivalry may underestimate its economic and infrastructural implications. The maritime domain is at the same time a security space and an economic system in which geopolitical competition can be spread to the global markets. The observation is an opportunity to consider Hormuz and Bab el-Mandeb as part of a geopolitical system in the region, not as separate waterways.

Theories of Maritime Chokepoints in the Geopolitical dimension

A narrow waterway is a generally accepted maritime chokepoint in terms of the chokepoint scholarship because it brings together flows in a geographically limited space. Their importance lies in their rarity, economic reliance and potential disruption. The focus on strategically vital lines of communication in classical geopolitical thinking is paralleled by a growing emphasis in the modern literature on maritime security on network effects, interdependence and the systemic implications of disruption. This latter view is also helpful based on the strategic value of a chokepoint which can only be judged by the amount of trade transiting through it. The importance also will depend on the availability, cost and reliability of alternative routes.

The Bab el-Mandeb, Strait of Hormuz, Suez Canal, Panama Canal, and other sea trade passages are defined as key nodes of global seaborne trade by the UN Trade and Development (UNCTAD, 2024). The group points out that a disruption in such facilities can produce increased travel time, increased freight charges, congestion, more fuel use and broad economic impact. This network view contradicts the notion of geographical containment of maritime disruption. However, a node disruption will reallocate vessel flows and capacity among other nodes, resulting in secondary vulnerabilities.

There is, however, some existing literature on chokepoints which focuses on water systems separately. This creates an important constraint of the present study. Hormuz and Bab el-Mandeb are two strategically significant locations, both linking the energy-rich Persian Gulf to big international commercial shipping lanes. Therefore, literature demands a more relational understanding of chokepoints that view disruption as a function of the interaction of geography, geopolitical rivalry, maritime networks, and adaptive responses.

The Strait of Hormuz and World Energy Security

The Strait of Hormuz is in a unique place in the energy-security literature because of its importance as a way for energy producers in the Gulf to move petroleum and LNG resources to the rest of the world. It is strategically significant because of its scarcity, and the fact that most major energy exporters are located in the Persian Gulf. Historically, about 20% of global petroleum liquids consumption and a significant percentage of global liquefied natural gas (LNG) trade has passed through the Hormuz (EIA, 2025). This leaves the market structurally vulnerable, as risk premiums, uncertainty and precautionary responses can be triggered in energy markets by threats to shipping, even if there is no physical closure.

The literature mostly confirms the importance of Hormuz as an energy choke-point, while scholars disagree on the degree of vulnerability and its magnitude. One view focuses on Iran's potential for using

asymmetric maritime means – mines, missiles, fast attack craft and others – to launch threats against navigation. The other focuses on U.S. and regional capabilities to prevent or thwart such threats by means of naval dominance and maritime surveillance. Maritime coercion has been shown in 2023 in incidents such as the seizure of commercial tankers by Iranian forces, which can lead to the challenge of the security of international shipping without the presence of conventional war. (U.S. Navy)

One shortcoming of this literature is that it focuses on the physical availability of energy supplies to define energy security. This can lead to the neglect of the wider concept of security, such as its affordability, reliability, market confidence, infrastructure protection, and its capacity to withstand long-term disruption, especially with an import-oriented economy. Beyond the quantitative aspect of whether oil actually flows through the strait, the importance of Hormuz can be examined from a qualitative view: what do governments, energy companies, insurers, shipping companies, and markets think of the risk of disruption? The chokepoint turns into a location the place geopolitical perceptions are converted to economic activity.

Bab el-Mandeb, Red Sea Insecurity and Maritime Trade

The Bab el-Mandeb is now at the forefront of academic interest due to the recent surge in maritime insecurity in the Red Sea since the end of 2023. It is an oceanic passage that links the Red Sea and the Gulf of Aden and the Indian Ocean, and is part of the maritime route that connects Asia with Europe via the Suez Canal. UNCTAD (2024) estimates that Bab el-Mandeb accounted for about 8.7% of the global seaborne trade volume in 2023, and also had significant volumes of containerized goods, automobiles, crude oil, and oil products. The importance of such a development is not limited to energy transport, but also applies to global manufacturing and distribution of consumer goods.

Empirical studies conducted recently have found that the Red Sea crisis resulted in significant behavioral shifts and changes in the structure of maritime networks. Analysing the vessel-tracking data, Zhang et al. (2024) concluded that there was a marked decrease in ship movement, speed and a significant diversion away from the Red Sea. However, the study also revealed that resilience exists at the broader level of the maritime network, meaning that shipping systems are also resilient even when core routes are not. Likewise, a study in the Journal of Transport Geography proves that shipping companies adjusted their port calls, vessel deployments and routes when geopolitical disruptions occurred (2024). (ScienceDirect)

However, the robustness found in shipping networks shouldn't be confused with the lack of vulnerability. According to UNCTAD (2024), the attacks on commercial vessels led to significant drop in flow in the Suez and the Gulf of Aden, and forced vessels to go around the Cape of Good Hope. This increased not only the distance of the voyage, but also the fuel usage, insurance and delivery time. The literature thus points to a paradox: the maritime networks can be kept active while at the same time they become less efficient and more costly and more polluting. It is significant to understand the implications of Bab el-Mandeb to global trade.

Geopolitical risks and vulnerability of global supply chains

Geopolitical instability is a systemic risk to the supply chain, as today's supply-chain literature is increasingly pointing out. The COVID-19 pandemic, Russia-Ukraine war, the Red Sea crisis and other events have shown that a critical requirement for global production networks is a relatively predictable transportation corridor. Maritime chokepoints, in particular, are critical because disruptions can have consequences that impact ships, ports, inventories, production schedules, insurance markets and downstream distribution. UNCTAD (2024) states that disturbances to key maritime supply lines have

potential to have cascading impacts on global trade, inflation, food security, and energy markets. (UNCTAD)

A recent study advances the thinking on SC resilience beyond the notion of "business as usual". According to Chen et al. (2025), the maritime supply-chain resilience is defined as the ability to absorb, adapt and recover from unexpected shocks. They focus on the growing vulnerability of maritime systems to geopolitical and other international crises. Research on the Red Sea crisis also indicates that shipping networks can maintain regional connectivity and significantly alter their shipping routes and port deployments (Yap et al., 2025). (DOI)

The major constraint is that much supply-chain research focuses on geopolitical disruption as a exogenous shock and fails to look at the geopolitical processes as a source of vulnerability. Risk is not just an exogenous event that places threats on logistics networks, but the result of strategic signaling, sanctions, naval deployments, coercive diplomacy, proxy conflict, and competing interpretations of maritime security, in the context of Iran–U.S. rivalry. It is an indication that geopolitical analysis should not be considered as an analytical field apart from resilience in the supply chain.

Maritime security, maritime sanctions, naval power, and maritime strategic deterrence

Another key strand that features in the literature is maritime security. The Hormuz case is a good example of the use of naval power to serve four different ends, namely deterrence, coercion, reassurance, and economic pressure. Throughout history, the United States has tried to ensure freedom of navigation and commercial shipping by deploying its navy and by participating in multinational maritime-security arrangements. In comparison, Iran has built up asymmetric capabilities that can take advantage of the geography of the Gulf, small swift craft, missiles, drones, and other means of maritime pressure. The result is a security landscape that is out of balance when it comes to standard naval capabilities and has plenty of Iranian potential for local disruptions.

The strategic competition between the two countries is complicated by the imposition of sanctions, which are now a part of commercial and financial networks as well. As energy exports, shipping, insurance and financial transactions are curtailed, the strategic significance of maritime routes may rise due to the impact of economic restrictions on Iran's economic incentives and calculations of external actors. Meanwhile, coercive sea-going actions can have unintended effects when business people become uncertain about navigation rights, insurance coverage, legal risks, and the potential for escalation.

In the literature, one therefore comes across a basic contradiction. The presence of the navy can lower the likelihood of continued disruption because it makes it more costly to be an aggressor, but it can also make it more likely that the people will feel "encircled" or "escalated. Maritime security thus poses a security dilemma in which the security aspects of navigation protection measures can be viewed as security aspects of strategic pressure. An interpretivist perspective can be helpful in this regard as it enables analysis of the meaning constructed by different actors in the concepts of deterrence, sovereignty, coercion and legitimate navigation.

Supply-chain resilience and alternative transportation routes

The most significant finding on the literature of recent years is that maritime actors have a great capacity for adaptation. With the Red Sea becoming unsafe, shipping companies rerouted their ships around the Cape of Good Hope, made changes to port rotations, upped the number of ships and changed their schedules. According to UNCTAD (2025) rerouting via the Red Sea was a factor that helped freight rates to remain at tainted levels despite the market now having more container capacity. In recent research on

European ports, rerouting resulted in differentiated impacts on ports, with some ports benefiting from an increase in connectivity, while others saw significant decreases (2025). (ScienceDirect)

Alternative ways around are thus important resiliency mechanisms, but not substitutes for vulnerability. Rerouting transfers rather than necessarily removes risk. More ships, fuel, crew time and insurance is required for longer voyages, and congestion may be a problem at alternative ports. UNCTAD (2024) points out that rerouting around Africa resulted in longer voyages and added extra strain to the capacity and logistics of maritime transport. Recent research also confirms that port resilience varies and geographically strategic and well-connected ports exhibit varying capacities to absorb disruption (2026). (ScienceDirect)

The literature reviewed identified a key conceptual difference between operational and systemic resilience. The shipping firms could succeed in the avoidance of unsafe 'chokep points', while the global shipping system could have increased costs, congestion, emissions, and decreased reliability. The fact that there are alternate routes should not be taken as an indicator that chokepoints are not important. Rather, the resilience of the broader maritime system should be measured by its capacity to withstand shocks and stresses without resulting in cascading economic impacts.

Synthesis & Research Gap

The literature as a whole shows that the rivalry between Iran and the United States, the chokepoints of the sea, energy security, maritime trade, and supply-chain resilience have strong links. However, there is still a considerable amount of fragmentation. Iran-U.S. competition studies are dominated by nuclear-strategy, sanctions, power balances and/or military-deterrence approaches; maritime-security research is dominated by naval threats and freedom of navigation; energy-security scholarship is dominated by Hormuz and petrol flows; and studies of the Red Sea crisis are on the rise and increasingly take a shipping-network and/or operational-resilience approach. The methods used produce useful information, but usually do not connect the two chokepoints within a single geopolitical context.

The most important disconnect, then, is between the Strait of Hormuz and Bab el-Mandeb in the overall strategic competition between Iran and the U.S. Research to date focuses on Hormuz as an energy chokepoint and Bab el-Mandeb as a Red Sea maritime-security issue. This separation hides their functional relationships in a larger maritime system. The literature also lacks a sufficient amount of interpretative focus on the vulnerability and resilience of interconnected maritime networks and how strategic narratives, perceptions of threat, sanctions, deterrence, and geopolitical signaling impact them.

This study asserts that the present study narrows this gap by conceiving of the two ports as geopolitical counterparts as well as strategic infrastructures with interconnected impacts that can, in the hands of geopolitical rivalry, create cascading effects in global energy markets, maritime trade, and supply chains. Qualitative underpinning of its work is based on geopolitical and maritime-chokepoint views, alongside energy-security and supply-chain-resilience views. Thematic analysis of documentary and secondary sources explores not only the potential for disruption but also the ways in which disruption is political, strategic, economic and operational. This conceptualization, as a geopolitical process, forms the basis of an interpretive analysis of the Iran–U.S. rivalry as a process that can transform localized maritime insecurity into broader manifestations of global economic vulnerability.

RESEARCH METHODOLOGY

The research philosophy and approach

The research philosophy used in this study is interpretivist because it aims to understand the representation, interpretation and linkage of geopolitical rivalry, maritime insecurity, energy vulnerability and supply-chain disruptions in the existing documentary evidence. In the view of Interpertivism, meanings, perceptions, institutional narratives and historically situated interpretations are found as much as social and political realities are. (Schwartz-Shea & Yanow, 2012) It is a philosophical outlook that is suitable for analysis of Iran–United States strategic rivalry because of the significance that concepts like "maritime security," "deterrence," "freedom of navigation," "strategic threat" and "energy security" can have for different states, international organizations, maritime institutions, and policy actors. The study is not designed to statistically test set assumptions of causal relationships, but rather to identify patterns of meaning and relationship that evolve from the data at hand.

This research is a qualitative documentary research. Documentary research is well suited for research problems that involve geopolitical processes over time and for cases where there is extensive evidence in publicly accessible policy, governmental, institutional, and academic documents (Bowen, 2009). The design allows the study to investigate the strategic importance of the Strait of Hormuz and Bab el-Mandeb without having to gain access to primary empirical sources such as interviews, surveys, field observations, etc. Thus, only secondary and documentary evidence are used for the analysis.

Data Sources and Source Selection

The documentary corpus is composed of different types of sources. Identification of peer-reviewed academic literature is done mostly by Scopus and Web of Science, with the help of other databases/ platforms as required such as ScienceDirect, SpringerLink, Taylor & Francis, Sage, JSTOR, and Google Scholar. Second, the importance of books and scholarly monographs on geopolitics, maritime security, energy security, international relations, and supply chain resilience are taken into account. Third, the study draws on authoritative policy papers, government documents, maritime-security estimates, and reports by international organizations and specialized institutions such as the International Energy Agency, UN Trade and Development, the International Maritime Organization, the U.S. Energy Information Administration, and other governmental and maritime-security agencies. These types of institutional documents are especially useful in regard to shipping routes, energy flows, maritime risks, sanctions and policy responses.

The documents are identified using the purposive sampling method, with the aim of identifying documents that will directly answer the research questions. Unlike random sampling, which is generally used in quantitative research to select information-rich materials that are relevant to the phenomenon under study (Palinkas et al., 2015), purposive selection is employed by qualitative researchers. Priority is given to literature published in the last five years (2020–2026), and earlier foundational works are kept when they give important theoretical or methodological concepts. Source credibility is evaluated based on authorship, institutional authority, source of publication, transparency of methods, relevance and congruence with other credible sources.

Inclusion and Exclusion Criteria are provided for the information of the applicant

The documents included are those that address one or more of the following core analytical dimensions of the study: (1) Iran–U.S. strategic rivalry; (2) the Strait of Hormuz; (3) Bab el-Mandeb and Red Sea security; (4) maritime chokepoints; (5) global energy security; (6) maritime trade and shipping security;

(7) maritime sanctions; and (8) vulnerability and resilience of global supply chains. Special analytical consideration is given to peer-reviewed studies and authoritative institutional reports.

Documents are missing if they do not have identifiable authorship or institutional responsibility, if the claims in the document are unverifiable, if they do not provide sufficient relevance in terms of the research questions, if they duplicate information that is already presented in the corpus, or if they are mainly made up of unsupported commentary. News, media sources can only be used where they provide contextual information in regard to events documented in the geopolitical sphere and are not considered to be the same as peer-reviewed scholarship or authoritative institutional evidence. This distinction is significant because a qualitative approach to documentary research needs to be systematic in the consideration of the authenticity, credibility and representativeness of the documentary materials (Bowen, 2009).

Data Collection and Documentary Analysis

The process of data collection entails a structured search and screening process. Sexed ideas involved are Iran–United States rivalry, Iran maritime security, Strait of Hormuz, Bab el-Mandeb, Red Sea shipping, maritime chokepoints, energy security, oil transit, geopolitical risk, supply-chain resilience, shipping disruption, naval deterrence, and maritime trade. Documents retrieved are filtered based on pre-set inclusion/exclusion criteria. The information recorded includes bibliographic data, publication year, source type, central argument, geographical focus, and relevance to the research questions to form a transparent corpus of documents.

The materials that have been selected will then be analyzed qualitatively in document analysis. Document analysis is a systematic process of analyzing and interpreting documents in order to gain meaning and empirical knowledge as identified by Bowen (2009). This study does not treat the documents as isolated sources of information, but rather reads them comparatively. Explicit arguments and recurring ideas, assumptions, narratives, contradictions and relationships around the concepts of maritime vulnerability and geopolitical power are analyzed. The analysis also admits that there are differences between the academic interpretations and the institutional or policy-oriented representations.

Thematic Analysis

After documentary analysis, the study utilizes thematic analysis to uncover, classify, and explain common themes in the documentary texts. Thematic analysis was appropriate because it can help to identify patterns of meaning within qualitative materials in a systematic but flexible way (Braun & Clarke, 2021). The six general steps of the analytical process are: familiarization with the documents, development of initial codes, development of candidate themes, review and revision of candidate themes, development of final themes, and interpretive synthesis.

In the early coding, the concepts of strategic rival, geopolitical coercion, maritime chokepoint vulnerability, deterrence, sanctions, energy insecurity, shipping disruption, route diversion, trade vulnerability and supply-chain adaptation are emphasized. The related codes are then grouped into larger themes. The themes covered in the expected analysis are likely to be interconnected and will focus on Iran–U.S. strategic competition, the strategic vulnerability of the Bab el-Mandeb, the Red Sea and the energy market, disruption of maritime trade, and resilience of supply chains. Important, all these themes are not treated as the already known empirical results, but they are built and refined by systematic engagement with the documentary evidence.

Qualitative Research Questions

The study is guided by the following research questions:

RQ1: What is the impact of the Iran – United States strategic rivalry on the Strait of Hormuz and Bab el-Mandeb geopolitical and security landscape?

RQ2: What are the vulnerabilities at these maritime choke points and how do they shape the concept and perceptions of global energy security?

RQ3: What are the possible impacts of the disruptions of security threats around Hormuz and Bab el-Mandeb on international shipping and maritime trade?

RQ4: What are the vulnerabilities in the global supply chains identified in the geopolitical disruptions at these chokepoints, and what are the types of resilience and adaptation that emerge in the documentary evidence?

Three steps to building credibility, transparency and triangulation

Multiple strategies are used to enhance the qualitative credibility. First, source triangulation is done by correlating peer-reviewed scholarship with government publications, reports from international organizations, maritime assessments, and policy documents. Triangulation is a method of research that involves considering interpretations, rather than a single institutional or disciplinary narrative, within different accounts of the documents (Bowen, 2009). Secondly, the study is transparent in terms of search terms, a criteria for the selection of sources, analysis and thematic development. Thirdly, rather than excluding potentially conflicting interpretations, contradictory ones are kept to allow for the analysis to account for disagreements about the likelihood of maritime disruption, the ability of deterrence to work and the capacity of alternative routes to buffer shocks.

Ethical Considerations

There is no direct information gathered from the participants because the investigation only involves secondary and documentary sources found from public sources and no interviews, surveys, personal data or fieldwork is conducted. However, there are still ethical standards that are important. Sources are fairly represented, properly cited in the APA 7th edition, and explained in the context. There is no fabricating information, selective misrepresentation, plagiarism or unsupported attribution. Participant quotations, survey results, and primary empirical observations are not presented as evidence. The methodology thus ensures a proper separation between documented evidence and the researcher's interpretative synthesis, which facilitates the transparency and integrity in the qualitative research process.

FINDING AND DISCUSSION

Six themes were subsequently identified from the thematic analysis of peer-reviewed scholarship articles, institutional reports, maritime-security assessments, policy documents, and other authoritative secondary sources, and these are interconnected. The analysis shows that the Strait of Hormuz and Bab el-Mandeb are not geographies in their own right, but are instead both part of a broader maritime, energy and geopolitical system. The results also indicate that strategic competitions between Iran and the United States are not only military, but also energy-market, shipping choices, insurance coverage, shipping routes and resiliency responses of global energy supply chains. This is an interpretation in line with recent

maritime research that suggests geopolitical tensions are increasingly remaking the geography and cost dynamics of international shipping (UNCTAD, 2025).

Theme 1: Iran-USA Strategic Competitions and Geopolitical Escalation

The first big theme is the conversion of Iran–U.S. rivalry into a constant source of geopolitical risk with implications for the sea. The tension between the two can not be resolved in the ordinary ways of a military balance. It includes sanctions, deterrence, regional alliances, proxy wars, nuclear diplomacy, naval deployments, and sovereignty and freedom of navigation claims. In this context, the maritime domain becomes a very significant space as commercial shipping is vulnerable even in the absence of a formal conventional war.

A realist view of the strategic significance of Hormuz is based on the geopolitical interactions of geography and coercive power. Iran has geographical advantage of the Strait and the U.S. has a wide network of naval forces and regional alliances. But this imbalance isn't fatal to Iranian influence; the geography of the Gulf allows for relatively small disruptions to create disproportionately large international concerns. Thus, deterrence does not just depend on the capacity to kill an opponent's forces, it also depends on the capacity to make escalation uncertain about the costs and consequences.

Security-dilemma interpretation is also substantiated by the documentary evidence. Washington and its allies propose measures to protect navigation that can be viewed in Tehran as instruments of containment or coercion. On the other hand, Iranian maritime operations may be seen by the U.S. and commercial parties as obstructions of freedom of navigation. Maritime insecurity is not only about the material military power but also a partly a perception and strategic signaling issue which is a reciprocal construction. The discovery fits a growing body of scholarship which has seen geopolitical reality in the Middle East today as one or more bilateral security competition, instead of a bilateral one.

Importantly, the analysis does not simply lead to the simplistic conclusion that rivalry automatically results in closure or continued disruption. Rivalry and maritime insecurity, on the other hand, are dependent upon each other. There is a degree of uncertainty as a result of strategic escalation, but at the same time, economic costs to disruption, naval presence, and diplomatic signaling restrict escalation. The principal result is therefore that a geopolitical rivalry creates a risk landscape in which commercial actors have to deal with a risk of disruption even if the situation does not reach a complete closure.

Theme 2: Strait of Hormuz as a Global Energy – Security Chokepoint

The second theme is the very special energy security value of Hormuz. The doco states that one of the most important energy chokepoints in the world is the Strait, as it is a maritime channel with a very small area through which a large volume of energy products, both petroleum and LNG, flow. According to EIA estimates, some 20.9 million bpd of crude oil and petroleum liquids transited through the Hormuz region in the first half of 2025, a significant amount of global maritime oil trade. More recent EIA data show that flows continued to be significant into 2025, but dropped significantly in the first quarter of 2026 as a result of increased disruption, reflecting how geopolitical events can impact actual maritime energy flows.

The qualitative finding is that Hormuz is a more than just a physical choke point. It is a strategic weakness that lies in the fabric of global energy interdependency. Its importance is derived from the fact that most of the oil exporting nations are located in and around the Persian Gulf, and from the fact that other pipelines and shipping routes cannot fully replace the Strait. As a result, the threat, even if of short duration, can impact expectations of availability, transportation, insurance and energy-market stability.

This discovery is an addition to traditional energy-security strategies. Security is often presented in terms of the amount of physical resources available, as is common in traditional analyses. Reliability, affordability, predictability, infrastructure security, and confidence appear to be the elements of a wider interpretation, according to the documentary evidence. A potential loss of production might thus result in economic consequences before a long-term physical loss of production. For the interpretivist, the amount of oil flowing through Hormuz is not the only factor, but the interpretation of both the likelihood and the duration of disruption that governments, traders, insurers and shipping companies place on it.

Meanwhile, the evidence warns to not make the statement that disruption will inevitably lead to a global energy crisis. Energy importing states have strategic stocks, alternative suppliers, pipeline facilities and demand management tools. Limited volumes can be diverted from a specific producer by alternative means. Therefore, there is no inevitability of systemic collapse in Hormuz in a way that leads to high systemic exposure. This is important as the length, intensity, and spread of disruption affects resilience.

Theme3: To analyze the region of Bab el-Mandeb and the securitization of maritime trade

The third theme is the securitization of Bab el-Mandeb as a strategic space, rather than a space for commerce and trade. The Red Sea crisis has shown that trade can still function despite threats to merchant vessels, even though trade does not come to a standstill. Suez Canal trade contracted significantly in the first months of 2024, when shipping firms routed vessels around the Cape of Good Hope, adding to delivery schedules and wreaking havoc on supply chains (Kamali et al., 2024).

Securitization is identified as a key mechanism in the analysis. As commercial shipping comes to be understood largely in terms of military threat, vessels, ports, crews, insurance policies, and navigation corridors become elements of a broader security system. Shipping companies thus base their decisions not just on distance and fuel consumption, but on the perceived risk to ship, crew, cargo, and legal or insurance cover.

This is in line with recent studies that have demonstrated resilience of maritime networks to disruption by rerouting and reconfiguration. But there are significant costs to adaptation. UNCTAD said shipping companies were avoiding the Red Sea, which was leading to longer journeys, increased consumption of fuel, diminished effective shipping capacity and higher operating costs. In conclusion, the evidence suggests that the narrow concept of resilience that relies on continued trade as proof of successful adaption is problematic. A route can be in place but much slower, more costly and less reliable.

The results are also an example of the importance of keeping Bab el-Mandeb under study along with Hormuz. Hormuz is particularly important regarding energy transactions, while Bab el-Mandeb is more important in regard to the shipping of energy and manufactured items across Asia, Middle East, Europe and Africa. Disruption at either location may consequently impact the strategic value and use of alternate routes.

Theme 4: Energy-prices, shipping, and insurance vulnerabilities

The fourth theme is a link between geopolitical insecurity and economic price. There are several interconnected ways in which maritime disruption impacts international markets as documented: energy-price expectations, freight rates, insurance premiums, vessel utilization, fuel consumption, delivery times and port congestion. UNCTAD's 2025 assessment highlights the geopolitical shock that has led to longer shipping routes, price fluctuation in freight rates and greater strain on the reliability of shipping chains.

This is especially true of the Red Sea experience. This adds to the time of the voyage and takes up vessel capacity as it goes around the Cape of Good Hope. Therefore, even if the physical supply of cargo has not been exhausted, the transportation system becomes less efficient. Global ton-miles rose significantly in 2024, largely due to longer voyages, argues UNCTAD, while helping to keep container freight rates high. The argument goes on to say that geopolitical insecurity has a cost-multiplier effect: that is, a relatively local insecurity event can have impacts far beyond the immediate geographic region.

Another crucial mechanism is via insurance. Maritime insurers will charge a premium for the perceived risk of war, attack, detention, and the security of the route. If the risk assessment becomes poorer, the shipping company may either have to pay higher premiums or change the shipping route. Ultimately these costs are borne by the exporter, the importer, the consumer, and the government. Energy markets work on a similar anticipatory basis, and when people expect prices to rise or fall, that can impact prices before there is a significant physical shortage.

The impacts can be especially important in developing and import-dependent countries. UNCTAD makes a point of the fact that countries in the developing world have been hit especially hard by the longer voyages, higher prices and disruption to maritime connectivity. This discovery thus undermines the idea that the maritime resilience has been assessed mainly based on the major trading powers' experiences. The global maritime system could still operate, but costs could significantly affect the economies that have restricted fiscal resources, small strategic stocks, or significant reliance on imported fuel and food.

Theme 5: Geopolitical Disruption and Resilience of Global Supply-Chains

The fifth theme focuses on the geopolitical disruption and supply-chain resiliency. The documentary evidence shows that the global supply chains have significant adaptive capacity, however, this capacity is not limitless nor free of cost. In response to the insecurity in the Red Sea, shipping companies have shifted their routes, altered their schedules and frequencies, shortened port calls, and redistributed capacity.As a result of Red Sea insecurity, shipping companies have adjusted routes, frequencies, port calls, and capacity. The resilience of the organization and network is proved by the fact that maritime trade continues despite disruption. However, the fact the costs have stayed high and the voyages longer does not mean that it is resilient, it is just not as efficient as before.

Theoretically this is highly significant. A supply chain may be resilient when it's continuous, but not efficient. The system can still provide goods and have increased transportation costs, inventory pressures, congestion, and uncertainty. While the Red Sea diversions were said to have caused delays in deliveries and inflationary pressures for businesses with low inventory (Kamali et al., 2024), the IMF noted that this could also have a detrimental impact on the economy. UNCTAD also states that rerouting has resulted in a lower effective shipping capacity and higher operating costs.

The results also suggest that the geopolitical resilience is not evenly distributed. As the company gets larger, multinational companies might have more resources to diversify their suppliers, stock inventories, and be able to negotiate freight contracts and deal with the temporary increase of expenses. The comparable buffers may not exist in smaller companies or developing economies. In this way, geopolitical turmoil can help exacerbate inequalities in the international trading system.

The mutual influence of Hormuz and Bab el-Mandeb adds to this conclusion. If one becomes unsafe, traffic could be rerouted to already limited alternate routes. The Cape of Good Hope, for instance, will be able to take more traffic, but with longer voyages. This means that alternative capacity is not equal to equivalent capacity. There are alternatives to geo-location but no economically equivalent alternatives.

Theme 6: Strategic Responses: Diversification, Alternative Paths, Reserves, Security Cooperation, Diplomacy

The last theme relates to the variety of ways that publicly and commercially can be achieved. The evidence suggests that increasing resilience involves making use of diversification instead of just one protective mechanism. These strategies involve alternative transportation routes, diversifying energy sources, establishing strategic petroleum reserves, expanding the maritime surveillance, coordinating navies between countries, enhancing port infrastructure, and diplomatic measures to decrease escalation.

Alternate routes offer immediate operational response. The Red Sea crisis showcased shipping companies' capacity to reroute shipping around Africa, but UNCTAD's evidence shows that this option involves longer voyages, higher costs and higher emissions. Energy diversification offers a longer-term solution that helps to decrease reliance on any one producing area or transportation route. Strategic reserves can offer some short-term resiliency to physical supply disruptions and enhanced port and logistics capacity can mitigate secondary constraints.

Maritime security cooperation is another level of resilience. Application of multinational monitoring, information exchange, naval surveillance and coordinated action would minimize uncertainty for commercial operators. But the analysis implies that there must be diplomacy to go along with security cooperation. Naval protection can help to reduce immediate physical threats, but can not solve underlying geopolitical conflicts that lead to threats.

This discovery aligns with the wider concept of resilience being a multi-level governance challenge. States have no ability to secure global maritime transport alone since shipping networks span across national boundaries and rely on international laws, commercial operators, ports, insurers, energy markets and diplomatic relations. UNCTAD's recent evaluations thus highlight the need for cooperation and collaboration among international and national partners, better maritime connectivity, port performance, regulatory coordination and targeted support to developing economies.

General discussion and implications

All the six themes highlight the fact that Iran–U.S. strategic rivalry should not be interpreted as being confined to the region but is actually a potential multiplier for maritime and economic vulnerability. The realist, geopolitical theory sheds some light on why Hormuz and Bab el-Mandeb are of geopolitical importance: control of these spaces, or disruption or protection of them, has an impact on a state's power, which is geographically constrained. Realism is, however, not enough, as the implications of geopolitical rivalry rely on interpretations, expectations, institutional reactions and network adaptation.

An alternate view, interpretivist, illustrates how maritime insecurity is socially generated by the multiple narratives of threat and legitimacy. Last, theory on supply chain resilience suggests that in certain circumstances disruption does not lead to systemic collapse. Rather, networks adapt by rerouting, diversifying, buffering, and reorganizing. The central theoretical implication is thus that the analysis of geopolitical power, chokepoint vulnerability and supply-chain resilience should be viewed as interconstitute processes.

The results highlight, for the big powers, that energy and maritime routes must be diversified, and not just be based on military deterrence. The findings underscore the importance of strategic reserves, multiple sources, and emergency transport methods for energy importing states. The implications for developing economies are more difficult, as rising freight, insurance and energy prices could turn into inflationary, fiscal pressures. Resilience for shipping companies means flexible routing, risk assessment and having

contingency plans in place, as well as sufficient insurance. The results underscore the importance of having cooperative maritime-security arrangements, diplomatic de-escalation, open information-sharing, and international action for safeguarding commercial navigation for global governance.

Overall, the documentary evidence suggests the Hormuz and Bab el-Mandeb are not standalone regional chokepoints, but are rather part of a global system. Physical closure is, thus, not the only risk. It's the sum of uncertainty, rerouting, increased costs, decreased reliability, energy-market sensitivity and uneven adaptive capacity. What the Red Sea experience shows is economy, geography and politics has a limit on resilience to shocks in the global maritime networks.

Therefore, the study considers global maritime resilience as the ability to predict, absorb, adapt to, and recover from disruption and to limit the broader systemic impact of such disruption. In this context, it is not enough to deter Iranian-U.S. competition – it needs to be reduced. It demands diversified energy supplies, alternative transport infrastructure, strategic reserves, resilient maritime ports and transport networks, effective maritime-security cooperation and diplomatic processes that can help prevent the rise of local geopolitical competition from disrupting the global trade.

CONCLUSION

The aim of the present research was to discuss an interconnected geopolitics of the Strait of Hormuz and the Strait of Bab el-Mandeb in the context of Iran–United States strategic rivalry, in which the narrow geographical chokepoints were considered not only as geographical constraints but rather as strategic infrastructures within global energy, trade and supply chain interdependence. The main argument from the interpretivist qualitative view is that the geopolitical competition has implications beyond actual military conflict, as the perception of threat, deterrence, coercion, maritime insecurity, and escalation affects the way governments, shipping companies, energy markets, insurance companies and other economic actors interpret and react to uncertainty. Hormoz and Bab el-Mandeb are not just a physical connection, but also a channel for geopolitical uncertainty to spread through international economic networks.

Thematic analysis of the study reveals that the Strait of Hormuz is a vulnerability of geopolitical importance in global energy security due to the high density of petroleum and LNG shipping via a geographically narrow maritime channel. Its significance shows that it should not be measured in terms of the supply of physical resources only, for energy security. Other critical dimensions of energy security are reliability, affordability, transport security, market confidence, and ability to withstand temporary disruption. Likewise, one could examine Bab el-Mandeb as an example of how the seafaring insecurity can turn a trade route into a very securitized geopolitical space. Recent events in the Red Sea have illustrated that while the seaway is disrupted, sea trade can still find alternative routes, but this can lead to longer voyages, higher operating costs and strain on maritime capacity (UNCTAD, 2025). (unctad.org)

A key finding is thus that Hormuz and Bab el-Mandeb cannot be considered analytically distinct chokepoints. Though their functions are distinct, they are linked by wider maritime networks that link the Persian Gulf, Indian ocean, Red Sea, Mediterranean, Europe, Africa and Asia. A break in one corridor can reroute traffic to other areas, adding pressure to other corridors. This vulnerability is therefore not "geographical" in nature. The evidence also indicates that disruption does not lead to a sudden collapse of the global economy. Instead, higher freight and insurance costs, longer transit times, energy market uncertainty, congestion and lower supply-chain efficiency are all possible impacts. This is crucial as it frames resilience in terms of the ability to adapt, while acknowledging that this process of adaptation has economic and logistical costs (UNCTAD, 2024, 2025). (unctad.org)

Theoretically, the study opens the door for international-relations and geopolitical-security academia by combining scholars' approaches that have been traditionally treated separately. Realism is important to understand why states are interested in strategic points controlling the seas and why control, deterrence, and the presence of military forces are still a key factor in geopolitical competition. But an interpretivist approach shows that material factors are not enough to determine maritime insecurity. How geopolitical developments are perceived and how the strategic narratives are developed, how sovereignty is understood and interpreted and how deterrence is understood by actors all have an impact on the actors' response. This is combined with the scholarship of supply chain-resilience to give a fuller conceptual picture of how geopolitical power and economic vulnerability are interlinked. Chokepoints, therefore, are not only places that states want to dominate, but also points where geopolitical meanings and geopolitical risks turn into global economic implications.

Its practical implications are of great importance. To limit over-dependence on the each specific maritime route, governments should strengthen the diversification of energy supplies, maintain strategic reserves, enhance emergency logistics planning and prepare alternative means of transport. States that import energy need to build up their contingency planning for extended maritime disruptions and should not expect alternative shipping lanes to be available on a moment's notice to replace vulnerable chokepecks. Maritime shipping can build resilience by diversifying routes, conducting dynamic risk assessments, developing flexibility in contracts, conducting suitable insurance planning and investing in maritime-security technology. International organisations to facilitate information sharing, maritime situational awareness, coordinated and timely response to emergencies, capacity-building for developing economies especially those exposed to freight and energy cost increases. Also, diplomatic activity remains vital because while military deterrence can mitigate some threats in the short term, it is not a solution to any political conflict that creates enduring maritime insecurity.

A number of constraints should be noted. First, the study only uses documentary and secondary sources, and thus cannot reflect the actual thoughts or experiences of policymakers, naval officers, shipping managers, energy merchants, insurers or any other maritime actors. Second, the dynamic geopolitical landscape can make it possible that the documents submitted may become obsolete based on the evolution of political and security situations. Third, even in the face of systematic procedures and source triangulation, the interpretation required in qualitative thematic analysis is an interpretative act which involves judgment. Finally, the study does not quantify, statistically, the size of the relationships between geopolitical disruption and economic outcomes. It is used to explain things rather than to measure cause.

Comparative qualitative case studies of Hormuz and Bab el-Mandeb, expert interviews with maritime and energy-security stakeholders, longitudinal analysis of geopolitical crises, and comparative studies of different energy-importing and developing economies' response to chokepoint disruptions were potential future research avenues that could support these limitations. For future research, qualitative geopolitical analysis could be added to shipping-network data and economic indicators to investigate the connections between strategic perceptions and the measurable impacts on routing, freight markets, energy prices, and supply-chain performance.

In the end, the authors' study offers a stark reminder that global maritime commerce and Middle East geopolitics go hand in hand. In the case of Iran and the U.S., this localized strategic competition can have transregional implications where it meets the crucial maritime chokepoints. Thus, geopolitical de-escalation, diversified energy and transportation systems, preparedness, maritime cooperation and institutional coordination are key components of building resilience. The goal over the long term shouldn't be just to shield individual chokepoints against disruption but to build a global maritime network resilient to geopolitical shocks and prevent them from spreading to the broader energy, trade and supply-chain crises.

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