

Threat of Israeli Port Closures

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DATE: 11/3/2023

Contents

Executive Summary

Due to the Israel and Hamas conflict two Israeli ports, Ashdod and Ashkelon, are at risk of closure. The port of Ashdod is facing a likely closure in coming weeks and the port of Ashkelon has already announced a closer for the foreseeable future. The closer of said ports would cause a negative effect on not only Israel's economy, but also the economy of Germany, India, the Netherlands, Switzerland, China, and the United States, their biggest trade partners.

The supply chain also faces disruptions as backups at port and a shortage of truck drivers lead to an overflow of products sitting in port. This is likely to affect multiple sectors including oil and petroleum supply, bromine and potash, fertilizer, technology, pharmaceuticals, and textiles.

It is likely that in coming weeks multiple tier 1 companies will be facing threats to multiple sectors:

- Boeing is likely to experience a delay in the production of their v-22 Ospreys, t-38 Talons, t 45 Gashawk, and their f-15 program due to one of their aerospace manufactures, Israel
 Aerospace Industries, shipping via the Ashdod port.
- Applied Materials is likely to face product delays as their Israeli manufacturing facility is within close proximity to the Ashdod Port, which will likely lead to trouble accessing necessary equipment.
- American Airlines is likely to receive an increase in request for their cargo shipments both in and around the region as companies search for backup options to the Ashdod Port.

It is recommended that in coming weeks companies facing threat work on implementing a series of mitigation efforts. These mitigation efforts include looking into working with backup ports such as Hadera, a port in northern Israel, and looking into working with secondary regions to deliver their products.

RESEARCH, ANALYSIS, & TRAINING

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Historical Background

Ashdod Port

Ashdod Port is the largest and most advanced port in Israel. It plays a crucial role in Israel's supply chain by handling a significant volume of cargo that includes metals, lumber, machines, various grains, powders, vehicles, and passenger-related items.ⁱ These products are shipped domestically and internationally, making the port a key player in the country's economy. It is a critical gateway for goods and cargo in the region, with extensive facilities and a notable annual throughput of around 1.58 million TEUs in 2020. ^{III} 2,500 ships and 19 million tons of cargo are handled at the Ashdod Port annually.^{IIII} Located near Israel's commercial centers and national transportation networks, Ashdod has transformed into a busy port that accommodates Panamax ships and major shipping companies. ^{IV} To achieve this, the port collaborates with numerous companies, such as logistics providers, shipping companies, and startups.^V The port specializes in loading and unloading services for cargo ships and serves different cargo sectors, including general cargo, containers, bulk cargo, vehicles, and passenger ships. Additionally, the port also offers storage services, logistics, and other related services. ^{VII} The port city is renowned for its oil refinery, one of the largest in Israel. It also houses pharmaceutical and construction industries, as well as manufacturers of radar equipment and electronic warfare gadgets.^{VIII}

Ashkelon Port

The Ashkelon oil terminal is just two nautical miles away from Ashkelon City and 10 miles from Ashdod.^{viii} It is owned by the Europe Asia Pipeline Company Ltd (EAPC) as authorized by the Israel Oil Pipeline Concession Law 5728 of 1968. Their pipeline system consists of 3 pipelines, with their main pipeline being 254 km long and linking the Eilat oil port on the Red Sea coast with the Ashkelon oil port on the Mediterranean Sea. Their other two pipelines supply the refineries in Haifa, Israel, and Ashdod. The EAPC owns two oil ports, two oil terminals, and a crude oil and petroleum products storage.^{ix} The port itself is significant as it is responsible for serving the industrial region of Israel and sees over 1000 ships arrive every year.^x

The two terminals are located in Ashkelon and Eilat. Eilat is a resort town in the south of Israel, near Jordan, at the head of the Gulf of Aqaba in the Red Sea. The two oil ports are located in the same cities. The Eilat Oil Port has an oil jetty that can accommodate tankers up to 300,000 DWT (deadweight tonnage) with a water depth of 30 meters. The Ashkelon Oil Port transfers the oil products to the adjacent Petroleum & Energy Infrastructure Company Ltd (PEI) tank farm, where they are pumped into the national oil products network. The Ashkelon Oil Port can accommodate tankers of about 250,000 DWT.

Current Threat Indicator Events

Executive Summary

The Israel/Hamas conflict has created a significant threat towards the supply chain in many countries as Israel's largest port Ashdod is at risk of unscheduled closer, and their largest oil port Ashkelon has already closed. The closer of ports would threaten a newly signed cooperation agreement between the Ashdod Port Company and the port of Thessaloniki that was set to open Israel up to the Balkans and Southeast Europe. Just last week, Evergreen Line officially became the first to declare force majeure, diverting their containers to the port of Haifi. It is likely that in coming weeks more shipping companies will begin to divert their shipments to neighboring ports.

News

In July 2023, the Ashdod Port Company Ltd signed a cooperation agreement with the port of Thessaloniki to open innovation embassy offices as a part of their innovation strategy to improve their services. The deal will enable a joint response to global challenges in sustainability in the world of ports. It will also emphasize advanced technological solutions for cyber, security, and operational efficiency.^{xi} The port of Thessaloniki, also known as Salonica, is located in the Eastern Mediterranean and is one of the largest in the region. It is the gateway to the Balkans and Southeast Europe.^{xii} It's a port in Greece owned by the Thessaloniki Port Authority Society Anonyme.^{xiii}

Last week, Taiwanese container shipping line Evergreen Line became one of the first to declare force majeure relating to a shipment bound for the port of Ashdod on Israel's southern coast. Instead, the vessel was diverted to the Haifa port in the north. Although the Port of Ashdod has not yet had any direct air strikes due to its protective shelters and Iron Dome air defense system in close proximity, the port has taken an economic hit since the outbreak of the war. At least 20 ships have opted to divert from Ashdod to the northern Israeli port of Haifa in recent weeks, and the port has seen a 30% drop in volume week-on-week, said Shaul Schneider, chairman of the port of Ashdod's board of directors. Ashdod Port has also restricted the transport of hazardous materials, which has meant slower transits. The board of directors has expressed their worries regarding the recent decrease in cargo and has tried to eliminate global shipping reluctance by releasing a statement with the Transportation Ministry. The Transportation Ministry sent out a message dated to reassure the global maritime industry that the country's ports were "highly protected strategic facilities," stating that "steps have been taken by the government to minimize risk levels for calling ships" and the Iron Dome defense system had "proven to be super effective." ^{xiv}

Supply Chain Implications

Executive Summary

It is likely that port closers would threaten not only Israel's economy, but also the economies of many of their major trade partners who rely on Israel for many crucial goods and supplies. In recent years Israel has become a major trade partner with a plethora of countries like the United States, China, Germany, India, the Netherlands, and Switzerland. Each year roughly 40% of Israels maritime-bound trade flows directly out of the Ashdod Port; supplies such as Bromine and Potash which are critical components in fertilizer, textiles, pharmaceuticals, electronics, and oil are at a likely risk of being delayed in the coming months.

Major Trade Partners

Israel trades with a plethora of countries around the world to both get the imports they require and export enough of their resources. As of 2021, the leading trade partners to Israel were the United States, China, Germany, India, the Netherlands, and Switzerland. Israel imports the most goods from China and exports the most goods to the United States.^{xv} Countries with strong trade relations with Israel, including India, will likely face potential challenges in the coming weeks and months.^{xvi}

Israel exported \$3.94 billion of goods to India, making it a key trading partner. ^{xvii} The trade relationship between the two nations comprises mainly rough diamonds, oil, fertilizers, and herbicides. This trade relationship is not limited to traditional sectors but includes electronic machinery, high-tech products, communication systems, and medical equipment. This evolving trade relationship spans across various industries.^{xviii}

The conflict may disrupt Israel's high-tech exports and hinder access to China's market, potentially affecting trade flows valued at \$4.68 billion.^{xix}

The United States is a significant trade partner for Israel, with a focus on exports. The two countries have a solid economic and commercial relationship, with bilateral trade of nearly \$50 billion in goods and services annually.^{xx} Several treaties and agreements, including the 1985 U.S.-Israel Free Trade Agreement and the Agreement on Trade in Agricultural Products, codify this relationship.^{xxi} Since the 1985 FTA was signed, the bilateral trade volume between the United States and Israel has grown eight times. As a result, the United States has become Israel's largest trading partner.^{xxii} In 2019, the United States exported goods worth \$14.7 billion to Israel, while imports were \$19.6 billion. Additionally, an estimated \$5.7 billion in services were exported from the United States to Israel in 2019, while imports were \$7.4 billion.^{xxiii}

Germany is also a critical European trade partner for Israel. The ongoing conflict is likely to affect Israeli exports to Germany as well. The conflict may impact Israel's exports to Germany, valued at \$1.88 billion. xxiv

Israel Imports/Exports

The Ashdod port is responsible for roughly 40% of Israel's total maritime-bound trade, including imports and exports, as it is Israel's second largest port^{xxv}. Key Ports include those at Haifa and Ashdod,

which handle oil, fertilizers, and other chemicals. The port of Ashkelon, Israel's biggest oil-importing port, is already facing closers. The Ashdod Port is a significant hub for potash and bromine exports from Israel. Potash is a critical component in fertilizer. Bromine is a raw material used in textiles, pharmaceuticals, oil, gas, food, beverage making, energy generation, construction, and electronics. ICL Group, a major Israel-based manufacturing company, provides around a third of global bromine supply. Ashdod Port has become a transport linchpin for ICL Group in recent years. ICL has stated that the export of some chemical goods will be delayed in the coming weeks. Ashdod Port is one of the key ports for food imports. The country imports almost three times as much food and agriculture than exports. Essential imports include live animals for meat, sugar, vegetable oils, grain, and feed. Israel usually also imports around 10-13 cargos of crude oil monthly. ^{xxvi}

In August 2022, Israel was ranked 25th trade partner with the U.S.. Israel exports mostly diamonds, computer chips, and medical instruments. They ship by tonnage to the U.S., primarily phosphatic fertilizers, potassic fertilizers, and gasoline or other fuels.^{xxvii} In 2022, Israel's top export globally was electrical machinery, valued at \$10.2 billion.^{xxviii} Israel also exports gems and optical, technical, and medical apparatus.^{xxix} Israel's top 10 exports are valued at 79% of all global shipments.^{xxx}

Industry Specific Analysis

Executive Summary

It is likely that if the ports of Ashdod shuts down and Ashkelon remains shut in coming weeks that multiple sectors and supply chains will be affected. The port of Ashkelon being closed threatens to affect the oil supplhy and petroleum products within all of Israel. The supply chain has already begun to slow as increased security checks, labor shortages, and wait times grow; likely leading to the backlog of goods waiting in ports and surcharges being added to good as insurance firms impose "extra war risk preiums". Multiple tier 1 companies face risks due to these shipping concerns.

- Boeing is likely to experience a delay in the production of their v-22 Ospreys, t-38 Talons, t-45 Gashawk, and their f-15 program due to one of their aerospace manufactures, Israel Aerospace Industries, shipping via the Ashdod port.
- Applied Materials is likely to face product delays as their Israeli manufacuring facility is within close proximity to the Ashdod Port, which will likely lead to trouble accessing necessary equipment.
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Oil Sector

The ongoing conflict between Israel and Hamas has had significant repercussions on the nation's maritime operations and trade routes. Critical infrastructures, including the port of Ashkelon and the oil terminal, have been shut down. These closures have caused severe disruption to the flow of goods in

and out of Israel. These closures are expected to have wide-reaching impacts on the country's economy and energy supply as it grapples with the challenges of ensuring the safety of its maritime assets amid conflict. ^{xxxi} The suspension of operations at the oil terminal is particularly significant. As a central hub for Israel's oil imports, its closure threatens to disrupt the oil supply and other petroleum products, potentially affecting domestic energy prices. The closure of the port and oil terminal underlines the economic and logistical challenges faced by Israel amidst the conflict.

Supply Chain

These port closures will directly affect every part of Israel's economy due to its location, likely forcing the country to rely on almost exclusively trading imports and exports via sea routes. Data has shown that Ashdod is one of Israel's most significant and vital ports; if it were to shut down entirely, supply chain issues would likely be seen immediately. With increased security checks, labor shortages, and waiting times growing exponentially, we will be witnessing an overall lack of productivity from the port. The situation could escalate in weeks of a complete shutdown. With Israel relying almost exclusively on imports for its sugar, vegetable oils, feed, grain, live animals, and other raw materials for the food industry, the companies within the entire country, such as Tnuva^[11], relying on these imports will see an immediate supply issue, Ashdod being the main port to receive these imports as well^[111]. Ashdod also employs approximately 1706 employees and brings in a revenue of \$375.9M; alongside the unidentified number of employees and revenue Ashkelon port is affiliated with, the shutdown of these ports will only increase the humanitarian issues within Israel, along with its economy taking a massive hit^[112]. Ashkelon port is also known as Israel's "oil terminal." this being said, all companies that rely on these imports, excluding the government, will directly be impacted if this port is shut down^[12].

Backlog of Goods CENTER FOR INTELLIGENCE

The arrival of the majority of supplies at the Haifa port instead of Ashdod, has begun raising concerns amongst Israeli shipping company officials as to how these goods will now be transported once they are discharged from the ports. Due to the massive call-up of military reservists, there was a shortage of manpower, making it difficult to transport and replenish inventories due to higher consumption. However, there was no shortage of supplies. With the continuation of Israeli Defense Forces expanding its ground incursion inside the Gaza Strip, there will likely need to be a plan for business continuation to make sure that not only the ports are open but that the end users will get their products from the ports. ^{xxxii} It is likely that in the coming weeks, deliveries from the ports in question will continue to be delayed as shipping companies are unsure of the safety of their ships as well as delays due to shortages in manpower.

Surcharges

In consideration of the war situation in Israel, almost all global insurance companies and maritime insurance firms have imposed what they call an "extra war risk premium" on all vessels using Israeli ports. Israeli shipping firm Zim has also announced that it will begin applying a new "war risk charge" on its cargoes as its insurers have imposed this premium on all vessels using Israeli ports, which the firm needs to pay to maintain service to and from Israel. ^{xxxiii} As a result, Israel will see an increase in

the prices of basic products and consumer goods, such as TVs and furniture, as most of it arrives on container ships. Yoni Essakov called on the government to cover the cost of the extra war risk premiums to ensure the continuous supply of goods. Yoni Essakov stated, "It's a big expense, but to maintain stability in the economy, I believe it's an expense that is worthwhile," however, no official word has been released from the Israeli government. ^{xxxiv}

Port Operations

Shipping lanes from India, Palestinian territories, Indonesia, South Africa, Sri Lanka, and Thailand are likely to be affected which will hinder port operations. Both the time spent rerouting a shortage in truck driver shortages in the region will lead to the delay of cargo to its final destinations. It is also likley to increase the amount of product sitting at the ports, leading to a risk robberies, damages and the overworking of dock personnel.

Tier 1 Clients

Boeing

Boeing utilizes a plethora of countries and companies when sourcing parts for their aircraft, Israel being one of their major partners. A company known as Israel Aerospace Industries is the leading aerospace manufacturer in the region. They have recently partnered with Boeing to help manufacture the significant structures of their v-22 Osprey, t-38 Talon, t-45 Goshawk, and the f-15 program.^{XXXV} In the coming months, it is likely that Boeing will face disruptions as more oversized products, such as these significant structures, get stuck in ports and have trouble traveling to their intended destinations. This port closer will mean that critical systems for Boeing will be backlogged in Israeli ports for an unknown amount of time. This will likely cause disruptions to the creation of Boeing's f-15 program, v-22 Osprey, t-38 Talon, and t-45 Goshawk.

Applied Material CENTER FOR INTELLIGENCE

Applied Material has manufacturing facilities located across the world, including in Israel. The location of this manufacturing facility in Israel is within close proximity to the Ashdod Port, making it likely that products created in this facility are transported and shipped out of the Ashdod Port. It is likely that the closer of the Ashdod Port would lead to production delays due to trouble accessing the necessary equipment or supplies that may be stuck in the port until it reopens.

American Airlines

Although American Airlines have announced that they will be forgoing stops in both Ashdod and Haifi through at least December of 2023, they are still planning to allow both cargo and passenger aircraft to travel to surrounding regions. As the ports face closer, companies in the region will likely begin to look at other options for shipments of their products or resources both into and out of the area. It is likely that with the possible port closers of Ashkelon and Ashdod, American Airlines will see a rise in requests for their cargo shipment service in areas surrounding the ports.

Mitigation/Prevention

Executive Summary

It is vital that companies at risk of being affected by the closer of ports look into mitigation and prevention methods. It is recommended that companies research backup ports in the region that still have access to similar regions, such as the Hadera port in in northern Israel. It is also recommended that companies look into getting their necessary goods and equipment from secondary regions who may export similar goods.

Backup Ports

With the continuation of the Israel-Hamas conflict, the Israeli ports of Ashdod and Ashkelon are at risk due to their close proximity to the conflict. In the event of Ashdod or Ashkelon being closed due to the conflict, ships may need to be diverted to another port in Israel. One port that could be targeted is the port of Hadera.

Hadera is situated in the northern part of Israel, close to the cities of Tel Aviv and Haifa. It is a medium-sized facility comprising a coal and fuel oil terminal serving the region's two primary power stations. The coal berth spans 600 meters (about 1968.5 ft) and can easily accommodate coal carriers weighing around 200,000 DWT. Oil tankers up to 70,000 DWT can be berthed at the oil terminal.xl However, with Hadera being just over 30 miles from Tel-Aviv, there may be risks associated with moving work to this port because of over 130 missile strikes that have hit Tel-Aviv.xli With Hadera being the next closest city to Tel Aviv, safety concerns may become an issue if Hamas were to infiltrate Tel Aviv.

Secondary Regions

It is recommended that private sector companies at risk of being affected by these possible port closers look at sourcing their materials from secondary regions. Companies who may export goods out of the region to create their product would likely be able to source their necessary materials from surrounding areas they still have access to.

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