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The Suez Canal

Evolution of traffic and current trend
in ship movement during the Covid-19 pandemic,
competitiveness indicators and the role of industrial
and infrastructural development projects

maritime economy

2021

"The Suez Canal. Evolution of traffic and current trend in ship movement during the Covid-19 pandemic, competitiveness indicators and the role of industrial and infrastructural development projects"

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Preface

This is the third Report produced by Alexbank and SRM (Economic Research Centre belonging to Intesa Sanpaolo Group) to monitor the dynamics of the Suez Canal, one of the most important maritime and logistical nodes in the world.

The first Report was published in 2015 to analyse the impact of the doubling of the Canal on Mediterranean trades and routes. As this was a complex project that would have changed, by greatly improving it, the Canal's functionality, we decided to carry out an in-depth study on how the dynamics generated by this expansion could have impacted the maritime routes.

Later, in 2018, we produced a second report in which we focused in particular on the effects of China's Belt & Road Initiative and on investments in the Suez Canal Zone, one of the most important free zones in the MENA area.

In the meantime, SRM had also carried out a specific study comparing the Suez Canal and the Panama Canal. Although very different in terms of morphological characteristics and geographical location, the two canals have strategic elements in common and are certainly among the most important maritime passages in the world.

Also with a view to analysing alternative routes, SRM has carried out a specific study on the Arctic Route, a still underdeveloped and mainly seasonal way, but which should also be monitored from the perspective of hypothetical alternatives to Suez, especially when considering possible climate change effects.

With this background we have come to this new Report in which SRM and Alexbank intended to analyse, in particular, the impact that the severe Covid-19 pandemic has had and is having on maritime and global trades as well as the way these have affected the dynamics of the Canal.

It is clear that Suez has shown remarkable resilience to the effects of the pandemic, exceeding 1 billion tonnes of cargo in 2020 and with 18,829 ships transited. Even in difficult economic times, it has remained a strategic hub for traffic in the Mediterranean, still accounting for 12% of world traffic (7-8% of oil traffic).

The Canal is important for the Egyptian economy because of the revenue generated by ship passages and the goods handled in the ports close to Suez. In addition, the Canal is equally important for Italian ports, especially Genoa, La Spezia, Trieste and Gioia Tauro, as a key point along the main sea route for trade between Italy and Asia. In 2020 this amounted to € 82.8 billion, or more than 40% of Italy's total maritime trade.

In March 2021, the case of the Ever Given, a megaship of over 20,000 TEUs which ran aground in the Suez Canal blocking passage for several days, clearly demonstrated that the dynamics of international maritime trade are highly dependent on this strategic crossroads.

The maritime economy, and shipping in particular, is based on delicate balances and has a very strong impact on logistics and the entire chain, including land goods transport. The Ever Given vessel wedged across the canal caused great damage not only to the canal but to the entire global maritime system and the global supply chain; according to authoritative estimates, global shipping losses amount to approximately $9.6 billion a day.

It took only six days (11 days in total for the return to normality) and 422 ships stopped at the entrances to the Canal to raise debates on many issues such as naval gigantism or the search for alternative routes, as well as problems such as port congestion, the rise in oil prices and freight rates.

As regards alternative routes, the African route via the Cape of Good Hope (already used during the pandemic period) connects to the strategic routes to the Mediterranean and Northern Europe with an additional 7-10 days' sailing, forcing carriers to bear the associated costs in terms of fuel, bunkering and delays in delivery of goods. The Arctic Route could meet some needs in the future, but it is still a seasonal route, albeit one that is experiencing strong growth.

The lack of real alternatives makes Suez a doubly strategic hub.

The doubling of the infrastructure had already raised the issue of megaships, which is now more current than ever following the accident in March.

Although often criticised and full of unknown factors, including from a technological point of view, the phenomenon of giant ships is ongoing as clearly indicated by the orderbooks. Estimates point to a growth in capacity of 13% in 2021 and 9% in 2022. Going back to using smaller ships could perhaps mean taking a step backwards in a scenario that has now been mapped out.

However, the Report presented in the following pages is enriched by many other analyses, information and data. In fact, there is also an examination of Suez in relation to the numerous investments that are being made in the Free Zone, which currently hosts companies from various production sectors such as textile, steel and plastics and aims to attract $20 billion worth of investment in the coming years.

With this research, Alexbank and SRM aim to provide a useful tool for understanding the strategic importance of the canal, its traffic and investments as well as the way in which it is increasingly contributing to the Mediterranean acquiring a central role in international trade and the world economy.

We would like to thank all the researchers who carried out the analyses and gathered the information contained in this book. We hope this can be another step towards a better understanding of the issues related to maritime transport and logistics, and that it will help bring the economies of the South and North of the Mediterranean closer together.

We would also like to thank H.E. Mr. Giampaolo Cantini, the Italian Ambassador to Egypt, and the Italian Embassy, for the support in presenting our studies. The Italian Embassy is actively supporting the maritime connections between Italy and Egypt, by promoting the initiative “Italian-Egyptian

dialogue in the Maritime Sector", a series of forums started few years ago aimed at nurturing the development of the sea routes between the two countries.
An old proverb says that 'joins the sea that separates the countries'. For us, the Suez Canal is not only a 'bridge' between seas and oceans, but also a bridge between economies, cultures and civilisations.

Dante Campioni
Managing Director & CEO
Alexbank

Massimo Deandreis
General Manager
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EXECUTIVE SUMMARY

The impact of Covid-19 on freight traffic

- **Transits through the Suez Canal have shown remarkable resilience to the fallout of the Covid-19 pandemic**, judging by total transits of the **three commercial shipping sectors (Container Ships, Dry Bulker and Oil Tanker) which are up 0.6% in 2020** year-on-year.
- **The total number of transits for the year 2020 came to 18,829 vessels, 51 less than the 18,880 in 2019.**Transiting net tonnage was 1,17 million, recording a decrease of 3%.
- Bulk carriers are the most numerous (5,113) vessels with a 27% share and they are followed by tankers (5,006) with 26% and containerships (4,710) accounting for 25% of the total.
- **Dry bulk transits have risen by 21.7%** (913 more transits) in 2020, while harsh conditions in the container shipping market have limited **containership transits**, which in fact **have unsurprisingly fallen by 12.4%** (665 less transits).
- The **impact of Covid-19 on the Canal** depended primarily on a **decrease in volumes handled worldwide** (effect of the lockdowns) and on a **drop in the price of oil** that led carriers in some cases to decide to **re-route via the Cape of Good Hope** to reduce costs while taking advantage of lower fuel prices. This makes it possible to avoid the cost of transiting the Suez Canal and absorbing excess capacity by extending sailing times. This has also resulted in the loss of over 50 mega-ships and produced over 250 blank sailing vessels, which has obviously impacted import-export, especially on the East-West routes along the Far East-Middle East-Mediterranean-Northern Europe line.
- **The outlook for container traffic in the Mediterranean is positive**: for 2021 a recovery of +4.8% in the East Med and +8.9% in the West Med is expected, while in 2022 the rebound will be +4.6% and +5.5% respectively. This trend will also have beneficial effects on Suez Canal transits.

The impact of Covid-19 on tariffs and revenues

- The Canal Authority – in an attempt to influence carriers' choices who tended to avoid transit to save on toll costs – has introduced a **tariff discount** of 17% **for** southbound **containerships**, and of 50% to 75% for the US East Coast- South/South East Asia route. The Canal Authority

will **slash transit fees for large oil tankers** traveling between northern Europe and southeast Asia by 48% as it looks to maintain the canal's status as a critical shipping route. The Authority began implementing this decision in early December 2020 and announced that they would maintain their tariffs and incentives for 2021.

- The **Canal's revenues** recorded the third highest annual revenue in the history of the Canal. The revenues are currently at $5.61 bn, down 3.3% from $5.8 bn the previous year. ($5.3 bn in 2014).
- About 16% of the total revenues in 2020 ($930 mln) were achieved thanks to the transit of 4,087 ships from new markets (the US East Coast, Australia and South America).
- The Egyptian government has allocated 16.9 billion Egyptian pounds (**$1.07 billion**) to **investment in the 2020-21** financial year to carry out canal development projects.

Ship size, main routes and kind of goods

- **Almost 10% of global trade every year passes through the Suez Canal.** In 2014, before its enlargement, the daily average of transits was 47 ships and transiting net tonnage was 2,637.7 thousand tons. In 2019 the daily average of transits increased to 51.7 ships and that of net tonnage went up to 3,307.1 thousand tons.
- Thanks to the enlargement, in 2019 **the average size of transiting containerships grew by 35% on 2014** (the year before enlargement).
- **Transiting goods traffic amounted to 1,031 million tons** registering a **growth** equal to **4.9%** on 2018. Southbound goods amounted to 572 million tons, increasing by 9.1%, while Northbound goods remained stable at 459 million tons.
- The most important **destination areas** in terms of goods traffic **north of the Canal** were: **a) "North, West Europe & the UK" with a 26.3 % share** of the total goods transits via the Suez Canal **and b) "East, S.E. Med" with a 19.1% share**; the main destinations **south of the Canal** were **"South East Asia" (28.2 %) and the "Red Sea" (22.3 %).**
- **Containerised cargo amounted to 507 million tons, with a share of 49% of the total** (+3.3% on 2018). **Oil & Products followed with a 23% market share** (+1.3% on 2018). The third type of goods transported through the Suez Canal were cereals and they have also set a new historical record of 54 million tons, with an increase of 4% on 2018.
- **More than 20% of the vessels transiting the Suez Canal were from lines using the Canal for the first time in 2020**. These carriers represented nearly 17% of total revenue for the Suez Canal in 2020.

Oil and LNG traffics

- **Approximately 7% of global seaborne oil trade passes through Suez**, which makes it the **4th most important route in the world**, with a flow of oil of 4.9 million barrels per day transited in both directions in 2018.
- **Oil exports from Russia accounted for the largest share (26%) of Suez Canal Southbound oil flows**. The **largest importers** of Suez Southbound oil flows were **Asian countries**, with China, India and Singapore accounting for more than 60% of the total. **Oil exports from some Gulf countries accounted for 63% of Suez Canal Northbound oil flows.** The **largest importers** of Northbound oil flows through the Suez Canal in 2019 were **European countries**.
- **LNG flows through the Suez Canal** account for about **8% of total LNG traded worldwide.**

Belt & Road Initiative

- The growing role of the Canal has also been noticed and supported by the **Chinese Belt & Road policy** which has invested significant amounts of money in the area.
- **North Africa is a pivotal area in the framework of the BRI**: North African countries can serve as a production area for European markets, as a logistic gate for both Europe and sub-Saharan Africa and as an energy hub for oil, gas and renewable energies. In the competition among North African countries to attract Chinese investments, there are three characteristics the countries should enhance: their strategic geographic position, a friendly business climate and political stability. **Egypt** in north-east Africa and Morocco in the north-west are one step ahead in this regard.

Main indicators of international competitiveness

- **Egypt's Shipping connectivity is on the rise**, especially after the Suez Canal expansion. Some improvement in logistics is expected.
- **Egypt,** with an **LPI (Logistic Performance Index) of 2.8,** ranked **67th** in the global table. Egypt is ranked **9th** among the other MENA countries.
- In terms of **QPI (Quality of Ports Infrastructure Indicator)**, Egypt's ranking is 38th with a value of 4.8 points, **6th** among MENA countries.
- Based on the **LSCI (Liner Shipping Connectivity Index)**, Egypt has **good transport connectivity**. In 2020, with an index of 68, Egypt ranked **23rd** in the world (China holds the 1st position), **3rd** among the MENA countries and **1st** among African countries.

- In 2006 Egypt's LSCI was 47. Since 2006 the linear trend shows a **1.3 point increase** annually in Egypt's LSCI.
- Based on the **PLSCI (Ports Liner Shipping Connectivity Index)**, which analyzes shipping connectivity for ports, there's been **evident growth of Port Said**, particularly after the Canal expansion and thanks to infrastructural investments. The Index was **39.2 in 2006 and 60.8 in 2020**.
- Based on the **LSBCI (Liner Shipping Bilateral Connectivity Index)**, which analyses connectivity between two countries, **Egypt is well connected with China and Singapore, and Italy is the first partner**. **Turkey** is another one with which Egypt has the highest LSBCI; and among MENA countries, **Saudi Arabia and UAE**.
- Over the past decades, **Egypt's LSBCI with China, Singapore, Turkey and Italy has increased remarkably.**

The Suez Canal Zone

- **Investors will benefit from a number of privileges the SCZone offers:** a unique geographical position, access to large markets, skilled & affordable labour, business-friendly processes, infrastructure and logistics, supportive regulatory framework.
- **The SCZone has implemented a number of mega infrastructure projects** to prepare the area for receiving investors at a cost of almost EGP23.5 billion.
- **The SCZone signed in 2020 a USD150 million contract** with a consortium led by Japan's Toyota Tsusho to Build, Operate, and Transfer (BOT) a Roll-On Roll-Off (RORO) **vehicle terminal at East Port Said**.
- During the period between July 2016 and June 2020, the Suez Canal Economic Authority has achieved almost **EGP11.4 billion in revenue**.

1 / The impact of Covid-19 on traffic and port performance

Foreword

Covid-19 has hit the global economy severely, creating great pressure for economies and institutions and putting the world at a crossroads. The global economy had been fragile long before, due to a geopolitical shift, the digital transformation, global warming and societal fragmentation, among other causes.

Recently, due to the pandemic, the world has realized how crucial smoothness of trade is for everyone's life.

One of the possible future scenarios poses several open questions and highlights that the post-Covid-19 world will be more complex than the old one. We will probably face a reality characterized by higher regionalization due to both political and economic reasons concerning, amongst others, the US-China trade war, the boost to Chinese internal demand, European phenomena such as Brexit or other economic events linked to reshoring and to the need for shorter supply chains that maximize production value. All of this will produce a world with lower integration levels of global trade which might also affect maritime connectivity.

Global trends in an economic-maritime scenario affected by Covid-19

According to the latest IMF forecast, world GDP will fall by 4.4% in 2020. This figure represents an unprecedented crisis and the rebound is expected to be slow, with a 5.2% growth by the end of 2021. In particular, global trade of goods in 2020 will decrease by 9.2% with expected recovery of 7.2% after 2021, which will obviously produce a negative spillover effect on shipping since this sector accounts for 90% of global import-export.

This crisis will result in GDP slumps in all countries except China which has partly been supported by government policies. Significant declines are expected in Italy, Spain, France but also in Germany, the US, the UK and Japan. However, in 2021 the growth rate of advanced economies is expected to strengthen and reach 3.9%.

This is why considerable reduction of demand is being forecast also for shipping which, according to Clarksons research, is expected to shrink by 3.6% in 2020.

In particular, containers represent one of the main sectors of maritime trade which can help better understand overall trends and developments. As a matter of fact, containerised transport is the one most strongly linked to economic trends and this, as a consequence of negatively affected volumes for the whole year, will also shrink and then see a recovery in 2021.

Annual % change of world GDP, international and seaborne trade, 2020- 2021

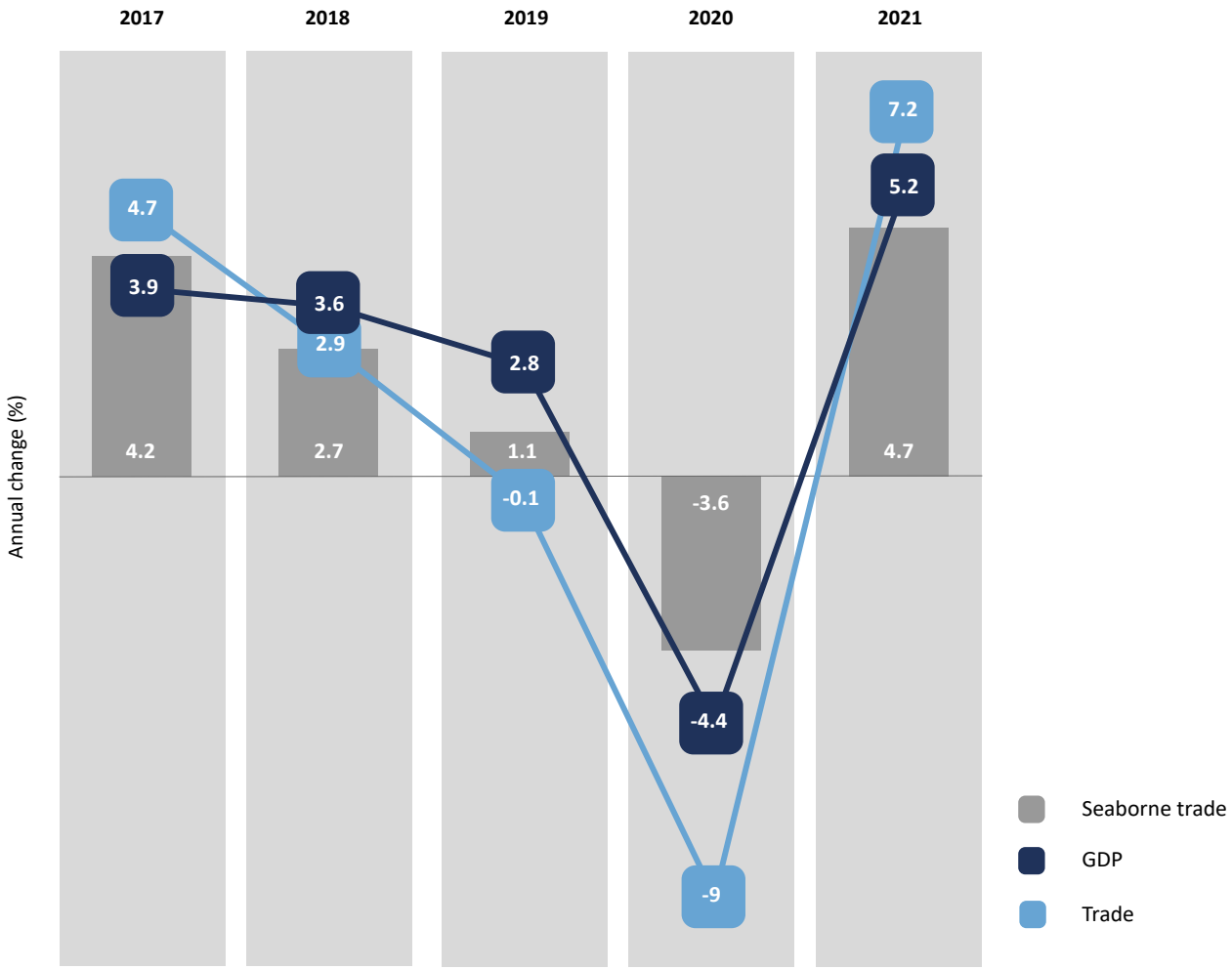
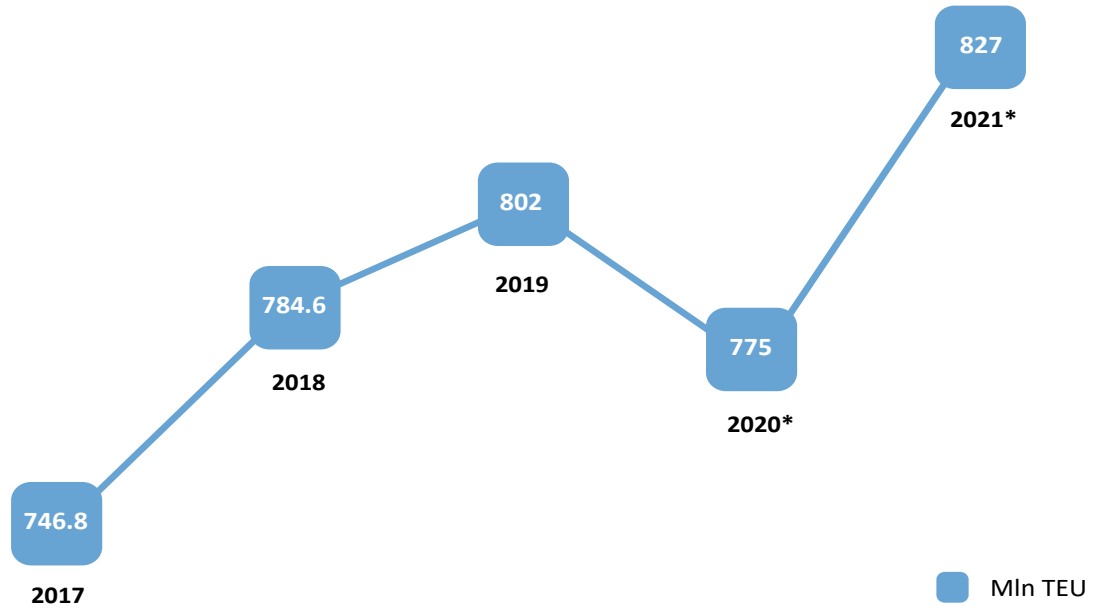


Figure 1 - Source: SRM on IMF, WTO and Clarksons

The latest Drewry forecast about the impact of Covid-19 on containers highlights a 3.3% fall in 2020 equal to a total of 775 million TEU transported, a figure close to that of 2018 volumes. Therefore, the virus seems to have swept away the last few years' worth of growth, even though a rebound of 6.6% is expected to occur in 2021. The first encouraging signals can already be detected in September 2020 with the recovery linked to a peak in Chinese demand before the Golden Week Holiday.

Trend of Global container throughput 2017-2021



* 2020-21 data represent estimates.

Figure 2 - Source: SRM on Drewry

Container transport is closely linked to the development of the economy, and in particular to global production and consumption. If we take a closer look at port calls on a global level we can observe that containership arrivals have recently increased, moving from -8.5% in June 2020 to +1% in September on annual basis. This trend is not only influenced by the pandemic but also by other elements influencing the choice of a specific port of call, such as changes in trade policy implying modifications to activity flows, port reforms, the strategy of naval gigantism, new balances in the configuration of the network of ports and maritime alliances. However, recently recorded data indicate encouraging conditions for positive future trends.

In particular, the phenomenon of gigantism has not stopped, and in fact new record-breaking vessels measuring 24,000 TEU are currently being launched. The size component is a crucial one as it represents an aspect that affects the competitive profile of a port and of its investments in new equipment. If the port can accommodate mega ships, it will also be included in a context of long routes with higher capacity for storing and handling goods, engage in logistic activities and activate intermodal mechanisms. Conversely, a port that cannot accommodate big vessels will concentrate on feeder routes with smaller ships serving territories with a need for connectivity which nevertheless has to pass through a hub or bigger port.

Yet, the container sector is one of those that managed to benefit from the pandemic. Notwithstanding a sudden reduction in the demand for services, carriers have tried to use blank-sailing (cancellation of routes due to lack of cargo) as a strategy to manage the crisis and protect themselves, which seems to have paid back.

Containerships – Number of vessel routes

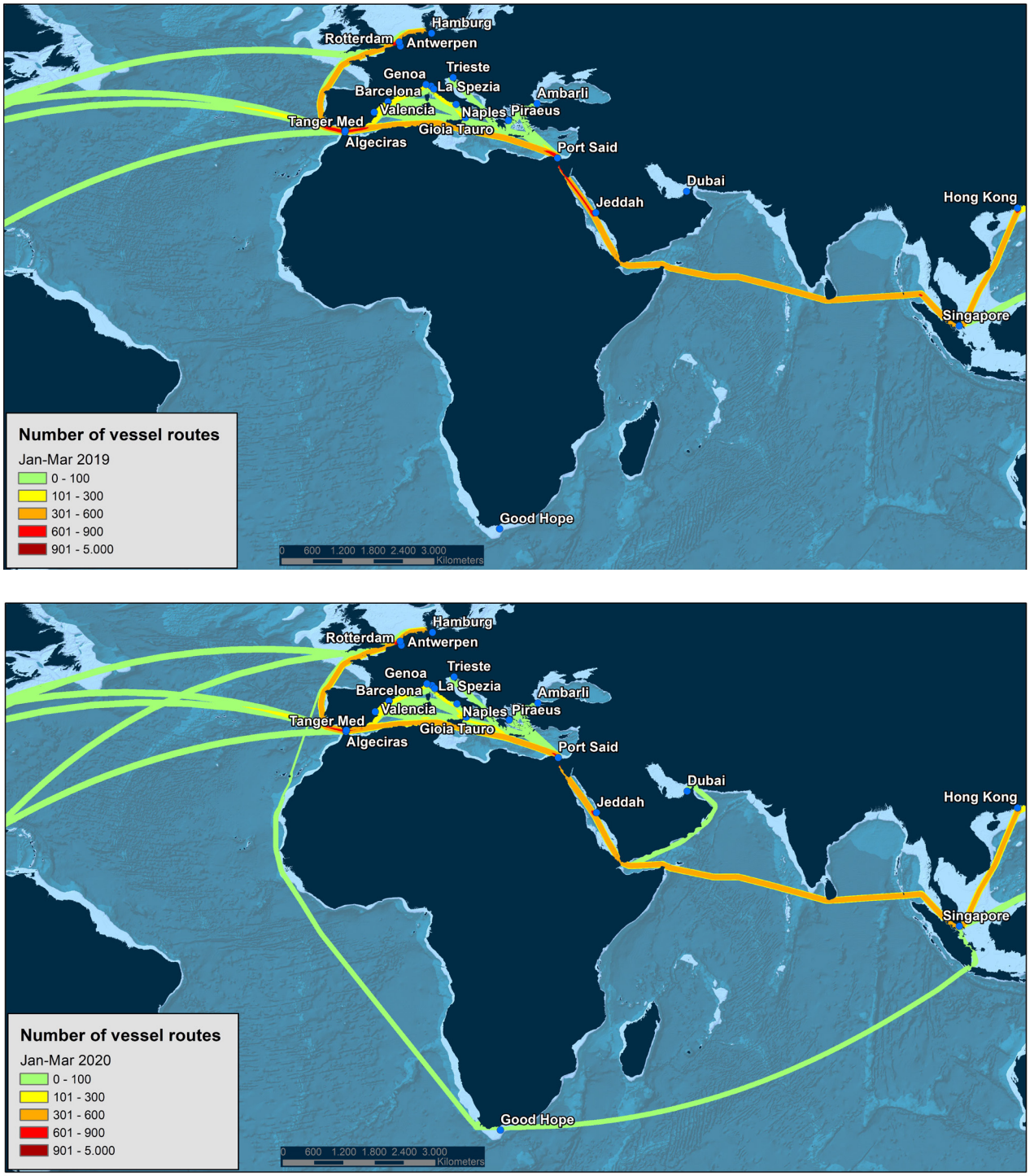


Figure 3 - Source: SRM

Overall, besides the significant savings associated with a reduction of activity and to lower fuel costs, the sector is expected to show operating profits of approximately $9 billion in 2020.

The double-faced condition of low oil prices and higher hold capacity has also caused the emergence of slow-steaming practices whereby carriers are progressively readdressing part of

their Asia-Europe tonnage from the Suez corridor to the circumnavigation of the Cape of Good Hope. The fall in oil prices has in fact led many containerships to take the longer route south of the African Continent, which meant avoiding the hefty Suez tolls and thus reducing overall costs in spite of a longer route by about 3,000 nautical miles (megaships preferring this option in the period March-June 2020 amounted to 52, equal to 5.1% of the total). This has happened in a context where the Suez Canal Authority introduced discounts on canal tolls ranging from 17% to 75%. The growth of transits around the Cape of Good Hope can be clearly seen in the geo-maps used to track the new long-haul routes of containerships.

Global maritime transport and the factors currently shaping the new normal trend

In 2019, seaborne goods amounted to 11.9 million tonnes, a figure representing a 0.4% increase which is the lowest of the last five-year period. Dry bulk (wheat, coal, iron ore) accounted for 44% of the total while liquid bulk (crude and petroleum products, gas, chemicals) covered 39%. Also, 16% of seaborne goods were transported by containerships and the remaining 8% were other goods.

Amount (million tonnes) and share of the different types of seaborne goods in 2019

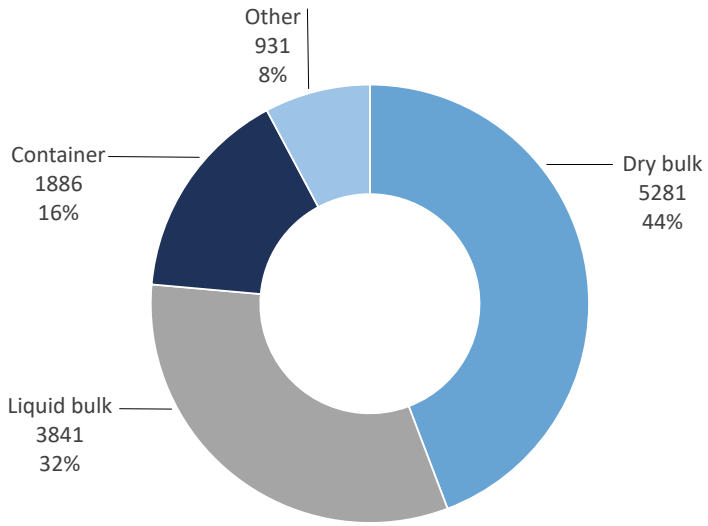


Figure 4 - Source: SRM on Clarksons

If we take a look at the trend of seaborne goods in the last five years' period, it seems clear that there was a slowdown of growth across all categories in the last two years simultaneously to what occurred in terms of both the economy and trade. A better performance was shown by the container sector which has been growing at a faster pace despite the challenges posed in the last five years by potentially disruptive events such as the rebalance of power between the US and China, a general weakness of consumption markets and overall economic instability.

Annual percentage variation of seaborne goods 2015-2019

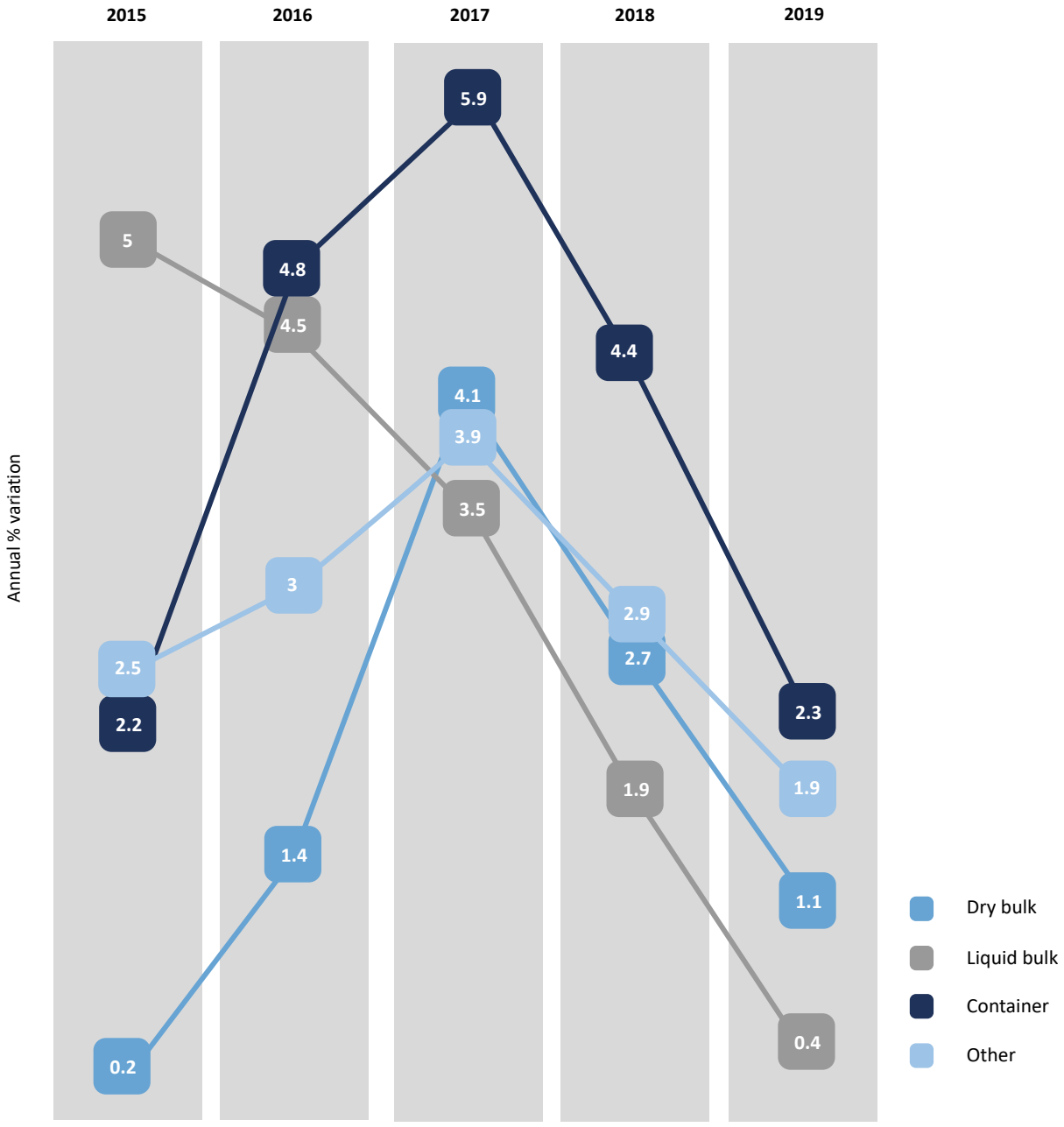


Figure 5 - Source: SRM on Clarksons

East-West routes (Asia-Europe, Trans-Pacific and Transatlantic) still represent the major ones and their 2019 volumes showed a stable trend with an overall 30% share of global traffic in TEUs. What has changed is the importance of the three individual routes within this group. The Trans-Pacific remains the busiest with 26 million TEU but due to the Trade War it has lost 1% in the direction North America-Far East and 2% in the opposite one. This benefited the Asia-Europe route which, with 25 million TEU, showed an 8% growth in the direction Europe-Far East and a 3% increase in the opposite one.

The Transatlantic route also grew to 8 million TEU showing +3% in the direction Europe-North America and +4% in the opposite one.

In terms of share on the total, between 2009 and 2019, some differences emerged. Intraregional routes (43%) grew in volumes over the last 10 years by more than 70% while the average was 50%.

Containerships – Number of vessel routes

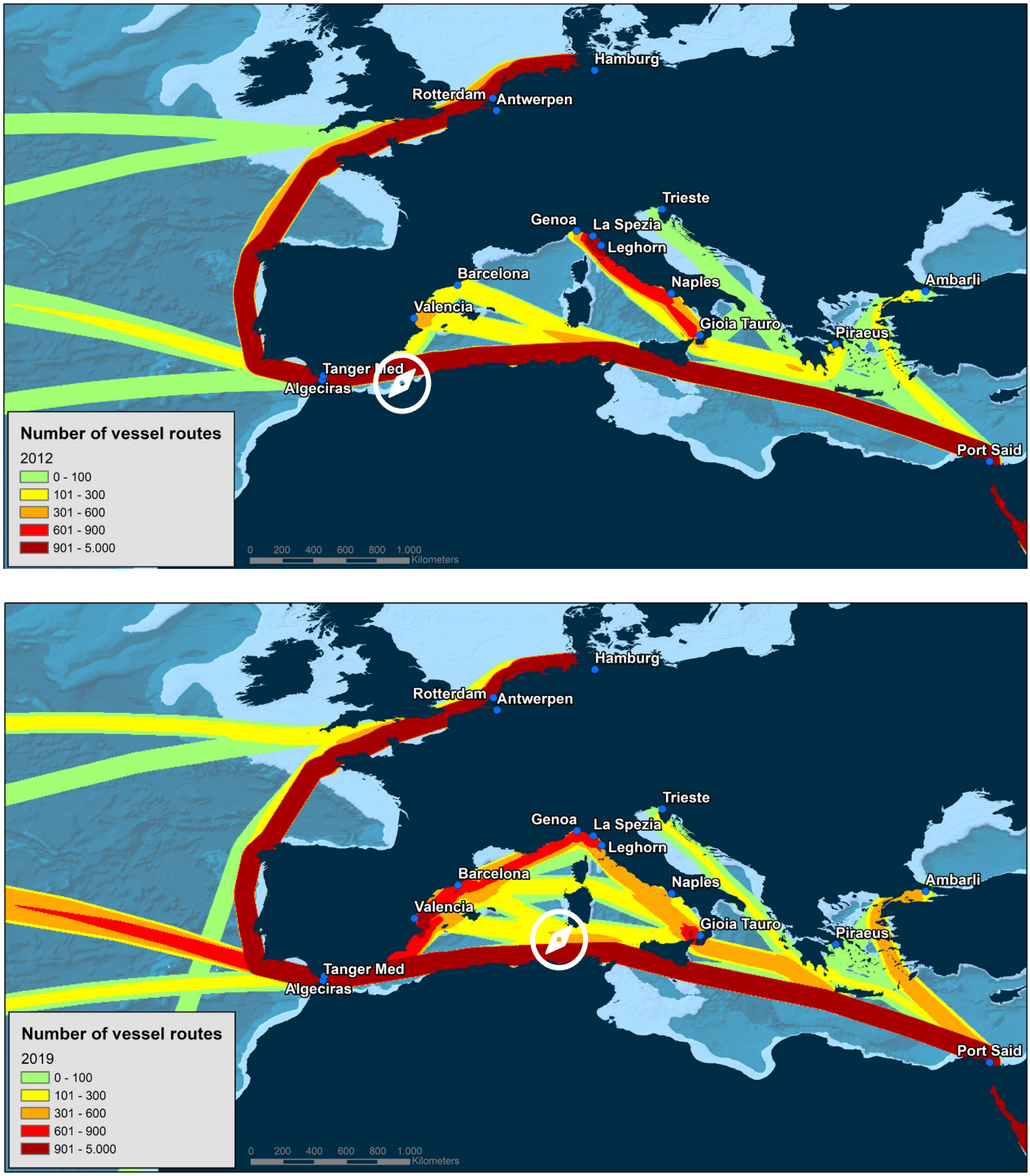


Figure 6 - Source: SRM

Also, at the moment, approximately 70% of containerized traffic is distributed across multiple secondary routes.
Current phenomena are characterized by the increasing regionalization of trade flows and by a tendency to reshaping supply chains which need to become shorter, flexible and more diversified. Covid-19 has boosted nearshoring, which had already been ongoing for some years, thus bringing production and consumption markets closer to one another.
One of the most apparent consequences of regionalization and shorter routes is the increasing centrality of the Mediterranean, with the shift of the traffic's center of gravity within the Basin from Gibraltar to Suez.
The following geo-maps indicate the positions of containerships over 7,000 TEU in transit through the Mediterranean. If we compare the pictures in 2012 and 2019 it seems clear that in the period taken into account, the number of positions in the Mediterranean increased by over one third.
The crucial role of Asia appears glaringly obvious also in light of figures relating to the global handling of container ports. In 2019, the top 50 ports handled over half billion TEUs showing an annual growth rate of 3.5%. On a regional level, Asian ports – including the Middle East and the Indian subcontinent – accounted for approximately 80% of the total. In comparison, European and North American ports accounted for 12.7% and 6.4% respectively.

The growing role of the Mediterranean in global shipping

The centrality of the Mediterranean today is mainly linked to the maritime dimension of trade routes. It represents a privileged route for container traffic, concentrating 27% of the world's scheduled services, and short sea shipping between its shores.
The growth of goods in transit confirms the importance of the Suez Canal as a crucial route for the passage of all types of cargo.
In addition, despite the recent overall slump in goods demand, the Egyptian sea passage has shown a stable trend with over 14,000 ship transits through Suez in the first nine months of 2020, a figure representing a 1% growth on the same period of the previous year.
The greater concentration of scheduled services in the Mediterranean facilitated by the Egyptian Canal, which, following its enlargement, places virtually no limits on the size of ships in transit, is an undoubted benefit for the ports bordering its shores, which gain a further advantage from their position. Not only can they strengthen their role as hubs for goods coming from the Far East heading towards North America, but they become the potential gateway for territorial production towards transoceanic markets.
With the increase in traffic and routes and the consequent importance of the Mediterranean basin in maritime transport and logistics, and with the development of major global strategies, starting with the Chinese BRI, the stiffness of competition between the shores of the Mediterranean also grows.

At the same time, important investment opportunities are created for countries able to offer a modern and integrated network of port and hinterland infrastructure.
Consequences of the pandemic have also affected China's strategies towards the Mediterranean. Covid-19 has impacted numerous projects of the Silk Road resulting in slowdowns and disruptions. According to a survey conducted by the Chinese Ministry of Foreign Trade, 20% of approximately 3,000 projects has been severely affected by the pandemic, which negatively also impacts ports although this phenomenon is expected to vanish once the pandemic is over.

Impact of Covid-19 on BRI projects

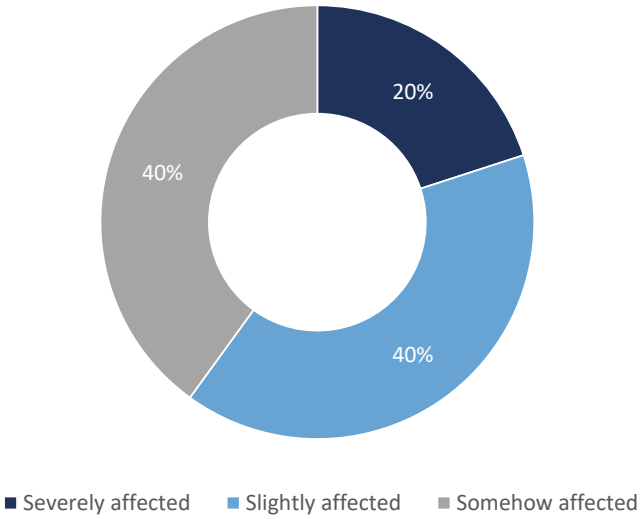


Figure 7 - Source: SRM on Chinese Ministry of Foreign Trade

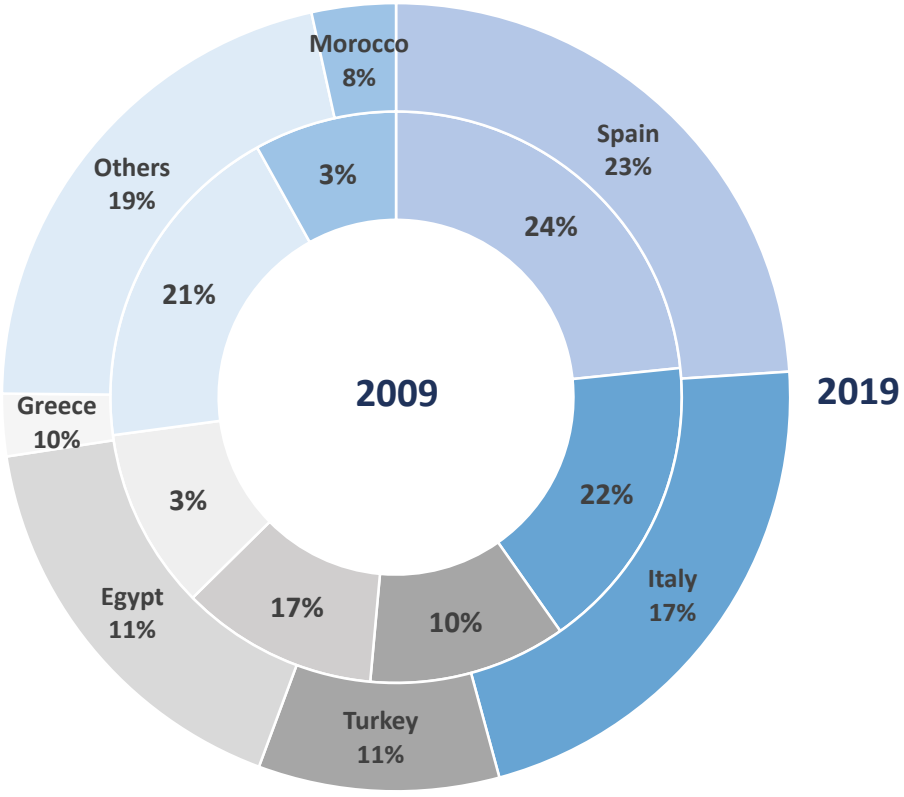
The effective policy of port terminal acquisitions started in 2013 has continued until 2020. China's placement in the Mare Nostrum is now complete, while the details and strategies of the individual ports of call remain to be defined. Piraeus in Greece has been elected as a reference point in the eastern part of the basin but terminals in Spain (Valencia and Barcelona), Turkey (Istanbul), Italy (Savona-Vado in pool with APM and Qingdao Port), Egypt (near the Suez Canal) and others have also been taken over. Similarly, in the Northern Range, the Chinese presence has been consolidated in the ports of Rotterdam and Antwerp. This widespread diffusion is aimed at creating entry gates for seaborne goods through ports of call that can give access to diversified markets with interesting characteristics.
The ports on the Southern and Eastern shores (North Africa and Turkey) are pursuing important policies for the development of their port systems and are aware that this represents a fundamental factor for the economy, development and foreign outreach of an area. Not only are we witnessing a new design in world trade by sea, but also a change in the rules of competitiveness of ports, which currently cannot base their growth only on infrastructural, material and immaterial endowment, but must be able to innovate and offer value-added services, back port areas where

manufacturing and logistic activities can settle in favorable environments both from the fiscal and bureaucratic point of view.

The figure below, designed considering the first 30 ports of the Med and Black Sea by TEU moved in 2019, depicts the weight of each country and highlights the variation compared to 2009.

Several success factors have been analyzed for competitor ports. Firstly, the growth of investment (both public and private as well as FDIs) in ports generates new services and activities. This is the case of Piraeus, where operations are managed by Chinese COSCO, and which in 2019 became the top port in the Mediterranean with 5.65 million TEUs. Furthermore, new investment is currently being deployed in 2020 with €90 million allocated to Piraeus by COSCO (70 in the three container terminals and 20 in shipyard facilities). In other cases, an important role was also played by back-port areas where industrial and manufacturing plants have been introduced alongside numerous logistic functions in the framework of SEZs (Special Economic Zones with partial or total tax exemption for export, re-export or import flows).

Share of ports in the handling of containers in the Mediterranean and the Black Sea (TEU)*



SPAIN / Valencia, Algeciras, Barcelona
ITALY / Genoa, Gioia Tauro, La Spezia, Leghorn, Trieste, Venice, Naples, Salerno, Ravenna
TURKEY / Ambarli, Mersin, Izmir
EGYPT / Port Said, Alexandria, Damietta
GREECE / Piraeus, Thessaloniki
MOROCCO / Tanger Med

Figure 8 - Source: SRM on Port Network Authorities

Container handling of the top 10 Mediterranean ports (TEU)

		2014	2016	2018	2019	2019/2018		**2019/2014**	
1	Piraeus	3,620,545	3,749,709	4,908,000	5,648,030	15%	▲	56%	▲
2	Valencia	4,441,949	4,732,136	5,182,665	5,439,827	5%	▲	22%	▲
3	Algeciras	4,556,492	4,761,444	4,773,158	5,125,385	7%	▲	12%	▲
4	Tanger Med	3,077,764	2,964,278	3,472,451	4,801,713	38%	▲	56%	▲
5	Port Said	3,959,000	3,035,900	3,105,418	3,658,159	18%	▲	-8%	▼
6	Barcelona	1,893,300	2,236,961	3,472,879	3,324,196	-4%	▼	76%	▲
7	Marsaxlokk	2,900,000	3,084,309	3,310,000	2,720,000	-18%	▼	-6%	▼
8	Genoa	2,172,944	2,297,917	2,609,138	2,615,375	0%	▲	20%	▲
9	Gioia Tauro	2,969,802	2,797,070	2,328,218	2,522,874	8%	▲	-15%	▼
10	Mersin	1,498,852	1,453,038	1,722,713	1,939,029	13%	▲	29%	▲

Table 1 - Source: SRM on Port Network Authorities

2 / Canal's traffic trends after the Suez Canal expansion

Foreword. The impact of the pandemic and the "new competitors" of the Suez Canal

Since August 2015, the month in which the doubling was inaugurated, the Suez Canal (a global hub for ship passages representing 10% of world traffic) has consistently reported double-digit growth in transits. The expansion of the infrastructure has made the passage of ships smoother, with shorter waiting times and the possibility of guaranteeing more daily passages, making the Mediterranean an increasingly central sea in global maritime transport strategies.

The impact of Covid-19 on the Canal depended primarily on a decrease in volumes handled worldwide (effect of the lockdowns) and on a drop in the price of oil that led carriers to decide a re-routing via the Cape of Good Hope to pare down costs while taking advantage of lower fuel prices. This makes it possible to avoid the cost of transiting the Suez Canal ($600,000 and more for a one-way trip for ultra-large container ships) and absorbing excess capacity by extending sailing times. Re-routing vessels could imply over $10 million in lost tariffs for the Suez Canal Authority.

This has also resulted in the loss of over 50 mega-ships and produced over 250 blank sailing vessels, which has obviously impacted import-export, particularly on the East-West routes on the Far East-Middle East-Mediterranean-North Europe line.

The Canal Authority – in an attempt to limit carriers' choices to avoid transit in order to save on toll costs – has introduced a tariff discount of 17% for southbound containerships, and of 50% to 75% for the US East Coast- South/South East Asia route.

The Canal Authority will slash transit fees for large oil tankers traveling between northern Europe and southeast Asia by 48% as it looks to maintain the canal's status as a critical shipping route. The Authority began implementing the decision earlier December 2020 and the discounts will run next year.[1] The Canal's revenues were falling towards the end of the year due to the pandemic. The revenues are currently at USD 5.61 bn, down 3.3% from USD 5.8 bn of the previous year.

A Suez Canal competitor could be represented by the activity of Russia, which is in the process of mainstreaming its Arctic shipping route and trying to persuade commercial shipping lines to use its waters as an alternative to the Suez Canal. It does not expect to attract year-round business until the end of the current decade, but it could offer to cover the extra insurance costs for shippers. The Russian arctic route is some 3k nautical miles shorter than the Suez route, and while it isn't yet traversable all year round, climate change could help Russian plans in these terms.

[1] Source: Al Mal news, 2020.

The Suez Canal: features and traffic capacity

The Suez Canal was built in 1869 and was 164 km long, 8 mt deep, 53 mt wide and it allowed the transit of ships with 6.7 mt of draught. In 2015 some parts of the Canal were enlarged and today it is 193.30 Km long, 24 mt deep and 205/225 mt wide. The completion of this enlargement allows the transit of ships with 20.12 mt of draught.

Due to potential increase in volume of world trade, Egypt has been very keen on maximizing the length of doubled parts of the waterway to shorten both the transiting and waiting time for vessels, which shall result in minimizing the cost of the trip for transiting vessels, thus attracting a bigger number of ships to use the canal. All of this contributes to raising the classification of the Suez Canal and to increasing its competitiveness to the detriment of other alternative routes. The growing role of the Canal has also been noticed and supported by the Chinese Belt & Road policy which has concentrated important investments in the area.

Almost 10% of global trade passes every year through the Suez Canal. The saving in distance achieved by using the Canal, ranging from 23% to 88% is quite a reliable proof of the importance of this infrastructure. In 2014, before the enlargement, the daily average of transits was 47 ships and transiting net tonnage was 2,637.7 thousand tons. In 2019 the daily average of transits increased to 51.7 ships and that of net tonnage went up to 3,307.1 thousand tons.

Assuming the global economy gradually recovers from the shock of the Covid-19 pandemic and that protectionist walls are not built much taller, it is likely that world trade will continue to grow, much to the benefit of the Suez Canal.

The figure below shows traffic trends of the Canal since 2011. After the enlargement in 2015, the “New Suez Canal” set new records in 2019 with just under 19,000 ships making full transits through the Canal in two directions, an increase of 3.9% on 2018. For the first time in its history ships transported over 1 billion tons of cargo (+4.9% on the previous year).

However, the impact of the pandemic can be considered light when we look at the 2020 data about the number of ships transited through Suez.

The Suez Canal showed its lively activity in 2019 and its resilience in the first 6 months of 2020. In terms of volumes transported, the slight increase recorded in the first half of 2020 compared to the first six months of last year (+1.5%) was generated in the first few weeks of the year. The increase in tonnage in the first two months of 2020 was 9.3% compared to the first two months of 2019, while the data for the March-June period show a decrease in cargoes of -2% compared to the same period last year. As for the number of ships, after years of growth, the first 6 months of 2020 also show an increase in the number of ships in transit (+4.7%).

While transits showed that they were holding up under the pandemic’s blows in the first 9 months of the year (just over 14,000 ships crossed the Canal between January and September, an increase of 165 vessels, +1.2%, on same period last year), in the last quarter of 2020 ship transits in the Suez Canal decreased by 4.3% (4,810 ships in transit compared to 5,026 in 2019).

With the decrease in the last period, the total number of transits for the year 2020 came to 18,829 vessels, 51 less than the 18,880 in 2019.

Ships and cargo through the Suez Canal Trend 2011, 2015-2020

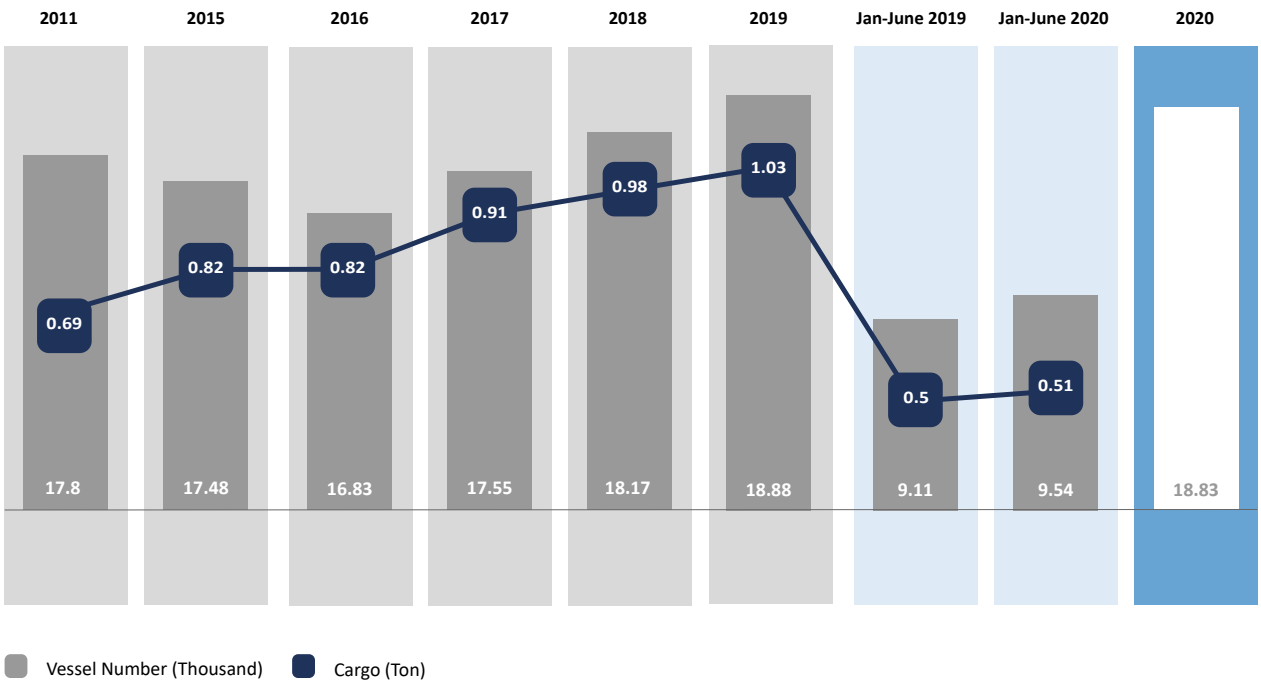


Figure 9 - Source: SRM on Suez Canal Authority

Moreover, as a reminder of the strategic importance of this infrastructure, the Egyptian government has allocated 16.9 billion Egyptian pounds ($1.07 billion) to investment in the 2020-21 financial year to carry out canal development projects.

Ships traffic evolution

In 2020, 18,829 ships made full transits through the Suez Canal in two directions, recording -51 vessels on 2019. Transiting net tonnage was 1,17 million, recording a decrease of 3%.
The figure below shows that bulk carriers are the most numerous (5,113) vessels with a 27% share and they are followed by tankers (5,006) with 26% and containerships (4,710) accounting for 25% of the total.
For the whole 2020, the Authority had recorded increases in several categories of ships due in part to their incentive pricing policies. Bulk carriers saw the largest increase with the number of ships up more than 20% to a total of 5,113 bulkers. General cargo also increased nearly 20% to a total of 1,792 ships. Also, 4,710 containerships transited the Suez in addition to 5,006 oil tankers and 686 LNG carriers.

Traffic by ship type (number)

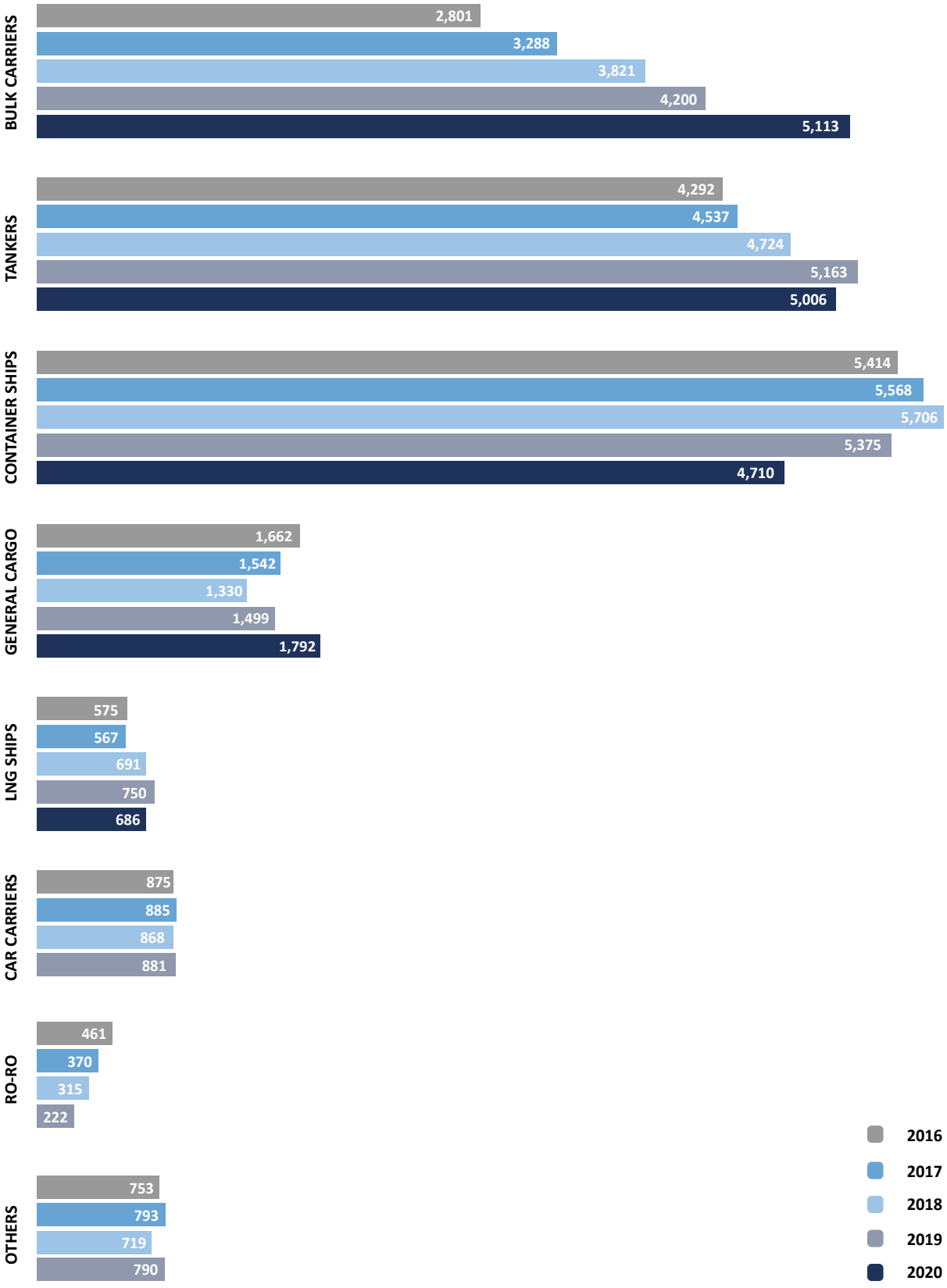


Figure 10 - Source: SRM on Suez Canal Authority

Transits through the Suez Canal have stayed remarkably resilient to the fallout of the Covid-19 pandemic if judging by total transits of the three commercial shipping sectors which are up 0.6% year-on-year (see graph below).

14,829 ships made full transits in the Suez Canal in 2020, including oil tankers, dry bulkers and container ships. The number of oil tankers passing through the Suez Canal in 2020 showed a 3% decline; in contrast, dry bulk transits have risen by 21.7% (913 more transits), while harsh conditions in the container shipping market have limited containership transits, which in fact have unsurprisingly fallen by 12.4% (665 less transits).

Suez Canal Transits. Total transits of Container ships, Dry bulker, Oil Tanker, 2019-2020 (in the box % y-o-y)

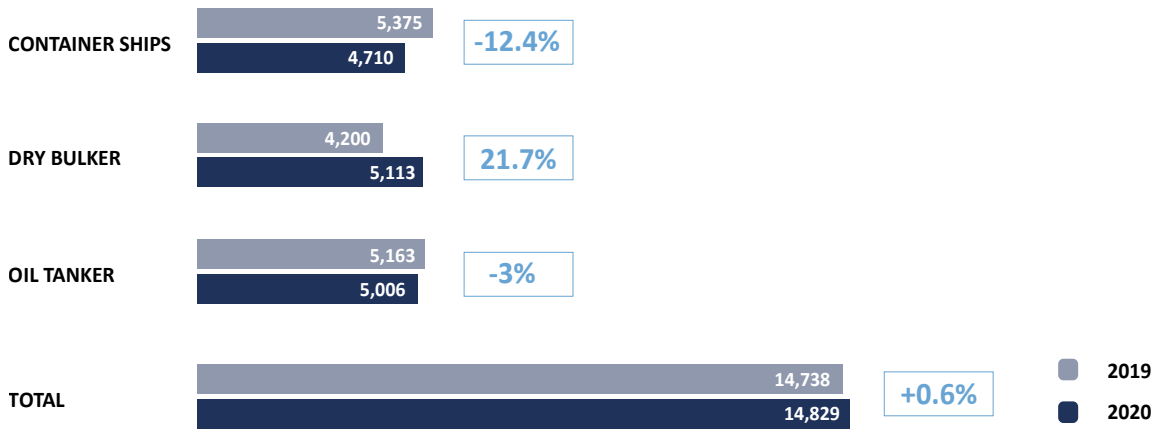


Figure 11 - Source: SRM on Suez Canal Authority

The container shipping segment has been battered by the Covid-19 pandemic in what can be regarded as a three-fold beating. Firstly, China's lockdown and intra-Asian supply chain disruptions impacted volumes in February and March. Secondly, as the virus spread beyond Asia and became a global pandemic, it immobilized populations and limited consumer spending along the way.

Thirdly, looking ahead at the medium-term, economies around the world will struggle with structural damage, including mass unemployment, slowing output and lower consumer confidence. This is likely to drag on container volumes and inhibit any quick recovery for container shipping demand.

The relentless pursuit of achieving cost reductions through economies of scale in the container shipping industry partly explains this downward trend of transits. As increasingly larger container ships are delivered to the market, a cascading effect of the fleet occurs, where smaller ships are removed from the Asia-Europe trade lane and larger ships are inserted instead. This cascading effect will nominally decrease the number of container ship transits through the Suez Canal, even as total TEU transported in the waterway increase. This upsizing of the fleet will decrease the number of ships on the main trade lanes, even as the total amount of containers transported increa-

ses. Therefore, this explains the declining Suez Canal container ship transits over the past decade. The figure below shows the average size of ships, which is the ratio between net tonnage of transiting ships and number of vessels. It is interesting to notice the comparison that this figure makes with 2014 (the year preceding the enlargement).

Average net ton by ship type. Comparison 2014-2019

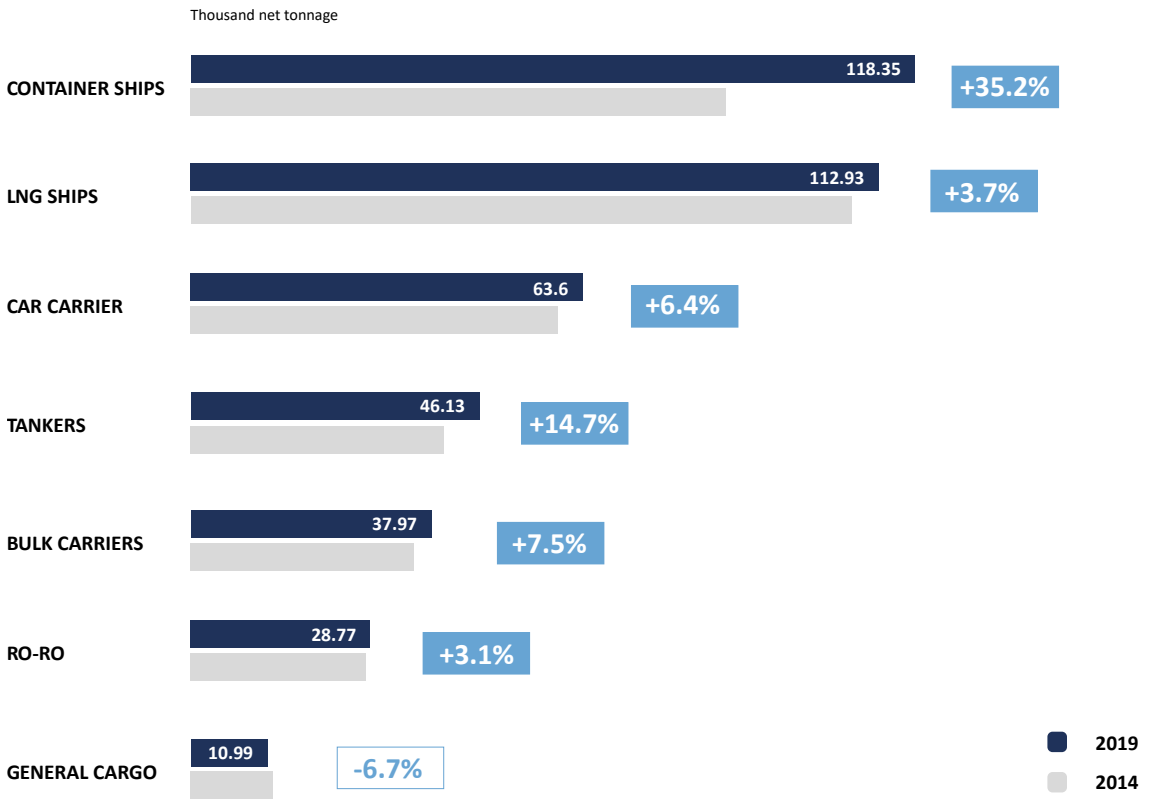


Figure 12 - Source: SRM on Suez Canal Authority

Thanks to this improvement, the size of transiting containerships has grown also as a result of the trend of naval gigantism, which is increasingly gaining importance in the containership sector. The average size of the ships transited through Suez increased by 14% over the period. The ratio increases for almost all types of ship, and we can see that the biggest ships passing through the Canal are containerships (average size 118.35 thousand net ton), followed by LNG ships. Thanks to the enlargement, in 2019 the average size of transiting containerships grew by 35% on 2014. While the average size of transiting tankers grew by 15%.

The traffic data of Port Said, which is now a protagonist in the Mediterranean Basin, highlight the ability of this port to capitalize on the transits through the Canal, both for the revenues from tolls and for the volume of traffic attracted.

Port Said traffic trend (2015-2019)

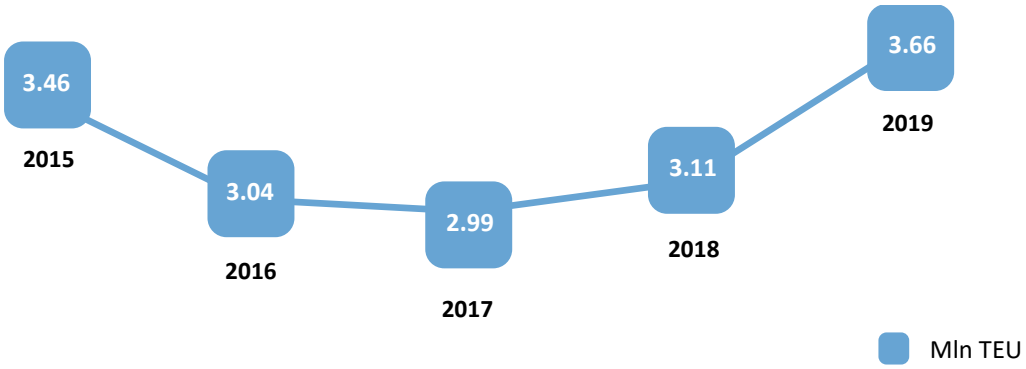
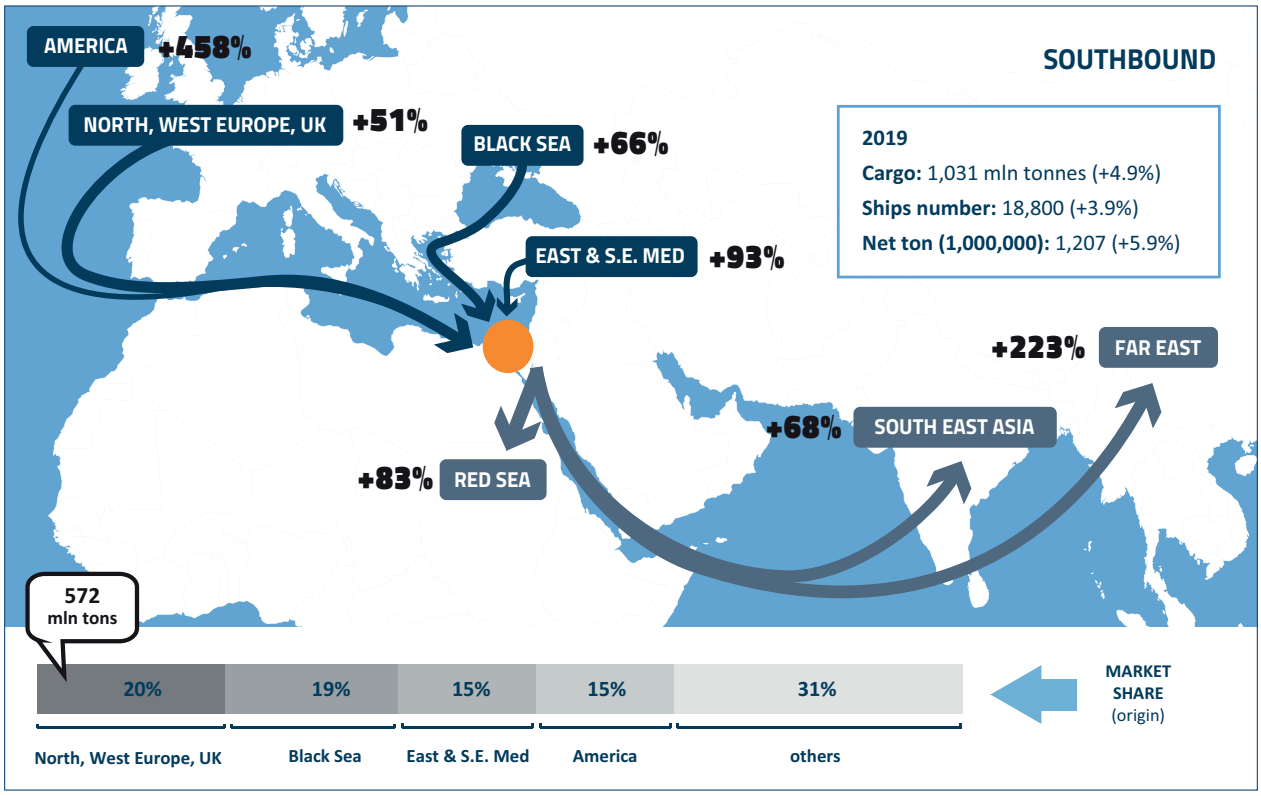


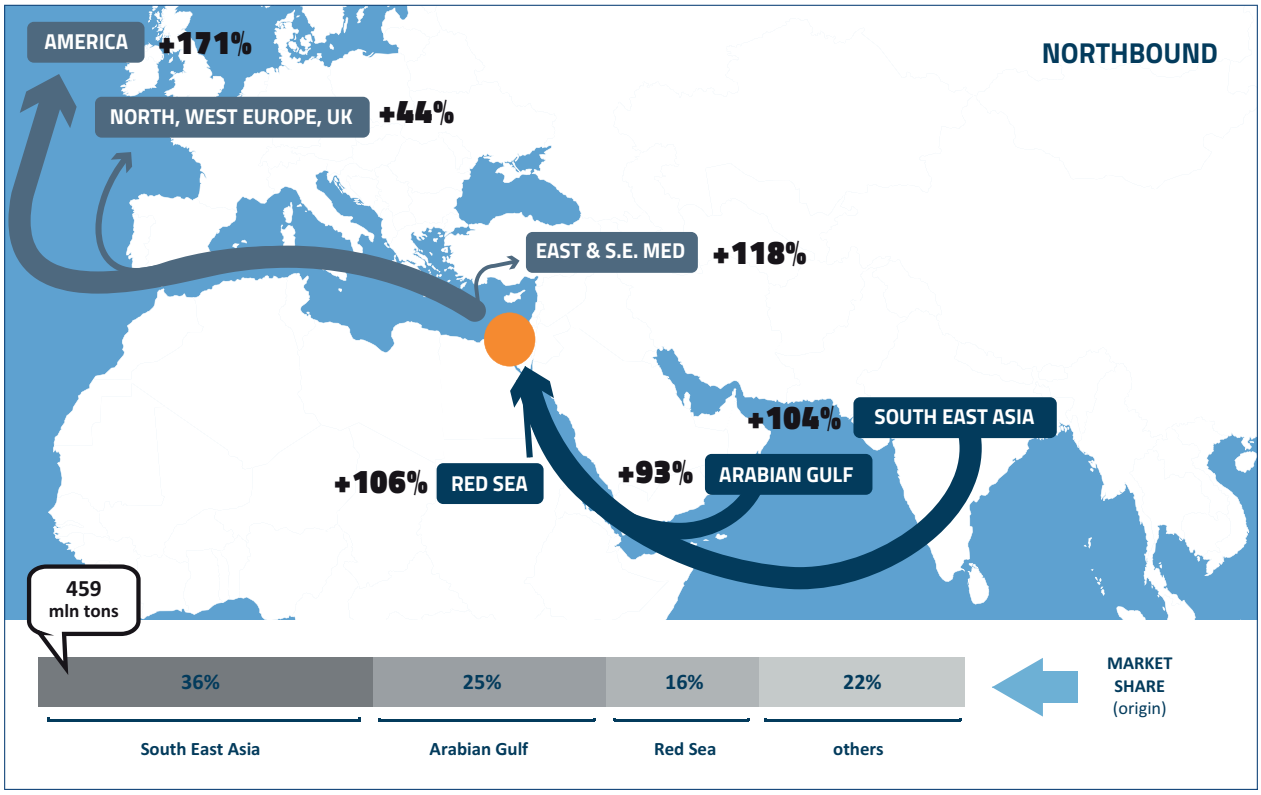
Figure 13 - Source: SRM on Port Authority

Cargo traffic

Transiting goods traffic in 2019 amounted to 1,031 million tons, a 4.9% growth on 2018.
Southbound goods amounted to 572 million tons, increasing by 9.1%, while Northbound goods were 459 million tons. The most important destination areas in terms of goods traffic north of the Canal were: a) “North, West Europe & UK” with a 26.3 % share of the total goods transits via Suez Canal and b) “East, S.E. Med” with a 19.1% share; the main destinations south of the Canal were “South East Asia” (28.2 %) and the “Red Sea” (22.3 %).
The following figure represents an analysis of the destination of goods transiting through the Canal and shows an increase in the period 2009-2019 in both directions: Southbound and Northbound. The most important areas in terms of southbound goods traffic are North, West Europe &UK, Blacksea East, S.E. Med and America. Together these areas account for almost 70%. We can see the significant increase in goods destined for the Far East (+223%) and coming from America (+458%). In terms of volumes, 36% of the Southbound cargo (in 2019) is from the Mediterranean ports, a share that grows to 54% if the Black Sea is also taken into account.
The main destinations of the northbound cargo are and North, West Europe &UK and East S.E. Med.
Together these areas account for 58%. Northbound cargo showed a significant growth too, in particular towards the South East Med (+118%) and America (+171%) and from the Red Sea (+106%) and South East Asia (+104%). In terms of volumes, Mediterranean ports received 52% of the Northbound cargo in 2019, a figure that goes up to 53% if Black Sea ports are taken into account.

2009-2019 growth of SOUTHBOUND and NORTHBOUND cargo traffic through Suez by markets of origin and destination





SUEZ CANAL ORIGIN DESTINATION

Figure 14 - Source: SRM on Suez Canal Authority

The ring chart below illustrates the volumes and shares of cargo traffic in both directions in 2019. Containerized cargo amounted to 507 million tons, with a share of 49% of the total (+3.3% on 2018). Oil & Products follow with a 23% market share (+1.3% on 2018). The third type of goods transported through the Suez Canal are cereals and they have also set a new historical record of 54 million tons, with an increase of 4% on 2018.

Suez Canal traffic by cargo type (million tons) in 2019

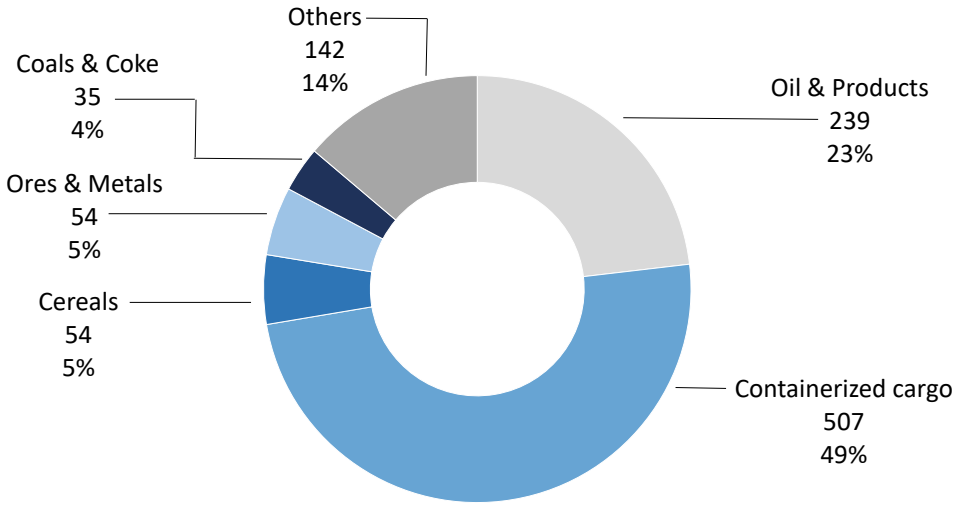


Figure 15 - Source: SRM on Suez Canal Authority

Oil & Derived Products traffic

The Suez Canal is therefore an important transit route for crude oil and derived products, together with the 200-mile long SUMED Pipeline, or Suez-Mediterranean Pipeline, that transports crude oil through Egypt from the Red Sea to the Mediterranean Sea.

The Canal and the SUMED pipeline represent crucial crossroads for two reasons: a) northbound traffic of Oil & Natural gas from the Gulf to Europe/North America and b) the increasing relevance of southbound flows of US and Russian crude and petroleum products directed to Asia and the Middle East.

Approximately 7% of global seaborne oil trade[2] passes through Suez, which makes it the 4th most important route in the world, with a flow of oil of 4.9 million barrels per day transited in both directions in 2018.

Based on the latest U.S. Energy Information Administration data, the table below shows the main chokepoints in the world.

[2] EIA (July, 23, 2019), The Suez Canal and SUMED Pipeline are critical chokepoints for oil and natural gas trade.

Volumes of crude oil and petroleum products transported through global maritime chokepoints, 2014-2018 (million barrels per day)

Location	2014	2015	2016	2017	2018
Strait of Hormuz	17.2	18.4	20.6	20.3	20.7
Strait of Malacca	15.5	15.5	16		19
Bab el-Mandeb	5.1	5.7	5.9	6.2	6.2
Suez Canal and SUMED Pipeline	**3.7**	**3.8**	**3.9**	**4.6**	**4.9**
Danish Straits	3	3.2	3.2		
Turkish Straits	2.6	2.4	2.4		
Panama Canal	0.9	1	0.9	1.1	1.1
Cape of Good Hope	4.9	5.1	5.8		
World maritime oil trade	**56.4**	**58.9**	**61.2**	**62.5**	**NA**
World total oil supply	**93.9**	**95.9**	**96.9**	**98.5**	**99.9**

Table 2 - Source: SRM on U.S. Energy Information Administration, 2019

In 2019, crude oil and refined products and LNG accounted for 23% and 3% of total Suez cargo in net metric tonnage, respectively. Oil & Products (crude oil and refined products) Northbound flows decreased by 9.5% to 111.4 million tons, while Southbound grew by 13.1% to 127.2 million tons. Also, increased refined products exports from Russia to Asia contributed to higher Southbound traffic.

Figure 16 shows flows of Oil & Products by exporting (origin) and importing (destination) countries. Oil exports from Russia accounted for the largest share (26%) of Suez Canal Southbound oil flows, followed by those from Libya (13%) and Algeria (10%). The largest importers of Suez Southbound oil flows were Asian countries, with China, India and Singapore accounting for more than 60% of the total.

Oil exports from some Gulf countries (Iraq, Saudi Arabia and United Arab Emirates) accounted for 63% of Suez Canal Northbound oil flows. The largest importers of Northbound oil flows through the Suez Canal in 2019 were European countries, in particular the Netherlands and France, which together accounted for 34%, and the United States (10%).

Figure 17 shows that after a few years of stability in oil shipments, since 2017 total traffic through the Canal has increased significantly. This reflects increases in OPEC production and exports, including Iraq and Saudi Arabia, as well as the growth in exports from Iran following the lifting of sanctions.

"Oil & Products" flows by exporting and importing countries (million tons) in 2019

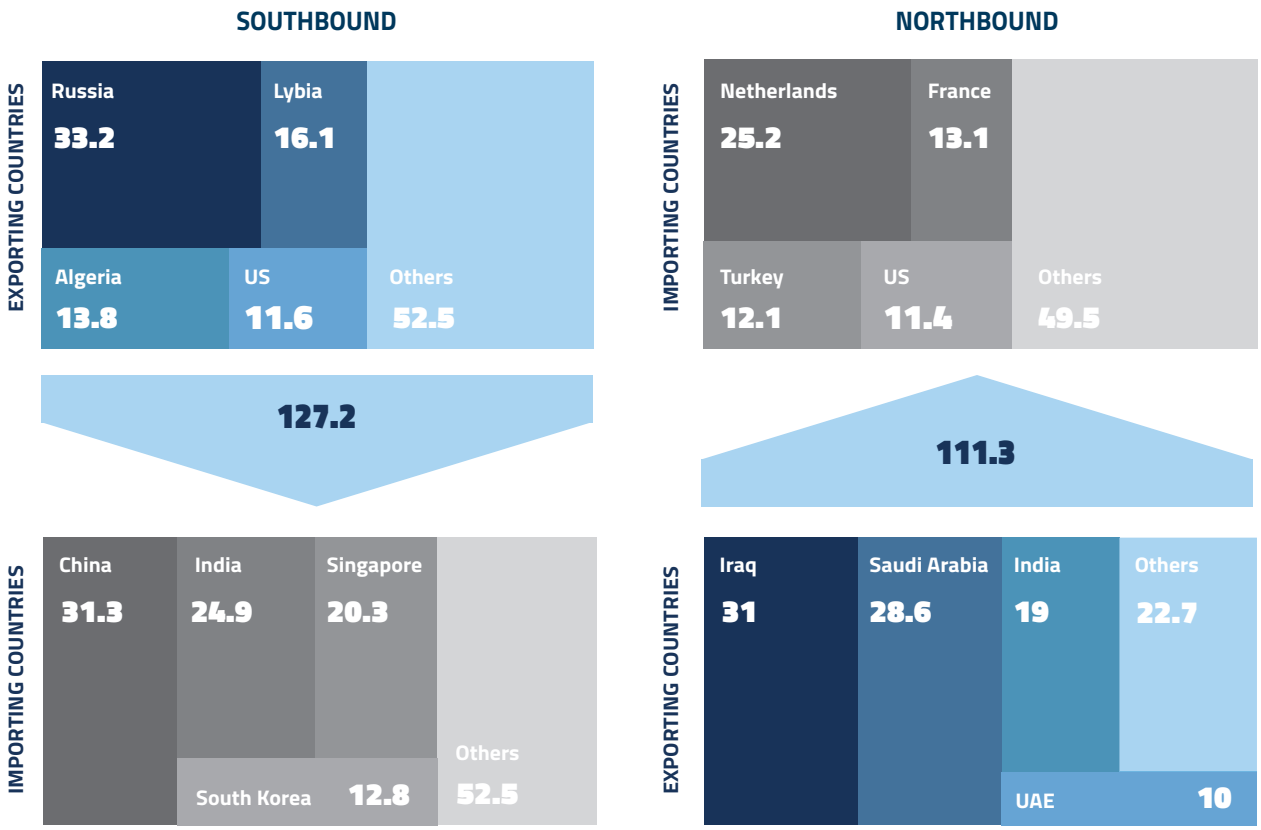


Figure 16 - Source: SRM on Suez Canal Authority

"Oil & Products" traffic through the Suez Canal. Trend 2014-2019

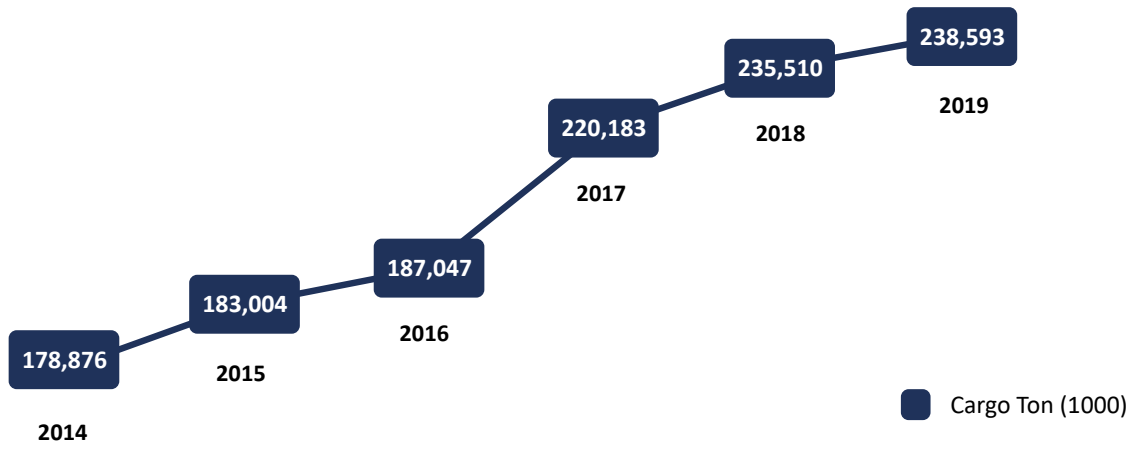


Figure 17 - Source: SRM on Suez Canal Authority

Overall LNG flows through the Suez Canal have declined in recent years, but account for about 8% of total LNG traded worldwide.
Southbound LNG transit mostly originates from the US, Egypt and France, and is mostly destined for India, China, Jordan, and Pakistan, which combined account for 70% of the total southbound LNG imports through the canal.

LNG flows by exporting and importing countries in 2019

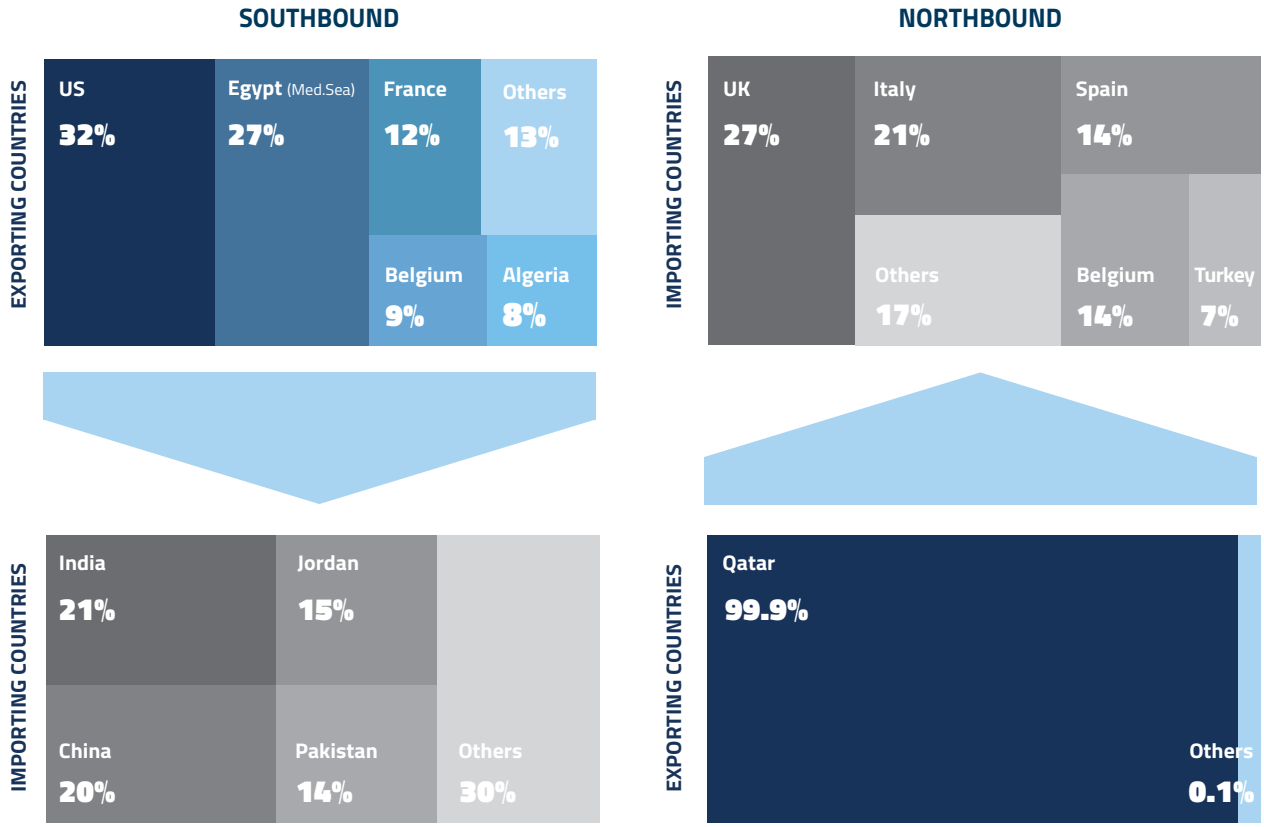


Figure 18 - Source: SRM on Suez Canal Authority

Nearly all (over 99%) of the northbound LNG transits are from Qatar and mainly destined for European markets. Although Qatar remains a key exporter of LNG through the canal, it has been diverting more cargoes to Asia in recent years. Also, changes in LNG traffic through the Suez Canal tend to reflect growing U.S. shale gas production and LNG exports, falling LNG demand in some European countries, and increasing competition for LNG in the global market, especially in Asia.[3]

[3] SRM has started monitoring also the developments of the Damietta LNG terminal's actvity.

3 / International performance indexes: Egypt's ranking on logistics performance, competitiveness, infrastructure and maritime connection

Foreword. Logistics performance and infrastructure efficiency as factors attracting investments

This chapter analyzes Egypt's features in terms of competitiveness, infrastructure, logistics performance (customs, infrastructures, shipping rates, logistic services, consignments, timeliness) and shipping connectivity (regular shipping services for the import and export of manufactured goods). In particular, the latter two elements are important for facilitating the business of manufacturing companies, and, more in general, to improve efficiency in trade and supply chains. The Logistics Performance Index (LPI) is an interactive benchmarking tool created to help countries identify the challenges and opportunities they face in trade logistics and what they can do to improve their performance. The LPI 2018 (the latest available) allows comparisons across 160 countries. It is based on a worldwide survey of operators on the ground (global freight forwarders and express carriers) who provide feedback on the logistic "friendliness" of the countries in which they operate and those with which they trade.

Egypt ranks 67th in the world with an LPI of 2.8, a figure that showed an improvement on the 2007 performance (LPI 2.4, 97th in the world). Egypt's LPI trend also showed a peak of 3.2 in 2016 (49th) before falling to 2.8 in 2018, which makes it the 67th country in the world and the 9th in the MENA area.

Egypt's LPI Rank and Score (trend 2007-2018)

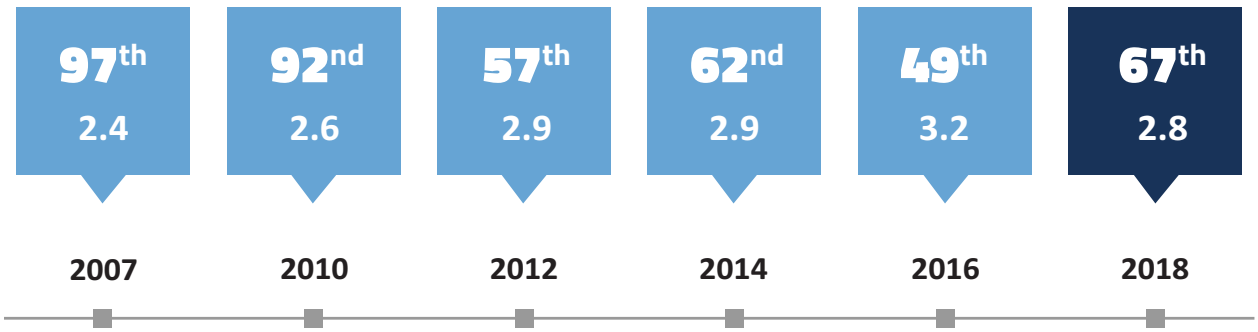


Figure 19 - Source: SRM on World Bank data

The following MENA countries showed better performances in terms of LPI, with scores higher than 3.0: the UAE, Qatar, Oman and Turkey.

Egypt's LPI compared with other MENA countries

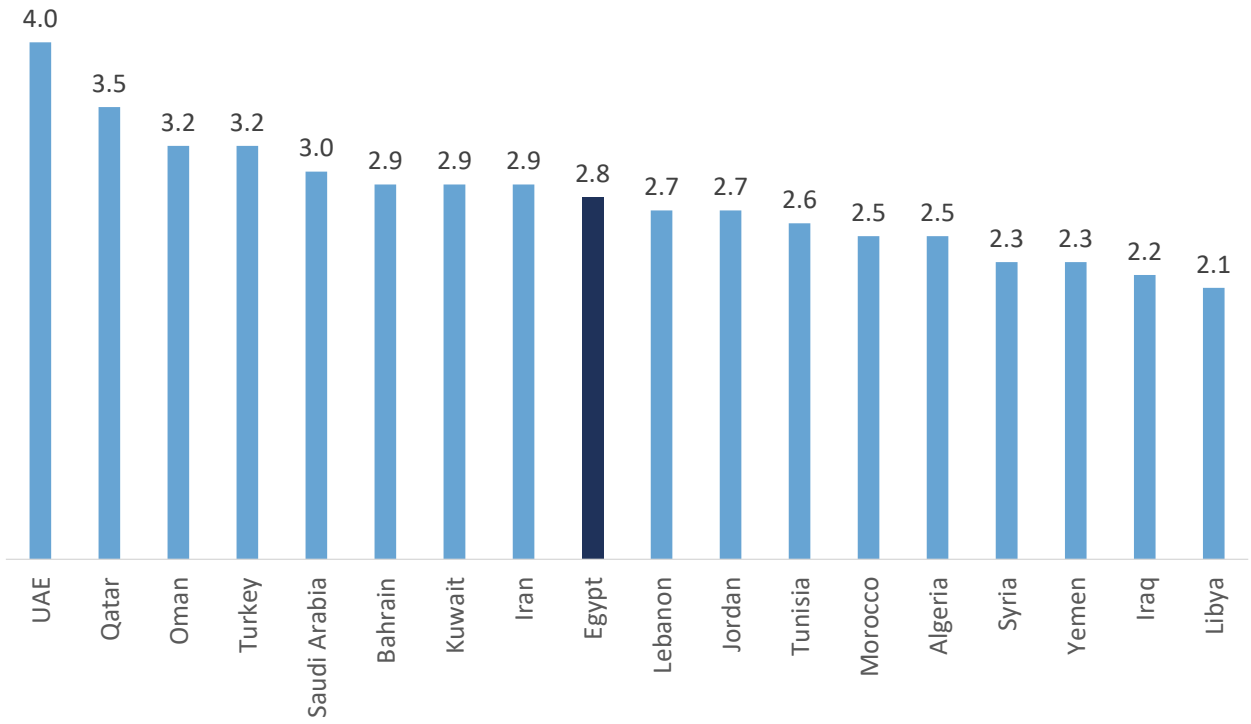


Figure 20 - Source: SRM on World Bank data

In the World Economic Forum's Global Competitiveness Report, Egypt ranks 93rd out of 141 countries in 2019[4] (+1 from 94th in 2018). If we take a closer look at some of the 12 pillars of the Global Competitiveness Index[5], Egypt's ranking is 52nd in terms of infrastructure and 44th in transport infrastructure. Road and shipping connectivity improved and as a consequence also efficiency in train, air transport and seaport services increased.

One of the components of the Global Competitiveness Index is the Quality of Port Infrastructure indicator[6].

[4] Due to the current special period of pandemic, the long-standing Global Competitiveness Index (GCI) rankings have been paused in 2020.

[5] Institutions; Infrastructure; ICT adoption; Macroeconomic stability; Health; Skills; Product market; Labour market; Financial system; Market size; Business dynamism and Innovation capability.

[6] It represents an assessment of the quality of port facilities in a given country based on data from the WEF Executive Opinion Survey, a long-running and extensive survey tapping the opinions of over 14,000 business leaders in 144 countries. The score for port infrastrucutre quality is based on only one question. The respondents are asked to rate the port facilities and inland waterways in their country of operation on a scale from 1 (underdeveloped) to 7 (extensive and efficient by international standards). The individual responses are aggregated to produce a country score.

According to this indicator, Egypt's ranking is 38th with a value of 4.8 points. If we consider the data from 2006 to 2019, the average value for Egypt during that period was 4.19 points with a low of 3.49 points in 2007 and a peak of 4.8 points in 2019. Egypt was 6th among MENA countries.

Egypt: Quality of Port Infrastructure

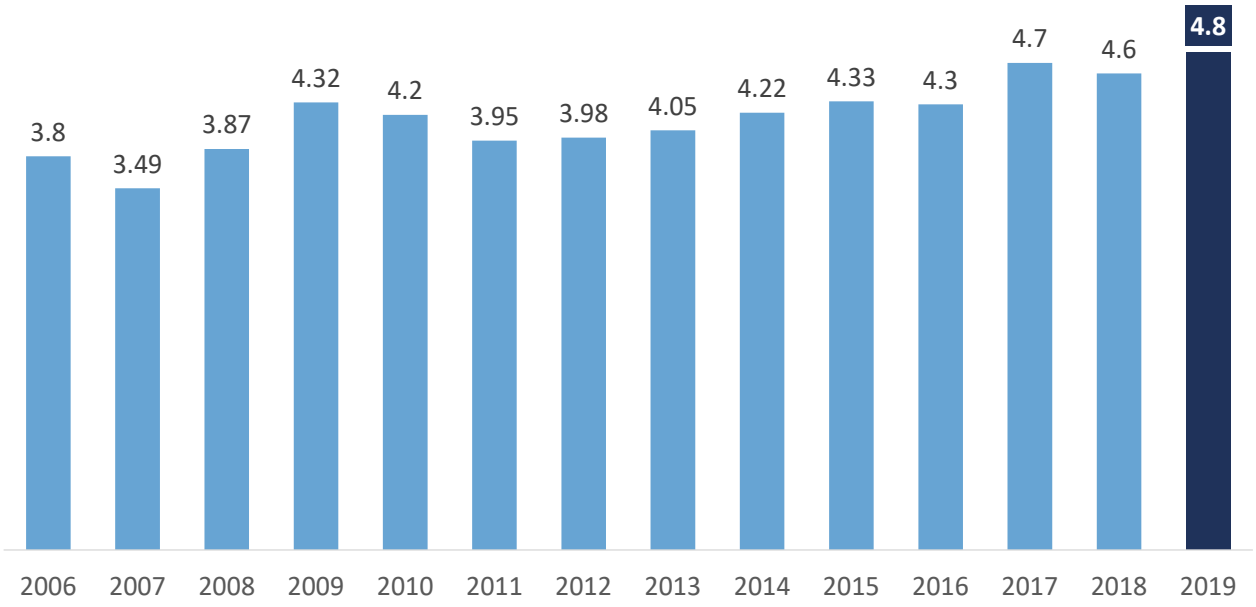


Figure 21 - Source: SRM on World Economic Forum data

Egypt: Quality of Port Infrastructure Index 2019. A comparison with MENA Countries

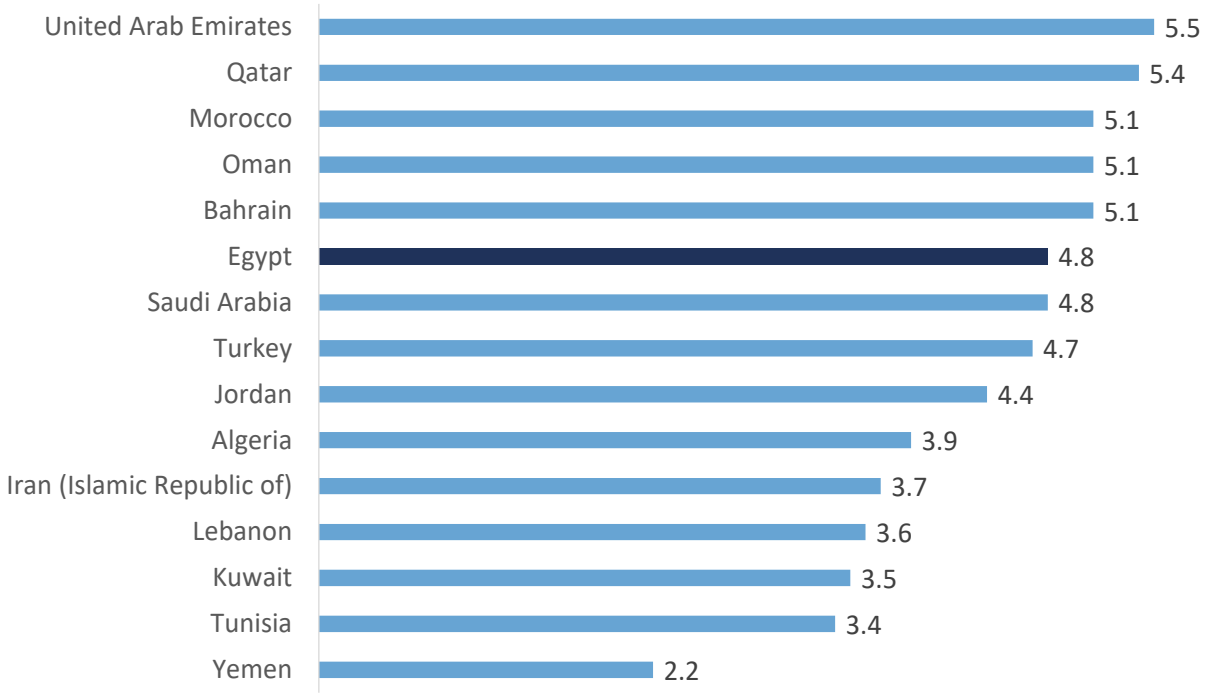


Figure 22 - Source: SRM on World Economic Forum data

Liner Shipping Connectivity Index (LSCI): a comparison with other MENA countries

Every country's access to global markets depends largely on transport connectivity, especially with regards to regular shipping services for the import and export of manufactured goods. The position of countries in maritime transport networks matters for trade and development because it impacts trade costs and competitiveness.

UNCTAD's Liner Shipping Connectivity Index (LSCI) indicates a country's position within global liner shipping networks. It is calculated by taking into account five components: number of ship calls, their container carrying capacity, number of companies that provide services, number of services, size of the largest ship. The Index was updated and improved in 2019 to add a component covering the number of countries that can be connected through direct liner shipping services, without the need for transhipment. This component is important because counting on a direct regular shipping connection has empirically been shown to help reduce trade costs and increase trade volumes.

Egypt's LSCI in Q3 2020. A comparison with MENA Countries (ranking in the boxes)

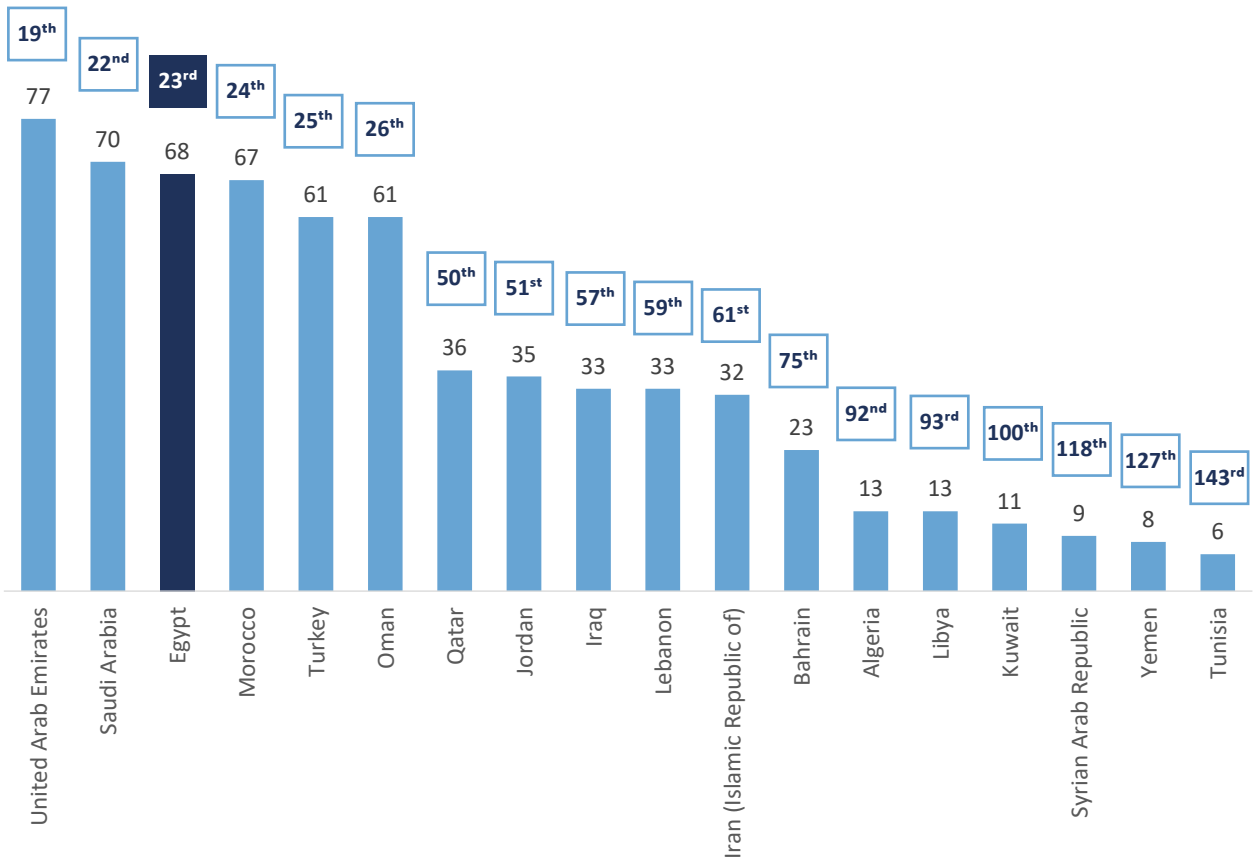


Figure 23 - Source: SRM on UNCTAD data

The LSCI is an indicator of the deployment of the world's container ship fleet and is highly correlated with a country's port traffic. If there is more demand for the shipping of containerized cargo, liner companies will deploy larger and more numerous ships, to achieve a higher level of total fleet deployment. They are also likely to provide more services to better connect the country directly to more countries. Also, as demand goes up, additional companies will enter this market. These components of fleet deployment are the six components from which the liner shipping connectivity index is generated.

According to the LSCI, Egypt has good transport connectivity. In the third quarter of 2020, with an index of 68, Egypt ranked 23rd in the world (China is 1st, followed by Singapore and the Republic of Korea), 3rd among the MENA countries (behind the UAE and Saudi Arabia) and 1st in Africa (before Morocco).

In 2006 Egypt's LSCI was 47, much lower than in 2020 (68). Since 2006, the linear trend shows an increase of 1.3 points every year for Egypt's LSCI. However, Egypt's potential is even more considerable. In fact, some MENA countries (i.e. Morocco and the UAE), thanks to their big investments in ports and related infrastructures, have dramatically improved their transport connectivity and the same may happen for Egypt.

Egypt's LSCI trend 2006-2020

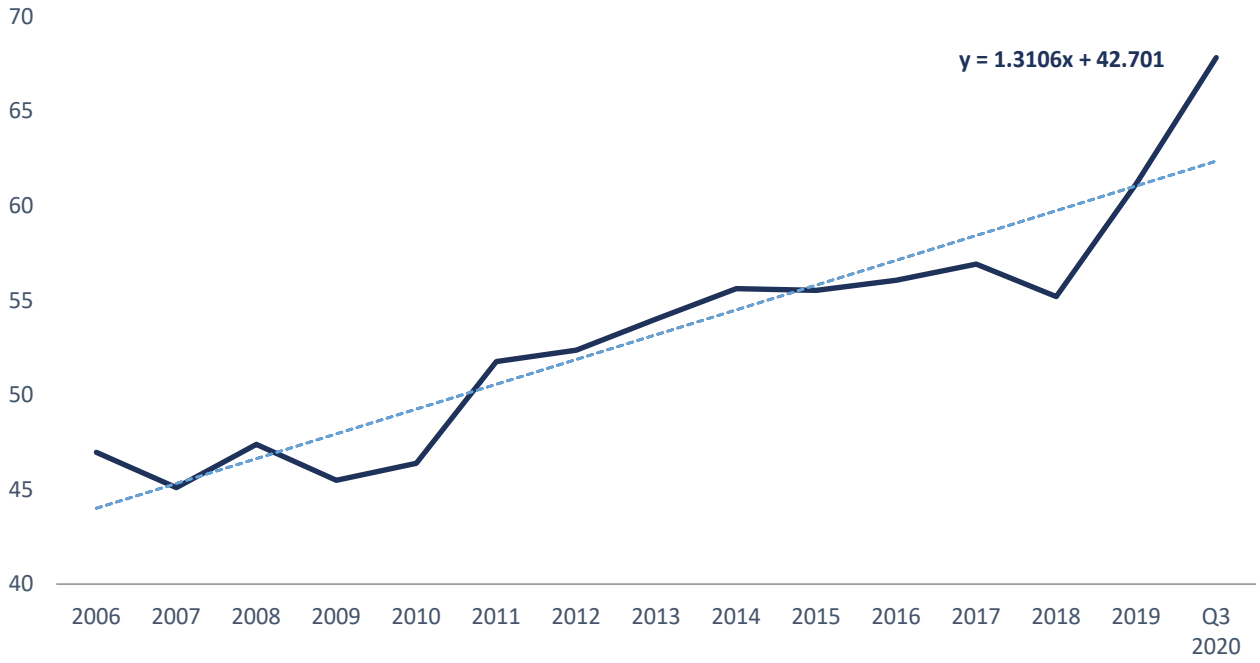


Figure 24 - Source: SRM on UNCTAD data

Egypt has lost positions from 2006 to 2020, but thanks to infrastructural investments, Egypt's LSCI has increased considerably. Further improvement is likely to occur over the next years.

Top 5 MENA Countries dynamic (LSCI value)

	2006		2010		2015		2020	
1st	UAE (19th)	48.5	UAE (18th)	61	UAE (17th)	69	UAE (19th)	77.3
2nd	**Egypt (20th)**	**47**	Morocco (20th)	50.3	Morocco (20th)	58.3	Saudi Arabia (22nd)	70.1
3rd	Saudi Arabia (21st)	41.2	Saudi Arabia (21st)	48.7	**Egypt (22nd)**	**55.5**	**Egypt (23rd)**	**67.8**
4th	Turkey (25th)	34.1	**Egypt (22nd)**	**46.4**	Turkey (25th)	51.3	Morocco (24th)	67.4
5th	Oman (35th)	28.1	Oman (27th)	40.4	Saudi Arabia (26th)	51	Turkey (26th)	61.1

Table 3 - Source: SRM on UNCTAD data

Port Liner Shipping Connectivity Index (PLSCI)

Applying the same methodology as for country-level liner shipping connectivity index, UNCTAD has generated a new liner shipping connectivity index for ports (PLSCI). The port-level liner shipping connectivity index is generated for all container ports of the world that receive regular container shipping services.

Each of the six components of the Port Liner Shipping Connectivity Index is based on a key aspect of connectivity, and these are as follows: a large number of scheduled ship calls allows high frequency of servicing imports and exports; a high deployed capacity allows shippers to trade great volumes of imports and exports; a large number of regular services to and from a port is associated with shipping options to reach different overseas markets; a large number of liner shipping companies that provide services is an indicator of the level of competition in the market; large ship sizes are associated with economies of scale on the sea leg and possibly lower transport costs; a large number of destination ports that can be reached without the need for trans-shipment is an indicator of fast, reliable and direct connections to foreign markets.

Figure 25 shows the liner shipping connectivity index of the leading Egyptian ports.

It is clear that Port Said showed an increase in the index over the period analysed, especially after the Canal expansion and thanks to infrastructural investments.

Port Liner Shipping Connectivity Index. Top 5 Egyptian Ports. Trend 2006-2020 (Peak 2006 = 100 for China)

Figure 25 - Source: SRM on UNCTAD data

Liner shipping bilateral connectivity index

The liner shipping bilateral connectivity index (LSBCI) is a further elaboration of UNCTAD's country-level Liner Shipping Connectivity Index (LSCI) and is based on a proper bilateralization transformation. It shows the level of liner shipping connectivity between two individual countries and can range between 0 and 1, with 1 being the highest. The current version of the LSBCI is calculated by taking into account five components, including the number of transhipments required to trade and the connections available using one transhipment.

Based on the LSBCI (Liner Shipping Bilateral Connectivity Index), which analyzes connectivity between two countries, Egypt is well connected with China and Singapore, and Italy is the first partner. Turkey is another one with which Egypt has the highest LSBCI while among MENA countries, Saudi Arabia and UAE show high figures which demonstrate good levels of connectivity.

Bilateral connectivity index - Top 10 partners in 2020

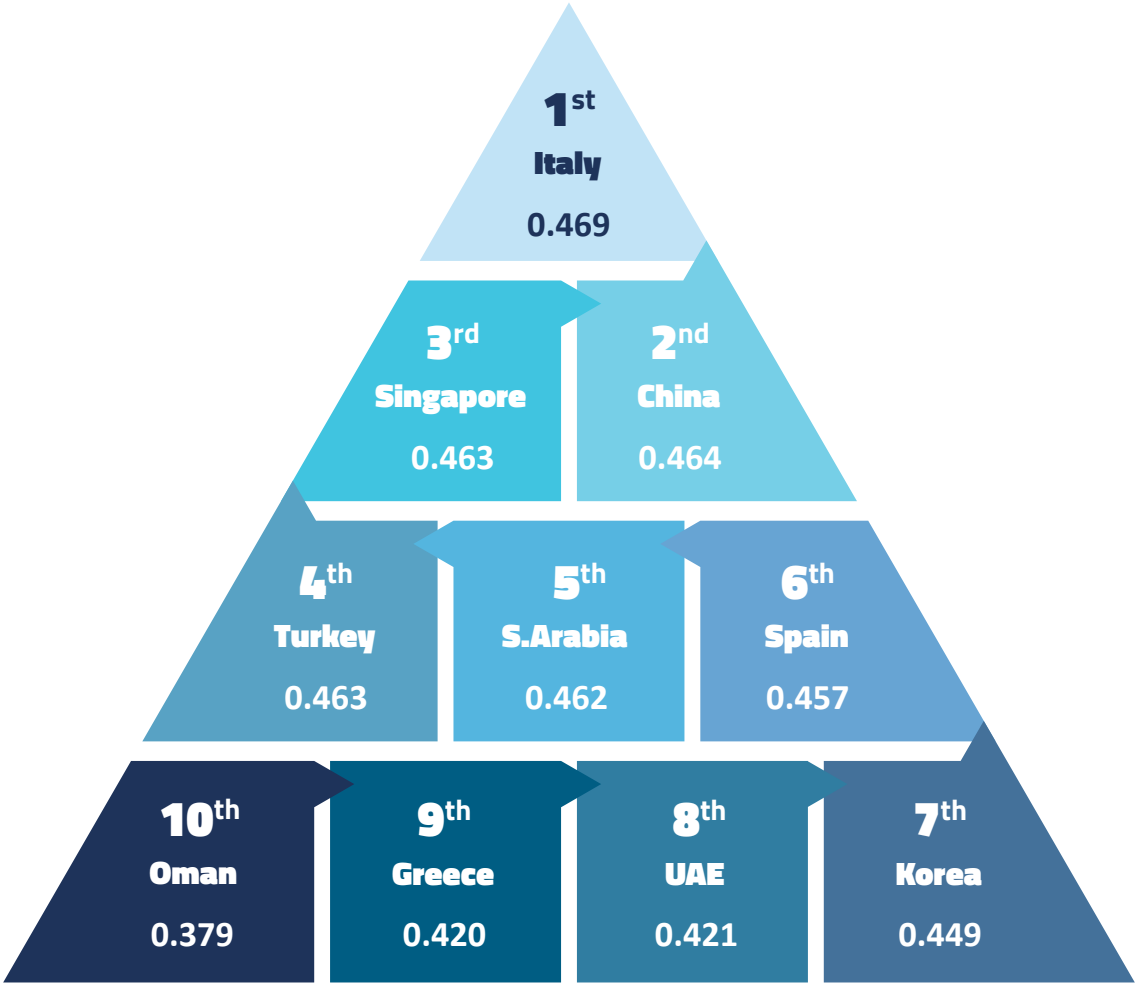


Figure 26 - Source: SRM on UNCTAD data

Over the past decades, Egypt's LSBCI with China, Singapore, Turkey and Italy has remarkably increased.

Top 5 World partners dynamic (LSBCI value)

	2006		2010		2015		2020	
1st	China	0.374	China	0.377	China	0.441	Italy	0.469
2nd	Hong Kong	0.365	Singapore	0.355	Turkey	0.440	China	0.464
3rd	Germany	0.362	Netherlands	0.336	Italy	0.429	Singapore	0.463
4th	United Kingdom	0.358	Germany	0.336	Singapore	0.417	Turkey	0.463
5th	Netherlands	0.353	United Kingdom	0.335	Saudi Arabia	0.414	Saudi Arabia	0.462

Table 4 - Source: SRM on UNCTAD data

Egypt's position in global and MENA rankings in terms of maritime indicators

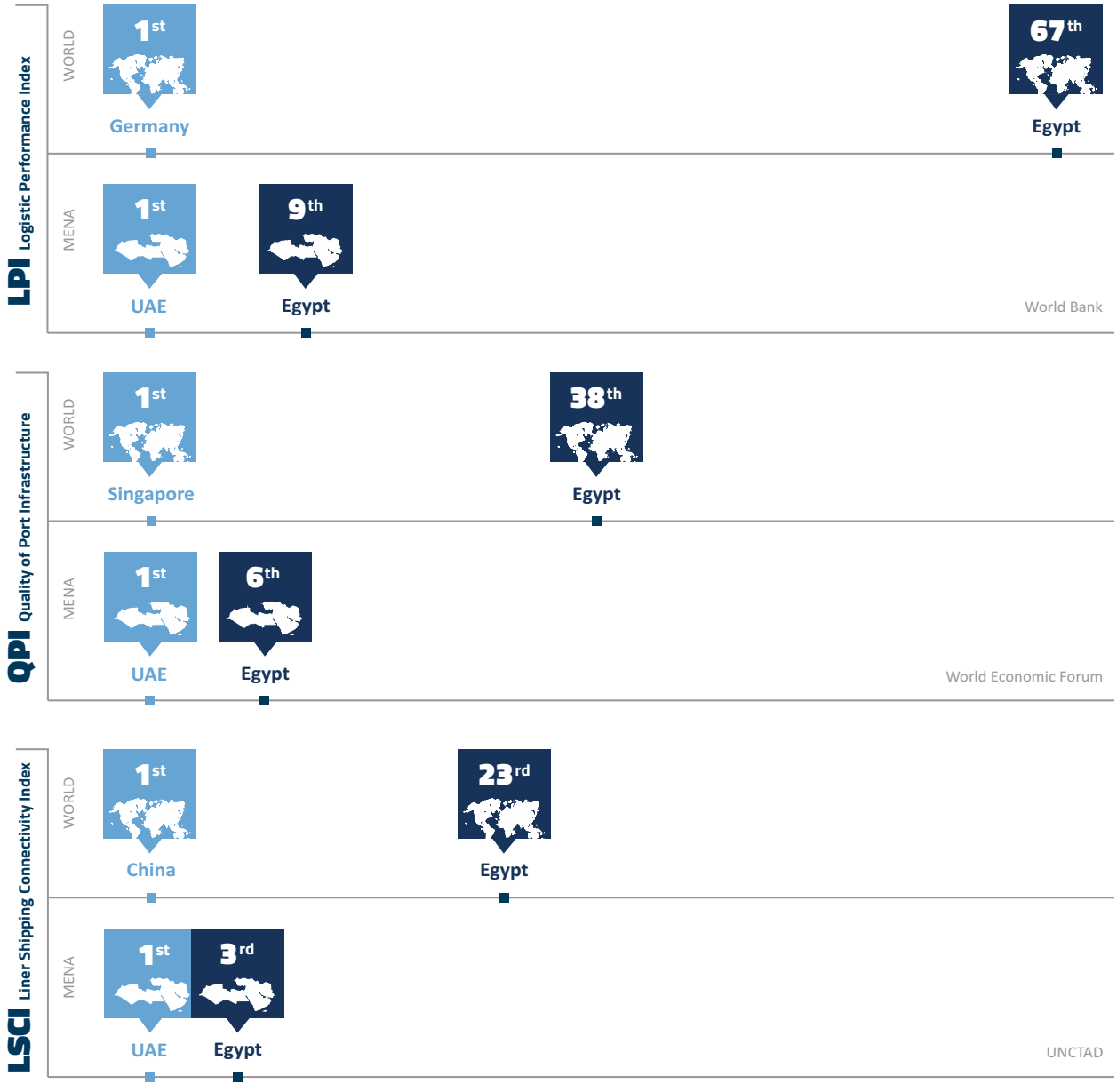


Figure 27 - Source: SRM on World Bank, World Economic Forum, UNCTAD data

4 / Suez Canal Economic Zone

The Suez Canal Economic Zone (**SCZone**) is a world-class free zone and trade hub along the banks of the newly expanded Suez Canal. It is strategically located on the main trade route between Europe and Asia, where almost 10% of global trade passes every year.

Spanning 461 km², almost two-thirds the size of Singapore, it consists of two integrated areas (Industrial Zone + Port), two development areas (for residential communities and tech. industries) and four ports.

Location isn't the only privilege investors enjoy in the SCZone, as they will also have access to hundreds of millions of potential customers in Egypt and its trade partners. Additionally, they will experience a supportive regulatory framework and a business-friendly environment.

The SCZone has implemented a number of mega infrastructure projects to prepare the area for receiving investors, at a cost of almost EGP23.5 billion. These projects include power stations, water supply and treatment plants, natural gas pipelines, road networks, etc.

14 Industrial developers in the SCZone are working on developing an area of 239 km², with a total investment of USD17 billion, which provided nearly 70,000 job opportunities. The zone currently hosts several industrial activities, including the production of steel, textiles, plastics, motorcycles, etc. The zone also targets attracting more than USD20 billion investments over the coming years for 2 mega projects in petrochemicals and locomotives.

The Suez Canal Economic Zone

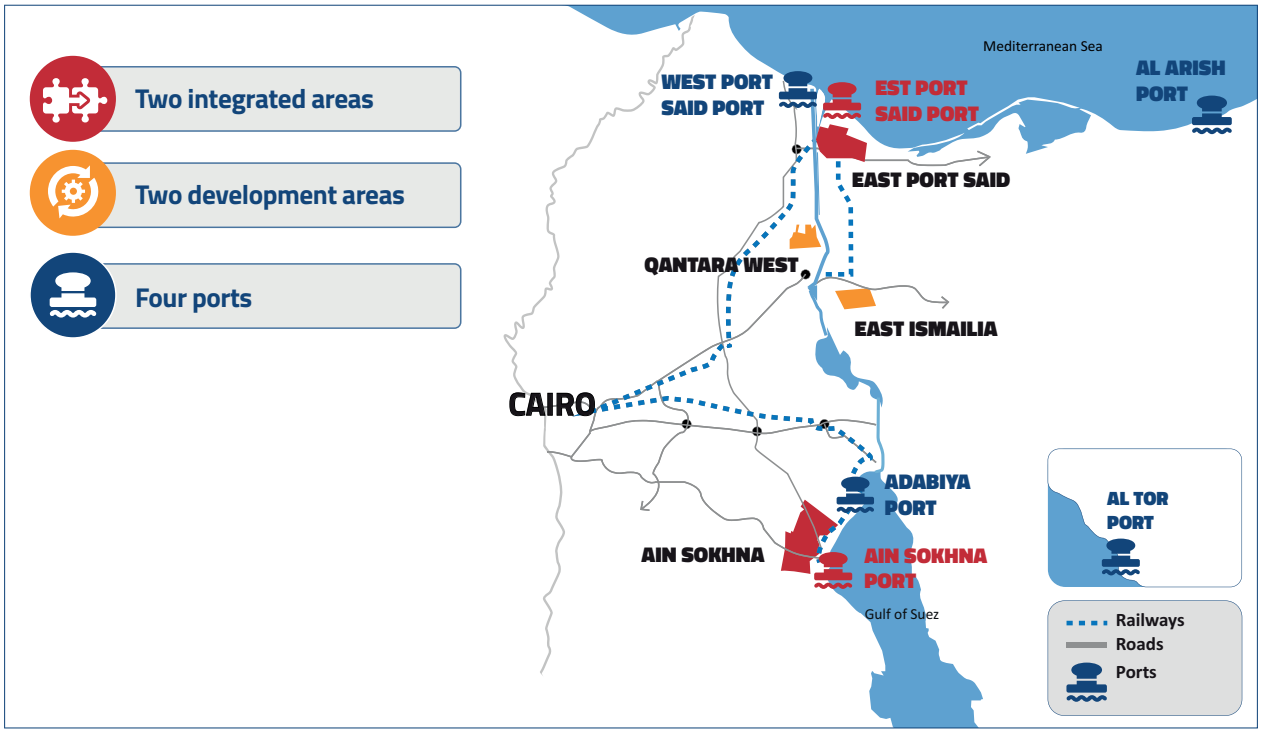


Figure 28 - Source: SRM on SCZone

Overview

The SCZone consists of two integrated areas, two development areas and four ports.

A. Integrated areas

- **Ain Sokhna:** A major industrial and logistics hub at the southern gateway to the Suez Canal, combining port facilities, industrial zones, residential areas, and road and rail linkages to Cairo and the city of Suez. More than 162 km² of Ain Sokhna's total 210 km² are earmarked for manufacturing. Ain Sokhna Port is a major international gateway port for Egypt, the Arabian Gulf and Asia. It is located on the western coast of the Gulf of Suez, 43 km south of the city of Suez, covering an area of 22.3 km² and it has a depth of 18 m.
- **East Port Said:** Currently being developed into a major transshipment center with a multi-modal logistics center, this area occupies 75.5 km² adjacent to the East Port Said Port. With planned and existing urban communities in the immediate vicinity, 40 km² of the area are earmarked for medium and light industries and commercial activities. East Port Said Port is a main international and domestic transshipment hub at the northern entrance of the Suez Canal. It is known for its sheltered deep-water facilities that allow it to accommodate large vessels, rendering it among the world's top 40 busiest ports and growing.

B. Development Areas

- **Qantara West:** A new residential community with light industry and logistics centers easily accessible to the Suez Canal. Located close to farmland 30 km north of Ismailia on the road to Port Said, Qantara West benefits from proximity to the fertile Delta and is ideal for agribusiness. Currently, 13.6 km² are available for development in an area well supplied with water, electricity and sewage. Logistical services are also available, including warehousing and fulfillment services, transportation, distribution and freight forwarding.
- **East Ismailia:** A new center for high-tech industries as well as educational and scientific research institutions. East Ismailia is located 10 km east of the Suez Canal and covers an area of 71 km², with excellent electricity and water supply. It offers ample prospects for light and medium industry, research and development facilities, as well as commercial ventures and services.

C. Ports

- **West Port Said Port**: A well-established transshipment port on the key global sea route between Europe and South Asia. West Port Said Port occupies 2 km² at the northern entrance of the Gulf of Suez from the Mediterranean Sea.

- **Adabiya Port:** Located in the upper part of the Gulf of Suez on the Red Sea, Adabiya Port has the potential to be a gateway port for large volumes of dry bulks. According to the master plan, the suggested development targets are dry bulk, liquid bulk, general cargo and container terminals.
- **Al Tor Port:** A strategic port for South Sinai, occupying three hectares on the eastern bank of the Gulf of Suez, south of Abu Zenima. The majority of exports from Al Tor Port are minerals and dry bulks. This commercial port includes terminals for dry bulk cargo, general cargo and containers as well as fishing boats and a marina.
- **Al Arish Port:** Located on the shore of the eastern Mediterranean Sea with docks stretched over 40 Km. Active as a cargo, fishery and tourist port, Al Arish Port plays a crucial role as an industrial and commercial port for North Sinai and Gaza.

Why To Invest In The SCZone?

Penitential investors will benefit from a number of privileges the SZCone offers:

- **A Unique Geographical Position**: Strategically located on the main trade route between Europe and Asia, where almost 10% of global trade passes every year.
- **Access To Large Markets:** Multiple port facilities and preferential trade agreements with major trade blocs ensure access to 1.8 billion consumers in Europe, Asia, the Middle East and Africa[7]. The Egyptian domestic market of almost 100 million people is also within easy reach.
- **Skilled & Affordable Labor:** Egypt has the largest labor pool in the region and is a net exporter of educated skilled labor. The workforce includes experienced accountants, lawyers, ICT specialists, engineers, technicians and designers, all available to work for SCZone companies at competitive wages.
- **Business Friendly Process:** The SCZone board of directors has designed a business-friendly process for investors to quickly register and receive licenses, as well as obtain permits related to land, building and labor (One Stop Shop Policy / 48 Hours to incorporate your company).
- **Infrastructure and Logistics:** State-of-the-art energy, water, waste management, telecommunication, and transport facilities ensure the smooth functioning of the SCZone. Excellent roads, railways and six strategically-located ports are placing SCZone companies ahead of the competition.

[7] Egypt has signed 16 preferential trade agreements with major economic blocs worldwide, covering almost 107 countries. Egypt's 5 main trade agreements are with: **European Union (EU):** Egypt-EU Association Agreement, **Arab Countries:** Pan Arab Free Trade Area (PAFTA), **Latin America:** Mercosur, **United States and Israel:** Qualified Industrial Zones (QIZ), and **Africa:** African Continental Free Trade Area (AfCFTA). Egypt is also in talks with the Eurasian Economic Union (EAEU) to establish a free trade zone. EAEU includes Russia, elarus, Kazakhstan, Armenia and Kyrgyzstan.

- **Supportive Regulatory Framework:** Companies can be 100% foreign owned / Machines, raw materials and spare parts necessary for the activities in the zone may be imported without permit and are exempt from customs tax, sales tax and all other taxes and duties / No restrictions on transferring profits to parent companies / Discount for Corporate Tax equivalent to 50% of the project investment costs for 7 years from beginning of operating the project.

Infrastructure Projects

The SCZone has implemented a number of mega infrastructure projects to prepare the area for receiving investors at a cost of almost EGP23.5 billion, as follows:

A. General Projects

List of Implemented Infrastructure Projects in the SCZone

Type	Description		Investment Cost
Power	**7** Power Sub-Stations	2,480 MVA	EGP3.5 BN
	13 Power Distributors	280 MVA	
Water Supply	**2** Sea Water Desalination Plants	250 Km³/day (1st phase)	EGP4.8 BN
	4 Water Lift Plants & Storage	115 Km³/day	
Water Treatment	**2** Treatment Plants + Pipelines	150,000 M³/day	EGP2.2 BN
	6 Sewage Treatment Compact Unit	7,000 M³/day	
Communication	Units and Fiber Cables	21,000 Wide Band Subscriber	EGP29 MN
Natural Gas	**3** Pressure Reduction Units + Pipeline Net.	10,000 M³/Hour	EGP0.5 BN
New Roads	64 km (East Port Said)	-	EGP4.2 BN
	32 km (West Qantara)	-	EGP455 MN
Soil Improvement	Industrial zone in East Port Said	17 km² (1st stage)	EGP7.8 BN

Table 5 - Source: SCZone

B. Mega Tunnels

- **Port Said Tunnels** (3rd of July Tunnels):
  - Inauguration: 2019
  - Length: 4 Km per tunnel
  - Capacity: 2000 vehicles/Hour
  - Passing Duration: 10-20 Minutes instead of days using ferries
  - Two car tunnels, passing under the Suez Canal, one of which is for those arriving from Port Said and heading to Sinai and the other is for those who are coming from the opposite direction. The aim is to connect Sinai and the east of the canal to the valley and the Delta.

- **Ismailia Tunnels Project** (Tahya Misr Tunnels):
  - Inauguration: 2019
  - Length: 5.8 Km per tunnel
  - Investment Cost: EGP12 BN
  - Passing Duration: 15 Minutes instead of days using ferries
  - Two car tunnels, passing under the Suez Canal. The tunnels aim at linking Sinai to the Nile Valley.
- **Ahmed Hamdy Tunnel 2**
  - Inauguration: 2020
  - Length: 4.3 Km
  - A two-way tunnel, which is the fifth new tunnel passing under the Suez Canal, connecting Sinai with Suez.

Ports' Development

- **East Port Said Port:**
  - Establishing 5 km of new berths at a cost of EGP6.8 billion to increase the length of the port's berths from 2.4 km in 2014 to 7.4 km in 2019.
  - Inaugurating the port's side channel, with a length of 9.2 km and a depth of 18.5 m, to reduce the waiting time for ships from 13.5 hours to 4.6 hours (Investment cost was USD37 million).
  - The SCZone signed in 2020 a USD150 million contract with a consortium led by Japan's Toyota Tsusho to Build, Operate, and Transfer (BOT) a Roll-On Roll-Off (RORO) vehicle terminal at East Port Said. The consortium, which also includes France's Bolloré Transport & Logistics and Nippon Yusen Kaisha (NYK), will develop and run a 270 km² terminal and 600 m platform for the import, export, and transshipment of around 800,000 vehicles.
- **Ain Sokhna Port:** Expanding the third basin and construction of a liquid bulk jetty at a cost of EGP436 million. In addition, establishing the port's second basin and a second container terminal, with total investments of about EGP10 billion.
- **West Port Said Port:** Starting to raise the efficiency of 670 m of the port and deepen it, at a cost of EGP1.4 billion.
- **Adabiya Port:** Completing 90% of a dry bulk terminal in the port, with BOT system, at a cost of EGP260 million. The efficiency of the port was also developed at a cost of EGP250 million (85% completed).
- **Al Arish Port:** Working on the establishment of a 250 m berth and a breakwater with a total length of 1,250 m.

- **Al Tor Port:** Raising the efficiency of the port's constructions by 80%, at a cost of EGP29 million.

Key Developers & Projects

14 Industrial developers in the SCZone are working on developing an area of 239 km², with a total investment of USD17 billion, which provided nearly 70,000 job opportunities. Prominent developers include:

Egypt-Teda SCzone Development Co.	**Main Development Company for Economic Zone**
DP World	**Egyptian Chinese J.V. Co. for Investments**
El Sewedy Industrial Development	**East Port Said**
Gateway Industrial Part	**OIC Ein Sokhna**
Oriental for Industrial Projects	**Sokhna Refinery & Petrochemicals Co.**
Eldorado Industrial Park	**Suez Industrial Development Co. (SIDC)**

Highlights

Among the most significant developments in the economic zone are the following:

Egypt-Teda SCzone Development Co.

- **Location**: Ain-Sokhna Industrial Zone
- **Area:** 1st phase: 1.34 km² (completed the infrastructure and road network works in 2017 with total investments of USD1 billion), 2nd Phase includes a 6 km² area (Under development)
- TEDA City includes Chinese plants producing textiles, plastics, motorcycles, recycling, …

Suez Industrial Development Co. (SIDC)

- **Location:** Ain Sokhna Industrial Zone
- **Area:** 8.75 million m²
- **Investments:** EGP40 billion
- **Number of attracted investors:** 72
- **Total area sold:** 1.56 million m²

List of Industrial Projects in the SCZone

Company	Purpose	Investments	Status	Notes
Egyptian Steel	Producing steel Rebars and Billets	EGP5.5 BN (USD351 MN)	Operating	One of the biggest plants in the Middle East with an annual capacity of 530,000 tons steel Rebars and 830,000 tons Billets
Dayun Motorcycle	Producing motorcycles, three-wheeled electric bicycles, light, medium and heavy trucks	USD30 MN	Operating	The company has started operation of the motorcycle factory mid-2019 and construction work is being completed in administration, service and accommodation buildings (TEDA City)
Egypt Leichu for Textile Industry Co.	Textile	USD30 MN	Operating	The company has started the operation of the textile dyeing and printing factory in 2019 and is expected to finalize the construction of the second phase by the end of 2020 (TEDA City)
Gold time for plastic company	Producing, processing and export of polyester fibers and storing their raw materials	USD15 MN	Under Development	The Company develops 20,000 m² (TEDA City)
Tiancheng for Renewable resources	Recycling / Renewable resources / Plastic products	USD18 MN	Under Development	In 2019, the Company has started developing of 50,000 m² to establish the project consisting of a factory for plastic industry in addition to administrative and service buildings (TEDA City)
Taishan Gypsum Co., Ltd.	Producing gypsum board and gypsum powder	USD100 MN	Contracted*	TEDA City
Fanyang Textile Company	Producing non-woven products	USD36 MN	Contracted	TEDA City
Patron Egypt Company	Producing PVB films, plastic products and granules	USD55 MN	Contracted	TEDA City
Benya Capital	Producing Fiber Optics	EGP1 BN	Contracted	The Plant will be built over 50,000 m² with an annual production capacity of 4 million km of cables
Arab Organization for Industrialization	Stainless Steel / Car Tires	USD156 MN	Contracted	-
Mercedes Benz	Cars Assembly	NA	Under Negotiations	In 2019, Mecredes Benz declared resuming assembling passenger cars in Egypt in addition to launching a logistics hub in the SCZone, which will be the first of its kind in the entire Middle East
National Egyptian Company for Railroad Industries (NERIC)	Locomotives	Government targets USD10 BN investments over the coming years	Upcoming	In November 2020, the SCZone and the Sovereign Fund of Egypt signed an agreement to establish (NERIC). The agreement was signed with several private sector companies
Red Sea National Refining and Petrochemicals Company	Petrochemical Products	USD7.5 BN	Upcoming	A 3.56 million m² petrochemical complex in the Ain Sokhna industrial zone as part of the country's efforts to turn into a regional energy hub. It aims to produce value-added petroleum products, including polyethylene, polypropylene, polyester, bunker fuel and other petroleum and chemical products.

*Contracted indicates unavailable information on the level of development yet confirmed contracting.

Table 6 - Source: SCZone

Russian Industrial Zone

- The Russian industrial zone is being built in East Port Said for logistics industries.
- The Project's total area is 5.25 km² of which 2.8 km² are industrial buildings and projects built on this area, so that the rest of the area will be used to establish residential, commercial and recreational complexes for the workers in the region.
- Total investments are estimated at USD6.9 billion.
- The zone is expected to generate 35,000 direct and indirect job opportunities.

Training Centers

- **Egyptian-German Academy:** First training center in the zone, established by an alliance of Siemens company, German Government and the SCZone with total investments of EUR22 million. The academy aims at offering advanced technical training to more than 5,500 Egyptian engineers and technicians.
- **Chinese Center:** The center's total investments amount to RMB45 million and it aims at qualifying workers in the zone according to international standards.

Revenues

During the period between July 2016 and June 2020, the Suez Canal Economic Authority has achieved almost EGP11.4 billion revenues from the following sources:

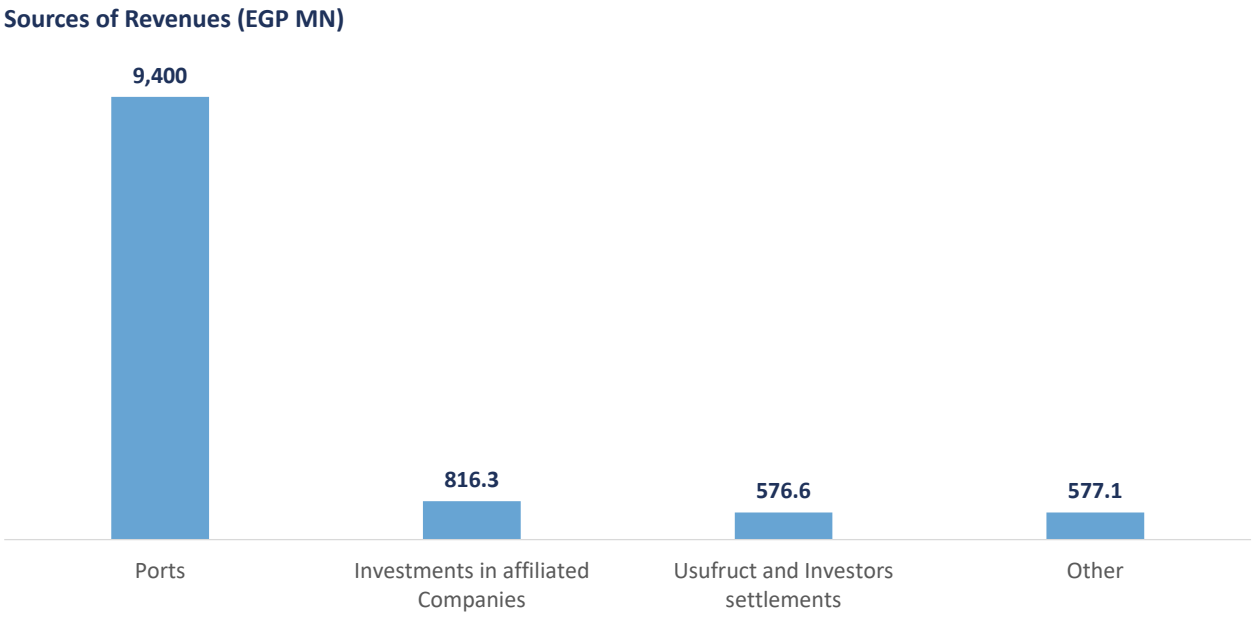


Figure 29 - Source: SRM on SCZone

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