Short Communication

Maritime Transport Between Conflict and Cooperation: The Implications of Logistic Rerouting in the Mediterranean Basin - The Case of the Port of Trieste

Giuseppe Borruso[1]

1. Department of Economics, Business, Mathematics and Statistics, University of Trieste, Italy

The contribution focuses on the complex dynamics of maritime transport in the Mediterranean basin, with particular attention to local and regional implications arising from global crisis contexts. In particular, it will focus on the impact of geopolitical tensions in the Middle East and the resulting bottlenecks on logistics chains, such as the Houthi conflict and the blockade of the Bab el-Mandeb chokepoint, on the strategic choices of ship owners and the reconfiguration of maritime routes.

The events of the last few years have highlighted the fragility of globalised logistics chains and the strategic importance of certain chokepoints. Tensions in the Middle East have triggered a series of chain reactions in the maritime sector, with some shipowners opting for alternative solutions, such as circumnavigating Africa, to avoid the risks associated with transit through the Bab el-Mandeb Strait. However, other actors have continued to use traditional routes, carefully weighing the costs and benefits of each option.

The analysis will focus on the case of the Port of Trieste, a strategic logistics node in the Mediterranean, to understand how the new dynamics of maritime transport are affecting port activities and trade relations with countries in the basin. The opportunities and challenges for the port of Trieste in this context will be examined, with particular reference to the potential effects of reshoring and nearshoring on the region's production and logistics activities[1].

Through a multi-scalar approach, which integrates elements of geopolitics, maritime economics and logistics, the study aims to provide an original contribution to the understanding of the transformations taking place in the maritime transport sector and their implications for local and regional economies, including the Weberian logic of localisation, in the light of the transformations taking place in the circular economy. In particular, an attempt will be made to answer the following questions:

– How have the geopolitical crises in the Middle East influenced the strategic choices of shipowners operating in the Mediterranean?

– What are the main consequences of the reconfiguration of maritime routes for ports in the Mediterranean basin, and for the Port of Trieste in particular?

– What are the opportunities and challenges related to reshoring and nearshoring for local and regional

doi.org/10.32388/THADJY

economies?

– What are the policies and interventions that can be adopted at local, national and international level to strengthen the resilience of logistics chains and promote the sustainable development of maritime transport?

Background

The contribution is correctly placed within the framework of the session 'Hybridity as a compromise. The combination of exogenous and endogenous factors in the identity of a space'. Such a collocation is appropriate, since the ongoing changes linked to the crisis of the two chokepoints - Bab-el-Mandeb and its inevitable repercussions on Suez and the Mediterranean, have direct and indirect effects on Mediterranean (in general) and Upper Adriatic ports and the Port of Trieste (in particular), and cause-effect relationships are certainly not easy to highlight.

Hybridisation and ports

Ports today are hybrid spaces from various points of view, some of which are relevant to the present discussion (and addressed in a recent contribution[1]). Today we are faced with: Hybrid port-city relations (both in central and peripheral areas); 2. Hybrid relations between Transport and logistics/industry functions; 3. Hybrid port functions - from single-function terminals to mixed or 'multipurpose' terminals; 4. Hybridization of port roles, between hub and gateway.

Especially the last two types of hybrid relations become relevant for the purpose of this contribution. After the specialisation phase, mainly related to the unification of cargo (containers), port traffic is developing in different directions. From the single-function terminals (e.g. container terminals) requiring large quay spaces, dedicated equipment (LO-LO, Lift On - Lift Off, cranes, reach stackers, etc.) and deep sea bottoms, to the deepest and most complex ones.) and deep water depths, there is a shift to multipurpose terminals, capable of handling unitised cargo (containers but also semitrailers and swap bodies), RO-RO (Roll On - Roll Off) and LO-LO loading systems, with greater flexibility on both the ship and quayside (mobile cranes can be used, and a ramp is required for 'rolling' cargo units). In addition, the traditional separation of ports between gateway ports and 'pure' hubs is being lost, with most gateway ports now also acting as hubs, thanks also to the development of pendulum routes.

These considerations on hybridisation, understood both in relation to the local context of ports and their local and territorial spatial configuration, and in relation to the functions exercised, link up maritime range and hinterland dynamics, i.e., following a transcale approach, observing the medium- and long-distance dynamics of which ports constitute inevitable and necessary nodes.

doi.org/10.32388/THADJY

Maritime Routing and the Implications for the Northern Adriatic - The Port of Trieste

The merchant traffic of the port of Trieste is largely related to liquid bulk, i.e. oil products, serving the Transalpine Oil Pipeline (SIOT), instrumental in the supply of hydrocarbons to Southern Germany (Bavaria above all). The latter figure appears to have increased in absolute terms over the past year, and accounts for most of the tonnage handled. On the container side, Trieste stands at around 800,000 TEU, approaching one million TEU equivalent per year, considering, in this case, a valuation, in TEUs, of other partially unitized cargo, such as semi-trailers and swap bodies.

With reference to 'short sea' traffic, this figure is accentuated by the growing importance of RO-RO in the handling of the Julian port. Favoured by the free point regime (RO-RO traffic in Trieste is not subject to quotas as in other national ports), RO-RO is the protagonist of the, by now historical, motorway of the sea between Turkey and the Upper Adriatic, today managed by the Danish operator DFDS (Det Forenede Dampskibs-Selskab - The United Steamship Company). The latter was started during the war years in the former Yugoslavia to shift road haulage initially to safer modes, then consolidated to represent a case of 'good practice' in logistics supply chain management and optimisation of the road-sea-rail-road chain between Turkey (and its target markets) and Central and Northern Europe. In the most recent period, the RO-RO has seen an expansion of routes and operators, both on the Turkish route and on new routes: in this case, Egypt and Morocco. This also through the entry of new operators, such as Grimaldi, into the Adriatic market (an interesting sign of expansion from the latter operator's traditional market, i.e. the Tyrrhenian Sea and the West Med), also with hybrid and low environmental impact vessels.

With reference to the 'deep sea' trades, certainly the crisis of the Bab-El-Mandeb and Suez chokepoints has conditioned these trades, with an important reduction occurring during 2023 and part of 2024. Indeed, shipowners initially had to reconfigure traditional 'pendulum' services to/from the Far East, and this led to inevitable delays in deliveries due to longer voyage times via Cape of Good Hope and Gibraltar than via Bab-El-Mandeb - Suez. The important element to be considered, however, is twofold and can be found on the one hand in the decision of shipowners, so far, in maintaining services to and from the Far East, in fact recognising a consolidation of the route and 'trust' in the North Adriatic as a 'gateway' to European markets. On the other hand, an element of interest is the different strategy adopted by shipowners. While players such as MSC and Maersk have preferred to reconfigure the pendulum service via the Cape of Good Hope -and Gibraltar (in fact not calling at any port between the Indian Ocean and the North Adriatic!), CMA-CGM continues to maintain a service via Bab-El-Mandeb and Suez, in fact preferring the shorter transport times (and associated costs) compared to the other solution.

Economic and logistical considerations

The positioning of the Port of Trieste in relation to the current dynamics of economic performance and logistical connectivity should be reconsidered within the above-mentioned overview: from a traffic point of view, the

 doi.org/10.32388/THADJY

traditional opposition between the Northern Range and the Mediterranean, regarding the ‘magnet’ effect of the ports of the European core, seems to be diminishing. The success of the Northern Range ports, aided by the traditional network of rivers and navigable canals that have for decades extended their natural hinterlands as far as Central Europe, is being challenged by the reduction in the water flow of the same navigable network, which threatens to make the service discontinuous. On the other hand, the growth of the economies of Central and Eastern Europe is gradually shifting the economic centre of gravity eastwards, while, on the southern front, Turkey and its neighbouring countries are characterised by a growing economic dynamism, thus important traffic generators - as well as by-passes for areas subject to economic sanctions, such as Russia and Iran. Similarly, the countries on the African coast (e.g. Morocco, Egypt) face important growth dynamics, which in turn are transformed into transport demand.

These elements contribute to making the Mediterranean, North Tyrrhenian and North Adriatic ports more attractive, with the latter closer to the new outlet markets. In the reconfiguration of the European logistics chain, the presence of international and multinational operators operating in the different port realities is significant. By way of example, HHLA (Hamburger Hafen und Logistik AG, an important terminal operator of the Port of Hamburg, controlled 50.1% by the City of Hamburg and 49.9% by the MSC group) currently manages the new logistics platform (Multipurpose Terminal) of Trieste through its terminal operator, the company HHLA PLT Italy; furthermore, Duisport, an inland port linked to the Port of Hamburg, is present with 15% of the shares of Interporto Trieste, a terminal behind the Port of Trieste and an important hub for road and rail transport. Added to this is the characteristic of the port of Trieste as a rail port, with more than one third of the gateway traffic to the hinterland moved by rail, a legacy of the network that, since the second half of the 20th century, has connected Trieste with the central European hinterland. These considerations also, in fact, make Trieste partly as an ‘additional pier’ of the Northern Range, rather than in strong competition with the northern ports.

On the maritime side, the motorway of the sea in the Adriatic is articulated in road-sea competition on the route from Turkey to Eastern and Central Europe as well as in sea-sea competition between the different ship owners (DFDS and Grimaldi).

Hybridity as a compromise

As per the session's title, there are numerous combinations of exogenous and endogenous factors in the identity of the space which, in the logic of the relationship between hinterland and foreland, sees the port as a central junction.

In this specific case, in which the chokepoints of access to the Mediterranean and the Port of Trieste are the protagonists, there are numerous interactions, which make it difficult to identify cause and effect relationships.

- How have the geopolitical crises in the Middle East influenced the strategic choices of ship owners operating in the Mediterranean?

 doi.org/10.32388/THADJY

The shipowners active in services to the Port of Trieste have responded differently, some maintaining the routes via Suez, others preferring the circumnavigation of Africa. In any case, so far, services to Trieste have not been changed, rather some intermediate stages have been missed (e.g. Saudi ports such as Jeddah, cut off in the circumnavigation of Africa). It is possible that the Houthi crisis is seen as non-structural, and therefore the expectation is for a reopening of trade via Bab-El-Mandeb and Suez. Operators are likely to follow an inertia in maintaining established relationships with terminals and back-port logistics networks, rather than choosing other destinations.

- What are the main consequences of the reconfiguration of maritime routes for ports in the Mediterranean basin, and for the Port of Trieste in particular?

Apart from a drop in Mediterranean traffic as a result of the Houthi crisis, the port of Trieste seems to be experiencing various reconfigurations in the types and modes of transport, in the face of a general maintenance of traffic volumes (if not a general increase, driven by liquid bulk, and a 'hold' of containers). If containerised traffic suffers more from the increased shipping times and costs, on the other hand, the shorter-haul Mediterranean routes seem to be intensifying, mainly due to a greater dynamism of the countries bordering the Mediterranean (Turkey and the North African coast: Egypt and Morocco in particular) and of Central and Eastern Europe. This shift of traffic in the eastern European and southern Mediterranean area is fuelling more different types of traffic (e.g. Ro-Ro) that are more flexible and require less infrastructure.

- What are the opportunities and challenges related to reshoring and nearshoring for local and regional economies?

The greater dynamism of the countries on the southern and south-eastern shores of the Mediterranean can hypothesise a greater consolidation of nearshoring, with greater exchanges and interdependencies with countries on the European continent. Sectors such as the automotive industry (currently in crisis especially in northern and central Europe, the consequences of which are spreading like wildfire to much of the European manufacturing sector) have in countries such as Turkey and Algeria important industrial realities that are increasingly consolidated, both as places of production and as market places. Similarly, textiles and agri-food products have significant growth potential in the area, in fact fuelling trade between the different shores of the Mediterranean.

- What are the policies and interventions that can be adopted at local, national and international level to strengthen the resilience of logistics chains and promote the sustainable development of maritime transport?

From the point of view of logistic chains, the land side can certainly benefit from a strengthening of the railway component compared to the road one, also in the form of incentives and a strengthening of the infrastructure component, aimed both at limiting the effects of climate change (alternative to the network of rivers and navigable canals in Northern and Central Europe, which increasingly suffers from a not always constant water flow) and at reducing emissions and negative externalities compared to road transport. On the maritime side, the environmental component can certainly be addressed by the increasingly widespread use of hybrid vessels (as already in place in the RO-RO sector) and in forms of cold ironing of docks. Resilience, especially in the aftermath of geopolitical events, can be addressed by forms of development of parallel and alternative by-pass corridors on international traffic

 doi.org/10.32388/THADJY

routes. From a policy perspective, fostering developments towards near-shoring of production in the Mediterranean sense can strengthen short-to-medium range connections, limiting the effects of crises related to strategic chokepoints.

Footnotes

[1] In 2024, the Trieste and Monfalcone port system recorded an overall increase in the volume of goods handled, exceeding 63 million tonnes.

Trieste saw a growth of 7.14%, reaching 59,540,505 tonnes, thanks mainly to liquid bulk, which marked an increase of 10.64%. The container sector remained stable compared to 2023, with a slight decrease of 0.93% (841,867 TEUs: however, full containers increased and empty containers decreased), while the Ro-Ro sector suffered a slight decrease of 0.84%, despite a steady increase in the latter part of the year. 11,147 trains moved, a decrease compared to 2023 (-9.94%). Monfalcone, on the other hand, was affected by the crisis in the automotive sector and the geopolitical context, recording a decrease of 6.34% in the volume of goods handled, for a total of 3,586,782 tons.

https://www.themeditelegraph.com/it/transport/ports/2025/01/31/news/2024_porti_trieste_63milioni_tonnellate-14974906/

References

1. ^*Borruso G. "Port-City relationship in the era of hybridization. A development model". J-READING-JOURNAL OF RESEARCH AND DIDACTICS IN GEOGRAPHY. 11(2), 2022, pp. 125-137. http://www.j-reading.org/index.php/geography/article/view/341/295*

Declarations

Funding: No specific funding was received for this work.

Potential competing interests: No potential competing interests to declare.

doi.org/10.32388/THADJY