



COVID-19 and European maritime futures: different pathways to deal with the pandemic

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Abstract

The aftermath of the Covid-19 crisis and the re-development of maritime sectors in the EU will be unprecedented. This article deals with the consequences of COVID-19 for the maritime sectors' cruise tourism, shipping, and fisheries. To give insight into the consequences of the pandemic on the longer term and to discuss these consequences in a systematic way, this article develops four potential maritime futures. These potential maritime futures are based on two key choices, the development of the EU and state-aid to maritime sectors. The first choice concerns a connected and solidary Europe versus a fragmented and differentiated EU. The second choice concerns the development of active maritime industry policies by the EU and Member States versus a neo-liberal free market model. Combining these two choices results in four potential maritime futures: “on board”, “single-handed sailing”, “all hands on deck”, and “to give a wide berth”. These maritime futures differ from each other in (marine) governance structures and processes and the support given to maritime sectors. The maritime futures give insight into the enabling and constraining conditions to deal with the aftermath of the COVID-19 pandemic in specific, and how the maritime futures will affect the sustainable development of maritime sectors in general. For each of the maritime futures, the enabling and constraining conditions to deal with the COVID-19 pandemic are described, and the uncertainties of the future development of maritime sectors in the post COVID-19 period are discussed.

Keywords COVID-19 · Maritime futures · EU · Shipping · Fisheries · Cruise tourism

Introduction

Today, beginning of 2021, Europe is facing the dramatic consequences of a worldwide pandemic caused by SARS-CoV2, or severe acute respiratory syndrome coronavirus 2, shortly COVID-19. Since the end of 2019 and the beginning of 2020, the world and Europe have entered unknown territories. After its outbreak in the city of Wuhan in China (December 2019), the virus spread at the beginning of 2020 over the world. Almost unnoticed, the virus sets foot in Europe (end of February in Mulhouse, France, and Codogno, Italy) and quickly spread over Europe with the beginning of the ski-holidays and carnival festivities end of February 2020. During this first period, European countries were confused and struggled how to deal with the growing number of infections and deaths. Much is still unknown about the virus.

Doctors and scientists do the best they can but are still facing many uncertainties, despite the fact that several vaccines have been developed and vaccinations have been started in all European countries the beginning of 2021. Politicians formulated and implemented measures based on available scientific knowledge varying from social distancing, lock-downs, face-masks, expanding intensive care capacity in hospitals to setting up temporary test stations.

While the EU institutions acted passively, Members States were forced to deal with the pandemic nationally. Not only was the reaction of countries very different but also the extent to which countries were prepared for the pandemic. Greece, Portugal, Norway, and Denmark reacted quickly and postponed or cancelled big events and festivals, closed schools, and borders; Germany and Belgium reacted more slowly, while for example Italy, the Netherlands, and Spain reacted late. The way countries dealt with the pandemic tended to reflect their cultural, social, and political identity (Mak 2020). In general, the pandemic legitimized drastic state interventions in the personal lives of their citizens based on medical scientific insights. Italy, France, and Spain announced a total lockdown. Hungary and Poland used the virus for their political agenda to control

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parliament and the media, while the Netherlands, Denmark, and Sweden emphasized the responsibility of their citizens, resulting in “intelligent lockdowns” in the Netherlands and Denmark and initially (before the second wave in November 2020) no lockdown measures in Sweden. European countries were faced with economic disaster and national governments were willing to invest in firms, jobs, medical supplies, and the cultural sectors (Spring 2020). While Member States tried to revive their economies by various kinds of economic recovery programmes, at the EU level, the willingness to develop an economic recovery fund was a laborious process, which brought national differences to the surface. On the one hand, the so-called Frugal Four (Austria, Denmark, the Netherlands, and Sweden, accompanied by Finland at the July 2020 summit) refused to support the Commissions’ proposal of a €750 billion recovery fund including the €500 billion in grants. France, Germany, and the Southern European countries, such as Italy, Spain, Greece, and Portugal, supported this proposal. According to the Frugal Five, the size of the grants program should be reduced and most preferably grants should be replaced by conditional loans (reforming of the economies and disbursement of any recovery funds).¹ After 4 days and nights of laborious negotiations, the EU leaders agreed at 5.30 am 21 July 2020 to jointly borrow €750 billion to respond to the coronavirus pandemic. The EU’s new recovery fund, to be composed of €390 billion in grants and €360 billion in loans, will be attached to a new €1.074 trillion 7-year budget, the Multiannual Financial Framework (MFF), on which heads of state and government also reached a unanimous agreement—bringing the total financial package to €1.82 trillion. Autumn 2020, the world and most European countries are confronted with the second corona wave. New lockdowns and health, social, and economic measures are taken to get the spreading of infections under control, and to deal with the social and economic consequences of this second wave. Pharmaceutical firms like Pfizer and Moderna and the University of Oxford were front runners in developing a vaccine. Recently, the European Medicines Agency (EMA) authorized the Comirnaty vaccine (22/12/2020), the Moderna vaccine (06/01/2021), and the Oxford/AstraZeneca vaccine (29/01/2021) (www.ema.europa.eu).

The aftermath of the COVID-19 crisis, i.e. the re-development of economies worldwide and the re-organizing of public life, will be unprecedented and very context-specific at the same time. This article will give insight into the different ways public authorities and private actors/sectors in the maritime domain in Europe are affected by the COVID-19

pandemic, and their ability to deal with the economic, political, and social consequences of the COVID-19 crisis. To do this, this article starts in the “[The consequences of COVID-19 for maritime sectors](#)” section with a general overview of the consequences of COVID-19 for the maritime sectors cruise tourism, shipping, and fisheries (“[How are maritime sectors affected by the COVID-19 pandemic?](#)” section). These sectors are selected because they are impacted most by the pandemic and because their mobile and dynamic character requires different levels of governance to be involved. At the same time, in the midst of the COVID-19 pandemic, the EU has presented its ambitious Green Deal agenda. The implementation of the Green Deal, which is discussed in the “[The European Green Deal](#)” section, will have consequences for the development of maritime sectors. To give insight into the consequences of the COVID-19 pandemic in the longer term and to discuss these consequences in a systematic way, the “[European maritime futures](#)” section presents four potential maritime futures. These scenarios are constructed based on two key choices, one related to the development of Europe as a continent (and its geopolitical role and position) and one related to state-aid to industries, more specifically maritime sectors. The first choice concerns an integrated EU based on solidarity and connectedness versus a fragmented and differentiated EU. The second choice concerns the development of active and interventionist industrial policies by the Member States versus a neo-liberal, laissez-faire free market model. Combining these two choices results in four maritime futures differing from each other in marine governance structures and processes, the support of maritime sectors, the hydro-political² role of the EU, and the development of maritime policies. These different maritime futures also define the boundaries of how public authorities and maritime sectors are able and capable of dealing with the aftermath of the COVID-19 crisis for the Blue economy, the maritime domain as a whole, and more specific maritime sectors. The “[Enabling and constraining conditions of the maritime futures to deal with the COVID-19 pandemic](#)” section discusses the implications of the respective maritime futures in dealing with COVID-19, their sustainable potential and contribution to the Blue-Green Deal, and how they will affect the sustainable development of maritime sectors. The “[Discussion](#)” section presents a discussion about the capability of maritime sectors to deal with the aftermath of COVID-19, in light of the different maritime futures. In the “[Conclusions](#)” section, conclusions are drawn.

¹ On the first day of the Summit, Prime Minister Rutte of the Netherlands stated; “that the Netherlands still dislikes the entire concept of taking on joint debt to finance recovery grants, but said that if the rest of the bloc favored that approach, it must then agree to tougher governance controls” (...). If a big group of countries really wants grants, then only under “very strict conditions,” PM Rutte said, adding that the overall size of the recovery fund “is also still a discussion.” (Politico.eu).

² Hydro-politics is the study of geopolitics and international relations around transboundary waters (Kraak 2012 in Nagheeb and Warner 2018). It refers to conflicts and negotiations between sovereign states on water allocation and distribution particularly in relation to transboundary rivers (Nagheeb and Warner 2018). Recently, Sheikh (2019) used the concept of hydro-politics as the counterpart of geopolitics. According to him, hydro-politics is not a continuation of geopolitics on the water, but it refers to a new a mentality and norms of a society, which are related to the characteristics of water, and a different form of thinking and doing politics (Sheikh 2019).

The consequences of COVID-19 for maritime sectors

This section discusses the consequences of COVID-19 for the maritime sectors. The “[How are maritime sectors affected by the COVID-19 pandemic?](#)” section describes the consequences of COVID-19 for cruise tourism, shipping, and fisheries. In the “[The European Green Deal](#)” section, the main points of the EU Green Deal will be presented.

How are maritime sectors affected by the COVID-19 pandemic?

The COVID-19 crisis has pervasive effects on the development of maritime sectors such as transport and shipping, cruise tourism, and fisheries. Hudson³ refers to an informal poll conducted by the economist during one of its World Ocean Initiative webinars, in which participants ranked the following ocean sectors as impacted most by COVID-19: tourism 70.7%, fisheries 10.4%, offshore oil and gas 7.2%, shipping 6.2%, offshore renewables 2.9%, and aquaculture 2.6%. To understand the consequences of the COVID-19 pandemic for maritime sectors and their maritime futures, I will focus on cruise tourism, shipping, and fisheries, as among the most impacted sectors and because of their mobile and dynamic character. Developments in the other sectors will be used as an illustration if relevant.

According to United Nations Conference on Trade and Development (UNCTAD) (UNCTAD 2020), coastal and maritime tourism is the largest blue economy sector and 50% of the tourists choose a coastal destination for their holidays. The sector is facing a sharp economic decline: flights and cruises have been cancelled, entire crews and passengers have been under quarantine, borders closed, and in many tourist areas hotels, restaurants, resorts, etc. were forced to close for a few months. According to the World Travel and Tourism Council,⁴ the COVID-19 pandemic could cut 50 million jobs worldwide in the travel and tourism industry. It is expected that once the outbreak is over, it could take 10 months up to 2 years for the sector to recover. *Cruise tourism* is severely impacted by the pandemic. A cruise ship as a “marine mobile community” is more likely to be the site of outbreaks “due to their large passenger capacity, high personnel density, constrained internal environment, relatively concentrated diet, and a generally comprehensive itinerary of visiting ports in comparison to onshore communities” (Liu and Chang 2020). This makes it difficult to control effectively a COVID-19 outbreak on a cruise ship. This is reinforced by the refusal by

local and port authorities for cruise ships to enter cruise terminals. When there is a COVID-19 outbreak on board of a cruise ship, the ship becomes not only harm in itself for those on board (who are exposed to contaminated passengers and have no possibility to leave the vessel) but also for the residents in cities nearby a cruise terminal. Worldwide, national governments closed down harbours and restricted navigation for cruise ships in response to contagion on board of cruise vessels⁵. Passengers and crews were endangered because they could not disembark and did not have access to proper medical facilities⁶. The International Maritime Organization (IMO) called for solutions from port authorities, urging for a dialogue between stakeholders involved in the shipping industry⁷. The decision to close cruise terminals involves medical (the public health of port city residents and of passengers and crews on board vessels) and economic (the local economy of cruise destinations) considerations. Port states have a right under international law to determine entry conditions for cruise vessels (Marten 2014). The law only mandates ports to grant access when the vessel itself is at risk and thus does not accommodate the interest of the passengers and of the cruise vessel operator in the context of a pandemic. However, existing International Health Regulations of the World Health Organization (WHO) discourage a port to close access (Hardiman 2003; Kandel et al. 2020). The decision to restrict access thus remains at the discretion of port authorities, who assess the situation and the risks.

On March 19, 2020, the IMO announced “that to slow down the spread of the disease and mitigate its impacts, travel is being curtailed and borders are being closed”. *Maritime transport and shipping* are severely affected by the COVID-19 crisis. On the one hand, because ports closed and ships were denied entry and, on the other hand, because of the slowdown of output of value chains, the demand for maritime transport services reduced. This was reflected in a sharp decline in container trade⁸. The shipping sector was also confronted with a situation that “crew changes rendered near impossible because of travel restrictions, some 150,000 seafarers have been stuck on board for the last several months, to the detriment of their physical and mental well-being”⁹. Already early April 2020, IMO called governments to keep shipping and supply chains open and to grant special travel exemptions to seafarers, and to designate them as “key workers” providing an essential service. On the 27th of May 2020 IMO, the International Labour Organization (ILO) and the International Civil Aviation Organization (ICAO) made a joint plea “for

³ <https://www.undp.org/content/undp/en/home/blog/2020/the-ocean-and-covid-19.html>

⁴ <https://www.weforum.org/agenda/2020/03/world-travel-coronavirus-covid19-jobs-pandemic-tourism-aviation/>

⁵ Virus-hit Diamond Princess exits quarantine in Yokohama | The Japan Times, The Japan Times. (n.d.)

⁶ Panama to allow cruise liner Zaandam through canal, Guard. (2020)

⁷ IMO Calls on Port States to Allow Seafarers Access to Medical Care, Marit. Exec. (2020)

⁸ <https://www.undp.org/content/undp/en/home/blog/2020/the-ocean-and-covid-19.html>

⁹ Idem.

urgent action on crew changes and for keyworker designation so that sea and air workers can be relieved and repatriated in a safe way during the COVID-19 pandemic”¹⁰.

Fisheries and seafood production are also affected by the COVID-19 crisis. Legal industrial and small-scale fisheries have declined from a combination of risks being at sea in a pandemic (infection of crews is high in the restricted space of fishing vessels) and supply chain complications caused by market closures (Bennett et al. 2020; UNCTAD 2020). The pandemic has impacted fish products and the seafood value chain through closure of restaurants, hotels, and the retail business; disrupted trade routes; and changes in consumer demands. Due to the cancellation of air traffic, there is a sharp decline in the trade of fresh seafood products, while the market for frozen, canned, and packaged seafood is growing (UNCTAD 2020). With the declined markets and shut down of some fisheries, fisheries communities are economically and socially directly affected (unemployment, etc.). Twenty-five social scientists from 12 countries of the ICES Working Group on SOCIAL indicators (WGSOCIAL) identified a number of social impacts of the COVID-19 pandemic on the fishing industry during an online meeting in April 2020¹¹, such as disrupted supply chains¹²; declined markets; and differences in national circumstances.

The European Green Deal

The European Green Deal is “a new growth strategy that aims to transform the EU into a fair and prosperous society, with a modern, resource-efficient and competitive economy where there are no net emissions of greenhouse gases in 2050 and where economic growth is decoupled from resource use” (EC 2019: 2)¹³. To deliver the European Green Deal, there is a need to rethink EU actions and policies and “to increase the value given to protecting and restoring natural ecosystems, to the sustainable use of resources and to improving human health” (EC 2019: 4). According to the European Commission, “this is where transformational change is most needed and potentially most beneficial for the EU economy, society and natural environment” (EC 2019: 4).

While the vision on climate neutrality is leading¹⁴ to formulate “the conditions for an effective and fair transition, to provide predictability for investors, and to ensure that the transition is irreversible” (EU 2019: 4), ambitions are

formulated on several other themes and policies¹⁵. Especially energy, the circular economy, mobility, food systems, and preserving and restoring ecosystems and biodiversity are relevant for the development of the maritime domain and maritime futures. To accelerate the shift to sustainable and smart mobility, the development of multimodal transport systems (i.e. the shift from road transport to rail and inland waterways), needs a boost. To support multimodal freight operations involving waterborne transport, including short-sea shipping, the EC is planning to develop a Combined Transport Directive (EC 2019: 10). The EC wants to extend the Emissions Trading System to the maritime sector in coordination with the International Maritime Organization (IMO), to end the fossil-fuel subsidies on maritime fuels, to regulate access of the most polluting ships to EU ports, and to oblige docked ships to use shore-side electricity (EC 2019: 10–11). In relation to the food system, fishermen are seen as key to manage the transition and the Common Fisheries Policy (CFP) will remain a key tool to support these efforts while ensuring a decent living for fishermen and their families, while at least 30% of the Maritime Fisheries Fund has to contribute to climate action (EC 2019: 12). Related to preserving and restoring ecosystems and biodiversity, the impacts of fishing on ecosystems should be reduced, especially in sensitive areas and the EC will also support more connected and well-managed marine protected areas. (EC 2019: 13). Finally, a “sustainable ‘blue economy’ will have to play a central role in alleviating the multiple demands on the EU’s land resources and tackling climate change. The role of oceans in mitigating and adapting to climate change is increasingly recognised. The sector can contribute by improving the use of aquatic and marine resources and, for example, by promoting the production and use of new sources of protein that can relieve pressure on agricultural land. More generally, lasting solutions to climate change require greater attention to nature-based solutions including healthy and resilient seas and oceans. The Commission will analyse the findings of the International Panel on Climate Change special report on oceans and propose measures in the maritime area. This will include ways to manage maritime space more sustainably, notably to help tap into the growing potential of offshore renewable energy. The Commission will also take a zero-tolerance approach to illegal, unreported, and unregulated fishing. The 2020 United Nations Ocean Conference in Portugal will be an opportunity for the EU to highlight the importance of action on ocean issues”. (EC 2019: 14).

¹⁰ <http://www.imo.org/en/MediaCentre/PressBriefings/Pages/16-IMO-ICAO-ILO-joint-statement.aspx>.

¹¹ <https://www.ices.dk/news-and-events/news-archive/news/Pages/wgsocialCOVID.aspx>

¹² For example, the peeling of North Sea brown shrimp fishery has stopped, due to the lockdown of Morocco.

¹³ European Commission (2019), The European Green Deal, COM(2019) 640 final, Brussels, 11.12.2019.

¹⁴ To realize a climate neutral Europe, the aim is to reach zero greenhouse gas emissions by 2050 (with a 50–55% reduction in 2030).

¹⁵ Supplying clean, affordable and secure energy; mobilising industry for a clean and circular economy; building and renovating in an energy and resource efficient way; accelerating the shift to sustainable and smart mobility; from “farm to fork”: designing a fair, healthy, and environmentally-friendly food system; preserving and restoring ecosystems and biodiversity; a zero pollution ambition for a toxic-free environment (EC 2019; 6–15).

European maritime futures

Introduction

To give insight into the consequences of the COVID-19 pandemic on the longer term and to discuss them in a systematic way, this section presents four potential European maritime futures. Based on two key choices (“Key choices” section), four potential¹⁶ maritime futures are constructed with 2030 as the time horizon. A maritime future is what Börjeson et al. (2006) call an explorative (external) scenario. The aim of explorative (external) scenarios is to explore developments that are regarded as possible to happen and which focus on factors beyond the control of relevant actors (pp. 727). A maritime future is a potential scenario of the development of maritime sectors in light of processes of Europeanization and industrial policies. These maritime futures differ from each other in marine governance structures and processes, the support given to maritime sectors by the EU and the Member States, and the geopolitical and hydrological role of the EU. Before the key choices are introduced, the dynamic interplay of EU institutions and Member States will be shortly described.

The development of the EU shows a complex intertwining of national and supranational institutions, reflected in the division of responsibilities and forms of (formal and informal) multi-level governance (Van Tatenhove 2016; Van Tatenhove et al. 2006). Until 2005, the European Economic Community (EEC) and later the European Union (EU) developed towards an “ever closer Union” between increasing numbers of Member States. The French “*non*” and the Dutch “*nee*” in the referendums in 2005 about a European constitution exposed a gap between citizens on the one hand and national and European politicians and civil servants on the other. Dutch and French dissatisfaction was related not only to the ongoing processes of Europeanization but also to the uncertainty about jobs and social protection (Giddens 2007), more general the narrowing down of the EU to an economic project only was criticised. Throughout the history of the EU, there is a continuous tension between the national political and policy arenas of the Member States and the supranational and intergovernmental arenas of the EU. Wallace (2000) visualizes this continuous tension with the metaphor of a (governance) pendulum, swinging between national, European, and global arenas, and set in motion because of the push and pull pressures from the Member States, the supranational institutions or industrial sectors to find national or European solutions for problems. This is also reflected in the normative and ideological discussions about the future of Europe, with on the one side those defending the idea of the development of the EU to a federal state (A United

States of Europe), and the inter-governmental idea of active cooperation between independent sovereign states on the other. Both options have opponents and proponents. In the last decennia, the governance pendulum swung from an ongoing process of Europeanization (even possibly leading to a federal state) back to intergovernmental cooperation between the Member States and national arenas. Nationalistic and populist parties¹⁷ in particular argue for a continent of national states, deliberately undermining the EU as a project.

Key choices

To understand the ability of the EU to deal with the COVID-19 pandemic, it is important to give insight into the possible developments of the EU. In general, the EU faces two choices which will affect the way policymakers and maritime sectors are able to deal with the consequences of the pandemic: (1) a further process of Europeanization or (2) a development towards more differentiation between the Member States. Behind these choices (or at the background) is also the question of the size of the European Union. Although made possible in the treaty of Lisbon (2007, entered into force 1 December 2009),¹⁸ the (Br)exit of the UK from the EU (from January 2021) came as a surprise and as an unprecedented event, because for the first time in its history, the EU has shrunk in size. The Brexit opened the door for other countries to consider the option of leaving the EU. Gastinger (2019) developed an index measuring propensities across all EU Member States. This index—based on dimensions of regional integration (social, economic, and political)—makes it possible to define “cores of Europe”¹⁹. He concludes that future exits are overall very unlikely. At the same time, the EU is involved in several accession negotiations.²⁰ However,

¹⁷ Such as Freiheitliche Partei Österreichs (FPÖ) (Austria); Vlaams Belang (Belgium); Dansk Folkeparti (Denmark); Le Front National (France); Perussuomalaiset (True Finns, Finland); Golden Dawn (Greece); AfD (Alternative for Deutschland) Germany); Fidesz – Hungarian Civic Alliance (Hungary); Lega Nord (Italy); Partij voor de Vrijheid (PVV) and Forum voor Democratie (FvD) (the Netherlands); Sverigedemokraterna (Sweden); United Kingdom Independence Party (UKIP) (UK).

¹⁸ The Treaty for the first time provides for a formal procedure to be followed by Member States wishing to withdraw from the European Union in accordance with their constitutional requirements, namely Article 50 TEU.

¹⁹ Core 1 countries (BG, SI, PT, SK, LT, ES, NL, IE, EE, MT, BE, and LU) are extremely unlikely to leave the EU. Core 2 countries (Fr, PL, RO, HU, FI, CZ, LV, HR, DE, AT, CY) are still very unlikely to leave, but need to change substantially often in two dimensions before getting closer to exiting the EU. Core 3 countries (Italy, Greece, Denmark, and Sweden) are still unlikely to leave, but have plausible exit scenarios and need substantial change in at least one dimension (Gastinger 2019).

²⁰ Accession negotiations have started with Serbia (January 2014), Montenegro (June 2012), and Turkey (October 2005) and decisions have been taken to open accession negotiations with Albania and the Republic of North Macedonia (March 2020). Potential candidates are Bosnia and Herzegovina (application submitted in February 2016) and Kosovo (stabilization and association Agreement entered into force in April 2016). (<https://www.consilium.europa.eu/en/policies/enlargement/>).

¹⁶ According to William Dunn (Dunn 2004), “potential futures (sometimes called *alternative futures*) are future societal states that may occur, as distinguished from societal states that eventually do occur. A future state is never certain until it actually occurs and there are many potential futures (Dunn 2004: 134–135).

given the political climate in Europe, the economic crisis during and after the COVID-19 pandemic it is not expected that new Member States will enter the EU on short notice.

The first dimension used in order to develop maritime futures consists of a connected and solidary EU versus a fragmented and differentiated EU. Since the bank crisis (2008), the financial crisis (2011), and the migration crisis (2015), the crucial choice the EU is facing is about solidarity. A connected and solidary Europe of the 27 will entail a smaller and more decisive Commission, a directly elected president (of the Council), and a strong European Parliament with truly European parties. Solidarity and responsibility are reflected in substantial developments, such as a harmonization of national policies, more tax responsibilities for the Commission, cooperation in foreign affairs, and the development of a European army. A connected and solidary Europe could be a powerful player in the global arena and a countervailing power in relation to the USA, China, Russia, India, and Brazil. A light variant of a connected Europe consists of a core group of countries, with an outside circle of countries cooperating in a more loose and differentiated way. The other end of the continuum is a fragmented and differentiated EU, in which differentiation and the national interests of Member States are the norms. The internal market and the free-trade regime will be maintained, “but efforts to achieve a more profound socio-economic integration or to strengthen the EU’s role in the world arena will end in a labyrinth of internal struggles and procedural complications” (Liefferink et al. 2002: 52). Geopolitically, the EU will be a “paper tiger” unable to react rapidly and convincingly due to internal struggles and different national interests.

To deal with the economic consequences of the COVID-19 crisis, states all over the world have given financial support to economic and cultural sectors. Therefore, the second dimension concerns the development of active (maritime) industrial policies on the one hand versus a neo-liberal market model on the other. Industrial policy is a particular sectoral support by governments (Maloney and Nayyar 2018). An active industrial policy presumes state aid for industrial sectors, and also a preference to develop certain sectors over others. Trouille (2007) distinguishes two dominant conceptions of industrial policy. First, a “horizontal” laissez-faire, market-oriented approach, “which states that industrial policy should focus on creating a favourable economic and legal environment for business investments, by allowing market mechanisms to operate as fully as possible, with a view to generating sustainable economic development” (Trouille 2007: 506). Second, a vertical, more “active” and interventionist interpretation of industrial policy, “which leads the national state to preserve long-established corporate structures by means of selective sectoral interventions in order to protect domains perceived as strategic, save jobs, and create national or European “champions”.” (Trouille 2007: 506).

Potential maritime futures

By combining these two dimensions, four potential maritime futures can be constructed (see Fig. 1): “on board”; “single-handed sailing”; “all hands on deck”, and “to give a wide berth”.

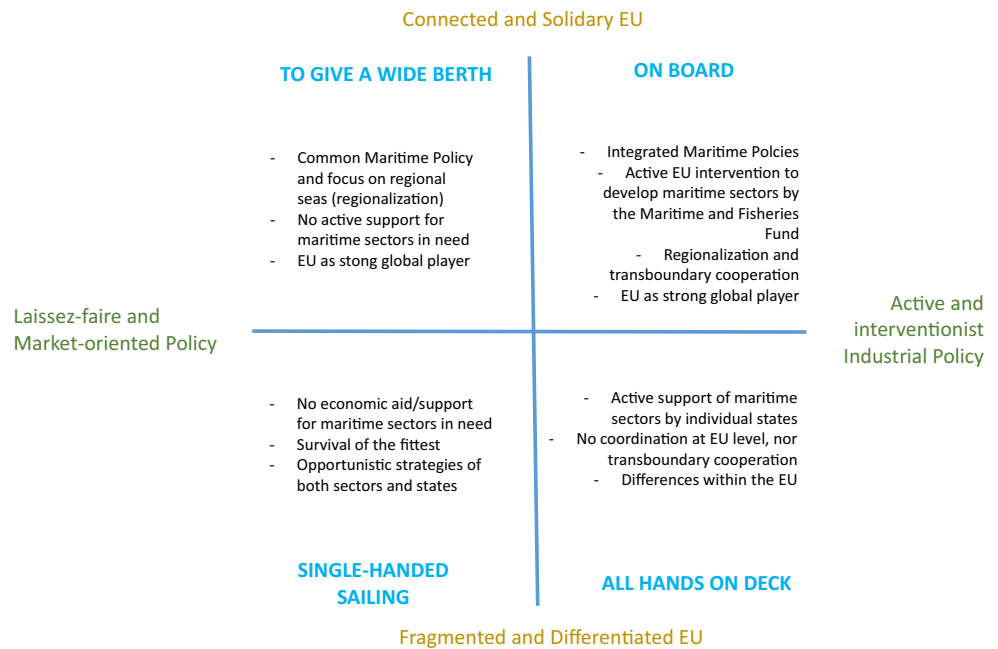
On board

The maritime future “on board” represents a connected and solidary EU and an active, interventionist industrial policy. In nautical terms, “on board” refers to be part of the crew—be part of the team. This future is the expression of a joint effort of the EU to be frontrunner and a core player at the international podium, and to formulate *unisono* EU policies. The Commission is the executive institution, while the European Parliament and the Council of the EU play legislative roles and are in that sense essential decision-makers. There is a Europeanization of national policies. In terms of maritime policies, the EU develops integrated maritime policies, bringing together the objectives for healthy and productive oceans and seas. It is expected that after the reviews of the Marine Strategy Framework Directive (MSFD) and the Maritime Spatial Planning Directive (MSPD) the EU will develop an integrated maritime policy (framework) in 2022, which defines and develops an ecosystem-based approach, regional maritime plans for the regional seas, and networks of MPAs at the regional sea level. New governance arrangements are developed to guide and implement transborder cooperation between Member States (Van Tatenhove 2017). The European Maritime and Fisheries Fund makes investments at the regional sea level possible, for example, the development and implementation of combined Macro-Regional and Sea-Basin strategies, to create innovative “land-sea-land” and “sea-land-sea” connections, and also an active investment policy for maritime sectors. Guided by the Blue Economy discourse, selected Blue Growth sectors (aquaculture, coastal tourism, blue biotechnology, ocean energy, and seabed mining)²¹ are stimulated next to the development of a network of MPAs.

The EU develops a strong hydropolitical position (Sheikh 2019) based on egalitarianism, entrepreneurial spirit, financial expertise, and innovation. This resembles regionalization as “territorial synchrony” (Soma et al. 2015) in which integrated goals and measures are developed in a coordinated way between representatives of maritime sectors, and the EU institutions. Keywords are information sharing, institutional trust, productive science—policy interactions (Runhaar et al. 2016), jointly developing a common approach for European regional seas to integrate economic and environmental (Green Deal) objectives in an integrated maritime approach.

²¹ https://ec.europa.eu/maritimeaffairs/policy/blue_growth_en

Fig. 1 Four potential maritime futures



Single-handed sailing

The opposite maritime future “single-handed sailing” represents a fragmented and differentiated EU, in which each Member State formulates national- and market-oriented industrial policies for national-based maritime sectors. In nautical terms “single-handed sailing” refers to sailing alone with nobody helping you: “to sail around the world single-handed”. In this future, each Member State develops its own maritime policy. Within the context of EU regulation, each Member State translates the rules of the directives for the national situation, in such a way that fits best the national economic, social, and environmental interests and favours the nationally important maritime sectors. With their maritime policies, Member States give some direction about the development of maritime sectors, but economic development and growth are the responsibility of the sectors themselves. The national government sets the conditions for a favourable maritime economic and legal environment for maritime business development, so that the market mechanism and the free market can operate optimally.

Cooperation between the Member States is very limited and as riparian states, they do not develop a common approach for the regional sea. Each Member State defines the conditions for economic development on a national level, while not actively stimulating the economic development of maritime sectors. In this situation of “survival of the fittest”, both countries and maritime sectors opportunistically try to realize separate interests.

All hands on deck

This maritime future represents a fragmented and differentiated EU and an active, interventionist industrial policy. “All

hands on deck” is a way of saying that everyone needs to help and assist in resolving problems. As in the “single-handed sailing” future, the EU institutions are weak and the Member States develop different national-based maritime policies. The *acquis communautaire* establishes the internal market and the free-trade regime. However, maritime policies are not coordinated at the EU level and there is no need for transboundary cooperation, unless the Member States do initiate such cooperation to stimulate the national economic development of maritime sectors. The Member States actively stimulate and subsidize maritime sectors in this maritime future. There will be differences within the European Union, as before some countries will develop a more active industrial policy than others, but overall there is a willingness to support sectors with direct state aid, investments, rewarding taxes, and loans.

Geopolitically the EU does not play an important role in this future. European-based multinational maritime businesses are the powerful actors in the global maritime flows and networks, sidelining individual states as geo-political players in the maritime global arena. Examples are the A.P Møller – Mærsk group (container shipping); Boskalis, Van Oord, and Jan de Nul (dredging companies); Lloyds and Allianz Global Corporate & Specialty (insurance companies), P&O Cruises (cruise shipping), Harbours (Amsterdam, Antwerp, Hamburg), Damen Shipyards (ship building), Global Sea Mineral Resources NV and UK Seabed Resources Ltd (deep seabed mining), and Austevoll Seafood (fishing and aquaculture).

To give a wide berth

This maritime future represents an integrated EU and a market-oriented maritime industrial policy. “To give a wide

berth” is a nautical expression that ships need plenty of room to prevent accidents. A berth is a place a ship drops its anchor or the allocated space to ships in harbours.

As in the “on board” future, in this future, the EU develops a common approach to maritime governance and policies, with a focus on the regional seas and a strong hydropolitical position (see the “On board” section), but does not employ an active industrial policy. The EU sets the economic and financial conditions within the context of the internal market for maritime sectors to develop in a sustainable way. The EU does not actively support maritime sectors with economic aid or European subsidies; economic development and growth are the responsibility of the sectors themselves.

Enabling and constraining conditions of the maritime futures to deal with the COVID-19 pandemic

The maritime futures differ in their understanding of the governing capacity of the EU, the role and position of Europe as a continent in the global arena, the role and position of the Member States and maritime sectors, and their maritime orientations. Maritime orientation refers to where maritime activities should be organized and who should govern and be responsible for the social, economic, and environmental consequences for maritime activities and the protection of marine ecosystems. Should that be organized on the regional sea level or at the level of territorial seas? Are governance processes initiated by governmental actors alone or in cooperation with market parties and civil society actors too? This raises the question: What are the enabling and constraining conditions of each of the maritime futures to deal with the aftermath of the Corona crisis for maritime activities? Does the maritime future in question provide public authorities and maritime sectors with the necessary resources and rules to deal with the consequences of the COVID-19 crisis? And in what way does a maritime future meet the conditions to initiate and implement a transition to a sustainable and climate-neutral future? A crucial question for the years to come is if there will be enough political will and courage to implement the Green Deal agenda and to invest and to transform the blue economy and coastal and marine communities²² in a sustainable way? What are the differences and similarities for each of the Maritime Futures to implement the Green Deal agenda and

²² Van Bets defines a marine community as “a community of socio-economic and policy actors and institutions organised around a certain maritime activity that influences or will be affected by the (marine) ecosystem in which the activity occurs. Analytically, in a marine community two interdependent communities can be distinguished a user and a policy community (...)” (Van Bets and Linde 2017: 10). She analysed marine communities in the Arctic related to expedition cruise tourism and gas production, and in the Caribbean related to cruise tourism and oil transshipment.

for the maritime sectors to meet its sustainable objectives? In the next subsections, these questions will be answered in relation to each of the European maritime futures.

On board

The “on board” maritime future is pro-active and forward-looking. In this scenario, the EU provides the conditions to find solutions for the COVID-19 pandemic and creates momentum for maritime sectors to trigger a broader transition and transformational changes, which incorporates a climate-neutral society and implementation of the biodiversity strategy (EU 2020²³). Based on an EU-integrated maritime vision, the EC launches a financial package to support core maritime sectors with the aim of a further sustainable maritime development and to realize ecosystem-based measures at the level of regional seas (regionalization). A precondition for financial aid to cruise tourism, fisheries, shipping, and harbours is that these sectors meet the criteria of the EU Green Deal and the EU Biodiversity strategy 2030. The aim is to develop a robust Blue Economy based on integrated, sustainable, and ecosystem-based principles and objectives. By proactively combining the Green Deal with integrated maritime policy objectives, only maritime sectors that are able to make the transformational change will be actively supported by this Blue New Deal programme.

In this maritime future, the EU is a strong regional maritime player, not only in the European seas but also in the Atlantic and Arctic Oceans. The Blue Economy is seen as an important way out of the economic crisis in the aftermath of the COVID-19 crisis.

The EU together with core representatives of the maritime sectors (branch organization, representatives of maritime sectors, etc.) and NGOs develop post COVID-19 measures for the maritime sectors. Possible measures are the maximum size of crews at ships, quarantine measures at ships and in harbours, social distancing at ships and in harbours and at oil and gas platforms, vaccination programs, extra financial aid for specific sectors, etc. that are regulated by EU regulations and are the same for all EU Member States.

Single-handed sailing

The “single-handed sailing” future is nationally oriented and reactive. Each Member State has to deal individually with the consequences of the economic recession/crisis due to the COVID-19 pandemic. The same holds for maritime sectors; each sector decides and implements post COVID-19

²³ EU Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions (2020) Biodiversity Strategy for 2030 Bringing nature back into our lives, COM(2020) 380 final.

measures. For the cruise tourism sector, this means that cruise owners, such as Carnival Corporation & PLC, the TUI group, and the SAGA Group, together with “cruise industry trade associations”, such as Cruise Lines International Association (CLIA) and Seatrade Global Cruise, decide about measures for cruise ships. In general, IMO and the EU mainly provide international standards and legislation for cruise shipping; the industry associations represent the interests of cruise lines by creating fora for information exchange and negotiations on cruise tourism development (Van Van Bets et al. 2017). Possible post COVID-19 measures on cruise ships are organizing testing capacities, reorganizing spaces (cabins, restaurants, swimming pools, discotheques, etc.), maximum amount of passengers, customized programmes and procedures for entering cruise terminals, and on-shore visits of cities. In general, the safety of cruise ship personnel is defined by branch organizations and cruise ship owners, while individual ships have to implement social distancing measures: how many people are allowed on the ship, what kind of service can be opened, etc. The inspection of cruise ships and protocols on how to deal with an outbreak on a ship is mainly the responsibility of the cruise owner, port authority, and the individual state in which territorial waters the outbreak was identified. There is neither an orchestrated nor organized reaction between the EU Member States. For shipping in general, we see the same situation and there are comparable measures taken on the level of the ships. The shipping industry within the boundaries of IMO regulation develops regulations about the maximum days at seas for the crew and measurements to replace them. The changes and repatriation of crews are the responsibility of the sector, and it is left to individual ports whether they facilitate the movement and changeover of ship’s crews.

In general, there is no public funding available to support maritime sectors, but there are differences within Europe. Countries will support those maritime sectors that contribute to the economic position of a Member State. In the post COVID-19 economic crisis, strong maritime sectors have more chance to survive, than the weaker ones. Especially for small-scale fisheries, it will be problematic to survive without economic and financial aid. This will have its impact on for example livelihood in coastal communities. These processes will differ between countries, depending on the strength of maritime sectors and the conditions set by the national and local governments.

Maritime sectors compete with each other in a free global market. National governments try to regulate the development of these sectors by national environmental objectives, taxes, etc. but sectors are not bound to the national arena, and operate on a global market. In this context, the EU plays a minor role, while China, the USA, India, and Russia determine the development of maritime sectors on the global seas and oceans.

All hands on deck

In the “all hands on deck” maritime future, individual Member States have to deal individually with the crisis. The difference compared to the “single-handed sailing” future is that in this maritime future, Member States formulate an active maritime industrial policy in order to protect maritime sectors which are perceived as strategic. Governments actively save jobs in the maritime domain and create national or European “champions” and best practices by stimulating maritime sectors actively. The sectors that will be supported are based on national economic, social, and environmental objectives and interests on the one hand, and the potential of maritime sectors to innovate on the other. This differs per Member State. For example, dredging companies and the development of harbours are important for the Netherlands and Belgium, while the small-scale fisheries industry is important for Mediterranean countries.

Post COVID-19 measures such as social distancing, testing, quarantine measures, and economic support are formulated and implemented nationally. This complicates for example the exchange of goods and people through harbours, by ships and ferries. As in the “single-handed sailing” future, the EU does only play a marginal role in developing and implementing the post COVID-19 measures. To support their interventionist maritime industrial policy, they agree that the EU formulates rules about the opening/closing of borders. This is especially important for the free passage of goods and persons to and in harbours.

To give a wide berth

The “to give a wide berth” future presents a connected and solidary EU, which plays an important role in the global (geopolitical and hydropolitical) arena. The maritime focus of the EU is on the development of regional seas, based on a common integrated maritime approach connected to the EU Green Deal. However, the EU does not actively support maritime sectors to realize this common vision, but stimulates the development of those maritime sectors, which contribute to the development of an integrated sea-basin strategy. This will be different for the different regional seas.

Post COVID-19 measures are formulated and agreed upon on the EU level Member States are supported in the implementation of these measures. However, there is no financial support to deal with the aftermath of the COVID-19 crisis; this is the responsibility of the maritime sectors operating on local, national, and global markets.

As in the “on board” maritime future, the EU is an important global player and develops a clear strategy for the Arctic Ocean and the Atlantic Ocean. For the Arctic Ocean, the EU is on the forefront of decisions related to resource exploitation and extraction and the development of Arctic shipping routes.

In the Atlantic Ocean, the EU is involved in area-based management in the Southern Atlantic Ocean together with African countries and Brazil²⁴.

Discussion

Cruise tourism, shipping, and fisheries have their own institutional dynamics, consisting of specific coalitions of actors and are regulated on different governmental levels. While fisheries is an EU responsibility, regulated by the Common Fisheries Policy, shipping and cruise tourism are regulated and governed by IMO and the Member States. While these sectors are affected in different ways by the COVID-19 pandemic (“How are maritime sectors affected by the COVID-19 pandemic?” section), they also deal with the consequences of the pandemic differently. In both cruise tourism and shipping, the cruise and ship owners, together with the branch organizations, have for example a responsibility for the safe repatriation and changes of crew members guided by IMO and ILO regulations. Concerning small-scale fisheries, coastal communities often do not have the resources to deal with the crisis, which puts extra responsibility on public authorities.

Given the different institutional dynamics of the maritime sectors and the fragmented institutional governance setting which regulates and governs these maritime activities, the sectors will deal in different ways with the aftermath of the pandemic and with related future uncertainties. This subsection will address the capability of maritime sectors to deal with the aftermath of COVID-19, in light of the different maritime futures?

With the second COVID-19 wave spreading over Europe, the future of the *cruise ship industry* remains very uncertain²⁵, while the sector is facing considerable economic damage. Uncertainties include when cruise operations are possible again, the willingness of tourists to book cruise voyages when travelling is allowed again, the measurements needed on the ships to guarantee the safety of crews and passengers, allowing last-minute itinerary changes and cancellations, etc. Also, cruise destinations face uncertainties, such as the willingness of port authorities and municipalities to invest in new cruise terminals and excursion programmes, while also local suppliers, restaurants, bars, and shops face economic uncertainties. It is expected that the maritime futures in the connected and solidarity quadrants have more European resources available to support the sector if the cruise operators meet the Green Deal objectives and objectives of EU (marine) policies. In the maritime futures in the fragmented and differentiated quadrants, cruise operators are more dependent on the

economic resources of Member States. In all maritime futures, course operators have to negotiate and are dependent on the willingness of port authorities and municipalities to host cruise ships and whether they are willing to invest in a cruise ship infrastructure.

The COVID-19 crisis has also had a major impact on *the shipping sector*, such as container ships and oil tankers. Confronted by lockdowns in many countries, the shipping industry was forced to take measures to secure the continuity of its operations²⁶. During 2020, the shipping industry was confronted with a decline in ship calls at EU ports²⁷. Although UNCTAD expects a growth of maritime trade by 4.8% in 2021 (assuming world economic output recovers²⁸), the shipping industry sector has to change to be prepared for future challenges and uncertainties related to crises. Transformations needed are for example supply chain shortening with less dependence on just-in-time and lean inventory models, and further investments in digitalization and automation. These challenges to deal with uncertainties are mainly the responsibility of the shipping industry itself, supported by governments. Given the diversity of the shipping industry, it is expected that each of the maritime futures could contribute to reduce the uncertainties. How they could contribute requires context specific research.

Also, *fisheries* will face social and economic uncertainties in the post COVID-19 period. According to the FAO,²⁹ it is unclear whether the sector will experience a quick or slow recovery after the pandemic is over, but they expect a level of industrial consolidation and digital innovation, such as web-based applications, online services, and improved product traceability and sustainability. For local and small-scale fisheries uncertainties relate to their ability to connect to domestic markets, whether fishermen are able to find additional sources of income, and the economic support by governments. The maritime futures present different pathways for fisheries to deal with the uncertainties in the post COVID 19 period. The EU-oriented maritime futures (“on board” and “to give a wide berth”) are expected to have additional EU resources available to support different types of fisheries. For example, the European Maritime and Fisheries Fund (EMFF) could help with the transition towards sustainable fishing practices, with a particular focus on supporting small-scale fisheries and coastal communities. In the fragmented and differentiated

²⁶ <http://www.emsa.europa.eu/news-a-press-centre/covid19-impact.html> (visited 27/11/2020)

²⁷ A decline by 12.8% in the first 46 weeks of 2020 compared to the same period in the previous year. The number of ships calls in week 46 only (9 November–15 November 2020) declined by 1% compared to the same week in 2019 (<http://www.emsa.europa.eu/news-a-press-centre/covid19-impact.html>, visited 26/11/2020).

²⁸ <https://unctad.org/news/covid-19-cuts-global-maritime-trade-transforms-industry> (visited 26/11/2020).

²⁹ <http://www.fao.org/2019-ncov/q-and-a/impact-on-fisheries-and-aquaculture/en/> (visited 26/11/2020).

²⁴ See for example the EU RISE PADDLE project: <https://www-ium.univ-brest.fr/paddle>.

²⁵ <https://www.cruisecritic.com/news/5694/> (visited 27/11/2020)

scenarios, fisheries are more dependent on national governments and their willingness to invest in the sector and coastal communities.

Conclusions

This paper gives insight into and understanding of the consequences of the COVID-19 pandemic for the maritime domain. On March 11, 2020, the Director-General of the World Health Organization (WHO) stated that that COVID-19 could be identified as a pandemic³⁰. Although vaccines have been developed and authorized, the future for maritime sectors, coastal communities, and crews is still very uncertain.

It is difficult to predict the future, but by exploring different potential maritime futures, it is possible to give insight into possible choices maritime sectors, the EU and the Member States could take, and the enabling and constraining conditions to deal with the uncertainties of the post-COVID-19 period.

The analysis in this article showed the enabling and constraining conditions for the EU, Member States, and maritime sectors to deal with the aftermath and the uncertainties of the COVID-19 pandemic according to different alternative futures (“on board”, “single-handed sailing”, “all hands on deck”, and “to give a wide berth”).

One end of the continuum is looking for *ad hoc* and sector-based solutions for the problems related to the COVID-19 crisis. In this option, the focus is on the economic and social recovery of maritime sectors and coastal communities from the COVID-19 pandemic. Issues related to for example climate change and loss of biodiversity are only considered indirectly. This option could be the outcome of the “single-handed sailing” and “all hands on deck” maritime futures. The other end of the continuum presents a way forward, according to which transformational change is not only focused on finding solutions for the economic and social crisis related to COVID-19, but that societal, market, and political actors realize that additional innovations, efforts, and investments are needed to realize a climate-neutral world by 2030, as enshrined in the Paris Agreement. This option could be realized in different ways with the “on board”, “to give a wide berth”, and “all hands on deck” futures, within which maritime sectors are supported by the EU and the Member States to realize high degrees of economic, financial, technological, and societal innovation.

³⁰ <https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19%2D11-march-2020> (visited 27/11/2020).

Declarations

Conflict of interest The author declares no competing interests.

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