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COVID-19 AND THE CRISIS MANAGEMENT OF DRY BULK SHIPPING COMPANIES

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ΠΡΟΛΟΓΟΣ

Η παρούσα Διπλωματική Εργασία με τίτλο "COVID-19 and the crisis management of Dry Bulk Shipping Companies" συντάχθηκε στα πλαίσια της ολοκλήρωσης των Μεταπτυχιακών Σπουδών μου του Προγράμματος "MSc in Shipping Management" του Πανεπιστημίου Πειραιώς.

Πρόκειται για μία εργασία στην οποία γίνεται ανάλυση πως οι dry bulk ναυτιλιακές εταιρίες και οι πλοιοκτήτες τους αντιμετώπισαν σε επίπεδο crisis management τις συνέπειες του COVID -19 ως τη μεγαλύτερη πρόσκληση σε παγκόσμιο επίπεδο μετά το Β΄ Παγκόσμιο Πόλεμο.

Ο COVID-19 δεν αποτέλεσε μόνο και αποτελεί απειλή για τη παγκόσμια δημόσια υγεία αλλά και για τη διεθνή οικονομία και δη για την παγκόσμια ναυτιλία και τις εταιρίες της.

Αυτό όμως που θέλω να επισημάνω είναι πως η παγκόσμια ναυτιλία παρά τα πρωτόγνωρα προβλήματα με τα λιμάνια και το crew των πλοίων παρέμεινε ως η πιο αξιόπιστη μεταφορική δύναμη που συνέχισε την εφοδιαστική αλυσίδα ανά τις ηπείρους.

Όπως πάντα οι ελληνικές ναυτιλιακές εταιρίες επέδειξαν μοναδική αντοχή και προσαρμοστικότητα στη νέα πραγματικότητα της μετά COVID 19 περιόδου με το βλέμμα στραμμένο στις νέες τεχνολογίες και την ψηφιοποίηση.

Από αυτή τη θέση θα ήθελα να ευχαριστήσω πρωτίστως τον επιβλέποντα αυτής της διπλωματικής εργασίας, κ. Διονύσιο Πολέμη για την στήριξη και την θερμή καθοδήγησή του για την σύνταξη και ολοκλήρωση αυτής της εργασίας.

Εν συνεχεία θα ήθελα να ευχαριστήσω την οικογένειά μου και τα άτομα που ήταν δίπλα μου καθ' όλη τη διάρκεια αυτού του απαιτητικού αλλά υψηλά ανταποδοτικού Μεταπτυχιακού Προγράμματος. Επίσης θα ήθελα να κάνω ειδική μνεία στον συζυγό μου Κωνσταντίνο Πρίφτη, πλοιοκτήτη της Ocean Star Management που δίπλα του έμαθα και αγάπησα την ναυτιλία και εκτίμησα την απαιτητική δουλειά όλων όσοι εργάζονται στον ναυτιλιακό και παραναυτιλιακό κλάδο.

ABSTRACT

My present dissertation concentrates on the dry bulk market trends from the beginning of 2020

and illustrates the impact of COVID-19 on crew, operations, insurance clauses, and chartering of

dry bulk shipping companies, with consideration on possible future trends based on this.

COVID-19 is a litmus test for a globalized and interdependent world economy.

Overall, the Greek Shipping companies demonstrated adaptability and resilience during the

extreme cyclicality of the freight market, while having adopted smarter ways of carrying out

management tasks and maintenance more efficiently while operating remotely.

KEYWORDS

TRT Terms: Communicable disease; COVID-19; Dry Bulk Shipping; Economic impacts; Crew

Subject Areas: Contractual Obligations; Economics; Marine Insurance; Marine Transportation;

Safety; Human Factor

ПЕРІЛНЧН

Η παρούσα διατριβή μου επικεντρώνεται στις τάσεις της αγοράς ξηρού χύδην από τις αρχές του 2020 και απεικονίζει τον αντίκτυπο του COVID-19 στο πλήρωμα, τις λειτουργίες, τις ρήτρες ασφάλισης και τη ναύλωση εταιρειών ξηρού χύδην φορτίου, λαμβάνοντας υπόψη πιθανές μελλοντικές τάσεις με βάση αυτό.

Ο COVID-19 είναι μια δοκιμασία λυχνίας για μια παγκοσμιοποιημένη και αλληλεξαρτώμενη παγκόσμια οικονομία.

Συνολικά, οι ελληνικές ναυτιλιακές εταιρείες επέδειξαν προσαρμοστικότητα και ανθεκτικότητα κατά τη διάρκεια της ακραίας κυκλικότητας της ναυλαγοράς, ενώ υιοθέτησαν πιο έξυπνους τρόπους διεκπεραίωσης των εργασιών διαχείρισης και λειτουργίας πιο αποτελεσματικά κατά τη λειτουργία εξ αποστάσεως.

ΑΦΙΕΡΩΣΗ

Στην πολυαγαπημένη μου αδελφή Αικατερίνη Χάρη

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Introduction

COVID-19 was declared as a global pandemic by the World Health Organization on 11th March 2020, with nations all over the world taking extreme measures to contain or delay the spread of the virus. There is no denying the impact of the COVID-19 pandemic on our lives, our behaviors, and our routines. To stop the spread of the virus outbreak, many countries across the world have been put under strict lockdown.

This is a unique time in our history. Recently, we have all come across the term "new normal". We almost have to grieve for our past normal and look to adapt, change and develop into this new way of doing things. How we work, we do business, we socialize, we live, we travel.

To prevent the happening of the Coronavirus malady (COVID-19), several countries round the world went into internment and obligatory new containment measures. These restrictions increasingly made changes to social behavior and world quality patterns, plainly disrupting social and economic activities.

Therefore, the coronavirus is not only a health crisis of immense proportion but also an imminent restructuring of the global economic order¹. "COVID-19 is a litmus test for a globalized and interdependent world economy," said Dr. Mukhisa Kituyi, Secretary-General, UN Conference on Trade and Development (UNCTAD)².

Its spread has left businesses around the world counting costs. A total halt to major industrial production chains, big shifts in stock markets, while in response, central banks in many countries, have slashed interest rates to encourage economic boost.

Likewise, oil has slumped to prices not seen since June 2001, affecting trade, while freight rates have reached bottom levels.

¹ Millefiori, L.M., Braca, P., Zissis, D. et al. COVID-19 impact on global maritime mobility. Sci Rep 11, 18039 (2021)

² Global Maritime Issues Monitor (2020), p.26, Global Maritime Forum, IUMI

Unemployment has hit a record high since World War II³, with unemployment filings keep increasing daily and employment relationships being re-assessed.

As a result, business leaders are obliged to reassess their entire business models to deal with the near-term issues of cash management for liquidity and solvency, but also to return businesses to operational health after this severe shutdown with digital transformation being accelerated.

In a way, we fell asleep in one world and woke up in another. During the months of lockdown and self-isolation, we have been writing a new future. Also, during the pandemic, the global dependence on Shipping has become apparent to the world. 90% of everything is transported at sea with seafarers as the wheel that keeps it all together.

Given the unprecedented nature of the pandemic and the profound changes it is causing, Shipping companies had to respond to several challenges and carve their path in uncharted waters.

What are the most important lessons Shipping companies have learned during the pandemic and that we all should remember going forward?

1. Peripheral Vision

In business, we have a tendency to tend to speak regarding the importance of strategic vision, that is, the flexibility to seem ahead. The pandemic may be a reminder that we have a tendency to cannot predict the longer term. So often, the foremost transformational events aren't expected the least bit or area unit therefore poorly understood that we have a tendency to ignore them fully as we glance ahead. There area unit numerous examples: the introduction of latest technologies that fully reorder winners ANd losers in an industry; the dot-com bust or the monetary crisis; terrorist and cyber-attacks; an epidemic. Or, on a somewhat smaller scale, maybe a challenger or key partner will one thing sudden or a very important client set reacts erratically.

None of those area unit the forms of events that generally show up in strategic plans and however every of them forces a corporation to reply and rework its strategy. slender strategic vision will simply become visual defect.

³ Rapaccini, M., Saccani, N., Kowalkowski, C., Paiola, M. & Adrodegari, F. Navigating disruptive crises through service-led growth: The impact of COVID-19 on Italian manufacturing firms. Ind. Market. Manag. 88, 225–237

Peripheral vision (Day and Schoemaker, 2006) is outlined as "being the outer a part of the sphere of vision." It offers America a head-up that one thing is going on, and things area unit everchanging around America. The keen sight would have unconcealed all of those events - as well as the pandemic - as one thing to listen to and have confidence before time, there have been scores of warning signs, as China and so European nation finish off that one thing new was occurring.

As the pandemic example illustrates, the key to keen sight is that our field of read is broad enough. we have a tendency to can't simply shop around in our curtilage - whether or not that's outlined by geographics or business or client base. we have a tendency to can't simply scrutinize what or United Nations agency is handy. we'd like to seem generally around at players, events, trends, and leading indicators. we'd like to concentrate to the investor voices still because the choir and that we should be willing to ponder what we might rather avoid.

2. Adaptability

Faced with an unexpected event and on the forefront of this challenging situation, the Shipping Industry adapted and with a significant effort, kept the trade flow uninterrupted, finding new ways of getting things done. We all experienced this on a business level as we became experts at doing everything virtually. We adapted and innovated. Shipping couldn't be an exception as a high performance industry.

It might appear too obvious, however organizations oftentimes don't adapt or introduce unless they're forced to try and do thus. And for a few, that's insufficient, too late for superior in an exceedingly perpetually dynamic world. Too several organizations have "a means of doing things." It's simple to comprise the pattern of assumptive that as a result of one thing has worked well within the past, it'll work well into the longer term. It's more leisurely and fewer tight to settle into a routine that's well-established and understood than to perpetually push for improvement and alter. Organizations rest on their laurels so much too simply. This was ne'er the case for Shipping and also the pandemic reminded America what quantity latent inventive energy and resilience exists in our trade.

3. Prioritization

The pandemic re-introduced America to the discipline of prioritization. Most organizations attempt to do too several things all right away and find yourself under-performing their potential.

They chew up energy by having too many "strategic imperatives" and create confusion and frustration in the process. The discipline of prioritization forces teams to grapple with which goals are truly imperatives now and what's required to perform at the highest levels. What's "must do" versus "nice to do" or "let's do it because someone upstairs wants us to"? We got focused on what it would take to get those "must-dos" done. The pandemic introduced everyone to the discipline of determining what's essential and what's not and then choosing to apply ourselves to the essential, instead of getting distracted by everything else.

Experience teaches all of us that good things can come out of difficult circumstances. The key is not to forget them when circumstances improve. Instead of falling back into old habits with a sigh of relief, we should hone our new insights and develop our new skills so that we achieve a new, higher level of performance.

Peripheral vision, adaptability and innovation, and prioritization are disciplines we have all learned in the last eighteen months. My present research concentrates on the dry bulk market trends from the beginning of 2020 to the end of July and illustrates the impact of COVID-19 on crew, operations, insurance clauses, and chartering of dry bulk shipping companies, with consideration on possible future trends based on this.

Basic Abbreviations and Definitions

Abbreviations

COVID-19 and/or Corona Virus: Coronavirus disease of 2019

WHO: World Health Organization

IMO: International Maritime Organization

CDC: Centers for Disease Control and Prevention

JHC: Joint Hull Committee of the Lloyd's Market Association

UNGC: United Nations Global Compact

NSF 2012: The Norwegian Saleform, 2012

ICS: International Chamber of Shipping

ITF: International Transport Workers' Federation

ILO: International Labour Organization

MLC: Maritime Labour Convention, 2006

MIA: Marine Insurance Act, 1906

IHR: International Health Regulations

BDI: Baltic Dry Index

UNGC: United Nations Global Compact

WIFPON: Whether in free pratique or not

Definitions

Affected Area: Any port or place where there is a risk of exposure to the Vessel, crew or other persons on board to the Disease and/or to a risk of quarantine or other restrictions being imposed in connection with the Disease.

Communicable Disease: Any disease, known or unknown, which can be transmitted by means of any substance or agent from one organism to another where:

- a) the substance or agent includes but is not limited to a virus, bacterium, parasite, or other organism or any variation or mutation of any of the foregoing, whether deemed living or not, and
- b) the method of transmission, whether direct or indirect, includes but is not limited to human touch or contact, airborne transmission, bodily fluid transmission, transmission to or from or via any solid object or surface or liquid or gas and
- c) the disease, substance or agent may, acting alone or in conjunction with other comorbidities, conditions, genetic susceptibilities, or with the human immune system, cause death, illness or bodily harm or temporarily or permanently impair human physical or mental health or adversely affect the value of or safe use of property of any kind.⁴

Cyber-attacks and data theft: Attempts by hackers to damage or destroy a computer network or system causing economic impact and the exploitation of private or official data.

Disease: A highly infectious or contagious disease that is seriously harmful to humans.

Fatigue: A state of feeling tired, weary, or sleepy, due to a prolonged mental or physical work, extended periods of anxiety, exposure to harsh environments, or loss of sleep.⁵

Global economic crisis: A significant downturn in the global economy resulting in a lack of growth for the maritime industry.

Pandemics: Outbreak of a disease that occurs over a wide geographic area and affects an exceptionally high proportion of the population.

Remote survey: A survey where the verification is undertaken, or partially undertaken, without attendance on board by the surveyor.

Seafarer: Any person who is employed or engaged or works in any capacity on board a ship.

⁴ As defined under JHC Communicable Disease Exclusion Clause (JH2020–007A) dated 20 November 2020. For the full Clause, please refer to the Appendix.

⁵ <u>As defined by the International Maritime Organization Resolution A.772(18) on Fatigue factors in manning and safety.</u>

Survey: A process for verifying that a ship and its equipment is in compliance with relevant standards, commonly the international Conventions of IMO, specific regulatory requirements of flag Administrations and Rules of a classification society.

The impact of COVID-19 in Dry Bulk Shipping Companies

The shipping industry and particularly the dry and container markets are struggling for the past ten years. The outbreak of the COVID-19 pandemic has had an unprecedented impact on the marine industry, while it disrupted most -if not all of the shipping operations.

What is COVID-19?

COVID-19 is an illness caused by the new coronavirus, SARS-CoV-2. First reported in China at the top of 2019, it's now spread to 224 countries. In 80% of individuals, COVID-19 isn't a severe disease and no hospital treatment is important. About 15% of these infected require oxygen and hospitalization and a further 5% need medical care. While people over 60 years aged and/or those with underlying medical conditions are at higher risk of developing serious illness and requiring additional care, severe illness can develop in people of any age.

Shipping companies had to sail in uncharted waters and were faced with several challenges, which ultimately affected the way any company operate. Vessels from cruise ships to local ferry companies have all had to form drastic changes recently. Despite the successful development of vaccines, the top of the pandemic isn't yet in view.

The COVID-19 pandemic affected global trade flows at an unprecedented speed and scale. During the pandemic, access to essential goods and medical items has been secured largely by the power of the maritime supply chain to quickly adapt.

Generally, although the overwhelming majority of the ports worldwide are operating in the least times during the pandemic, ports are congested to different extents, terminal staff, pilots, surveyors, etc. are required in instances to be quarantined for 14 days after a service, leading to vessels' berthing and departing to be delayed, while crew liberty remains still difficult.

Crew changes during COVID-19

One of the most important challenges brought upon shipping companies has been the impact felt by the crew, who were on the frontline of the battle. a serious hurdle facing shipowners has been crew changes. The pandemic has shown that hardly any nation within the world recognizes the essential humanitarian requirements of the seafarer necessary to stay the worldwide trade flowing during an extended period of restrictions.

With quite 1.2 million seafarers stumped at anybody's time, around 200,000 are trapped in delays to crew changes, as travel and border restrictions are applied, repatriation refused and medical attention ashore denied. Stopgap contract extensions are further prolonged, with seafarers trapped on board for months during a stressful limbo, despite many having had no contact with coronavirus and posing no risk. consistent with the AGCS report, operationally, the world appears to possess responded well to the initial impact of the pandemic, including disruption to crew changes, shoreside services, and therefore the risk of outbreaks onboard vessels.

Among others, the quarantine, the loss of hire, or a possible COVID-19 case onboard can cause severe financial issues. a further point is that the owners need to bear operational costs, like quarantine costs before embarkation and after disembarkation and PEME costs that are above normal since the outbreak.

Reaction of freight rates in COVID-19 era

According to research⁶ on the Covid-19 outbreak and its implications on Marine Transportation, it had been clearly proven that an exogenous shock like COVID-19 is directly affecting the dry bulk segment from the reaction of the freight market and therefore the demand for transportation services to the decline in oil prices and the impact from the stock exchange, which also exists for listed companies.

The pandemic outbreak had negatively affected the dry bulk segment by quite what the decline in port calls would imply. More precisely, a rise of 1% of the cases of the coronavirus reported globally, would decrease the Baltic Dry Index by 0.03%. Furthermore, second-round effects,

⁶ Shipping markets in turmoil: An analysis of the Covid-19 outbreak and its implications, Nektarios A. Michail, Kostis D.Melas (2020)

mostly via the decline in oil prices and, in some cases, third-round effects via the impact from the stock exchange, also exist. Via a mixture of those effects, freight markets had been pushed during a downwards spiral, from which they will only escape once cases start to say no and oil prices devour again.

It is interesting to look at how shipping markets react to crisis periods also because of the passthrough channels through which it's affected. Shipowners, charterers, operators could attempt to reduce losses and limit volatility in freight rates by getting into paper markets (FFAs, Futures) and have interaction in chartering activities.

The Baltic Dry Index (BDI), processed by the Baltic Exchange in London, is responsible to trace the freight rates trend of bulk vessels on most trade routes and it's widely considered a predictor of worldwide production trends.

On 23 September 2021, BDI reached a replacement peak at 4,651 points, the very best since 2009. The trend of the Baltic Dry Index, after an extended period of decline, had already started its recovery in February 2020, then continued in recent months until to the new high lately, consistent with the Baltic Exchange Bulk reports⁷. More specifically, the Index relating only to Capesize ships reached 7,438 points, also a record for the last 12 years, while that linked to the segment of Panamax and Supramax, reached 3,994 and 3,349 points respectively.

The rally within the dry bulk market in 2021 is impessive. The causes of this increase are the sustained trend in ore and coal traffic, alongside the port congestions caused by stringent COVID-19 protocols and inefficiencies also because of the weather-induced supply tightness, while demand stayed robust.

The dry bulk market is additionally taking advantage of the firm container rates. consistent with market sources, the trend of employing dry bulk ships to maneuver containers and cargoes that were containerized over past decades is predicted to hold on into 2022.

According to market estimates, the COVID-19-related protocols that are being followed at Chinese ports require vessels to be quarantined for seven to twenty-eight days and has led to roughly 5%

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⁷ Baltic Exchange Bulk Reports – Weekly Roundups (2021)

of the dry bulk fleet being delayed. Ship supply is additionally expected to remain tight given the skinny newbuilding order book. consistent with data from S&P Global Platts Analytics, a complete of 1.82 million dwt of dry bulk ships were delivered as of August 2021 and there remains 58.13 million dwt of ships within the order book, 6.2% of the present trading fleet.

Crew changes as a flashpoint for charterparty disputes

Another issue that's currently hitting the shipping industry amid the pandemic is the charterer clauses, which ask the ship operators to not include them on crew changes. With crew changes not allowed in many places around the world, shipowners haven't any choice but to deviate. Having that in mind, there are several debates between charterers and owners on who is to be countable for the value of the crew changes, especially within the occasion where the owners must deviate in another port because the port that charterers have ordered the vessel to call, doesn't allow crew changes.

It is interesting to state that under most traditional time charterparty forms, the performance and therefore the psychological state of the crew is additionally a charterer's responsibility, making it more crucial than ever to cooperate with the shipowners, to urge the crew members off and on vessels.⁸

The Impact on Marine Insurance Policies

On the marine insurance front, the marine policies couldn't be unaffected. For marine businesses that were highly hooked on the entertainment or transportation of passengers, COVID-19 has created an unprecedented scenario. Dry bulk companies weren't unaffected either. At a glance, it is often difficult to work out which marine insurance policies are eligible for claim submission and may help minimize risk. Insurers were suddenly liable for a much higher risk than they expected when writing a new policy.

While the market continues to watch this evolving risk through the CDC and therefore the WHO, new clauses and exclusions relative thereto exposure was introduced within the marine insurance contracts. Renewal terms across the market now incorporate exclusions within the policy terms to

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⁸ Write reference

clarify and limit the breadth of coverage afforded to an occasion like the Covid-19 pandemic or any similar events. The rationale is that the coverage afforded by their policy had not previously taken into consideration the exposure to claims that Covid-19 now potentially presents to Underwriters and therefore the introduction of an exclusion defines more clearly the scope of canopy afforded by that policy.

Covid-19 increased maritime cyber-assaults

The pandemic has shown digitalization to be a shortcoming within the industry. The shipping industry has already suffered from cyber-attacks. The pandemic came at a time when shipping organizations are investing to implement IMO's "Guidelines on Maritime Cyber Risk Management", to be better prepared against cyber security threats both on- and off-shore before 2021. To deal with operational issues like denied physical access, quarantined vessels, and travel restrictions, shipowners had to urgently open for remote access and implement remote digital survey tools towards vessels as in most of the cases they were obliged by law to encourage shore staff to figure remotely from home. As a result, dry bulk shipping companies had to deal also with a growing number of cyber-attacks thanks to Covid-19 and vulnerable communication technologies.

Overall, the Greek Shipping companies demonstrated adaptability and resilience during the extreme cyclicality of the freight market, while having adopted smarter ways of carrying out management tasks and maintenance more efficiently while operating remotely. Having said that though, Greek shipping has always demonstrated resilience, adaptability, and a solution-focused approach to the major challenges that has faced during the years.

Crew Issues during COVID-19

Crew Change Crisis

The continuing inability of ship operators to conduct crew changes had been the best operational challenge confronting the worldwide shipping industry since the Second war, it had been estimated that only about 25% of normal crew changes were ready to happen between March and August 2020, thanks to restrictions imposed by national health and immigration authorities and therefore the suspension of the bulk of international flights.

At least half 1,000,000 (500.000) seafarers had been affected in August 2020 by COVID-19 and it had been estimated that over 150,000 seafarers had required immediate repatriation with as many as 250,000 serving on extended crew contracts who were overdue to return home. There was a growing recognition that seafarers' tours of duty couldn't still be extended indefinitely which the present situation was unsustainable.

250,000 seafarers had completed their contracts but thanks to the COVID-19 pandemic were prevented from returning home, they're having to increase their service on board ships after many months stumped, unable to get replaced after long tours of duty or be repatriated aerially to their home countries.

Apart from the necessity for shipping companies to suit international regulations and contractual obligations, service periods on board ships couldn't be extended indefinitely thanks to the damaging impacts this has for the well-being of ship crew and, most significantly, safe ship operations.

Apart from serious humanitarian and crew welfare concerns, and problems with regulatory compliance, there was an increasing risk that fatigue will cause serious maritime accidents. If this example continued indefinitely, and ships were unable to work safely in compliance with international rules, large numbers of ships may need to suspend their operations. this can have serious consequences for the upkeep of worldwide supply chains on which all national economies were so dependent during that point of worldwide crisis.

Unless governments took necessary actions to facilitate crew changes, the number of crews stranded stumped seemed set to further increase. also as restrictions were placed on the movement of seafarers by national and native authorities, there was also the matter of the continued suspension of the bulk of flights between major crew change ports and therefore the principal labor supply countries, especially those located in Asia where the bulk of the world's seafarers reside.

It was clear that in response to increasing distress among ships' crews, who remained unable to return home, patience among seafarers' unions was running out. apart from the continuing shortage of scheduled flights, problems with conducting crew changes continued to be acute in much of Asia. Nations, like India and China, had largely restricted crew changes, to the extent that they had been permitted in the least, to seafarers who were their own countries' nationals, though within the case of India there was hope that this might change once it completed its program of general repatriation flights provided for all Indian citizens.

The major Asian crew change hubs of Hong Kong, Singapore, and therefore the Philippines had gradually removed some major obstacles to crew changes. However, while there had been some softening of the attitude on the part of many national authorities, it had often been a case of "two progress, one step back" as restrictions are re-imposed following a recurrence of local infections which were often attributed to travelers coming back from overseas. Disappointingly this had sometimes been the case in both Hong Kong and Singapore, despite their status as global maritime centers, although at the top of August 2020 there have been some positive signs of accelerating flexibility on a part of the local authorities.

The situation in Europe partially improved within the summer of 2020 as limited tourism flights were permitted to resume, and therefore the effort made by many EU governments and the United Kingdom towards facilitating crew changes, no matter the nationality of the seafarers concerned, is to be commended. Efforts made by the USA and Middle East nations merit special mention too. However, obtaining necessary visas was still a serious challenge for several non-EU seafarers wishing to visit and from the EU Schengen Area.

To deal effectively with the crew change crisis, the International Chamber of Shipping (ICS) led the event of the International Maritime Organization (IMO) Framework of Protocols for conducting safe crew changes which are now being promoted among governments worldwide.

IMO Framework of Protocols

The development of clear protocols under the International Maritime Organization (IMO) was a necessity. The International Chamber of Shipping (ICS) developed a technique with several elements in April 2020, the primary was the event by ICS, with input from the broader industry, of a comprehensive 'Framework of Protocols', which was circulated to governments via the Maritime Safety Committee of the IMO at the start of May 2020 with practical steps to support shipping and seafarers during the pandemic. This was a really important initiative of the Industry worldwide for conducting crew changes safely.

The IMO protocols aimed to guard seafarers during the pandemic, which might be kept the air and sea logistics networks open and functioning. As countries began to recover and reopen, it had been evident to the broader industry that the workers moving freight by sea played an important role within the economic recovery. Both the International Maritime Organization (IMO), the interior Labour Organization (ILO), and therefore the International Transport Workers' Federation (ITF) were supporting the maritime industry protocols with involve governments to require action on them.

The Protocol included:

- Protocols for joining a ship (From a seafarer's place of ordinary residence in one country via aircraft to join a ship in a seaport in another country), and
- Protocols for leaving a ship and repatriation (From a ship in a seaport in one country via aircraft to a seafarer's place of ordinary residence in another country).

These Protocols were designed to line a call at the detail the measures which shipping companies should take throughout the crew change process, and therefore the documentation needed to support this.

ICS members had therefore been liaising closely with relevant national authorities to form these Protocols work on a local level. However, while the utilization and recognition of those IMO Protocols had gained traction worldwide, many national authorities continued to enforce applying quarantine procedures to seafarers or other impractical requirements, like ships having to stay at berth or anchor until those seafarers being repatriated have departed on their flights, which, given the shortage of flights available, has been highly problematic.

There was also still much uncertainty about testing requirements, which ICS intended to deal with during a Revised Version of the Protocols for submission to IMO in April 2021. because the pandemic continues to evolve, things remain very fluid, which makes it very difficult to form generalizations about the extent to which there had been progressing towards an answer.

The role of Ship Operators in Crew Protection

The International Chamber of Shipping (ICS) has produced guidance to assist shipping companies and seafarers follow health advice provided by United Nations agencies et al. in response to the coronavirus (COVID-19) disease, which has been declared an epidemic by the planet Health Organization (WHO), under the WHO International Health Regulations (IHR).

The Guidance is to be used on all kinds of ships and tries to require under consideration the requirements of both cargo and passenger ships. it's recognized that cargo ships are unlikely to possess a trained doctor or nurse on board which medical treatment on cargo ships is going to be provided by a crewman with training to STCW medical requirements.

Port Entry Restrictions

According to International Health Regulations IHR (and other international regulations), States Parties shall not refuse to grant 'free pratique' (permission to enter a port, embark or disembark, or discharge load cargo or stores) for public health reasons. States Parties may subject the granting of free pratique to inspection, and, if a source of infection or contamination is found on board, conduct necessary disinfection, decontamination, or derating, or other measures necessary to prevent the spread of the infection or contamination. Nevertheless, many governments have introduced national and local restrictions, including:

- Delayed port clearance.
- Prevention of crew (or passengers where applicable) from embarking or disembarking
- (Preventing shore leave and crew changes);
- Prevention of discharging or loading of cargo or stores, or taking on fuel, water, food and
- supplies; and
- Imposition of quarantine or refusal of port entry to ships (in extreme cases).

While such measures can severely disrupt maritime traffic – and should rather be in breach of the IHR, the IMO Convention on Facilitation of International Maritime Traffic (FAL Convention), and other maritime principles regarding the rights and treatment of seafarers (and passengers where applicable) – the truth is that shipping companies may have little choice but to stick to those national and native restrictions thanks to the intense concern about COVID-19 and therefore the potential risk to public health.

Under the ILO Maritime Labour Convention (MLC):

- Flag States must ensure all seafarers on ships flying their flag are covered by adequate measures to protect their health and that they have access to prompt and adequate medical care while working on board; and
- Port States must ensure that any seafarers on board ships in their territory who need immediate medical care are given access to medical facilities on shore.

Together with the Flag States, companies and Masters should co-operate with port State health authorities to ensure that public health measures are completed satisfactorily.

Seafarers' fatigue in COVID-19

Despite the recent positive news regarding the development and availability of vaccines against COVID-19, the first vaccination data from the Neptune Declaration Crew Change Indicator⁹ shows that only 15.3% of seafarers are vaccinated, which suggests that the crew crisis is way from being resolved. consistent with the August Indicator, the amount of seafarers onboard vessels beyond the expiry of their contract has slightly increased from 8.8% to 9.0% within the last month, and

⁹ Neptune Declaration Crew Change Indicator is published monthly to provide reliable data regarding the crew change crisis and the way it evolves. It is based on data from 10 ship managers, who are collectively responsible for more than 90,000 seafarers across all the major segments.

The data is based on monthly reporting by the following ship managers: Anglo-Eastern Univan Group, Bernhardt-Schulte Ship Management, Columbia Shipmanagement, Fleet Management, OSM, Synergy Group, Thome, V. Group, Wallem and Wilhelmsen. The Global Maritime Forum is responsible for collecting and processing the data and publishing the indicator. More detail is available here.

therefore the number of seafarers onboard vessels for over 11 months has risen from 1% to 1.3%, while the Maritime Labour Convention states that the utmost continuous period a seafarer should serve on board a vessel without leave is 11 months. Although this era could also be exceeded in situations of "force majeure", any extension must be amid appropriate safeguards to avoid any abuse and protect seafarers' rights.

Regulation 2.5 of ILO's Maritime Labour Convention (MLC) states that seafarers have a right to be repatriated at the top of their contracts. Under the MLC, flag States have a responsibility towards the proper of seafarers to be repatriated and port States have an obligation to facilitate such repatriation also because of the replacement of seafarers. ILO has indicated that these obligations must be respected during the pandemic without prejudice for the necessity to require measures to stop contagion.

According to IMO data, As of July 2021, it's estimated that some 250,000 seafarers remain on board commercial vessels, unable to be repatriated and past the expiry of their contracts. an identical number of seafarers urgently got to join ships to exchange them. On any given day, nearly a million seafarers are performing on some 60,000 large cargo vessels worldwide to take care of vital supply chains. Moreover, seafarers fit into the category of workers who are in economically critical sectors and can't perform their occupation remotely.

Crew changes are vital to stop fatigue and protect seafarers' health, safety, and wellbeing – thereby ensuring the safe operation of maritime trade. they can't be postponed indefinitely. The duration of seafarers' contracts varies, but they typically work between four and 6 months on ships, followed by a period of leave. When stumped, they often work 10-12 hours shifts, seven days every week – performing tasks that need constant professional attention.

When fatigue kicks in, it immediately harms the physical and mental wellbeing of the seafarers. This phenomenon is has been noted numerous times among seafarers, who are overworking during long and irregular hours, leading to lack of sleep. A physically and mentally fatigued seafarer features a much higher risk of becoming involved in an event that causes a marine casualty.

However, fatigue isn't only physical, because it is often caused by mental factors also. Loneliness, lack of communication with home, isolation, and risks like piracy, can all take a toll on the psychological state of seafarers, and eventually cause fatigue. what's more, this gets worse if seafarers need to affect all of those during a worldwide pandemic. When the worldwide pandemic showed its full force last spring, the Seafarers Happiness Index report tried to offer some insight on what happened to the everyday lives of seafarers onboard during COVID-19.

Recent reports have revealed seafarers were less happy, as they were mostly concerned about connectivity between shore and sea, increased workloads, extended contracts, and increased isolation. These issues left most of the seafarers feeling stressed, anxious and exhausted.

Seafarers aren't only handling normal cargo operations but also are dealing with precautions, sanitizing, and living under a continuing fear of infection. Ironically, this will make them feel even more vulnerable and vulnerable to the virus. Seafarers aren't only handling normal cargo operations but also are dealing with precautions, sanitizing, and living under a continuing fear of infection. Ironically, this will make them feel even more vulnerable and vulnerable to the virus. Seafarers were feeling more fatigued, thanks to their constant plan to keep it up working without a way of once they could be heading back home.

In fact, increases in workload affected more those seafarers who were liable for cleaning and disinfecting the accommodation areas. These seafarers reported that the extra responsibilities significantly intensified their already heavy work schedules.

The COVID-19 crisis has triggered a psychological state crisis among the world's seafarers with much considering self-harm or suicide. Most seafarers work a typical contract length of nine months, but many have now been stumped for up to fifteen months thanks to the pandemic, performing on average 10-12 hours each day. Ships are usually crewed by people of a spread of nationalities, with a typical workforce potentially including Chinese, Filipinos, Indonesians, Indians, Bangladeshis, Poles, Bulgarians, Croatians, Russians, and Ukrainians. This COVID-19 situation would have made it virtually impossible for several to urge home, albeit that they had left the ships.

A new economic crisis in 2020 due to COVID-19

The COVID-19 outbreak has been causing an enormous impact on people's lives, families, and communities. because the international response continues to develop, organizations are operating in uncharted waters. Critical information on the characteristics of this new virus and its impacts on worldwide commercial activity is difficult to assess and is changing overnight.

In December 2019, an unknown virus, later named "Covid-19" erupted in the Wuhan district of China, within the city of Hubei. Its death rate accounted for two .5% of the cases, a percentage that's like previous pandemics.

Despite its origin though, the latter virus has erupted faster in comparison to previous diseases mainly due to the high transportation connectivity of today's world and it's affected most countries of the planet. The response to the latter threat by mostly all the national governments were a lockdown of all the citizens and businesses so as social distancing to act as a diminisher of the outbreak.

Thus, the planet economy has been hit and a replacement depression erupted. Researches show that coronavirus has affected both the financial markets also because of the national economies. Consequently, world trade has been hit also.

While the shipping markets were still recovering from the new desulphurization legislation, the new virus has hit the markets hard. The freight rates have dropped by 73% for the dry bulk segment, by 36% for the dirty tankers segment and by 30% for the clean tanker segment.

The outlook for the dry bulk trade in 2020 has weakened for example for the first quarter of 2020:

The Baltic Dry Index (BDI) in January has fallen below 500 index points for the primary time in four years. The tacit recovery didn't last long and therefore the index turned downwards again in March 2020.

Clarkson figures for the primary quarter of 2020 also indicate that the coronavirus outbreak features a significant impact on the industry. Shipyards reported just 15 bulk carrier orders of 1.0 million dwt in Q1 2020, compared to 83 ships (7 million dwt) in Q1 2019. The latter changes

affected negatively the income of the shipping companies and given the strong substitution effect that exists between the various shipping segments) also between the various vessel sizes left both ship owners and therefore the financiers exposed.

The shipping industry isn't only renowned for its main part within the global supply chain, since it accounts for 80% of the entire transportations that are happening globally, but also for its high volatility when it involves its freight rates.

While the typical trade cycle within the economy lasts for 14 years, the trade cycle of the shipping industry lasts for less than 7 years. Nevertheless, despite the difference that exists between the remainder of the economic sectors and shipping, little attention has been given up to now to the factors that make the shipping cycles so short-spanned. within the current time, we examine how a worldwide exogenous event affects the industry by quantifying the connection between a plague outbreak and therefore the freight rates of the tanker and the bulk shipping segments.

Shipowners, charterers, operators, and policymakers are all affected by the pandemic because the results suggest, the surplus drop by the industry's returns that hits the market in such exogenous events affects largely the income-generating abilities of shipping companies companies with income problems that affect the businesses themselves and consequently their investors, management, and employees.

Shipping operations face new challenges

In these unprecedented times, the power of shipping services to continue undisrupted to move food, energy, and medical supplies across the continents will play a critical role in overcoming this pandemic. Shipping companies will get to become agile and adaptable to the present changing situation and specialize in building effective response strategies and plans.

For this reason, the shipping operations face new challenges:

a. On board safety

The crew must prevent at any cost an infection from being transferred on board and will bear in mind that counting on the vessel's location, there could also be limited medical support just in case of an event.

b. Crew

Due to travel restrictions, the crew is probably going to be unable to visit join a vessel, or be repatriated following the completion of their contract. As vaccinations became available, crew vaccination is critical in solving the crew change crisis.

The August Indicator shows that the amount of seafarers onboard vessels beyond the expiry of their contract has slightly increased from 8.8% to 9.0% within the last month and therefore the number of seafarers onboard for over 11 months has risen from 1% to 1.3%. this might indicate that things have begun to stabilize since the many deteriorations we've seen within the previous months.

c. Supplies

There are difficulties in finding medical and other supplies for the vessel and its crew as well as likely a shortage in mechanical and electronic parts for vessels.

d. On board inspections

The COVID-19 global pandemic has challenged the maritime sector in some ways, including the completion of surveys to assure compliance and safety. When a vessel is found during a hard-to-reach location and requires a survey, expecting the surveyor to arrive on board can cost time and money, and have a negative impact on operational availability. At many ports, specialized staff like inspectors are restricted from accessing vessels and thus conducting the legally required inspections (safety, environmental, training, etc.). Under the circumstances, some IACS member Classification Societies were ready to perform certain surveys remotely by using a web connection or video streaming link to the vessel, rather than having a surveyor visit the vessel.¹⁰

e. Onshore support

As head offices, ports, and shore authorities are operating with emergency staff or remotely, vessels are experiencing delays also as reduced levels and quality of support from shore.

¹⁰ <u>IACS Information Paper on Remote Survey for Interested Stakeholders. (February 2021)</u>

COVID-19 instructions by OCEAN STAR MANAGEMENT for on-board safety operations

The bellow standing instructions are sent in order to advise and update you on the continuing efforts of the Company to adapt the on-board safety operations and services in the face of the Global COVID-19 pandemic.

With this unprecedented public health challenge impacting the shipping industry worldwide, the preventive measures being applied globally are having an immediate impact on shipping. However, the Company is ensuring that this global disruption will not negatively impact the core services and functionality of our fleet.

These standing instructions prepared to notify all parties concerned that due to the force majeure event of the spread and threat of COVID-19, effective as of March 13, 2020, the on-board personnel will modify on-board procedures as per the bellow instructions.

These procedures is being done in order to protect the health and well-being of the staff on-board our ships, the visitors, and all personnel involved in our ships' operations by reducing the risk of COVID-19 exposure and while striving to maintain business continuity and performance of best quality services.

These measures will ensure the on-board operations are well maintained with safety and security, there will be no delay or disruption to vessels operations and other port activities; while putting the health and safety of all parties as a priority during these unforeseen circumstances.

At the time of new-joining crew embarkation:

- All vessel's crew must avoid close contact and non-essential interaction with the new joining crew on the quayside, on the gangway or inside the accommodation.
- All vessel's crew must maintain the recommended social distance of at least 2 metres from each other and especially from new joining crew to the extent possible during the embarkation of the new joiners.
- All vessel's crew must wear personal protective equipment (PPE) as instructed from the Master.
- New joining crew must carry and handle their own luggage, so the already on-board crew are not allowed to assist them.
- New joining crew must deliver to Master all relevant documents(certificates, passports, etc.) in a bag that can be easily accessed and disinfected later.

- Disposal of any single-use PPE worn by the new joining crew during travel must be established immediately.
- All on-board crew at the point of embarkation must wear appropriate PPE (e.g. mask, gloves, etc.).
- New joining crew having their temperature taken from a responsible officer at the time of embarkation, or as may be appropriate at the time of entering the accommodation.
- Disinfection of new joining crew's luggage in a designated area outside the accommodation must be established.
- Disinfection and/or laundering of new joining crew clothes worn during the travelling from the home to the vessel must be effected immediately after embarkation.
- Master receiving the documents from the new joining crew disinfecting them, and washing their hands after touching any of the documents.
- Personal equipment frequently used during the transit (to and from vessel) (i.e. smartphones, laptop etc.) must be also sanitized.

Following new-joining crew embarkation, all crew for 14 days:

- New joined crew should have their temperature taken at the time of embarkation and thereafter twice per day for a period of 14days. Records should be maintained in the dedicated log.
- Master with heads of departments must ensure daily work and tasks assigned to recently new joined seafarers are arranged to minimize contact and close proximity with the other crew.
- All crew must practise shipboard self-distancing (SSD), maintaining a WHO recommended social distance of at least 2 metres when working alongside other crew to the extent possible.
- New joining crew must avoid all non-essential contact or close proximity with other crew.
- New joining crew at sea must use the external stairways and walkways to move around the ship when possible, but only if conditions and circumstances permit and it is safe to do so.
- New joining crew must disinfect their own work areas, equipment and tools as appropriate after use. Master to ensure new joining crew to be provided with cleaning materials, equipment and substances to clean and disinfect their own cabin and toilet on at least a daily basis. This to be effected strictly for first 14 days on board.
- New joining crew must refrain from using any common areas on board, such as the mess rooms, laundry area or recreational areas when being used by others, unless special arrangements or measures are in place, and avoid use of common toilets as far as practicable.
- New joining crew must return to their cabin immediately after completing work hours or duties the first 14 days on board.
- New joining crew must remain in their cabin during rest hours, and arrangements to be made by Master to permit them to spend some rest time on deck the first 14 days on board.

- New joining crew must receive and eat all meals in their cabin, provided it is safe to do so, with other personnel handling their meals and dishes to use PPE and disinfect carefully after each handling.
- New joining crew must avoid to enter pantries and the galley within the 14 days period on board.
- New joining crew must wear PPE as instructed when outside their cabin.
- All on board crew comply with all standard infection protection and control precautions related to social distancing, self-isolation, hygiene (e.g. hand-washing, avoid touching face, etc.) and safe food handling practices.
- All crew must avoid close contact with any persons who are or appear unwell or show any COVID-19 symptoms (e.g. cough, fever, etc.).
- All crew to be vigilant in order to Inform the Master (or designated responsible officer) if show any COVID-19 symptoms.

At the time of off-signing crew dis-embarkation:

- 1. All crew maintain the recommended social distance of at least 2 metres from each other.
- 2. All crew wear PPE as instructed by the Master.
- 3. All crew to follow Agent's advise and relevant protocols instructed to them by the Agent.

For Ship-Shore personnel Interaction:

- 1. All on board crew must arrange all on board operations with increased caution;
- 2. Officer on watch must restrict ashore personnel boarding to minimum requirements;
- 3. All personnel while on board to maintain social distance(2 meters) and wear masks at all times, if there are any visitors on board Officer on gangway watch to ensure correct donning, removal and disposal;
- 4. Gangway watch to do gangway screening to all ashore personnel entering the vessel;
- 5. Gangway watch to maintain distance > 2 meters between gangway duty crew and ashore personnel;
- 6. Gangway watch to check the credentials of all boarding personnel;
- 7. Gangway watch to not allow boarding of any unrelated staff;
- 8. Gangway watch to check all incoming personnel for any flu symptoms, and do not allow entry to any suspected people;
- 9. Gangway watch to arrange that all visitors to sanitize hands at gangway;
- 10. Gangway watch to arrange that all all visitors to disinfect shoes at gangway;

- 11. Gangway watch to arrange and check temperature and refuse entry to visitors showing signs of illness or temperature >37C;
- 12. Mater to ensure to minimize exchange of paper documentation. Use electronic documentation / exchange of information;
- 13. Where possible the Master to prepare and set up barriers (eg. plexiglass screen) if required to interact with shore personnel;
- 14. Master must arrange and inform Agents and Visitors in advance about shipboard controls and requirements;

As far as possible Master to arrange and avoid:

- Upcoming physical inspections;
- Crew shore leave;

For Shore Personnel to Restrict Movement on board:

- 1. Master to arrange and set up a reception area on the main deck itself and restrict shore staff to reception areas as far as possible;
- 2. Master to arrange where possible to avoid shore personnel entering the accommodation:
- 3. For pilots to ensure entry directly into the wheelhouse from outside without passing through the accommodation;
- 4. For others like immigration to choose a space/cabin with direct access from outside and where interactions with crew members can be kept to minimum;
- 5. For the stevedores to be arranged the Tally Room with direct access from outside and where interactions with crew members can be kept to minimum;
- 6. Where possible to be provided a separate toilet for shore personnel;
- 7. For Third Party inspections the bellow items to be arranged:
 - Maintain social distance with the inspector;
 - Use face covering at all times when the inspector is on board;
 - Restrict movement within the accommodation as much as possible;
 - During opening /closing meetings and documentation review, set up a barrier between you and the inspector (eg. plexiglass screen) and exchange information electronically or provide disposable photocopies;
 - Plan and agree on inspections rounds. Avoid talking directly (face to face) as much as possible

- Especially in the engine where communication is difficult due to noise / ear protectors;
- 8. Responsible Crew to disinfect allways and with precaution the accommodation door handles, accommodation staircases and hand rails;
- 9. Responsible Crew to disinfect regularly and with precaution the Tally Room, toilets used by shore personel and any accommodation places used by authorities or any visitor;

Charterparty issues in the era of COVID-19

The COVID-19 pandemic has disrupted even the foremost routine ship operations. one among the most important challenges facing the shipping community immediately is crew change. The national, regional, or local restrictions imposed to scale back the spread of the virus have made it extremely difficult to rotate crew within their normal contract periods.

Many crew members are working overtime thanks to various travel restrictions. Shipowners are forced to deviate from the contemplated voyage to the land crew. within the meantime, enhanced control measures are put into effect in some nations so that vessels which have changed crew at a port overseas within 14 days shall be subject to a compulsory quarantine before proceeding to load or discharge.

In May 2020 the UN Global Compact (UNGC) published a group of recommendations and guidelines to help port states around the world to acknowledge seafarers as "key workers". Since the proposal, we've seen port states take a cautious approach to adopt the protocols as long as their own national interest is at stake if there are any outbreaks thanks to crew change. Several port states have softened their stance and implemented the protocols and that we have seen positive developments if we compare the present situation with how it had been within the first few months of the pandemic.

The COVID-19 pandemic revealed that the Shipping industry leverage at the government level and with national health authorities is poor. Despite the worldwide movement regular crew change can still be a challenging task for shipowners, and same is that the reason that several of our members are encouraging their crews to serve on board longer than their contractually agreed period, we see that variety of nations are opening up to permit the movement of the crew through their ports and airports. These circumstances inevitably produce disputes under charterparties.

BIMCO COVID-19 Crew Change Clause

In response to the crew change crisis, BIMCO has produced a new clause named 'BIMCO COVID-19 Crew Change Clause for Time Charter Parties 2020'. The clause gives shipowners the liberty to deviate from crew changes if COVID-19-related restrictions prevent crew changes from being

conducted at ports or places as contemplated. The clause also aims to balance the interests between owners and charterers by conferring a notification obligation onto owners. Parties are permitted to choose how the time loss and associated costs are allocated between them under sub-clause (d) and (e).¹¹

Despite BIMCO's efforts to deal with the difficulty of crew changes in sight of COVID-19, subject clause is hardly acceptable by charterers, as the same is extremely much in favor of the shipowners. Also, time and expense in reference to compulsory quarantine at the port called after crew change doesn't seem to possess been specifically addressed within the BIMCO clause.¹²

Port delays due to crew changes

Some nations have tightened port control measures by putting vessels with a recent history of foreign crew changes in compulsory quarantine. Vessels are then released from quarantine upon expiration of 14 days after the last crew change. Should crew changes be unreasonable or not allowed, owners would probably be held susceptible to charterers for time loss also as damages arising out of owners' unilateral decision to crew changes and therefore the resulting quarantine.

Under time charterparties, charterers are obliged to pay hire unless an off-hire event as defined by the off-hire provisions prevents full working of the vessel. Some forms like Shelltime make it clear that the vessel is off-hire if time is lost thanks to quarantine delay. But whether charterers could establish off-hire under standard NYPE forms is more complicated. An argument might be made that the compulsory quarantine would fall within "any other similar cause preventing the complete working of the vessel" provision on the idea that the sort of delay is drawn to delay caused by "a deficiency of officers or crew". the result may however differ between cases where charterers comply with the crew change and where it's expected that the vessel is going to be delayed due to quarantine restrictions, and cases where the time loss results from the owner's decision to exchange the crew without permission, within the latter scenario, the immediate service of the vessel

Subject clause can be found at https://www.bimco.org/contracts-and-clauses/bimco-clauses/current/covid-19-crew-change-clause-for-time-charter-parties-2020 copied also in the Appendix for easy reference purposes.

¹² <u>Crew changes during COVID-19 - a new flashpoint for charterparty disputes?, Skuld P&I Club Insight, 10 December 2020</u>

required by charterers is to berth for cargo operation which however is prevented by the unexpected quarantine.

Damages entitled to be claimed by charterers would come with, but not be limited to, loss of demurrage which should be earned by charterers under their voyage charterparty. The rationale is that compulsory quarantine on arrival will render the vessel incapable of serving a notice of readiness (NOR) since the vessel isn't legally ready.

While WIFPON ("whether in free pratique or not") is usually agreed, such clause is taken into account for routine formalities only, and therefore the Covid-19 restrictions linked to the owners' decision to change crew are unlikely to be deemed as routine formalities. The advantage of the WIFPON clause will accordingly be lost and commencement of laytime can't be triggered until the compulsory quarantine ends. a possible argument for owners rests with Article IV Rule 2(h) of the principles if incorporated. That rule gives owners an exception for damages arising or resulting from "quarantine restrictions". However, the argument is perhaps weak considering that one might not be permitted to believe exceptions where the consequences of the exceptions could reasonably be avoided.

Deviation for crew changes

Under most traditional time charterparty forms, owners are granted the liberty to deviate the vessel for the aim of saving a life. it's going to not be possible to use this liberty within the present COVID-19 situation. Instead, an inexpensive deviation is expressly permitted under Article IV Rule 4 of the principles and available to owners if the principles are incorporated.

Whether or not a deviation for crew changes was reasonable also will be supported by a case-by-case assessment and subject as to if owners acted in due diligence in respect of the arrangements. Again, the court or the tribunal may check out timings, knowledge, and therefore the available options for swapping crew before the voyage commences. A deliberate deviation for crew changes with an intention of convenience solely (such on save costs) would probably be unjustifiable.

Unless owners could prove the reasonableness, owners are running the danger of breaching their contractual obligation to follow charterers' orders and to sail the vessel with utmost or due dispatch.

Owners are therefore recommended to form crew changes before commencement of the

contractual voyage or to invite charterers' consent before the conclusion of any fixture (particularly for brief period charterparties sort of a TCT).

Marine Insurance and Claims

According to P&I market reports, 2020/21 was an awful year in terms of technical underwriting results, with all Clubs reporting net combined ratios of more than 100%. The blame is laid universally on Pool and COVID-19 claims.¹³

Most of the Clubs are handling difficulties in respect of seafarers' repatriation, while they can't find how to help them not only with an illness but when in need of an emergency evacuation following an injury. because it was further noted, the value of treatment, repatriation, and medevac has exploded.

The position is not much different in the Marine Hull market. Market reports generally reflect both the vastly improved underwriting environment, but also the deleterious impact of COVID-19 and the adverse development of under reserved prior year losses. ¹⁴ Excluding COVID-19, Lloyd's market turned in an underwriting profit with a 97% combined ratio. Similar results, to a greater or lesser extent, were being declared by the Company market. ¹⁵

However, as the reinsurance market, to which all insurers including the Group Clubs are reliant upon, are also applying similar exclusions as renewals are presented, it might be a matter of time before coverage for pandemic-related claims will be impacted. Lloyd's of London has published proposals¹⁶ on how the market might meet the needs of business in the future, though this is likely to be in the form of additional coverages designed to stand alone or as an overall solution for

¹³ The P&I Report '21, Olympics Special Edition, Tysers International Insurance and Reinsurance Brokers (2021)

¹⁴ Quarter 1 2021 saw Lloyds post its fourth consecutive underwriting loss with a combined ratio of 110.3%, as COVID-19 losses of GBP 6.2 billion pushed the market into a GBP 900 million loss.

¹⁵ A Fragile Equilibrium - Half Year Report (2021), Lochain Patrick Marine Insurance Brokers.

¹⁶ Supporting global recovery and resilience for customers and economies: the insurance response to COVID-19, Lloyd's (2020)

insurers that will require the premiums to be charged as a separately identifiable cost and passed directly or indirectly to their assured clients.

Covid-19 has, doubtless, forced insurers to think about the impact that the potential of increased claims will wear their business. Whether insurers are willing to soak up the danger, counting on their existing reinsurance arrangements that currently don't have exclusions or write back a limited level of coverage and retain the danger or apply absolute exclusions will, in time be guided by the reinsurance market that underpins the actions of the direct insurer. In whichever way this unprecedented exposure is addressed by insurers, there'll inevitably be a consequential knock-on cost to the customer of insurance. The potential value of the claims that are already known will change the course of the market across the planet.

There may be Government intervention that will in time assist Underwriters in assessing and evaluating the danger to them through limitation doctrine. The marine market has seen this approach applied in other areas of high exposure like pollution, wreck removal, and passenger exposures. However, to realize International acceptance and adherence to such doctrine will take a few years and far debate to implement, and therefore the potential of a very global approach is even less likely.

Some of the most common risk exposures that dry bulk shipping companies may face in connection with COVID-19 are:

- Quarantine expenses
- Fines and penalties
- Deviation costs
- Crew maintenance and cure obligations
- Personal illness or death claims
- Loss of revenue

Below we will see in more detail the marine insurance policies that may respond to an infectious disease, like COVID-19.

Protection and Indemnity (P&I) Coverage

The International Group of P&I Clubs, which covers liability risks for between 90-95% of the worldwide shipping fleet, have found out a sub-committee to review the impact that Covid-19 will wear their mutual members. Of all the insurances a vessel owner purchases, Protection, and Indemnity insurance may provide the foremost amount of coverage for corona virus-related losses. The P&I coverage intends that the third-party liability claims and supply indemnity coverage for claims that arise in direct reference to the operation of the enrolled vessel, whether the vessel is owned, operated, or chartered.

It has been determined thus far that, as there are not any specific exclusions contained within the Club Rules for the 2020 year of account, claims which will arise directly under the coverage afforded by the Club Rules are going to be skilled accordingly and is extremely much in line with a Club's ethos to support the shipowner's needs. The claims are going to be covered by the Mutual funds and reinsurance, where applicable recoveries are often made. within the highly unlikely event that there would be a shortfall, further premium demands might be demanded from the Club Members within the shape of additional supplementary calls. the inspiration upon which the Clubs were founded.

Quarantine Expenses: Crew on board a variety of ships have caught COVID-19, as a result of which the ships are quarantined. just in case of an epidemic of the communicable disease onboard, quarantine expenses, i.e. the extra costs incurred when a vessel is forced to suit a quarantine order by the local health authority, could also be recoverable from P&I Clubs, after deductions for the prices that might are incurred by the vessel anyway, despite the quarantine. the prices and expenses usually contemplated are bunkers, insurance, wages, stores, provisions, victualling, and port charges that are incurred as a result of the quarantine.

Crew Maintenance and Cure: Crew members who become ill with COVID-19 during their employment aboard vessels will still be entitled to maintenance and cure from the vessel owner. Maintenance and cure benefits are due for illnesses or injuries, regardless of any negligence or other fault on the part of the employer. P&I Clubs will likely respond and buy these claims. Interestingly, the upkeep and cure remedy includes illnesses that first manifest themselves during

the utilization, so injuries occurring ashore or maybe prior injuries or illnesses that reoccur during employment could also be included.

Personal illness or death claims: Third-party liability insurance cover responds to a Member's liability to pay damages or compensation for illness and death resulting from illness of any seaman including hospital, medical, funeral, or other expenses necessarily incurred due to such an illness or death. Such liability will typically fall into the terms of an approved contract of employment or possibly under common law. If a serving crewmember falls ill or dies thanks to coronavirus, this can be treated in the same way as the other crew illness or death claim.

Fines and penalties: Port Authorities around the globe have adopted strict measures and need information before allowing a vessel to enter a port, while they impose fines just in case of non-disclosure or false information.

P&I Clubs would also consider claims for fines and penalties imposed on the vessel by governments and their health authorities, except where there's recklessness by the owner or if the vessel made intentional illegal calls at a quarantined port.

Deviation costs: Regardless of the nature of the illness, it's going to be necessary for a ship to deviate from its intended voyage to get appropriate medical aid for a sick crewmember on board. internet costs of the diversion in respect of fuel, insurance, wages, stores, provisions, and port charges are covered under the policy to the extent that such costs exceed what would be incurred no matter the diversion.

Loss of revenue: The occurrence of delay or some loss of your time is fairly frequent in maritime transport. Losses arising from delay are nearly always excluded under the quality sorts of marine insurance policies and under the Marine Insurance Act 1906 (MIA). Loss of time, freight, or revenue are generally excluded under IG P&I Club Rules.

It is important to notice that the above clauses are typical policy conditions and thus purely illustrative. Each case would need to be assessed on its own merits. Also, the clauses aren't binding on any Assured. The parties negotiating an insurance contract are completely liberal to agree upon other insurance conditions and clause wordings or modify the clauses.

Legal, Liability, and Insurance Issues arising from Seafarers Vaccination

A number of legal, liability, and insurance issues would potentially arise for shipowners from or about vaccinations of the crew for coronavirus (COVID-19).

The starting point for analysis is the Maritime Labour Convention, 2006¹⁷, as amended (MLC, 2006), which provides the minimum standards and rights of seafarers. Article IV of the MLC, 2006¹⁸ includes minimum requirements on shipowners to provide access to medical care onboard ships and ashore. MLC, 2006 does not include provisions for vaccinations/immunizations.

As there are not any express provisions within the MLC, 2006 regarding vaccinations, it's necessary to show to national law, either of the flag State which can regulate this (and which can also govern the seafarer's contract of employment) or the law of the seafarer's country. it's not feasible to conduct a review of the laws of all states, but some general principles are often drawn (based on English law as a focus).

The International Group of P&I Clubs (IG P&I), except for a useful guide¹⁹ on crew vaccinations, has also collaborated with the International Chamber of Shipping (ICS) and the ITF on an ICS publication²⁰ to answer some questions that are frequently asked about P&I Club cover relating to the vaccination of seafarers.

According to guidance²¹ issued by the P&I Clubs, in certain circumstances, members can make having a vaccine, providing proof of having a vaccine, and even having a particular type of vaccine conditions of the contract, but always subject to the law applicable to the contract. It is also

¹⁷ The Maritime Labour Convention is the fourth pillar of international maritime law and embodies "all up-to-date standards of existing international maritime labour Conventions and Recommendations, as well as the fundamental principles to be found in other international labour Conventions". The other "pillars are the SOLAS, STCW and MARPOL.

¹⁸ Maritime Labour Convention, 2006, Article IV, p.4, International Labour Organization.

¹⁹ <u>Vaccination of Seafarers, Frequently Asked Questions (FAQ's) relating to P&I Club Cover, IG P&I (July 2021)</u>

²⁰ Coronavirus (COVID-19): Legal, Liability and Insurance Issues arising from Vaccination of Seafarers, International Chamber of Shipping (2021)

²¹ Standard Club COVID-19 Vaccination FAQS, Michael Hughes, Rahul Sapra, Jamie Wallace, 6 August 2021

important to note that the cost of the vaccine and any time spent to administer or facilitate the administration are operational expenses and do not fall under members' P&I cover.

It is unlikely that shipowners are going to be ready to amend or vary an existing employment agreement to incorporate a replacement requirement or mandate that the seafarer is to be vaccinated unless the seafarer provides their free and consent to the amendment.

Regarding new contracts of employment, it's going to be possible to form it a condition of the utilization contract that the seafarer obtains any necessary vaccine(s), for instance, vaccines that are required for the countries the ship might visit. In such a scenario, whether members may include such a condition will therefore depend upon where the ship will, or may realistically, be going and whether such a vaccine is required or necessary to go to those countries.

Given the characteristics and danger of Covid-19 and therefore the existing global pandemic, vaccination may be going to be required by an increasing number of states because it will protect both the seafarer and anyone they are available into contact with.

In all cases, vaccination requires an individual's informed and voluntary consent and can't be forced. Accordingly, even in cases where there's a contractual requirement to possess the vaccine, an employee may refuse vaccination. Therefore, the difficulty with the crew vaccination requires very careful handling on behalf of the company because it involves a variety of general and operational issues to be addressed.

As the pandemic situation evolves, it is important for crew departments to be monitoring the situation closely and consult with their P&I Clubs for further guidance, as every case could be significantly different based on the place and the applicable regulations at the time.

Charterparty Developments

The outbreak from time to time of virulent diseases can have significant implications for ship owners and operators. With the broader Shipping industry is suffering from the pandemic, shipping contracts, like charterparties, couldn't be unaffected. during this section, my aim is to stipulate some key issues we've seen under a spread of shipping contracts in light of COVID-19 and supply a flavor of what can arise under shipping contracts.

Time Charterparties

Off-Hire

Generally, under the main dry cargo charterparty agreements, a vessel would not be off-hire if she is merely delayed in entering a port due to a lockdown, or congestion, on account of COVID-19.

New York Produce Exchange Form (NYPE)

The New York Produce Exchange Form (NYPE) is the most widely used standard time charter party in the dry cargo sector.

Clause 15 of the NYPE form (1946 edition)

- 1) This clause would not be triggered because its first requirement (applicability of a named off-hire event) would not be satisfied: none of its specific named events ("deficiency of men or stores, fire, breakdown or damages to hull, machinery or equipment, grounding, detention by average accidents to ship or cargo, drydocking for examination or painting bottom") would apply, and the general "or by any other cause" event would not apply either since this refers to events that are similar to the previously-named ones. However, if "whatsoever" is added to the end of the general phrase, this would be an applicable event because under English law this encompasses any events at all. Alternatively, if a sufficient number of the crew are infected and are not able to perform their duties because of that, that could constitute a "deficiency of men" under the clause.
- 2) Even if a named event applies, the clause contains a second requirement that the event has prevented "the full working of the vessel". Under English law, this means that the event is

preventing the vessel from doing what it is immediately required to do by the charter service (as opposed to what the time charterer would like it to be doing). If the vessel is, say, waiting in a berthing queue along with other vessels then this is the required service, the "full working of the vessel" is therefore not be prevented and the vessel is not off-hire. On the other hand, if the vessel is taken out of the berthing queue and has to wait somewhere else, it may be that its full working is being prevented and that it would be off-hire. It is a fact-specific exercise.

"If the vessel is taken out of the berthing queue and has to wait somewhere else, it may be that its full working is being prevented and that it would be off-hire."

Clause 17 of the NYPE form (1993 edition)

3) A similar analysis would follow under clause 17, whose specific named events and general event ("or by any other similar cause") would not apply, and whose second requirement would operate in the manner described above.

If the vessel is off-hire, then a question may arise as to whether the time charterer can cancel the charterparty if this continues for more than a certain number of days stated in the applicable Rider Clause²².

BIMCO COVID-19 Crew Change Clause 2020

The COVID-19 Crew Change Clause²³ was drafted by BIMCO in response to the extraordinary circumstances faced by many homeowners whose crew have had to stay on board during the COVID-19 "lockdown" for periods often extending beyond their contracts of employment. Although travel restrictions are starting to ease, there are still restrictions in many countries. This clause was designed to offer owners the freedom to deviate from crew changes under tightly defined circumstances. It also provides an option for charterers to contribute to the crew change in recognition of the extraordinary cost of creating a COVID-19 related crew change in which

²² Apart from derivations (such as the ASBATIME 1981, which is much more modern) both shipowners and charterers may also want to amend standard terms and add terms, which are specific to their own needs. The clauses in which these added terms are contained are known as "Rider clauses". The phrase means a set of additional clauses which substitute or supplement clauses in the original document.

²³ The BIMCO COVID-19 Crew Change Clause wording can be found in the Appendix.

charterers have a shared interest in having an efficient, rested, and well-performing crew onboard the ship.

The purpose of the clause is two-fold:

- firstly, it confers on owners a right to deviate from crew changes that would otherwise be prevented due to COVID-19 restrictions.
- Secondly, it provides an option for time charterers to contribute to crew changes by way of reduced daily hire for the duration of the deviation plus an equal share of bunker costs.

This clause permits the owner to refuse to proceed to or remain at a port or place which "in the reasonable judgment of the Master/Owners" is an "an Affected Area", defined to be a "port or place where there's a risk of exposure to the Vessel, crew or other persons on board to the Disease and/or to a risk of quarantine or other restrictions being imposed in reference to the Disease (in turn defined as a "highly infectious or contagion that's seriously harmful to humans")". consistent with BIMCO, this concerns extreme outbreaks of diseases, instead of mere everyday illnesses, as where there's, say, a declaration by a public health authority of a public health emergency (as would be the case with COVID-19).

If despite this, the vessel proceeds to such an area then the clause provides among other things that "additional costs, expenses or liabilities whatsoever arising out of the Vessel visiting or having visited an Affected Area, including but not limited to screening, cleaning, fumigating and/or quarantining the Vessel and its crew, shall be for the Charterers' account" which the vessel will "remain on hire throughout". The clause also provides the owner with an indemnity by the time charterer if the vessel incurs/experiences any delays, costs, expenses or liabilities after redelivery as a result of visiting an "Affected Area" during the charter.

The carrier contracts to move cargo from the place of delivery or loading to the place of discharge or delivery and is obliged to proceed with due dispatch on the standard route with no unreasonable deviation. Therefore, it's also important to form regard to the elemental importance of avoiding as carriers under a contract of carriage the danger of an unjustifiable deviation. Under this BIMCO Clause, any deviation under this clause won't be a breach or infringement of the contract. The exclusion of owners' liability for any loss or damage applies only within the context of such

deviation and to no other contractual losses or damage. It is, however, of fundamental importance that on each and each occasion owners shall deviate they need to first inform their P&I Club to determine that the deviation won't prejudice their P&I cover²⁴.

However, during this depressed shipping market, we've seen charterers renegotiating the wording of this clause in an attempt to limit its scope and it's hardly acceptable by the charterers because it is extremely much in favor of the shipowners.

In the absence of such a clause, an owner could, if he suffers loss as a result of proceeding to a port that's in lockdown or quarantined thanks to COVID-19, seek to believe the implied indemnity arising from him following the time charterer's orders under clause 8 of the NYPE forms against the results of signing bills obliging the vessel to proceed to a specific port, but this can be an uncertain route to follow.

Voyage Charterparties

Laytime

As soon because the vessel arrives at the place stipulated by the charterparty, the Master must tender a Notice of Readiness (NOR). Often this is often done before free pratique is provided. However, if free pratique isn't provided due to COVID-19, this can affect the validity of the NOR and stop the running of laytime, requiring the Master to re-tender a NOR as soon as free pratique has been provided.

As far as COVID-19 quarantine delays are concerned, whether this can constitute an exception to the running of laytime or demurrage depends on the wording of the charterparty. it might not be an exception under the quality wording of, say, the 1994 Gencon form (for bulk carrier vessels).

²⁴ P&I cover may be prejudiced if the deviation from the contractually agreed voyage would deprive the owners of the right to rely on defences or rights of limitation which would otherwise have been available to them. If the deviation from the contractually agreed voyage to effect such crew changes is not deemed by the applicable law/jurisdiction to constitute a "reasonable" deviation, the owners will be deprived of their defence under Article IV(4) of the Hague-Visby Rules. However, if sub-clause (a) has been incorporated into the contract of carriage, the owners will have expressly retained their Article IV(4) defence. The P&I clubs assess the circumstances of each deviation and advise whether additional cover is needed.

Force Majeure

Under English law, there's no concept of 'force majeure' within the sense of a celebration to the contract being excused from complying with its obligations thanks to an occasion beyond its control. Therefore, a celebration can only plead an act of God during a COVID-19 context under a voyage charterparty contract (or any contract) governed by English law if the contract expressly permits this.

Some voyage charterparties contain 'force majeure' provisions excusing contractual performance if one among the named events applies, however, their ability to use during a COVID-19 context will depend upon the wording of the clause.

BIMCO Infectious or Contagious Diseases Clause 2015

The BIMCO clause drafted for voyage charterparties contains similar provisions to the BIMCO clause for time charterparties.

Port/ Berth Safety (time and voyage charterparties)

Under English law, a port or berth is unsafe if the actual vessel cannot reach it, use it and depart from it without being exposed to danger which can't be avoided by good navigation or seamanship. With this in mind, mere delay to a vessel due to a COVID-19 lockdown or quarantine shouldn't render the port unsafe unless the owner can point to a really real danger, say, to the crew onboard the vessel.

Voyage Frustration

A contract is often delivered to an end by frustration if an occasion that neither party is responsible makes the performance of that contract radically different from what was originally agreed. Mere delay, or maybe very excessive delay, hardship, or loss won't suffice. With this in mind, it might take something very radical, on account of COVID-19, to offer rise to frustration.

Bills of Lading

Where the BIMCO Infectious or Contagious Diseases Clause appears during a charterparty whose germane terms are successively incorporated by a Congenbill 1994 form bill of lading, this may be particularly helpful for the owner within the event of a dispute with the bill of lading holder arising out of the owner's exercise of his rights under this charterparty clause.

Shipbuilding and Ship sale contracts

Shipbuilding Contracts

BIMCO NEWBUILDCON

The BIMCO NEWBUILDCON and Shipbuilders' Association of Japan (SAJ) forms, being the 2 most ordinarily used shipbuilding contract forms (albeit significantly amended by the parties in each case), permit the yard to postpone the vessel's delivery date for a "permissible delay" thanks to named "force majeure" events that are beyond their reasonable control.

In a COVID-19 context, the "epidemic"/"government...requirement or interference"/"cause of an identical nature" (NEWBUILDCON form) or "epidemics"/"quarantines"/"requirements of state authorities" (SAJ form) named events would seem to use, though the yard would have the burden of proving that this delayed the vessel's construction which it's beyond the parties' reasonable control, additionally to which it might need to notify the customer of the occurrence of this event and its termination. If the "permissible delay" continues for a particular number of days, the customer may have the proper to cancel the contract.

Ship sale Contracts

COVID-19 may produce issues under MOAs for the sale of ships, where the port at which the vessel is to be delivered by the vendor is in lockdown or is quarantined and where the contract provides for the vessel to be delivered by the required date failing which the contract are often canceled. within the absence of a 'force majeure' clause (which doesn't feature within the Norwegian Sale Form that's typically used), the precise answer to those issues will depend upon the wording of the actual contract.

Crisis management from Management's perspective

One of the most important impacts of coronavirus on the shipping industry is probably going to be the economic fallout of lockdowns and containment measures, which are disrupting production and supply chains, and damaging consumer and business confidence.

As the world emerged from the primary wave of coronavirus, the longer term for trade looked bleak. The International Monetary Fund2 says global GDP growth will fall to -3% in 2020, while the planet Trade Organization (WTO) expects world trade to fall by between 13% and 32% in 2020. A recovery goes in 2021, although this is often hooked into the duration of the outbreak and therefore the effectiveness of policy responses.

The pandemic has already begun to affect maritime trade, which had already been slowing, weighed down by trade tensions and weakening economic process. The WTO Goods Trade Barometer showed a pointy contraction within the second quarter of 2020, falling to its lowest value on record. the most important falls were in automotive products and container shipping, reflecting weak demand for goods also as supply-side constraints. the primary half of 2020 could see a 25% fall in shipping traffic, with a tenth drop for the year overall.

Revenues generated by German shipping companies declined by 30% to 40% in March and April 2020, consistent with the German Shipowners Association (VDR)4, which warned that the existence of considerable segments of the German merchant fleet is endangered. a discount in trade and shipping will have implications for safety and claims. Efforts to chop costs could impact marine insurance claims long run, although a discount in sailings might be a positive for claim frequency.

Shipowners faced additional cost pressures from a downturn in trade and put efficiency measures in situ. Crew and maintenance budgets are among the primary areas that are cut. But safety and maintenance standards mustn't be impacted by the downturn. The shipping companies operate in a particularly volatile and risky environment, counting on the effective use of data to stay competitive.

However, decision-making during this market is demanding due to the high uncertainty, market competition, and significant capital investments. Moreover, the rapid spread of COVID-19 renders information uncertainty a frightening challenge for companies engaged in global trade. Very enlightening is the study by Kelly Gerakoudi-Ventouri²⁵ to explore the knowledge behavior of managers during a time of crisis.

This study provides novel insights into the knowledge behavior of senior managers by adopting a qualitative approach. Forty-nine semi-structured face-to-face interviews with individuals from Hellenic shipping companies were conducted. Moreover, this study explores the extant theory qualitatively, using the grounded theory methodology, and shows that an unprecedented event (pandemic crisis) can redefine the knowledge behavior of managers. Moreover, this study highlights the importance of data in decision-making. Therefore, the results show that, during an epidemic, managers resort to alternative information sources, adopt collaborative information behaviors, and cash in on digital technology.

Effect of the pandemic on managerial decision-making

The current pandemic has resulted in the implementation of social distancing measures worldwide, including performing from home; it's also affected the knowledge behavior of people (El Junusi, 2020)²⁶. Moreover, the lockdown disrupted supply chains and a deadlock within the shipping industry. Overall, it is often implied that this pandemic and measures associated with it have affected the worldwide economy in a detrimental way (Vidya and Prabheesh, 2020)²⁷.

The study of data behavior during an epidemic crisis is comparatively unknown (Pan et al., 2020)²⁸. An inevitable consequence of this pandemic is an unusual pattern of information-seeking behavior, as people are confronted with a requirement for information (Bento et al., 2020a, 2020b). Unavoidably, all information about this crisis, including measures taken, has negatively impacted

²⁵ Kelly Gerakoudi-Ventouri, Shipping managers' information behavior during a pandemic crisis, Maritime Business Review, 8 June 2021.

²⁶ Rahman El Junusi, Digital Marketing During the Pandemic Period; A Study of Islamic Perspective, Journal of Digital Marketing and Halal Industry, Volume 2, pp 15-28, 10 July 2020.

²⁷ C. T. Vidya & K. P. Prabheesh (2020) Implications of COVID-19 Pandemic on the Global Trade Networks, Emerging Markets Finance and Trade, 56:10, 2408-2421.

²⁸ Pan, Y., Darzi, A., Kabiri, A. et al. Quantifying human mobility behaviour changes during the COVID-19 outbreak in the United States. Sci Rep 10, 20742 (2020).

the market expectations, by increasing levels of uncertainty within the shipping industry (Nikolopoulos et al., 2020)²⁹. This incremental amount of uncertainty has complicated the method of decision-making.

As a result, decisions are often made under time constraints and high uncertainty due to the shortage of credibility of data resources (Rosella et al., 2013). However, there's still a requirement to form informed decisions under such conditions (Lipsitch et al., 2011) because firms should pursue critical and quick decision-making for survival (Cesari and Proietti, 2020)³⁰. In these circumstances, managers are faced with the challenge of collecting relevant information. These challenges in managerial decision-making are often remedied by adopting suitable and effective decision-making policies. Predictive tools also can be adopted to help in effective managerial decision-making during pandemic crises.

Decision-making is often enhanced by using simulation tools that replicate the circumstances of an identical event (Araz et al., 2013). Doing so will minimize uncertainty during a true event because individuals are going to be more prepared. Furthermore, uncertainty during pandemics might be reduced by using contingency/emergency plans (Rosella et al., 2013), thus facilitating decision-making. Managers shouldn't underestimate the role of collaboration in decision-making during an epidemic crisis. Communication between decision-makers and data collectors should be supported to strengthen information channels (Lipsitch et al., 2011)³¹. In fact, individuals tend to use informal channels as information resources during pandemic crises (Lipsitch et al., 2011). this sort of collaboration often leads to quick and innovative analyses of knowledge that support effective decision-making under these circumstances (Lipsitch et al., 2011).

Essentially, information dissemination, collaboration, and building of strategic alliances could contribute to simpler decision-making during pandemic crises (Crick and Crick, 2020). More specifically, "coopetition" (which refers to competitive firms collaborating) could help companies

²⁹ Nikolopoulos, Konstantinos & Punia, Sushil & Schäfers, Andreas & Tsinopoulos, Christos & Vasilakis, Chrysovalantis. (2020). Forecasting and planning during a pandemic: COVID-19 growth rates, supply chain disruptions, and governmental decisions. European Journal of Operational Research.

³⁰ Cesari, M., & Proietti, M. (2020). COVID-19 in Italy: Ageism and Decision Making in a Pandemic. Journal of the American Medical Directors Association, 21(5), 576-577.

³¹ Lipsitch M, Galvani AP (2014) Ethical Alternatives to Experiments with Novel Potential Pandemic Pathogens.

withstand the economic effects of the COVID-19 pandemic (Crick and Crick, 2020). Overall, decision-making during pandemic crises should be supported credibility, transparency, and explicitness (Rosella et al., 2013).

Data collection

The research subjects were 49 Hellenic shipping managers from small-sized companies (10-25 employees) in Piraeus, Greece. Most of the businesses were family-owned, the typical fleet size of the sample companies was between 5 and 30 vessels, the typical turnover of the businesses fluctuated between US\$7m and US\$50m and their asset value varied between US\$50m and US\$800m.

The sample companies were initially contacted through telephone, the scope of the research was explained to the managers, and that they were asked if they wished to support the study. Initial contact with the concerned managers in each firm was informal. A manager was selected after the initial contact confirmed the organization's commitment to the study and therefore the researcher ensured access to and commitment of your time by the participants. The researcher endeavored to create confidence and trust with the staff of the shipping companies. All the participants were sent a letter preceding the interview stating that the participation was voluntary, explaining how the info was alleged to be used, and reassuring anonymity and confidentiality.

The participating companies were involved within the dry bulk, wet bulk, containers, and ferry sectors of the shipping industry. The research didn't examine the managerial population of all shipping companies; 40 shipping companies were selected (out of about 450 shipping companies) from which 49 managers were interviewed.

As such, the target was to accumulate deep knowledge of a small sample regarding the utilization of data and knowledge resources in decision-making. Additionally, the sample was statistically examined to spot any significant differences among the varied shipping sectors.

Results

The chemical analysis of the research on decision-making revealed that each participant (100%) replied positively to the question of whether managers actively seek knowledge and knowledge to form informed decisions.

Moreover, the managers supported the opinion that shipping is an industry that required quick and up-to-date information.

They also indicated that being conscious of competitors' moves also because the market levels was necessary; hence, the necessity for information. It can, therefore, be implied that creating informed decisions is vital for managers who increase their firm's competitiveness, even with the consequences of the COVID-19 pandemic on global trade.

Most managers indicated that prime uncertainty (28.57%) and high risk (24.49%) triggered the look for information. However, several participants supported the view that lack of data played no significant role in seeking information. The study explored the reliance of managers on either real-time data (up-to-date) or experience (the use of data from similar, past cases) to tell decisions. Most managers (59.18%) confirmed using both data and knowledge when making decisions. Nevertheless, a couple of the participants (26.53%) supported the view that has played no role in making decisions.

The research results on the effect of COVID-19 on managers' information behavior, revealed that pandemics affect how individuals seek and use information. The research findings suggest that the COVID-19 pandemic created the necessity for decision-makers to form informed decisions in urgent conditions using available information. However, the research results showed that decision-makers adopted irrational information behaviors and sometimes made decisions without information, or with some sort of bias.

Further, the research findings confirmed that pandemic influences not only society but also the markets, affecting global trade and particularly the shipping industry. especially, the research results showed that future pandemics might cause great disruptions in international trade and provide chains, additionally, market risk and uncertainty increase due to an epidemic. This increase is followed by a decline in revenues and an increase in costs, which further hinders effective decision-making.

Concerning the effect of COVID-19 on decision-making, the literature suggests that decision-makers are obliged to form decisions often without information and under time constraints. The research findings confirmed that conditions of great uncertainty and stress render decision-making

challenging. Concerning the characteristics of the decision-making pandemic, the research results showed that the aggressiveness of COVID-19 combined with government policies to contain the spread resulted in an increased need for information and increased uncertainty. additionally, decision-makers needed to form quick decisions under time constraints. However, the results revealed that managers were confronted with credibility concerns in times of crisis because it is associated with the available information, an element that negatively influences decision-making. thereon a basis, the research findings showed that managers need to better evaluate not only information resources but also their decisions, taking advantage of the available technology to form better-informed decisions.

In effect, managers must reevaluate their decision models by assessing the quantity of their time spent on prioritizing existing and new/alternative variables that affect any decision (Crick and Crick, 2020; Lipsitch et al., 2011). The results also highlighted the importance of using preparedness and predictive plans to raised deal with the consequences of such a crisis.

The last major category identified by the chemical analysis of the research data refers to the new mode of data behavior adopted by individual managers following an epidemic crisis. The research results revealed that decision-making needs to be supported by effective planning as a characteristic of such a replacement mode of data behavior during an epidemic, the utilization of predictive tools which will simulate the circumstances of a crisis would even be useful for decision-makers. Moreover, the research findings underscored the importance of collaboration among competing companies during crises, especially, the research results suggest that effective communication, the usage of private channels of data, and therefore the establishment of a "coopetition" among competing companies, for sharing and using credible data, could enhance decision-making during an epidemic crisis. Finally, the research results emphasized the important role that technology can play in supporting simpler information dissemination and sharing of knowledge, to form more informed decisions in times of crisis.

In conclusion, by employing a qualitative approach this study offers a phenomenological exploration of senior managers' information behavior when informing decisions in times of crisis. Specifically, by extending the prevailing theories, this study illustrates effective sorts of information behavior for managers during crises, to enhance decision-making. The results depict

the importance of data for decision-making, especially in an era characterized by a singular pandemic like the COVID-19 pandemic. The results highlight the importance of using alternative information resources, investing together and explicitness of data, taking advantage of the new digital technology to assess decision-making plans and collect relevant information, to deal with novel and challenging market situations.

Conclusions

Coronavirus is an ongoing situation that is evolving day by day and the effects could be deep and long-term. What shipping will look like post-COVID-19 is unclear. It will be quite a while before we understand the complete impact of the Covid-19 pandemic. But the history of such shocks tells us two things. First, even in severe economic downturns and recessions, some companies are ready to gain an advantage.

Second, crises produce not just a plethora of temporary changes, but also some lasting ones. For instance, the 9/11 terrorist attacks caused only a short-lived decline in aviation, but they caused an enduring shift in societal attitudes about the trade-off between privacy and security, leading to permanently higher levels of screening and surveillance. Similarly, the 2003 SARS outbreak in China is usually credited with accelerating a structural shift to e-commerce, paving the way for the increase of digital giants.

The Covid-19 pandemic has severely disrupted global consumption, forcing (and permitting) people to unlearn old habits and adopt new ones.

Shipping companies have emerged from the crisis stronger and definitely more resilient.

The outbreak of the infectious disease named as the coronavirus disease (COVID-19) caused by the newly discovered coronavirus has caused chaos and panic all over the world causing the ceasing of all normal daily activities like going to work, a walk outside or in some countries even stepping a foot outside the house. One of the activities that has also been majorly impacted due to the spread of this disease is the shipping and maritime industry. This epidemic has caused the shipping and maritime industry to face the worst circumstances as the workforce in these sectors has been shut down for the safety and prevention of the escalation of COVID-19. This setback has also been caused due to the standstill of all kinds of cargos via water or air during this quarantine period (period of isolation) as the transportation of such cargos in ships or through the air can be possibly carrying with it the virus from one port to another. This widespread pandemic has launched a major brunt for the shipping and maritime industry not only from the ports of China (where the virus is said to originate) but also the ports globally. All the trade chains, including the major import and export trade, is in the face with a downfall.

During this adverse time and the urgency of the situation, a ban has also been imposed by various countries on the entry of containers and vessels that are being operated from other ports, especially those that are transported from China. Such impeded operations have hampered with the logistics and operations of these industries. During this adverse time, many

workers and staff are being trapped onboard the vessels due to either being in quarantine or for other prescribed safety issues. The ports are also running at a low capacity, and the storage facilities have been highly overcrowded. The maritime transport and shipping industry is plastered with major challenges during these challenging times. Some of these issues faced by the maritime and shipping industry have been outlined below:

Port closures

Ports have been closed due to quarantine periods in effect and in order to ensure the well-being of workers and various conditions have been imposed, for instance, the ban of marine vessels into certain countries which has demanded such vessels to be on the water and not have a destination port to go to. The entry of vessels by certain countries has been restricted or prohibited, thus, causing chaos amongst the marine transportation facilities globally.

Less demand for cargos

The competent health authorities of every country are avoiding the risk of spreading of COVID-19, which has led to the decline in import and export of products and goods between countries. All such goods that were previously carried conveniently on a ship or any other marine vehicle have to follow a set standard of rules and procedure which has limited the demand for such cargos. The delay in such transportation due to added complications of quarantine periods have led to the further decline of demand for such cargos. Perishable goods are not being able to be transported due to the waiting period of 14 days or the waiting period prescribed by the competent authorities in every country.

Disputes between owners and charters

Charters hire the vessels from the owners of the vessels and various kinds of disputes are arising between the owners and charters of such vessels due to loss of time and money. The disputes are arising pertaining to the hire period of such vessels where the charter had been granted such a vessel for a limited period of time; however, such time period being negated due to force majeure.

Disputes in lay time settlement

The owners grant the vessels to charters for a definite time period for fixed costs. The overriding of such time period leads to additional costs that have to be paid for surpassing the set time period. COVID-19 has imposed major difficulties on the settlement of such time period as the vessels are prohibited from entering certain ports forcing them to be on territorial waters for an extended period of time forcing them to be a party to pay additional costs that are under the light of dispute. Due to force majeure, such costs are not being paid, therefore, causing losses to parties.

Discussion on clauses

Every owner of a ship or a vessel is to add an infectious disease clause within its directives and guidelines which is causing a dispute between the owners of the vessels and charters hiring such vessels. Both parties would want to add such clauses advantageous to their own situation or clauses that ensure maximum safety which is leading to disagreements on which clauses to be inserted.

Bankruptcy

Many small companies engaged in the maritime and shipping industry have gone bankrupt due to less demand and the inability to handle the finances of the company during this period of less demand of cargos and shipping. This has majorly impacted the small running businesses and even resulted in the shutting down of various companies engaged in this industry.

Federal Transport Authority in Play

The Federal Transport Authority (FTA) in the United Arab Emirates (UAE) has issued circulars with instructions that mandate various precautionary measures in light of the outbreak of COVID-19 in the maritime and shipping industry. Such instructions dictate the measures and methods to be adopted for containers and vessels that enter through the various waterways and airways in the UAE. Such instructions have been issued to contain the negative effects of this contagious disease and aims to keep the safety of transportation staff and users as the top priority. Such directives include the reduction of the number of staff engaged in such transportation, apply the preventive distancing policy in the public transport means, implement regular plans for disinfecting means of transport and facilities as determined by the competent authorities from time to time, ensure a backup for human resources in case the current staff falls as a victim to the virus so that the continuity of such operations is maintained, organize and establish communication channels within

every organization to facilitate the reporting of any symptoms in order to tackle it swiftly in accordance with the procedures of the respective country. Moreover, instructions that have been issued to educate the staff and workers about the crucial and necessary precautions and measures to be taken with regards to their operations in the work environment. All the vital equipment required for the disinfection is also to be delivered and installed and all such disinfection supplies to be distributed amongst the workforce and staff.

The transportation facilities would also be disinfected on a timely basis and reduce the staff by launching modern technologies to do the possible work. Priorities are given to seafarers with resident visa who are stuck board the ship vessels, the crew that is longer medically fit to carry out work onboard the ship and crew or seafarers that require urgent medical attention. Some of the other instructions that have been issued by the FTA include the following:

- All the dry docks, ship repair and maintenance workshops are to prevent and ban entry to any ship or marine vessel for any repair, maintenance or repair workshop except under the quarantine rules for the crew of the ship or marine vehicle. Such quarantine period defines that a ship repair or maintenance workshop can be held only after the passage of 14 days from the date of such ship or marine vehicle being located in the last designated port or after the passage of 14 days from the date of the last interaction of the crew of the ship with any person outside the ship or vessel.
- The captain of the ship or the marine vehicle is to inform the competent health authorities in case of any detection of symptoms of COVID-19, and all such information is to be delivered in time in order to avoid penalties.
- The FTA has also stopped the entry of foreign yachts and coordinated with relevant authorities to prevent the issuance of sailing permits.
- All commercial, marine recreational activity and personal pleasure boats have also been suspended during the nation sterilization period with the exception of mountainous areas and islanders that are to use these means only in accordance with the set requirements.

The work of wooden ships has also been suspended by the FTA, where all such work of wooden ships is banned from entering the waters of UAE and allow only such ships that are loaded with food and fish. The wooden ships are to remain in the territorial waters for a maximum period of 7 days in order to prevent mixing with seafarers. All wooden ships that are devoid of prior commercial contracts and are coming for direct shopping from the local market have also been forbidden.

All such guidelines have been issued by the FTA in order to ensure the implementation of such instructions and the failure of which would lead to applicability of heavy fines on the violators of such instructions. All such instructions are regulated in coordination with the competent authorities and are to be carried out in order to prevent the further spread and outbreak of this infectious disease and in order to ensure the security and safety of the workers engaged in such transportation facilities. Appropriate health scanning and clearance from ports is required before permitting any vessel inside the port of UAE. With the pandemic of COVID-19, the maritime and shipping activity has reduced significantly, and the way to recovery is showing signs of slackening. However, the hopes for recovery exist, and with added precautions and measures being taken, one can positively hope for the restoration of maritime and shipping activities inadequate swing boosting the economy.

References

Millefiori, L.M., Braca, P., Zissis, D. et al. COVID-19 impact on global maritime mobility. Sci Rep 11, 18039 (2021)

Rapaccini, M., Saccani, N., Kowalkowski, C., Paiola, M. & Adrodegari, F. Navigating disruptive crises through service-led growth: The impact of COVID-19 on Italian manufacturing firms. Ind. Market. Manag. 88, 225–237

Impact of the COVID-19 pandemic on trade and development: transitioning to a new normal (UNCTAD/OSG/2020/1) (19 Nov 2020)

Marine Insurance and Risk Management Responds to COVID-19 Pandemic, A.J. Gallagher, News and Insights (April 8, 2021)

ICS International Chamber of Shipping: Coronavirus (COVID-19) Guidance for Ship Operators for the Protection of the Health of Seafarers (pdf)

IMO: Focus on Coronavirus disease (COVID-19)

WHO: Operational considerations for managing COVID-19 cases and outbreaks on board ships

WHO: Handbook for management of public health events on board ships

CDC: Interim Guidance for Ships on Managing Suspected Coronavirus Disease 2019

EMSA: COVID-19 Impact on Shipping Report (September 2021)

IUMI Global Maritime Issues Monitor, p.26, Global Maritime Forum (2020)

Coronavirus (COVID-19) Vaccination for Seafarers and Shipping Companies: A Practical Guide, International Chamber of Shipping (March 2021)

Braca, P. et al. Decision support for the quickest detection of critical COVID-19 phases. Sci. Rep. 11, 1–13. https://doi.org/10.1038/s41598-021-86827-6 (2021)

Soldi, G. et al. Quickest detection and forecast of pandemic outbreaks: Analysis of COVID-19 waves. In IEEE Communications Magazine (2021)

Sarkis, J., Cohen, M. J., Dewick, P. & Schroder, P. A brave new world: Lessons from the COVID-19 pandemic for transitioning to sustainable supply and production. Resourc. Conserv. Recycl. 159, 104894. https://doi.org/10.1016/j.resconrec.2020.104894 (2020)

Nicola, M. et al. The socio-economic implications of the coronavirus pandemic (COVID-19): A review. Int. J. Surg. 78, 185–193. https://doi.org/10.1016/j.ijsu.2020.04.018 (2020)

World Trade Organization (WTO). Trade set to plunge as COVID-19 pandemic upends global economy (2020)

<u>United Nations Conference on Trade and Development (UNCTAD).</u> Review of maritime transport (2019)

<u>United Nations Conference on Trade and Development (UNCTAD).</u> COVID-19 and maritime transport: Impact and responses (2020)

Depellegrin, D., Bastianini, M., Fadini, A. & Menegon, S. The effects of COVID-19 induced lockdown measures on maritime settings of a coastal region. Sci. Total Environ. 740, (2020)

Kelly Gerakoudi-Ventouri, Shipping managers' information behavior during a pandemic crisis, Maritime Business Review, 8 June 2021

James M. Crick, Dave Crick, Coopetition and COVID-19: Collaborative business-to-business marketing strategies in a pandemic crisis, Industrial Marketing Management p.88, May 2020

A. Langadianos, Article: COVID-19: Issues under shipping contracts, Watson Farley & Willans, April 2020

C. T. Vidya & K. P. Prabheesh (2020) Implications of COVID-19 Pandemic on the Global Trade Networks, Emerging Markets Finance and Trade, 56:10, 2408-2421

Pan, Y., Darzi, A., Kabiri, A. et al. Quantifying human mobility behaviour changes during the COVID-19 outbreak in the United States. Sci Rep 10, 20742 (2020).

Cesari, M., & Proietti, M. (2020). COVID-19 in Italy: Ageism and Decision Making in a Pandemic. Journal of the American Medical Directors Association, 21(5), 576-577.

Lipsitch M, Galvani AP (2014) Ethical Alternatives to Experiments with Novel Potential Pandemic Pathogens.

Rahman El Junusi, Digital Marketing During the Pandemic Period; A Study of Islamic Perspective, Journal of Digital Marketing and Halal Industry, Volume 2, pp 15-28, 10 July 2020.

Nikolopoulos, Konstantinos & Punia, Sushil & Schäfers, Andreas & Tsinopoulos, Christos & Vasilakis, Chrysovalantis. (2020). Forecasting and planning during a pandemic: COVID-19 growth rates, supply chain disruptions, and governmental decisions. European Journal of Operational Research.

Stopford, M. Coronavirus, climate change & smart shipping – Three maritime scenarios 2020–2050. Tech. Rep., Seatrade Maritime, part of Informa Markets (2020).

<u>Appendix</u>

- JHC Communicable Disease Exclusion Clause (JH2020–007A) dated 20 November 2020.
- COVID-19 Crew Change Clause for Time Charter Parties

JHC COMMUNICABLE DISEASE EXCLUSION CLAUSE

- 1. Notwithstanding any provision to the contrary in this (re)insurance, it is hereby agreed that this (re)insurance excludes absolutely all Communicable Disease Loss, save where the conditions of the Infected Individual Exception are met.
- 2.1 "Communicable Disease Loss" shall mean all loss, damage, liability, or expense of whatsoever nature, proximately caused by or significantly caused by or contributed to by or resulting from or arising out of or in connection with any of the Excluded Circumstances, those Circumstances being
 - a) a Communicable Disease, and/or
 - b) the fear or threat, whether actual or perceived, of a Communicable Disease, and/or
 - c) any recommendation, decision or measure, made or taken to restrict, prevent, reduce or slow the spread of infection of a Communicable Disease or to remove or minimise legal liability in respect of such a disease, whether made or taken by a public authority or a private entity and/or
 - d) any recommendation, decision or measure made or taken to alter, reverse or remove any circumstance falling within (c) above, whether made or taken by a public authority or a private entity regardless of any other cause or circumstance contributing concurrently or in any other sequence thereto.
- 2.2 Without prejudice to the effect of Clauses 2.1 (a), (b) and (d), recommendations, decisions and measures by whomsoever taken to tie-up, lay-up or maintain at anchor, in port or elsewhere, any vessel, conveyance, rig or platform pending resumption of cruising, operation, trading, cargo loading or discharge or other customary use shall not constitute Excluded Circumstances, notwithstanding they or any of them may have been taken for the reasons set out in 2.1 (c) above.
- 2.3 Without prejudice to the effect of Clauses 2.1 (a), (b) and (d) for the purposes of a loss event first affecting a vessel, conveyance, rig or platform during a voyage undertaken as a consequence of a diversion, a prior recommendation, decision or measure by whomsoever taken to divert that vessel from an earlier loading or discharge or other destination shall not constitute an Excluded Circumstance solely by reason of that diversion having been made for the reasons set out in 2.1 (c) above.
- 2.4 Without prejudice to the effect of Clauses 2.1 (a), (b) and (d), where loss, damage or liability have first been incurred in circumstances which are not excluded under 2.1 (a) to (d) above, increased expense or increased liability for expense shall not be excluded notwithstanding that increase may have been incurred for the reasons set out in 2.1(c) above.
- 3. "Communicable Disease" shall mean any disease, known or unknown, which can be transmitted by means of any substance or agent from one organism to another where:

- a) the substance or agent includes but is not limited to a virus, bacterium, parasite or other organism or any variation or mutation of any of the foregoing, whether deemed living or not, and
- b) the method of transmission, whether direct or indirect, includes but is not limited to human touch or contact, airborne transmission, bodily fluid transmission, transmission to or from or via any solid object or surface or liquid or gas and
- c) the disease, substance or agent may, acting alone or in conjunction with other comorbidities, conditions, genetic susceptibilities, or with the human immune system, cause death, illness or bodily harm or temporarily or permanently impair human physical or mental health or adversely affect the value of or safe use of property of any kind.
- 4.1 The Infected Individual Exception shall apply where (1) the actions or decisions of any individual infected or allegedly infected with a Communicable Disease cause or contribute to an alleged loss event and (2) neither such action nor decision nor the alleged cause of the loss event itself was a recommendation, decision or measure as defined in 2.1 (c) or 2.1 (d) above.
- 4.2 Where those conditions are met, the fact or possibility that the individual's action(s) or decision(s) were impaired or affected by or caused by that individual's alleged or actual infection shall not exclude recovery of a Loss otherwise recoverable hereon provided always that there shall be no cover for loss, damage, liability, or expense arising from any increase in the spread, incidence, severity or recurrence of a Communicable Disease or from any Circumstance as defined in Clause 2.1 (c) or (d) consequent on that individual's actions or decisions.
- 4.3 For the purposes of this Exception, the Infected Individual need not be physically present on or in an interest affected by the loss event, provided that his or her actions or decisions causing or contributing to the loss event and affecting that interest, directly or indirectly, were of a kind which, when not impaired or affected, would fall within the ordinary course of his or her employment.
- 5. Loss, damage, liability and expense arising solely out of a loss event otherwise reinsured under this (re)insurance and not excluded thereby nor excluded pursuant to this Clause remain covered in accordance with the terms and conditions thereof.

JH2020-007A

20 November 2020

BIMCO Infectious or Contagious Diseases Clause for Time Charter Parties 2015

- (a) In addition to any other right to deviate under this contract, the Vessel shall have liberty to deviate for crew changes if COVID-19-related restrictions prevent crew changes from being conducted at the ports or places to which the Vessel has been ordered or within the scheduled period of call. Any deviation under this clause shall not be deemed to be an infringement or breach of this contract, and Owners shall not be liable for any loss or damage resulting therefrom.
- (b) Owners shall exercise the right under subclause (a) above with due regard to Charterers' interests and shall notify Charterers in writing as soon as reasonably possible of any intended deviation for crew changes purposes.
- (c) Charterers shall procure that subclause (a) shall be incorporated into any and all sub-charter parties, bills of lading, waybills or other documents evidencing contracts of carriage issued pursuant to this Charter Party.
- (d) During the period of such deviation the Vessel shall:
- (i)* remain on hire, but at a reduced rate of hire of USD per day. In the absence of an agreed amount, fifty per cent (50%) of the hire rate shall apply. The cost of bunkers consumed shall be shared equally between Owners and Charterers.
- (ii)* be off-hire and the cost of bunkers consumed shall be for Owners' account.
- (e) While the Vessel is at the port of deviation all port charges, pilotage and other expenses arising out of such crew changes shall be for the Owners' account.
- *(d)(i) and (d)(ii) are alternatives. Delete whichever is not applicable. In the absence of deletions alternative (d)(i) shall apply.