

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

FORM 20-F

REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) or (g) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2019

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

OR

SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of event requiring this shell company report _____

Commission file number: 001-36202

NAVIGATOR HOLDINGS LTD.

(Exact Name of Registrant as Specified in Its Charter)

Republic of the Marshall Islands
(Jurisdiction of Incorporation or Organization)

c/o NGT Services (UK) Ltd
10 Bressenden Place
London, SW1E 5DH, United Kingdom
Telephone: +44 20 7340 4850
(Address of Principal Executive Offices)

Niall Nolan
Chief Financial Officer
10 Bressenden Place
London, SW1E 5DH, United Kingdom
Telephone: +44 20 7340 4850
Facsimile: +44 20 7340 4858

(Name, Telephone, E-mail and/or Facsimile Number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

<u>Title of Each Class</u>	<u>Trading Symbol(s)</u>	<u>Name of Each Exchange on which Registered</u>
Common Stock	NVGS	New York Stock Exchange

Securities registered or to be registered pursuant to Section 12(g) of the Act: None

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: None

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.

55,826,644 Shares of Common Stock

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See the definitions of "large accelerated filer", "accelerated filer" and emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer Non-accelerated filer Emerging growth company

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards[†] provided pursuant to Section 13(a) of the Exchange Act.

[†] The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP International Financial Reporting Standards as Issued by the International Accounting Standards Board Other

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow.

Item 17 Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

NAVIGATOR HOLDINGS LTD.
INDEX TO REPORT ON FORM 20-F

PART I	1
Item 1. Identity of Directors, Senior Management and Advisers	1
Item 2. Offer Statistics and Expected Timetable	1
Item 3. Key Information	1
A. Selected Financial Data	1
B. Capitalization and Indebtedness	4
C. Reasons for the Offer and Use of Proceeds	4
D. Risk Factors	4
Item 4. Information on the Company	31
A. History and Development of the Company	31
B. Business Overview	32
C. Organizational Structure	59
D. Property, Plant and Equipment	59
Item 4A. Unresolved Staff Comments	60
Item 5. Operating and Financial Review and Prospects	60
A. Operating Results	60
B. Liquidity and Capital Resources	73
C. Research and Development Patents and Licenses etc.	84
D. Trend Information	84
E. Off-Balance Sheet Arrangements	85
F. Tabular Disclosure of Contractual Obligations	85
G. Safe Harbor	86
Critical Accounting Estimates	86
Item 6. Directors, Senior Management and Employees	92
A. Directors and Senior Management	92
B. Compensation	95
C. Board Practices	98
D. Employees	99
E. Share Ownership	99
Item 7. Major Shareholders and Related Party Transactions	99
A. Major Shareholders	99
B. Related Party Transactions	100
C. Interests of Experts and Counsel	101
Item 8. Financial Information	101
A. Consolidated Statements and Other Financial Information	101
B. Significant Changes	101
Item 9. The Offer and Listing	102
A. Offer and Listing Details	102
B. Plan of distribution	102
C. Markets	102
Item 10. Additional Information	102
A. Share Capital	102
B. Memorandum and Articles of Association	102
C. Material Contracts	102
D. Exchange Controls	104
E. Taxation	104
F. Dividends and Paying Agents	110
G. Statements by Experts	110

	H.	Documents on Display	110
	I.	Subsidiary Information	110
Item 11.		Quantitative and Qualitative Disclosures About Market Risk	110
Item 12.		Description of Securities Other than Equity Securities	111
PART II		112
Item 13.		Defaults, Dividend Arrearages and Delinquencies	112
Item 14.		Material Modifications to the Rights of Security Holders and Use of Proceeds	112
Item 15.		Controls and Procedures	112
Item 16A.		Audit Committee Financial Expert	113
	B.	Code of Ethics	113
	C.	Principal Accountant Fees and Services	113
	D.	Exemptions from the Listing Standards for Audit Committees	114
	E.	Purchases of Equity Securities by the Issuer and Affiliated Purchasers	114
	F.	Change in Registrant’s Certifying Accountant	114
	G.	Corporate Governance	114
	H.	Mine Safety Disclosure	115
PART III		116
Item 17.		Financial Statements	116
Item 18.		Financial Statements	116
Item 19.		Exhibits	116

Presentation of Information in this Annual Report

This annual report on Form 20-F for the year ended December 31, 2019, or this “annual report,” should be read in conjunction with our consolidated financial statements and notes thereto included in this annual report. Unless the context otherwise requires all references in this annual report to “Navigator Holdings,” “our,” “we,” “us” and the “Company” refer to Navigator Holdings Ltd., a Marshall Islands corporation. All references in this annual report to our wholly-owned subsidiary “Navigator Gas L.L.C.” refer to Navigator Gas L.L.C., a Marshall Islands limited liability company. As used in this annual report, unless the context indicates or otherwise requires, references to “our fleet” or “our vessels” include the 38 vessels we owned and operated as of December 31, 2019. As used in the annual report, “WLR Group” refers collectively to WL Ross & Co. LLC and certain of its affiliated investment funds owning shares of our common stock.

Cautionary Statement Regarding Forward Looking Statements

This annual report contains certain forward-looking statements concerning plans and objectives of management for future operations or economic performance, or assumptions related thereto, including our financial forecast. In addition, we and our representatives may from time to time make other oral or written statements that are also forward-looking statements. Such statements include, in particular, statements about our plans, strategies, business prospects, changes and trends in our business and the markets in which we operate as described in this annual report. In some cases, you can identify the forward-looking statements by the use of words such as “may,” “could,” “should,” “would,” “expect,” “plan,” “anticipate,” “intend,” “forecast,” “believe,” “estimate,” “predict,” “propose,” “potential,” “continue,” “scheduled,” or the negative of these terms or other comparable terminology. Forward-looking statements appear in a number of places in this annual report. These risks and uncertainties include, but are not limited to:

- future operating or financial results;
- pending acquisitions, business strategy and expected capital spending;
- operating expenses, availability of crew, number of off-hire days, drydocking requirements and insurance costs;

- fluctuations in currencies and interest rates;
- general market conditions and shipping market trends, including charter rates and factors affecting supply and demand;
- our ability to continue to comply with all our debt covenants;
- our financial condition and liquidity, including our ability to refinance our indebtedness as it matures or obtain additional financing in the future to fund capital expenditures, acquisitions and other corporate activities;
- estimated future capital expenditures needed to preserve our capital base;
- our expectations about the availability of vessels to purchase, the time that it may take to construct new vessels, or the useful lives of our vessels;
- our continued ability to enter into long-term, fixed-rate time charters with our customers;
- the availability and cost of low sulfur fuel oil compliant with the International Maritime Organization (“IMO”) sulfur emission limit reductions, generally referred to as “IMO 2020,” which took effect January 1, 2020;
- our vessels engaging in ship to ship transfers of liquidified petroleum gas (“LPG”) or petrochemical cargoes which may ultimately be discharged in sanctioned areas or to sanctioned individuals without our knowledge. Three of our vessels were named in a March 2019 U.S. Department of the Treasury’s Office of Foreign Assets Control (“OFAC”) Advisory to the Maritime Petroleum Shipping Community as ships that had engaged in such ship to ship transfers of cargoes that may have ultimately been destined for Syria;
- global epidemics or other health crises such as the recent outbreak of coronavirus COVID-19 (“Coronavirus”);
- changes in governmental rules and regulations or actions taken by regulatory authorities;
- potential liability from future litigation;
- our expectations relating to the payment of dividends;
- our expectation regarding providing in-house technical management for certain vessels in our fleet and our success in providing such in-house technical management;
- our expectations regarding the completion of construction and financing of the ethylene export marine terminal at Morgan’s Point, Texas (the “Marine Export Terminal”) and the financial success of the Marine Export Terminal and our related 50/50 joint venture with Enterprise Products Partners L.P (the “Export Terminal Joint Venture”); and
- other factors discussed in “Item 3—Key Information—Risk Factors” of this annual report.

All forward-looking statements included in this annual report are made only as of the date of this annual report. New factors emerge from time to time, and it is not possible for us to predict all of these factors. Further, we cannot assess the impact of each such factor on our business or the extent to which any factor, or combination of factors, may cause actual results to be materially different from those contained in any forward-looking statement. We expressly disclaim any obligation to update or revise any of these forward-looking statements, whether because of future events, new information, a change in our views or expectations, or otherwise. We make no prediction or statement about the performance of our common stock.

PART I

Item 1. Identity of Directors, Senior Management and Advisers

Not applicable.

Item 2. Offer Statistics and Expected Timetable

Not applicable.

Item 3. Key Information

A. Selected Financial Data

The following table presents selected historical financial data for the years ended December 31, 2015, 2016, 2017, 2018 and 2019 which has been derived in part from our audited consolidated financial statements included elsewhere in this annual report, and should be read together with and qualified in its entirety by reference to such audited consolidated financial statements.

The following table should be read together with “Item 5—Operating and Financial Review and Prospects.”

	Navigator Holdings				
	Year Ended December 31,				
	2015	2016	2017	2018	2019
	(in thousands, except per share data, fleet data and average daily results)				
Income Statement Data:					
Operating Revenue	\$ 315,223	\$ 294,112	\$ 298,595	\$ 310,046	\$ 301,385
Operating expenses:					
Brokerage commissions	6,995	5,812	5,368	5,142	4,938
Voyage expenses	33,687	42,201	55,542	61,634	55,310
Vessel operating expenses	78,842	90,854	100,968	106,719	111,475
Depreciation and amortization	53,453	62,280	73,588	76,140	76,173
General and administrative costs	13,564	14,504	15,947	18,931	20,878
Profit on sale of vessel	(550)	—	—	—	—
Vessel write down following collision	10,500	—	—	—	—
Insurance recoverable from vessel repairs	(9,892)	504	—	—	—
Total operating expenses	186,599	216,155	251,413	268,566	268,774
Operating income	\$ 128,624	\$ 77,957	\$ 47,182	\$ 41,480	\$ 32,611
Foreign currency exchange gain on senior secured bonds	—	—	—	2,360	969
Unrealized loss on non-designated derivative instruments	—	—	—	(5,154)	(615)
Net interest expense	(29,730)	(32,142)	(41,475)	(44,054)	(48,094)
Income/(loss) before income taxes	\$ 98,894	\$ 45,815	\$ 5,707	\$ (5,368)	\$ (15,129)
Income taxes	(800)	(1,177)	(397)	(333)	(352)
Share of result of equity accounted joint venture	—	—	—	(38)	(1,126)
Net income/(loss)	\$ 98,094	\$ 44,638	\$ 5,310	\$ (5,739)	\$ (16,607)
Net income attributable to non-controlling interest	—	—	—	—	(99)
Net income/(loss) attributable to stockholders of Navigator Holdings Ltd.	\$ 98,094	\$ 44,638	\$ 5,310	\$ (5,739)	\$ (16,706)
Earnings per share attributable to stockholders of Navigator Holdings Ltd.:					
Basic	\$ 1.77	\$ 0.81	\$ 0.10	\$ (0.10)	\$ (0.30)
Diluted	\$ 1.76	\$ 0.80	\$ 0.10	\$ (0.10)	\$ (0.30)
Weighted average number of shares outstanding:					
Basic	55,360,004	55,418,626	55,508,974	55,629,023	55,792,711
Diluted	55,706,104	55,794,481	55,881,454	55,629,023	55,792,711

Navigator Holdings					
Year Ended December 31,					
	2015	2016	2017	2018	2019
	(in thousands, except per share data, fleet data and average daily results)				
Balance Sheet Data (at end of period):					
Cash, cash equivalents and restricted cash . .	\$ 87,779	\$ 57,272	\$ 62,109	\$ 71,515	\$ 66,130
Total assets	1,560,505	1,724,843	1,853,887	1,832,751	1,874,253
Total liabilities	650,414	768,363	890,674	877,641	934,351
Total stockholders' equity	910,091	956,480	963,213	955,110	939,803
Cash Flows Data:					
Net cash provided by operating activities . .	\$ 149,554	\$ 86,748	\$ 75,921	\$ 77,517	\$ 49,700
Net cash used in investing activities	(205,856)	(238,153)	(183,025)	(42,327)	(90,409)
Net cash provided by / used in financing activities	81,555	120,898	111,941	(25,784)	35,324
Fleet Data:					
Weighted average number of vessels ⁽²⁾	27.8	31.3	36.2	38.0	38.0
Ownership days ⁽³⁾	10,135	11,463	13,228	13,870	13,870
Available days ⁽⁴⁾	9,865	11,255	13,195	13,767	13,608
Operating days ⁽⁵⁾	9,298	9,888	11,564	12,247	11,813
Fleet utilization ⁽⁶⁾	94.3%	87.9%	87.6%	89.0%	86.8%
Average Daily Results:					
Time charter equivalent rate ⁽⁷⁾	\$ 30,280	\$ 25,476	\$ 21,018	\$ 20,284	\$ 20,831
Daily vessel operating expenses ⁽⁸⁾	\$ 7,779	\$ 7,925	\$ 7,635	\$ 7,694	\$ 8,037
Other Data:					
EBITDA ⁽¹⁾	\$ 182,077	\$ 140,237	\$ 120,770	\$ 114,788	\$ 108,012
Adjusted EBITDA ⁽¹⁾	\$ 182,077	\$ 140,237	\$ 120,770	\$ 117,582	\$ 107,658

(1) EBITDA and Adjusted EBITDA are not measurements prepared in accordance with U.S. GAAP (non-GAAP financial measures). EBITDA represents net income before net interest expense, income taxes and depreciation and amortization. We define Adjusted EBITDA as EBITDA before foreign currency exchange gain or loss on senior secured bonds and unrealized gain or loss on non-designated derivative instruments. EBITDA and Adjusted EBITDA do not represent and should not be considered as alternatives to consolidated net income, cash generated from operations or any other measure prepared in accordance with U.S. GAAP, and our calculation of EBITDA and Adjusted EBITDA may not be comparable to that reported by other companies.

EBITDA and Adjusted EBITDA are included herein because they are bases upon which we assess our financial performance and because we believe that they are useful to investors in evaluating our operating performance and are frequently used by securities analysts, investors and other interested parties in the evaluation of companies in our industry.

EBITDA and Adjusted EBITDA have limitations as analytical tools, and you should not consider them in isolation, or as substitutes for analysis of our results as reported under U.S. GAAP. Some of these limitations are:

- EBITDA and Adjusted EBITDA do not reflect our cash expenditures or future requirements for capital expenditures or contractual commitments;
- EBITDA and Adjusted EBITDA do not recognize the interest expense or the cash requirements necessary to service interest or principal payments on our debt;
- EBITDA and Adjusted EBITDA ignore changes in, or cash requirements for, our working capital needs; and

- other companies in our industry may calculate EBITDA and Adjusted EBITDA differently than we do, limiting their usefulness as comparative measures.

Because of these limitations, EBITDA and Adjusted EBITDA should not be considered measures of discretionary cash available to us to invest in the growth of our business.

The following table sets forth a reconciliation of net income to EBITDA and Adjusted EBITDA for the periods presented:

	Navigator Holdings				
	Year Ended December 31,				
	2015	2016	2017	2018	2019
	(in thousands)				
Net income/(loss)	\$ 98,094	\$ 44,638	\$ 5,310	\$ (5,739)	\$ (16,607)
Net interest expense	29,730	32,142	41,475	44,054	48,094
Income taxes	800	1,177	397	333	352
Depreciation and amortization	53,453	62,280	73,588	76,140	76,173
EBITDA	<u>\$182,077</u>	<u>\$140,237</u>	<u>\$120,770</u>	<u>\$114,788</u>	<u>\$108,012</u>
Foreign currency exchange gain on senior secured bonds	—	—	—	(2,360)	(969)
Unrealized loss on non-designated derivative instruments	—	—	—	5,154	615
Adjusted EBITDA	<u>\$182,077</u>	<u>\$140,237</u>	<u>\$120,770</u>	<u>\$117,582</u>	<u>\$107,658</u>

- (2) We calculate the weighted average number of vessels during a period by dividing the number of total ownership days during that period by the number of calendar days during that period.
- (3) We define ownership days as the aggregate number of days in a period that each vessel in our fleet has been owned by us. Ownership days are an indicator of the size of our fleet over a period and the potential amount of revenue that we record during a period.
- (4) We define available days as ownership days less aggregate off-hire days associated with scheduled maintenance, which includes drydockings, vessel upgrades or special or intermediate surveys. We use available days to measure the aggregate number of days in a period that our vessels should be capable of generating revenues.
- (5) We define operating days as available days less the aggregate number of days that our vessels are off-hire for any reason other than scheduled maintenance. We use operating days to measure the aggregate number of days in a period that our vessels are providing services to our customers.
- (6) We calculate fleet utilization by dividing the number of operating days during a period by the number of available days during that period. We use fleet utilization to measure our ability to efficiently find suitable employment for our vessels.
- (7) Time charter equivalent, (“TCE”), is calculated by dividing total operating revenues, less any voyage expenses, by the number of operating days for the relevant period. TCE is not calculated in accordance with U.S. GAAP. TCE rate is a shipping industry performance measure used primarily to compare period-to-period changes in a company’s performance despite changes in the mix of charter types (i.e., spot charters, time charters and contracts of affreightment (“COAs”)) under which the vessels may be employed between the periods. We include average daily TCE rate, as we believe it provides additional meaningful information in conjunction with net operating revenues, because it assists our management in making decisions regarding the deployment and use of our vessels and in evaluating their financial performance. Our calculation of TCE rate may not be comparable to that reported by other companies.

The following table represents a reconciliation of TCE rate to operating revenue, the most directly comparable financial measure calculated in accordance with U.S. GAAP for the periods presented:

	Year Ended December 31,				
	2015	2016	2017	2018	2019
	(in thousands, except operating days and average daily time charter equivalent rate)				
Fleet Data:					
Operating revenue	\$315,223	\$294,112	\$298,595	\$310,046	\$301,385
Voyage expenses	<u>33,687</u>	<u>42,201</u>	<u>55,542</u>	<u>61,634</u>	<u>55,310</u>
Operating revenue less Voyage expenses	281,536	251,911	243,053	248,412	246,075
Operating days	9,298	9,888	11,564	12,247	11,813
Average daily time charter equivalent rate	\$ 30,280	\$ 25,476	\$ 21,018	\$ 20,284	\$ 20,831

(8) Daily vessel operating expenses are calculated by dividing vessel operating expenses by ownership days for the relevant time period.

B. Capitalization and Indebtedness

Not applicable.

C. Reasons for the Offer and Use of Proceeds

Not applicable.

D. Risk Factors

You should carefully consider the following risk factors together with all of the other information included in this annual report in evaluating an investment in our common stock. If any of the following risks were actually to occur, our business, financial condition, operating results and cash flows could be materially adversely affected. In that case, the trading price of our common stock could decline, and you could lose all or part of your investment.

Risks Related to Our Business

Charter rates for liquefied gas carriers are cyclical in nature.

The international liquefied gas carrier market is cyclical with attendant volatility in terms of charter rates, profitability and vessel values. The degree of charter rate volatility among different types of liquefied gas carriers has varied widely. Because many factors influencing the supply of, and demand for, vessel capacity are unpredictable, the timing, direction and degree of changes in the international liquefied gas carrier market are also unpredictable.

Future growth in the demand for our services will depend on changes in supply and demand, economic growth in the world economy and demand for liquefied gas transportation relative to changes in worldwide fleet capacity. Adverse economic, political, or social developments or other global financial turmoil, could have a material adverse effect on world economic growth and thus on our business and operating results.

The charter rates we receive will be dependent upon, among other things:

- changes in the supply of vessel capacity for the seaborne transportation of liquefied gases, which is influenced by the following factors:
 - the number of newbuilding deliveries and the ability of shipyards to deliver newbuildings by contracted delivery dates and capacity levels of shipyards;

- the scrapping rate of older vessels;
- the number of vessels that are out of service, as a result of vessel casualties, repairs and drydockings; and
- changes in liquefied gas carrier prices.
- changes in the level of demand for seaborne transportation of liquefied gases, which is influenced by the following factors:
 - the level of production of liquefied gases in net export regions;
 - the level of demand for liquefied gases in net import regions such as Asia, Europe, Latin America and India;
 - the level of internal demand for petrochemicals to supply integrated petrochemical facilities in net export regions;
 - a reduction in global demand for petrochemicals due to ecological or environmental concerns about the use of plastics;
 - a reduction in global or general industrial activity specifically in the plastics and chemical industry;
 - changes in the cost of petroleum and natural gas from which liquefied gases are derived;
 - prevailing global and regional economic conditions;
 - political changes and armed conflicts in the regions traveled by our vessels and the regions where the cargoes we carry are produced or consumed that interrupt production, trade routes or consumption of liquefied gases and associated products;
 - developments in international trade;
 - the distances between exporting and importing regions over which liquefied gases are to be transported by sea;
 - infrastructure to support seaborne liquefied gases, including pipelines, railways and terminals;
 - the availability of alternative transportation means, including pipelines;
 - changes in seaborne and other transportation patterns; and
 - changes in environmental and other regulations that may limit the production or consumption of liquefied gases or the useful lives of vessels.

Adverse changes in any of the foregoing factors could have an adverse effect on our revenues, profitability, liquidity, cash flow and financial position.

We are partially dependent on voyage charters in the spot market, and any decrease in spot charter rates in the future may adversely affect our earnings.

We currently own and operate a fleet of 38 vessels. Of those, 14 vessels are employed in the spot market, exposing us to fluctuations in spot market charter rates.

Although spot chartering is common in our industry the spot market may fluctuate significantly over short periods of time. The successful operation of our vessels in the competitive spot market depends upon, among other things, obtaining profitable spot charters and minimizing, to the extent possible, time spent waiting for charters and time spent traveling in ballast and to pick up cargo. If future spot charter rates decline, we may be unable to operate our vessels trading in the spot market profitably or meet our obligations, including payments on

indebtedness. Furthermore, as charter rates for spot charters are fixed for a single voyage or multiple voyages which may last up to several weeks or months, during periods in which spot charter rates are rising, we will generally experience delays in realizing the benefits from such increases.

We may be unable to charter our vessels at attractive rates, which would have an adverse impact on our business, financial condition and operating results.

Payments under our charters represent substantially all of our operating cash flow. Our time charters expire on a regular basis. If demand for liquefied gas carriers has declined at the time that our charters expire, we may not be able to charter our vessels at favorable rates or at all. If more vessels are added to the overall fleet through newbuilding programs, charter rates may reduce. In addition, while longer-term charters would become more attractive to us at a time when charter rates are declining, our customers may not want to enter into longer-term charters in such an environment. As a result, if our charters expire or newbuild vessels are delivered at a time when charter rates are declining, we may have to accept charters with lower rates or shorter terms than would be desirable. Furthermore, we may be unable to charter our vessels immediately after the expiration of their charters resulting in periods of non-utilization for our vessels. Our inability to charter our vessels at favorable rates or terms or at all would adversely impact our business, financial condition and operating results. Please read “Item 4—Information on the Company—Business Overview—Our Fleet.”

A significant portion of our revenues from a limited number of customers.

We have derived, and believe that we will continue to derive, a significant portion of our revenues from a limited number of customers. Our customers include major oil and gas companies, chemical companies, energy trading companies, state owned oil companies and various other entities that depend upon marine transportation. Four of our customers accounted for more than 10.0% each, and in aggregate, 5.41% of our consolidated revenues during the year ended December 31, 2019, equivalent to \$163.5 million of our total revenue. Three of our customers accounted for more than 10.0% each, and in aggregate, 45.4% of our consolidated revenues during the year ended December 31, 2018 equivalent to \$140.8 million of our total revenue. The loss of any significant customer or a substantial decline in the amount of services requested by a significant customer, or the inability of a significant customer to pay for our services, could have a material adverse effect on our business, financial condition and results of operations.

If the demand for liquefied gases and the seaborne transportation of liquefied gases does not grow, our business, financial condition and operating results could be adversely affected.

Our growth depends on continued growth in world and regional demand for liquefied gases and the seaborne transportation of liquefied gases, each of which could be adversely affected by a number of factors, such as:

- increases in the demand for industrial and residential natural gas in areas linked by pipelines to producing areas, or the conversion of existing non-gas pipelines to natural gas pipelines in those markets;
- increases in demand for chemical feedstocks in net exporting regions, leading to less liquefied gases for export;
- decreases in the consumption of petrochemical gases;
- decreases in the consumption of LPG due to increases in its price relative to other energy sources or other factors making consumption of liquefied gas less attractive;
- the availability of competing, alternative energy sources, transportation fuels or propulsion systems;
- decreases in demand for liquefied gases resulting from changes in feedstock capabilities of petrochemical plants in net importing regions;
- changes in the relative values of hydrocarbon and liquefied gases;

- a reduction in global industrial activity, especially in the plastics and petrochemical industries, particularly in regions with high demand growth for liquefied gas, such as Asia;
- adverse global or regional economic or political conditions, particularly in liquefied gas exporting or importing regions, which could reduce liquefied gas shipping or energy consumption;
- changes in governmental regulations, such as the elimination of economic incentives or initiatives designed to encourage the use of liquefied gases over other fuel sources; or
- decreases in the capacity of petrochemical plants and crude oil refineries worldwide or the failure of anticipated new capacity to come online.

Reduced demand for liquefied gases and the seaborne transportation of liquefied gases would have a material adverse effect on our future growth and could adversely affect our business, financial condition and operating results.

The expected growth in the supply of petrochemical gases, including ethane and ethylene, available for seaborne transport may not materialize, which would deprive us of the opportunity to obtain premium charters for petrochemical cargoes.

Charter rates for petrochemical gas cargoes can be higher than those for LPG, with charter rates for ethylene historically commanding a premium. While we believe that growth in production at petrochemical production facilities and regional supply and pricing imbalances will create opportunities for us to transport petrochemical gas cargoes, including ethane and ethylene, factors that are beyond our control may cause the supply of petrochemical gases available for seaborne transport to remain constant or even decline. For example, a significant portion of any increased production of petrochemicals in export regions may be used to supply local facilities that use petrochemicals as a feedstock rather than exported via seaborne trade. If the supply of petrochemical gases available for seaborne transport does not increase, we will not have the opportunity to obtain the increased charter rates associated with petrochemical gas cargoes, including ethane and ethylene, and our expectations regarding the growth of our business may not be met.

The market values of our vessels may decline if market conditions deteriorate. This could cause us to incur impairment charges, which could cause us to breach covenants in our debt facilities.

The market value of liquefied gas carriers fluctuates. While the market values of our vessels have declined as a result of the most recent market downturn, they still remain subject to a potential significant further decline depending on a number of factors including, among other things: shipyard capacity and the cost of newbuildings, general economic and market conditions affecting the shipping industry, prevailing charter rates, competition from other shipping companies, other modes of transportation, other types, sizes and age of vessels and applicable governmental regulations.

In addition, when vessel prices are considered to be low, companies not usually involved in shipping may make speculative vessel orders, thereby increasing the supply of vessel capacity, satisfying demand sooner and potentially suppressing charter rates.

Also, if the book value of a vessel is impaired due to unfavorable market conditions or a vessel is sold at a price below its book value, we would incur a loss that could have a material adverse effect on our business, financial condition and operating results.

Furthermore, our loan agreements and our bond agreements have covenants relating to asset values, whereby if vessel values were to reduce to below those set out in the covenants, a breach would occur and cause the loan amounts to be immediately repayable. This could have a material adverse effect on our business, financial condition and operating results.

Over the long-term, we will be required to make substantial capital expenditures to preserve the operating capacity of, and to grow, our fleet.

We must make substantial capital expenditures over the long-term to maintain the operating capacity and expansion of our fleet in order to preserve our capital base.

We estimate that drydocking expenditures can cost up to \$2.0 million per vessel per drydocking, although these expenditures could vary significantly from quarter to quarter and year to year and could increase as a result of changes in:

- the location and required repositioning of the vessel;
- the cost of labor and materials;
- the types of vessels in our fleet;
- the age of our fleet;
- governmental regulations and maritime self-regulatory organization standards relating to safety, security or the environment;
- competitive standards; and
- high demand for drydock usage.

Our ability to obtain bank financing or to access the capital markets for future debt or equity offerings in order to finance the expansion of our fleet may be limited by our financial condition at the time of any such financing or offering as well as by adverse market conditions resulting from, among other things, general economic conditions and contingencies and uncertainties that are beyond our control. Our failure to obtain the funds for future capital expenditures could limit our ability to expand our fleet. Even if we are successful in obtaining necessary funds, the terms of such financings may significantly increase our interest expense and financial leverage and issuing additional equity securities may result in significant shareholder dilution. Please read “Item 5—Operating and Financial Review and Prospects—Liquidity and Capital Resources—Liquidity and Cash Needs.”

We may be unable to make, or realize the expected benefits from, acquisitions and the failure to successfully implement our growth strategy through acquisitions could adversely affect our business, financial condition and operating results.

Our growth strategy may include newbuildings or selectively acquiring existing liquefied gas carriers and investing in complementary assets. Factors such as competition from other companies, many of which have significantly greater financial resources than we do, could reduce our acquisition and investment opportunities or cause us to pay higher prices.

Any existing vessel or newbuilding we acquire may not be profitable at or after the time of acquisition or delivery and may not generate cash flow sufficient to cover the cost of acquisition. Market conditions at the time of delivery of any newbuildings may be such that charter rates are not favorable and the revenue generated by such vessels is not sufficient to cover their purchase prices.

In addition, our acquisition and investment growth strategy exposes us to risks that could adversely affect our business, financial condition and operating results, including risks that we may:

- fail to realize anticipated benefits of acquisitions, such as new customer relationships, cost savings or increased cash flow;
- not be able to obtain charters at favorable rates or at all;

- be unable to hire, train or retain qualified shore and seafaring personnel to manage and operate our growing business and fleet;
- fail to integrate investments of complementary assets or vessels in capacity ranges outside our current operations in a profitable manner;
- not have adequate operating and financial systems in place as we implement our expansion plan;
- decrease our liquidity through the use of a significant portion of available cash or borrowing capacity to finance acquisitions;
- significantly increase our interest expense or financial leverage if we incur additional debt to finance acquisitions; or
- incur or assume unanticipated liabilities, losses or costs associated with the business or vessels acquired.

Unlike newbuildings, existing vessels typically do not carry warranties as to their condition. While we inspect existing vessels prior to purchase, such an inspection would normally not provide us with as much knowledge of a vessel's condition as we would possess if it had been built for us and operated by us during its life. Repairs and maintenance costs for existing vessels are difficult to predict and may be substantially higher than for vessels we have operated since they were built. These costs could decrease our cash flow and reduce our liquidity.

From time to time, we may selectively pursue new strategic acquisitions or ventures we believe to be complementary to our seaborne transportation services and any strategic transactions that are a departure from our historical operations could present unforeseen challenges and result in a competitive disadvantage relative to our more-established competitors.

We may pursue strategic acquisitions or investment opportunities we believe to be complementary to our core business of owning and operating handysize liquefied gas carriers and the transportation of LPG, petrochemical gases and ammonia. Such ventures may include, but are not limited to, operating liquefied gas carriers in different size categories, expanding the types of cargo we carry and/or ventures or facilities involved in the export, distribution, mixing and/or storage of liquefied gas cargoes. While we have general knowledge and experience in the seaborne transportation services industry, we currently have limited operating history outside of the ownership and operation of liquefied gas carriers and the transportation of petrochemicals, LPG and ammonia.

Any investments we pursue outside of our historical provision of seaborne transportation services could result in unforeseen operating difficulties and may require significant financial and managerial resources that would otherwise be available for the ongoing operation and growth of our fleet.

We may face several factors that could impair our ability to successfully execute these acquisitions or investments including, among others, the following:

- delays in obtaining regulatory approvals, licenses or permits from different governmental or regulatory authorities, including environmental permits;
- unexpected cost increases or shortages in the equipment, materials or labor required for the venture, which could cause the venture to become economically unfeasible; and
- unforeseen engineering, design or environmental problems.

Any of these factors could delay any such acquisitions or investment opportunities and could increase our projected capital costs. If we are unable to successfully integrate acquisitions or investments into our historical business, any costs incurred in connection with these projects may not be recoverable. If we experience delays, cost overruns, or changes in market circumstances, we may not be able to demonstrate the commercial viability of such acquisitions or investment opportunities or achieve the intended economic benefits, which would materially and adversely affect our business, financial condition and operating results.

We may be unable to realize the expected benefits from our investment in the Marine Export Terminal in the U.S. Gulf.

There are a number of contingencies that could impact our ability to benefit from the Marine Export Terminal on a timely basis or at all, including, among others, the following:

- our ability to have the throughput to the Marine Export Terminal fully committed;
- any inability of the Marine Export Terminal to operate due to operational issues; and
- existing customers not renewing their contracts.

In addition, our 50/50 joint venture partner in the Export Terminal Joint Venture is the sole managing member of the Export Terminal Joint Venture and is also the operator of the related Marine Export Terminal. The success of the 50/50 owned Export Terminal Joint Venture and the Marine Export Terminal is dependent on the successful management and operation thereof by the managing member and operator. Further, the managing member's and operator's interests may not be entirely aligned with our interests.

If our expectations with respect to the completion of construction and financing of the Marine Export Terminal or the success of our 50/50 owned Marine Export Terminal and the Export Terminal Joint Venture are not realized, it could have a material adverse effect on our business, financial condition and operating results.

We operate in countries which can expose us to political, governmental and economic instability, which could adversely affect our business, financial condition and operating results.

Our operations are primarily conducted outside of the United States, and may be affected by economic, political and governmental conditions in the countries where we engage in business or where our vessels are registered. Any disruption caused by these conditions could adversely affect our business, financial condition and operating results. We derive some of our revenues from transporting gas cargoes from, to and within politically unstable regions. Conflicts in these regions have included attacks on ships and other efforts to disrupt shipping. In addition, vessels operating in some of these regions have been subject to piracy. Hostilities or other political instability in regions where we operate or may operate could have a material adverse effect on our business, financial condition and operating results. In addition, tariffs, trade embargoes and other economic sanctions by the United States or other countries against countries where we engage in business may limit, restrict or prohibit our trading activities with those countries, which could also harm our business. Finally, a government could requisition one or more of our vessels, which is most likely during a war or national emergency. Any such requisition would cause a loss of the vessel and would harm our business, financial condition and operating results.

If our vessels call on ports located in countries that are subject to restrictions imposed by the U.S. government, our reputation and the market for our securities could be adversely affected.

Although no vessels owned or operated by us have called on ports located in countries subject to comprehensive sanctions and embargoes imposed by the U.S. government and other authorities or countries identified by the U.S. government or other authorities as state sponsors of terrorism, such as Cuba, Iran, North Korea, Sudan, Syria and the Crimean region of Ukraine, in the future our vessels may call on ports in these countries from time to time on charterers' instructions in violation of contractual provisions that prohibit them from doing so. Sanctions and embargo laws and regulations vary in their application, as they do not all apply to the same covered persons or proscribe the same activities, and such sanctions and embargo laws and regulations may be amended or strengthened over time.

Although we believe that we have been in compliance with all applicable sanctions and embargo laws and regulations, and intend to maintain such compliance, there can be no assurance that we will be in compliance in the future, particularly as the scope of certain laws may be unclear and may be subject to changing

interpretations. Any such violation could result in fines, penalties or other sanctions that could severely impact the market for our common shares, our ability to access U.S. capital markets and conduct our business and could result in some investors deciding, or being required, to divest their interest, or not to invest, in us.

Our charterers may violate applicable sanctions and embargo laws and regulations as a result of actions that do not involve us or our vessels and those violations could in turn negatively affect our reputation or the ability of our charters to meet their obligations to us or result in fines, penalties or sanctions.

Operating our vessels in sanctioned areas or chartering our vessels to sanctioned individuals or entities could adversely affect our business, financial condition and operating results.

We have obligations and believe we comply fully with the various sanctions regimes around the world, not just the sanctions authorities of the United States, but also the relevant departments within the United Nations, European Union and other individual countries, as well as governmental institutions and agencies of those countries. Our current 38 vessels transport LPG and other liquefied petrochemical gases throughout the globe and we are vigilant in ensuring our vessels do not call to countries or ports or trade with persons that may be on any lists which restrict or inhibit such trade or relationship. Any actual or alleged violations could materially damage our reputation and ability to do business.

Our vessels engage in hundreds of ship to ship transfers of LPG or petrochemical cargoes annually and these cargoes may ultimately be discharged in sanctioned areas or to sanctioned individuals without our knowledge. For example, three of our vessels were named in a 2019 U.S. Department of the Treasury's OFAC Advisory to the Maritime Petroleum Shipping Community as ships that had engaged in such ship to ship transfers of cargoes in 2017 that may have ultimately been destined for Syria.

Furthermore, if any of our customers were to become a sanctioned entity, the charterparty would end immediately and become void which could lead to one or more vessels being redelivered to us, ending what may be a long-term charter commitment. For example, as a result of OFAC designating Petr6leos de Venezuela S.A., or "PDVSA" as such, we had to prematurely terminate long term time charters on two of our vessels.

We provide in-house technical management for certain vessels in our fleet which may impose significant additional responsibilities on our management and staff.

We currently provide in-house technical management for 17 of the 38 vessels in our fleet. Providing in-house technical management for any vessel in our fleet may impose significant additional responsibilities on our management and staff. Further, because we had little experience of providing technical management in-house prior to 2016, our management may encounter challenges as we develop and refine our technical management systems.

Some charterers and port terminals may require the crew of our fleet to have a minimum of two years of experience with our vessel's on-board safety management systems. We switch to in-house technical management for a vessel in our fleet only if the existing charterer so agrees, but charterers may change and a new charterer may refuse to charter a vessel in our fleet if it is managed by our in-house technical managers. Similarly, certain ports may not allow our vessels that recently changed to in-house technical management into their terminals to load or discharge cargoes. If we are not successful with respect to any vessel for which we may provide technical management in-house, our reputation and ability to charter vessels may be negatively impacted, which could materially and adversely affect our business, financial condition and operating results.

A fluctuation in fuel prices may adversely affect our charter rates for time charters and our cost structure for voyage charters and COAs and consequently adversely affect our business, financial condition and results of operation.

The price and supply of bunker fuel are unpredictable and fluctuate based on events outside our control, including geopolitical developments, supply and demand for oil, actions by members of the Organization of the

Petroleum Exporting Countries (“OPEC”) and other oil and gas producers, war and unrest in oil producing countries and regions, regional production patterns and environmental concerns and regulations.

Bunker fuel prices have increased over the past few years and have further significantly increased with the introduction of the new low sulfur bunker fuel required effective as of January 1, 2020 under IMO 2020, absent the installation of scrubbers. We have not installed scrubbers on board our vessels, which removes sulfur oxides from exhaust gases, enabling the consumption of cheaper high sulfur bunker fuel. Consequently our customers may be less willing to enter into time charters under which they bear the full risk of bunker fuel price increases, or may shorten the periods for which they are willing to make such commitments. Under voyage charters and COAs, we bear the cost of bunker fuel used to power our vessels. From January 1, 2020, we will incur the increase in bunker fuel prices which will correspondingly increase our voyage expenses under each of our voyage charters and COAs, which could reduce our profitability and adversely affect our results of operations.

The required drydocking of our vessels could have a more significant adverse impact on our revenues than we anticipate, which would adversely affect our business, financial condition and operating results.

Our vessels require drydocking every five years until the age of 15 years and every two and a half years thereafter. The drydocking of our vessels requires significant capital expenditures and results in loss of revenue while our vessels are off-hire. Any significant increase in the number of days of off-hire due to such drydocking or in the costs of any repairs could have a material adverse effect on our financial condition. Although we attempt to ensure that no more than one vessel will be out of service at any given time, this may not always be possible because of the age of certain vessels in our fleet, we may underestimate the time required to drydock our vessels, or unanticipated problems may arise during drydocking. Currently, six of our vessels are over the age of 15 years and will require more regular drydocking.

Our operating costs are likely to increase in the future as our vessels age, which would adversely affect our business, financial condition and operating results.

In general, the cost of maintaining a vessel in good operating condition increases with the age of the vessel. As our vessels age, we will incur increased costs. Older vessels are typically less fuel-efficient and more costly to maintain than newer vessels due to improvements in engine technology. If equipment on board becomes obsolete and it is not cost effective to repair it, such equipment would have to be replaced. Cargo insurance rates increase with the age of a vessel, making older vessels less desirable to charterers. Governmental regulations, including environmental, safety or other equipment standards related to the age of vessels may also require expenditures for alterations, or the addition of new equipment, to our vessels to comply. These laws or regulations may also restrict the type of activities in which our vessels may engage or limit their operation in certain geographic regions. We cannot assure you that, as our vessels age, market conditions will justify those expenditures or enable us to operate our vessels as profitably as our younger vessels during the remainder of their expected useful lives.

The operation of ocean going vessels entails the possibility of marine disasters including damage or destruction of the vessel due to natural disasters, accident, the loss of a vessel due to piracy or terrorism, damage or destruction of cargo and similar events that may cause a loss of revenue from affected vessels and damage our business reputation, which may in turn lead to loss of business.

The operation of ocean going vessels entails certain inherent risks that may materially adversely affect our business and reputation, including:

- damage or destruction of vessel due to natural disasters;
- damage or destruction of vessel due to marine disasters such as a collision;
- the loss of a vessel due to piracy and terrorism;

- cargo and property losses or damage as a result of the foregoing or less drastic causes such as human error, mechanical failure, grounding, fire, explosions and bad weather;
- environmental accidents as a result of the foregoing;
- risks to the onboard vessel management personnel as a result of the foregoing; and
- business interruptions and delivery delays caused by mechanical failure, human error, war, terrorism, political action in various countries, labor strikes or adverse weather conditions.

Any of these circumstances or events could substantially increase our costs. For example, the costs of replacing a vessel or cleaning up a spill could substantially lower our revenues by taking vessels out of operation permanently or for periods of time. The involvement of our vessels in a disaster or delays in delivery or loss of cargo may harm our reputation as a safe and reliable vessel operator and cause us to lose business.

The total loss or damage of any of our vessels or cargoes could harm our reputation as a safe and reliable vessel owner and operator. If we are unable to adequately maintain or safeguard our vessels, we may be unable to prevent any such damage, costs, or loss that could negatively impact our business, financial condition and operating results.

The loss of or inability to operate any of our vessels would result in a significant loss of revenues and cash flow which would adversely affect our business, financial condition and operating results.

We do not carry loss of hire insurance. If, at any time, we cannot operate any of our vessels due to mechanical problems, lack of seafarers to crew a vessel, prolonged drydocking periods, loss of certification, the loss of any charter or otherwise, our business, financial condition and operating results will be materially adversely affected. In the worst case, we may not receive any revenues because of the inability to operate any of our vessels, but we may be required to pay expenses necessary to maintain the vessel in proper operating condition.

Adverse global economic conditions could have a material adverse effect on our business, financial condition and operating results.

Adverse global economic conditions may negatively impact our business, financial condition, results of operations and cash flows in ways that we cannot predict. Adverse economic conditions may lead to a decline in our customers' operations or ability to pay for our services, which could result in decreased demand for our vessels. There has historically been a strong link between the development of the world economy and demand for energy, including liquefied gases. Global financial markets and economic conditions have been volatile in recent years and remain subject to significant vulnerabilities, including trade wars between the U.S. and China or others, the effects of volatile energy prices and continuing turmoil and hostilities in the Middle East, the Korean Peninsula, North Africa and other geographic areas. An extended period of adverse development in global economic conditions or a tightening of the credit markets could reduce the overall demand for liquefied gases and have a negative impact on our customers. These potential developments, or market perceptions concerning these and related issues, could affect our business, financial condition and operating results.

Furthermore, a future economic slowdown could have an impact on our customers and/or suppliers including, among other things, causing them to fail to meet their obligations to us. Similarly, a future economic slowdown could affect lenders participating in our secured term loan and revolving credit facilities, making them unable to fulfill their commitments and obligations to us. Any reductions in activity owing to such conditions or failure by our customers, suppliers or lenders to meet their contractual obligations to us could adversely affect our business, financial condition and operating results.

Outbreaks of epidemic and pandemic of diseases could have a material adverse effect on our business, financial condition and operating results.

Our operations are subject to risks related to outbreaks of infectious diseases. The recent outbreak of the novel strain of coronavirus referred to as COVID-19 ("Coronavirus") that emanated from China, as well as other

potential outbreaks of infectious diseases in the future, may negatively affect economic conditions or restrict the seaborne transportation of products, including LPG and petrochemical products. Governments throughout the world have imposed travel bans, quarantines and other emergency public health measures. Those measures, though temporary in nature, may continue for longer than anticipated.

As a result of these measures, there may be a reduction in the supply of and demand for LPG or petrochemicals regionally or globally, including as a result of a slowdown or complete shutdown in the infrastructure of countries if the outbreak persists for an extended period of time. Any restriction on the ability to transport LPG and petrochemicals to countries or continents could adversely affect our business, financial condition and operating results, principally through reduced revenues and resultant reduced cashflows. This may affect our ability to comply with our loan covenant obligations. In addition counter parties may not honor their obligations to us, financing and refinancing may be more difficult to achieve, and our operational activities may be disrupted. The ultimate severity of the Coronavirus outbreak is uncertain at this time. Therefore, we cannot predict the impact it may have on our future operations, which could be material and adverse.

To date, we have experienced the following disruption to our operations:

- crew changes have been cancelled and/or delayed until it is safe and feasible to do so. This is due to port authorities denying disembarkation, and a lack of international air transport or denial of re-entry by crew members' home countries, which may have closed their borders;
- we have sought alternative shipyards which has resulted in delays to repairs, scheduled maintenance and dry docking of our vessels, as a result of a lack availability by shipyards from a shortage in labor or due to other business disruptions caused by COVID-19;
- delays or cancellations in vessel inspections and related certifications by class societies, customers or government agencies;
- we have had to implement and adhere to additional strict onboard procedures to avoid potential human-to-human transmission of COVID-19 to crew members as a result of vessel visits by port authority members, pilots, inspectors and suppliers.

Due to our lack of vessel diversification, adverse developments in the seaborne liquefied gas transportation business could adversely affect our business, financial condition and operating results.

We rely primarily on the cash flow generated from vessels that operate in the seaborne liquefied gas transportation business. Unlike many other shipping companies, which have vessels that carry drybulk, crude oil and oil products, we depend exclusively on the transport of LPG, petrochemicals and ammonia. Due to our lack of diversification, an adverse development in the international liquefied gas shipping industry would have a significantly greater impact on our business, financial condition and operating results than it would if we maintained a more diverse fleet of vessels.

If in the future our business activities involve countries, entities and individuals that are subject to restrictions imposed by the U.S. or other governments, we could be subject to enforcement action and our reputation and the market for our common stock could be adversely affected.

The tightening of U.S. sanctions in recent years has affected non-U.S. companies. In particular, sanctions against Iran have been significantly expanded. In 2012 the U.S. signed into law the Iran Threat Reduction and Syria Human Rights Act of 2012 (“TRA”), which placed further restrictions on the ability of non-U.S. companies to do business or trade with Iran and Syria. A major provision in the TRA is that issuers of securities must disclose to the U.S. Securities and Exchange Commission, or the “SEC,” in their annual and quarterly reports filed after February 6, 2013 if the issuer or “any affiliate” has “knowingly” engaged in certain activities involving Iran during the timeframe covered by the report. This disclosure obligation is broad in scope in that it requires the reporting of activity that would not be considered a violation of U.S. sanctions as well as violative conduct, and is not subject to a materiality threshold. The SEC publishes these disclosures on its website and the President of the United States must initiate an investigation in response to all disclosures.

In addition to the sanctions against Iran, the U.S. also has sanctions that target other countries, entities and individuals. These sanctions have certain extraterritorial effects that need to be considered by non-U.S. companies. It should also be noted that other governments have implemented versions of U.S. sanctions. We believe that we are in compliance with all applicable sanctions and embargo laws and regulations imposed by the U.S., the United Nations or European Union countries and intend to maintain such compliance. However, there can be no assurance that we will be in compliance in the future, particularly as the scope of certain laws may be unclear and may be subject to changing interpretations. Any such violation could result in fines or other penalties and could result in some investors deciding, or being required, to divest their interest, or not to invest, in our common stock. Additionally, some investors may decide to divest their interest, or not to invest, in our common stock simply because we may do business with companies that do business in sanctioned countries. Investor perception of the value of our common stock may also be adversely affected by the consequences of war, the effects of terrorism, civil unrest and governmental actions in these and surrounding countries.

Failure to comply with the U.S. Foreign Corrupt Practices Act, the UK Bribery Act and other anti-bribery legislation in other jurisdictions could result in fines, criminal penalties, contract termination and an adverse effect on our business.

We may operate in a number of countries throughout the world, including countries known to have a reputation for corruption. We are committed to doing business in accordance with applicable anti-corruption laws and have adopted a code of business conduct and ethics. We are subject, however, to the risk that we, our affiliated entities or our or their respective officers, directors, employees and agents may take actions determined to be in violation of anti-corruption laws, including the U.S. Foreign Corrupt Practices Act of 1977 and the Bribery Act 2010 of the Parliament of the United Kingdom. Any such violation could result in substantial fines, sanctions, civil and/or criminal penalties, curtailment of operations in certain jurisdictions, and might adversely affect our business, operating results or financial condition. In addition, actual or alleged violations could damage our reputation and ability to do business. Furthermore, detecting, investigating, and resolving actual or alleged violations is expensive and could consume significant time and attention of our senior management.

We rely on our information systems to conduct our business, and failure to protect these systems against security breaches could disrupt our business and adversely affect our results of operations.

We rely on information technology systems and networks in our operations, and those of our third-party technical managers, including processing, transmitting and storing electronic and financial information, communication with our vessels and the administration of our business. Information systems are vulnerable to security breaches by computer hackers and cyber terrorists and our operations could be targeted by individuals or groups seeking to sabotage or disrupt our information technology systems and networks, or to steal data. A successful cyber-attack could materially disrupt our operations, including the safety of our operations, or lead to unauthorized release of information or alteration of information on our systems. Any such attack or other breach of our information technology systems could have a material adverse effect on our business, operating results, financial condition, our reputation, or cash flows. In addition, the unavailability of the information systems or the failure of these systems to perform as anticipated including any failure in disaster recovery plans or data backups for us or our third-party technical managers for any reason could disrupt our business. We may be required to incur significant additional costs to remediate, modify or enhance our information technology systems or to try to prevent any such attacks.

Our business is subject to complex and evolving laws and regulations regarding privacy and data protection (“data protection laws”).

The regulatory environment surrounding data privacy and protection is constantly evolving and can be subject to significant change. New laws and regulations governing data privacy and the unauthorized disclosure of confidential information, including the European Union General Data Protection Regulation and recent California legislation, pose increasingly complex compliance challenges and potentially elevate our costs. Any

failure, or perceived failure, by us to comply with applicable data protection laws could result in proceedings or actions against us by governmental entities or others, subject us to significant fines, penalties, judgments and negative publicity, require us to change our business practices, increase the costs and complexity of compliance, and adversely affect our business. As noted above, we are also subject to the possibility of cyber-attacks, which themselves may result in a violation of these laws.

Maritime claimants could arrest our vessels, which could interrupt our cash flow.

Crew members, suppliers of goods and services to a vessel, shippers of cargo, cargo receivers and other parties may be entitled to a maritime lien against that vessel for unsatisfied debts, claims or damages. In many jurisdictions, a maritime lienholder may enforce its lien by arresting a vessel through foreclosure proceedings. The arrest or attachment of one or more of our vessels could interrupt our cash flow and require us to pay large sums to have the arrest lifted.

In addition, in some jurisdictions, such as South Africa, under the “sister ship” theory of liability, a claimant may arrest both the vessel that is subject to the claimant’s maritime lien and any “associated” vessel, which is any vessel owned or controlled by the same owner. Claimants could try to assert “sister ship” liability against all of the vessels in our fleet for claims relating to only one of our ships. The arrest of any of our vessels would adversely affect our business, financial condition and operating results.

A shortage of qualified officers would make it more difficult to crew our vessels and increase our operating costs. If a shortage were to develop, it could impair our ability to operate and have an adverse effect on our business, financial condition and operating results.

Our liquefied gas carriers require technically skilled officer staff with specialized training. As the world liquefied gas carrier fleet and the liquefied natural gas, or “LNG,” carrier fleet grows, the demand for such technically skilled officers increases and could lead to a shortage of such personnel. If our crewing managers were to be unable to employ such technically skilled officers, they would not be able to adequately staff our vessels and effectively train crews. The development of a deficit in the supply of technically skilled officers or an inability of our crewing managers to attract and retain such qualified officers could impair our ability to operate and increase the cost of crewing our vessels and, thus, materially adversely affect our business, financial condition and operating results. Please read “Item 4—Information on the Company—Business Overview—Crewing and Staff.”

Compliance with safety and other vessel requirements imposed by classification societies may be very costly and could adversely affect our business, financial condition and operating results.

The hull and machinery of every commercial vessel must be classed by a classification society authorized by its country of registry. The classification society certifies that a vessel is safe and seaworthy in accordance with the applicable rules and regulations of the country of registry of the vessel and the Safety of Life at Sea Convention. Our vessels are currently enrolled with, Lloyd’s Register, DNV GL Group AS or the American Bureau of Shipping. All of our vessels have been awarded International Safety Management certification.

As part of the certification process, a vessel must undergo annual surveys, intermediate surveys and special surveys. In lieu of a special survey, a vessel’s machinery may be on a continuous survey cycle, under which the machinery would be surveyed periodically over a five-year period. All of the vessels in our existing fleet are on a planned maintenance system, or “PMS,” approval, and as such the classification society attends on-board once every year to verify that the maintenance of the on-board equipment is done correctly. Each of the vessels in our fleet have been qualified within its respective classification society for drydocking either once every two and a half or once every five years, depending on the age of the vessel, the latter being subject to an intermediate underwater survey done using an approved diving company in the presence of a surveyor from the classification society twice in each five-year cycle, with a maximum of 30 months between each underwater survey.

If any vessel does not maintain its class and/or fails any annual survey, intermediate survey or special survey, the vessel will be unable to trade between ports and will be unemployable. This would adversely affect our business, financial condition and operating results.

Delays in deliveries of newbuildings or acquired vessels, or deliveries of vessels with significant defects, could harm our operating results and lead to the termination of any related charters that may be entered into prior to their delivery.

Although we currently have no vessels on order, under construction or subject to purchase agreements, we may purchase or order additional vessels from time to time. The delivery of these vessels could be delayed, not completed or cancelled, which would delay or eliminate our expected receipt of revenues from the employment of these vessels. In addition, under some of the charters we may enter into for newbuildings, if our delivery of a vessel to the customer is delayed, the customer may terminate the time charter, resulting in loss of revenues. The delivery of any newbuilding with substantial defects could have similar consequences.

Our receipt of newbuildings we may order or agree to purchase could be delayed because of many factors, including:

- quality or engineering problems;
- changes in governmental regulations or maritime self-regulatory organization standards;
- work stoppages or other labor disturbances at the shipyard;
- bankruptcy or other financial crisis of the shipbuilder;
- a backlog of orders at the shipyard;
- hostilities or political or economic disturbances in the locations where the vessels are being built;
- weather interference or catastrophic event, such as a major earthquake or fire;
- our requests for changes to the original vessel specifications;
- shortages of, or delays in the receipt of necessary construction materials, such as steel;
- our inability to obtain sufficient finance for the purchase of the vessels or to make timely payments; or
- our inability to obtain requisite permits or approvals.

We do not typically carry delay of delivery insurance to cover any losses that are not covered by delay penalties in our construction contracts. As a result, if delivery of a vessel is materially delayed, it could adversely affect our business, financial condition and operating results.

Our growth depends on our ability to expand relationships with existing customers and obtain new customers, for which we will face substantial competition.

The process of obtaining new charters is highly competitive, generally involves an intensive screening process and competitive bids, and often extends for several months or even years. Contracts are awarded based upon a variety of factors, including:

- the shipowner's industry relationships, experience and reputation for customer service, quality operations and safety;
- the quality, experience and technical capability of the crew;
- the age, type, capability and versatility of our vessels;
- the shipowner's construction management experience, including the ability to obtain on-time delivery of new vessels according to customer specifications;

- the shipowner’s willingness to accept operational risks pursuant to the charter, such as allowing termination of the charter for force majeure events; and
- the competitiveness of the bid in terms of the vessel’s overall economics.

We expect substantial competition for providing seaborne transportation services from a number of experienced companies. As a result, we may be unable to expand our relationships with existing customers or to obtain new customers on a profitable basis, if at all, which would have a material adverse effect on our business, financial condition and operating results.

The marine transportation industry is subject to substantial environmental and other regulations, which may limit our operations and increase our expenses.

Our operations are affected by extensive and changing environmental protection laws and other regulations and international treaties and conventions, including those relating to equipping and operating vessels and vessel safety. These regulations include the U.S. Oil Pollution Act of 1990, or “OPA 90,” the U.S. Clean Water Act, the U.S. Maritime Transportation Security Act of 2002 and regulations of the IMO, including the International Convention on Civil Liability for Oil Pollution Damage of 1969, as from time to time amended and generally referred to as the CLC, the IMO International Convention for the Prevention of Pollution from Ships of 1975, as from time to time amended and generally referred to as MARPOL, the International Convention for the Prevention of Marine Pollution of 1973, the IMO International Convention for the Safety of Life at Sea of 1974, as from time to time amended and generally referred to as SOLAS, the IMO International Convention on Load Lines of 1966, as from time to time amended, the International Management Code for the Safe Operation of Ships and for Pollution Prevention, or the “ISM Code,” the International Convention on Civil Liability for Bunker Oil Pollution Damage, generally referred to as the Bunker Convention, and the European Union 2015 Regulation on the monitoring, reporting, and verification of carbon dioxide emissions from maritime transport. We have incurred, and expect to continue to incur, substantial expenses in complying with these laws and regulations, including expenses for vessel modifications and changes in operating procedures. For example, under IMO 2020, absent the installation of expensive sulfur scrubbers to achieve reduced emission requirements, the maximum sulfur content of bunker fuels used by the marine sector, including our vessels, was lowered from 3.5% to 0.5% sulfur content. The marine sector accounts for approximately half of all global fuel oil demand and the impact of the increased demand for compliant low sulfur fuel is expected to affect the availability and cost of such fuels and increase our costs of operation. Additional laws and regulations may be adopted that could limit our ability to do business or further increase costs, which could harm our business. In addition, failure to comply with applicable laws and regulations may result in administrative and civil penalties, criminal sanctions or the suspension or termination of operations.

In addition, we believe that the heightened environmental, quality and security concerns of the public, regulators, insurance underwriters and charterers will generally lead to additional regulatory requirements, including enhanced risk assessment and security requirements, greater inspection and safety requirements on all vessels in the marine transportation markets and possibly restrictions on the emissions of greenhouse gases from the operation of vessels. These requirements are likely to add incremental costs to our operations and the failure to comply with these requirements may affect the ability of our vessels to obtain and, possibly, collect on insurance or to obtain the required certificates for entry into the different ports where we operate.

Please read “Item 4—Information on the Company—Business Overview—Environmental and Other Regulation” for a more detailed discussion on these topics.

Climate change and greenhouse gas restrictions may adversely impact our operations and markets.

Due to concern over the risk of climate change, a number of countries and the IMO have adopted, or are considering the adoption of, regulatory frameworks to reduce greenhouse gas emission from vessel emissions.

These regulatory measures may include, among others, adoption of cap and trade regimes, carbon taxes, increased efficiency standards and incentives or mandates for renewable energy. Additionally, a treaty may be adopted in the future that includes restrictions on shipping emissions. Compliance with changes in laws and regulations relating to climate change could increase our costs of operating and maintaining our vessels and could require us to make significant financial expenditures that we cannot predict with certainty at this time.

Adverse effects upon the oil and gas industry relating to climate change, including growing public concern about the environmental impact of climate change, may also have an effect on demand for our services. For example, increased regulation of greenhouse gases or other concerns relating to climate change may reduce the demand for oil and gas in the future or create greater incentives for use of alternative energy sources. Any long-term material adverse effect on the oil and gas industry could have a significant financial and operational adverse impact on our business that we cannot predict with certainty at this time.

Changes in the law and regulations relating to the use of, or a decrease in the demand for, plastic could adversely impact our business.

There is growing public concern surrounding the accumulation of plastics in the environment and, as a result, concerning the use of plastics more generally. Plastics are derived or manufactured largely from the petrochemical gases that we transport. The growing public concern could reduce consumer demand for plastic products and result in laws and regulations restricting the use of plastics, which could limit or reduce the demand and need for petrochemical gases to be transported and could have a significant adverse impact on our business, financial condition and operating results.

Marine transportation is inherently risky. An incident involving significant loss of product or environmental contamination by any of our vessels could adversely affect our reputation, business, financial condition and operating results.

The operation of an ocean-going vessel carries inherent risks. Our vessels and their cargoes and the LPG and petrochemical production and terminal facilities that we service are at risk of being damaged or lost because of events such as:

- marine disasters;
- bad weather or climate change;
- business interruption caused by mechanical failures;
- grounding, capsizing, fire, explosions and collisions;
- war, terrorism, piracy, cyber-attack; and
- human error.

An accident involving any of our vessels could result in any of the following:

- death or injury to persons, loss of property or damage to the environment and natural resources;
- delays in the delivery of cargo;
- loss of revenues;
- higher than anticipated expenses, or liabilities or costs to recover any spilled cargo and to restore the ecosystem where the spill occurred;
- governmental fines, penalties or restrictions on conducting business;
- higher insurance rates; and
- damage to our reputation and customer relationships generally.

Any of these results could have a material adverse effect on our business, financial condition and operating results.

Competition from more technologically advanced liquefied gas carriers could reduce our charter hire income and the value of our vessels.

The charter rates and the value and operational life of a vessel are determined by a number of factors including the vessel's efficiency, operational flexibility and physical life. Efficiency includes fuel economy, speed and the ability to be loaded and discharged quickly. Flexibility includes the ability to enter ports, utilize related docking facilities and pass through canals and straits. The length of a vessel's physical life is related to the original design and construction, maintenance and the impact of the stress of operations. If new liquefied gas carriers are built that are more efficient or more flexible or have longer physical lives than our vessels, competition from these more technologically advanced liquefied gas carriers could adversely affect the charter rates we receive for our vessels once their current charters are terminated and the resale value of our vessels. As a result, our business, financial condition and operating results could be adversely affected.

Acts of piracy on any of our vessels or on ocean going vessels could adversely affect our business, financial condition and operating results.

Acts of piracy have historically affected ocean-going vessels trading in regions of the world such as the South China Sea, the Gulf of Aden off the coast of Somalia, and West Africa. If such piracy attacks result in regions in which our vessels are deployed being named on the Joint War Committee Listed Areas, war-risk insurance premiums payable for such coverage could increase significantly and such insurance coverage might become more difficult to obtain. In addition, crew costs, including costs that may be incurred to the extent we employ on-board security guards, could increase in such circumstances. We may not be adequately insured to cover losses from these incidents, which could have a material adverse effect on us. In addition, detention or hijacking as a result of an act of piracy against our crew or vessels could require a significant amount of management time negotiating the release of crew members or the vessel and could have a material adverse impact on our business, financial condition and operating results.

Terrorist attacks, increased hostilities, piracy or war could lead to further economic instability, increased costs and disruption of business.

Terrorist attacks may adversely affect our business, operating results, financial condition, ability to raise capital and future growth. Continuing hostilities in the Middle East may lead to additional armed conflicts or to further acts of terrorism and civil disturbance in the United States or elsewhere, which may contribute further to economic instability and disruption of production and distribution of LPG, petrochemical gases and ammonia, which could result in reduced demand for our services.

In addition, petrochemical production and terminal facilities and vessels that transport petrochemical products could be targets of future terrorist attacks. Any such attacks could lead to, among other things, bodily injury or loss of life, vessel or other property damage, increased vessel operational costs, including insurance costs, and the inability to transport gases to or from certain locations. Terrorist attacks, piracy, war or other events beyond our control that adversely affect the distribution, production or transportation of gases to be shipped by us could entitle customers to terminate our charters, which would harm our cash flow and business. In addition, the loss of a vessel as a result of terrorism or piracy would have a material adverse effect on our business, financial condition and operating results.

Exposure to currency exchange rate fluctuations results in fluctuations in cash flows and operating results.

Substantially all of our cash receipts are in U.S. Dollars. Certain disbursements, however, including some vessel operating expenses and general and administrative expenses are in the foreign currencies invoiced by the

supplier, principally the Euro and British Pound Sterling. We remit funds in the various currencies invoiced. We convert the non-U.S. Dollar invoices received and their subsequent payments into U.S. Dollars when the transactions occur. This mismatch between receipts and payments may result in fluctuations if the value of the U.S. Dollar changes relative to such other currencies.

In addition, the Company has entered into a cross-currency interest rate swap agreement concurrently with the issuance of its NOK600 million NOK-denominated Senior secured bonds. If the Norwegian Kroner depreciates relative to the U.S. Dollar beyond a certain threshold, we are required to place cash collateral with our swap providers for the forecast future liability on the cross-currency interest rate swap. In the event the depreciation of the Norwegian Kroner relative to the U.S. Dollar is significant, the cash collateral requirements could adversely affect our liquidity and financial position.

Our insurance may be insufficient to cover losses that may occur to our vessels or result from our operations.

We carry insurance to protect us against most of the accident-related risks involved in the conduct of our business, including marine hull and machinery insurance, protection and indemnity insurance, which includes pollution risks, crew insurance and war risk insurance. We may not be able to adequately insure against all risks, and any particular claim may not be paid by insurance. None of our vessels are insured against loss of revenues resulting from vessel off-hire time. In addition, as a member of protection and indemnity associations we may be required to make additional payments over and above budgeted premiums if members claims exceed association reserves.

We may be unable to procure adequate insurance coverage at commercially reasonable rates in the future during adverse market conditions. Changes in the insurance markets attributable to war, terrorist attacks or piracy may also make certain types of insurance more expensive or more difficult to obtain. In addition, the insurance may be voidable by the insurers as a result of certain actions, such as vessels failing to maintain certification with applicable maritime self-regulatory organizations. Any uninsured or underinsured loss could have a material adverse effect on our business, financial condition and operating results.

Restrictive covenants in our secured term loan facilities and revolving credit facilities and in our secured and unsecured bonds and our Terminal Facility impose, and any future debt facilities will impose, financial and other restrictions on us.

The secured term loan facilities and revolving credit facilities and the secured bonds and unsecured bonds impose, and any future debt facility will impose, operating and financial restrictions on us. The restrictions in the existing secured term loan facilities and revolving credit facilities and the secured bonds and unsecured bonds may limit our ability to, among other things:

- pay dividends out of operating revenues generated by the vessels securing indebtedness under the facility, redeem any shares or make any other payment to our equity holders, if there is a default under any secured term loan facility, revolving credit facility or secured term loan and revolving credit facility;
- incur additional indebtedness, including through the issuance of guarantees;
- create liens on our assets;
- sell our vessels;
- merge or consolidate with, or transfer all or substantially all our assets to, another person;
- change the flag, class or management of our vessels; and
- enter into a new line of business.

The secured term loan facilities and revolving credit facility require us to maintain various financial ratios. These include requirements that we maintain specified maximum ratios of net debt to total capitalization, that we maintain specified minimum levels of cash and cash equivalents, that we maintain specified minimum ratios of consolidated earnings before interest, taxes, depreciation and amortization (consolidated EBITDA), to consolidated interest expense and that we maintain specified minimum levels of collateral coverage. Under our secured term loan facilities, if at any time the aggregate fair market value of (i) the vessels subject to a mortgage in favor of our lenders and (ii) the value of any additional collateral we grant to the lenders is less than 125% to 135%, as applicable, of the outstanding principal amount under the secured term loan facilities and any commitments to borrow additional funds, our lenders may require us to provide additional collateral. See “Item 5—Operating and Financial Review and Prospects—Liquidity and Capital Resources—Secured Term Loan Facilities and Revolving Credit Facility; 2017 Senior Unsecured Bonds; and 2018 Senior Secured Bonds—Financial Covenants.” The failure to comply with such covenants would cause an event of default that could materially adversely affect our business, financial condition and operating results.

In addition, following completion of the Marine Export Terminal, Navigator Ethylene Terminals LLC, our wholly-owned subsidiary and the borrower under our Terminal Facility (as defined in “Item 5—Operating and Financial Review and Prospects—Liquidity and Capital Resources—Terminal Facility”), can only pay dividends if it satisfies certain customary conditions to paying a dividend, including maintaining a debt service coverage ratio for the immediately preceding four consecutive fiscal quarters and the projected immediately succeeding four consecutive fiscal quarters of not less than 1.20 to 1.00 and no default or event of default has occurred or is continuing. The Terminal Facility also limits Navigator Ethylene Terminals LLC from, among other things, incurring indebtedness or entering into mergers and divestitures. The Terminal Facility also contains general covenants that will require Navigator Ethylene Terminals LLC to vote its interest in the Marine Terminal Joint Venture to cause the Marine Terminal Joint Venture to maintain adequate insurance coverage, complete the Marine Export Terminal and maintain its property (but only to the extent Navigator Ethylene Terminals LLC has the power under the organizational documents of the Marine Terminal Joint Venture to so cause such actions). Further, the loans under the Terminal Facility are secured by first priority liens on the rights to Navigator Ethylene Terminals LLC’s distributions from the Marine Terminal Joint Venture and our equity interests in the Marine Terminal Borrower.

Because of these covenants, we may need to seek permission from our lenders in order to engage in some corporate actions. Our lenders’ interests may be different from ours, and we may not be able to obtain our lenders’ permission when needed. This may limit our ability to finance our future operations and make acquisitions or pursue business opportunities. See “Item 5—Operating and Financial Review and Prospects—Liquidity and Capital Resources—Secured Term Loan Facilities and Revolving Credit Facility” and “Item 5—Operating and Financial Review and Prospects—Liquidity and Capital Resources—Terminal Facility.”

The secured term loan facilities and the Terminal Facility are reducing facilities. The required repayments under the secured term loan facilities and the Terminal Facility may adversely affect our business, financial condition and operating results.

Loans under the secured term loan facilities are subject to quarterly repayments. In addition, the loans under the Terminal Facility are subject to quarterly repayments of principal and interest beginning three months after the completion of the Marine Export Terminal. If at such time we have not made alternative financing arrangements or generate substantial cash flows, any such repayments and our declining borrowing availability could have a material adverse effect on our business, financial condition and operating results.

Our consolidated variable interest entity may enter into different financing arrangements, which could adversely affect our financial results.

In October 2019, we entered into a sale and leaseback transaction with respect to one of our vessels, *Navigator Aurora*, with a lessor, OCY Aurora Ltd, which is a newly formed special purpose vehicle (“SPV”) and wholly

owned subsidiary of Ocean Yield Malta Limited, to refinance the vessel's secured tranche of one of our secured term loan facilities. The SPV was determined to be a variable interest entity ("VIE"). We are deemed to be the primary beneficiary of the VIE, and, as a result, we are required by U.S. GAAP to consolidate the SPV into our results. Although consolidated into our results, we have no control over the funding arrangements negotiated by the SPV, such as interest rates, maturity and repayment profiles. In consolidating the SPV, we must make certain assumptions regarding the debt amortization profile and the interest rate to be applied against the SPV's debt principal. Our estimates are therefore dependent upon the timeliness of receipt and accuracy of financial information provided by the SPV. For additional information, refer to note 9 "Variable Interest Entities" to our consolidated financial statements. For a description of our current financing arrangements including those of the VIE, please read "Item 5—Operating and Financial Review and Prospects—Liquidity and Capital Resources" and "Item 5—Operating and Financial Review and Prospects—Tabular Disclosure of Contractual Obligations." The funding arrangements negotiated by the VIE could adversely affect our financial results.

If interest rates increase, it will affect the interest rates under our credit facilities, which could affect our operating results.

Amounts borrowed under our existing credit facilities bear interest at an annual rate ranging from 2.10% to 2.70% above LIBOR and loans under our Terminal Facility bear interest at an annual rate of 2.50% to 3.00% above LIBOR. Interest rates have recently been at relatively low levels and any increase in interest rates would lead to an increase in LIBOR, which would affect the amount of interest payable on amounts that we borrow under our credit facilities, which in turn could have an adverse effect on our operating results.

In addition, we are exposed to a market risk relating to increases in interest rates because the amounts borrowed under our existing credit facilities bear interest at rates based on LIBOR. On July 27, 2017, the United Kingdom Financial Conduct Authority ("FCA"), which regulates LIBOR, announced that it intends to stop persuading or compelling banks to submit rates for the calculation of LIBOR to the administrator of LIBOR after 2021 ("FCA Announcement"). The FCA Announcement indicates that the continuation of LIBOR on the current basis is not guaranteed after 2021. The industry is currently working towards the development of replacement rates for each of the affected LIBOR currencies. Working groups have been formed in the United States, the United Kingdom, the European Union and others to recommend an alternative rate to LIBOR for its respective currency.

In the U.S., an Alternative Reference Rates Committee has identified the Secured Overnight Financing Rate ("SOFR") as its preferred alternative rate for USD LIBOR. SOFR is a measure of the cost of borrowing cash overnight, collateralized by U.S. Treasury securities, and is based on directly observable U.S. Treasury-backed repurchase transactions.

The timing and method of transition to alternative successor rates by 31 December 2021 for each currency is likely to differ and a number of transition uncertainties remain at this time. An alternative reference rate with inherent increased volatility compared to LIBOR, significant increases in LIBOR or uncertainty surrounding its phase out after 2021 could adversely affect our business, financial condition, operating results and cash flows.

The derivative contracts we have or may enter into to hedge our exposure to fluctuations in interest rates could result in higher than market interest rates and reductions in our shareholders' equity, as well as charges against our income.

We have entered into cross-currency interest rate swap and may enter into further swaps for purposes of managing our exposure to fluctuations in interest rates and foreign exchange rates applicable to indebtedness under our secured term loan facilities and revolving credit facility which were advanced at floating rates based on LIBOR. Our hedging strategies, however, may not be effective and we may incur substantial losses if interest rates move materially differently from our expectations.

To the extent our derivative contracts do not qualify for treatment as hedges for accounting purposes, we recognize fluctuations in the fair value of such contracts in our statement of operations. In addition, changes in

the fair value of derivative contracts, even those that qualify for treatment as hedges, will be recognized as derivative assets or liabilities on our balance sheet, and can affect compliance with the net worth covenant requirements in our secured term loan facilities. In addition, we may have to cash collateralize unrealized losses on these derivatives, thus reducing our liquidity covenants headroom. The unrealized gains or losses relating to changes in fair value of our derivative instruments do not impact our cash flows, other than providing cash collateral security during the term of the derivative contracts. However, our financial condition could also be materially adversely affected to the extent we do not hedge our exposure to interest rate fluctuations under our financing arrangements under which loans have been advanced at a floating rate based on LIBOR.

Any hedging activities we engage in may not effectively manage our interest rate exposure or have the desired impact on our financial conditions or operating results.

Our business depends upon certain key employees.

Our future success depends to a significant extent upon certain members of our senior management team, who have substantial experience in the shipping industry and with the Company and are crucial to the development of our business strategy and to the growth and development of our business. In the event of the loss of any of these individuals, we may be unable to recruit replacement individuals with the equivalent talent and experience, which could adversely affect our business, financial condition and operating results.

Our major shareholder may exert considerable influence on the outcome of matters on which our shareholders will be entitled to vote, and its interests may be different from yours.

The WLR Group, our principal shareholder, owned approximately 39.2% of our common stock, as of December 31, 2019. The WLR Group may exert considerable influence on the outcome of matters on which our shareholders are entitled to vote, including the election of our directors to our board of directors and other significant corporate actions. The interests of the WLR Group may be different from your interests.

We are a holding company, and we depend on the ability of our subsidiaries to distribute funds to us in order to satisfy our financial obligations.

We are a holding company and our subsidiaries conduct all of our operations and own all of our operating assets. We have no significant assets other than the equity interests in our subsidiaries. As a result, our ability to satisfy our financial obligations depends on our subsidiaries and their ability to distribute funds to us. The ability of a subsidiary to make these distributions could be affected by a claim or other action by a third-party, including a creditor, or by the Republic of the Marshall Islands law, which regulates the payment of dividends by companies formed thereunder.

In addition, under the secured term loan facilities, Navigator Gas L.L.C., our wholly-owned subsidiary, and our vessel-owning subsidiaries that are parties to the secured term loan facilities and revolving credit facility may not make distributions to us out of operating revenues from vessels securing indebtedness thereunder, redeem any shares or make any other payment to our shareholders if an event of default has occurred and is continuing. Please read “Item 5—Operating and Financial Review and Prospects—Liquidity and Capital Resources—Secured Term Loan Facilities and Revolving Credit Facility.” Further, following completion of the Marine Export Terminal, Navigator Ethylene Terminals LLC, our wholly-owned subsidiary and the borrower under our Terminal Facility, can only pay dividends if it satisfies certain customary conditions to paying a dividend, including maintaining a debt service coverage ratio for the immediately preceding four consecutive fiscal quarters and the projected immediately succeeding four consecutive fiscal quarters of not less than 1.20 to 1.00 and no default or event of default has occurred or is continuing.

The inability of our subsidiaries to make distributions to us would have an adverse effect on our business, financial condition and operating results.

The vote by the United Kingdom to leave the EU could adversely affect us.

The 2016 United Kingdom (the “U.K.”) referendum on its membership in the European Union (the “EU”) resulted in a majority of U.K. voters voting to exit the EU (“Brexit”). On January 31, 2020, the U.K. formally left the EU. The British government is currently in negotiations with the EU to determine the terms of the U.K.’s exit. The withdrawal could potentially disrupt the free movement of goods, services and people between the U.K. and the EU, undermine bilateral cooperation in key geographic areas and significantly disrupt trade between the U.K. and the EU or other nations as the U.K. pursues independent trade relations. In addition, Brexit could lead to legal uncertainty and potentially divergent national laws and regulations as the U.K. determines which EU laws to replace or replicate. The effects of Brexit will depend on any agreements the U.K. makes to retain access to EU or other markets either during a transitional period or more permanently. It is unclear what long-term economic, financial, trade and legal implications the withdrawal of the U.K. from the EU would have and how such withdrawal would affect our business. In addition, Brexit may lead other EU member countries to consider referendums regarding their EU membership.

These developments have had and may continue to have a material adverse effect on global economic conditions and the stability of global financial markets, and may significantly reduce global market liquidity and restrict the ability of key market participants to operate in certain financial markets. Any of these factors could depress economic activity and restrict our access to capital, which could adversely affect our business, financial condition and operating results. As a result of the uncertainty and the potential consequences that may follow Brexit, we face risks with respect to volatility in exchange rates and interest rates, customs restrictions or delays in delivering our cargoes into the U.K. as well as our ability to employ or retain employees in our UK Representative Office. Any of these effects of Brexit, and others we cannot anticipate, could adversely affect our business, operating results and financial condition.

Risks Relating to Our Common Stock

We may issue additional equity securities without your approval, which would dilute your ownership interests.

We may issue additional shares of common stock or other equity or equity-linked securities without the approval of our shareholders, subject to certain limited approval requirements of the NYSE. In particular, we may finance all or a portion of the acquisition price of future vessels, including newbuildings, that we agree to purchase through the issuance of additional shares of common stock. Our amended and restated articles of incorporation, which became effective on November 5, 2013, authorize us to issue up to 400,000,000 shares of common stock, of which 55,826,644 shares were outstanding as of December 31, 2019. The issuance by us of additional shares of common stock or other equity or equity-linked securities of equal or senior rank will have the following effects:

- our shareholders’ proportionate ownership interest in us will decrease;
- the relative voting strength of each previously outstanding share may be diminished; and
- the market price of the common stock may decline.

Future sales of our common stock could cause the market price of our common stock to decline.

Sales of a substantial number of our shares of common stock in the public market, or the perception that these sales could occur, may depress the market price for our common stock. These sales could also impair our ability to raise additional capital through the sale of our equity securities in the future. The WLR Group, our principal shareholder, owned 39.2% of our common stock, as of December 31, 2019. In the future, the WLR Group may elect to sell large numbers of shares from time to time.

We have no current plans to pay dividends on our common stock. Consequently, your only opportunity to achieve a return on your investment is if the price of our common stock appreciates.

We have no current plans to declare dividends on our common stock in the foreseeable future. Consequently, your only opportunity to achieve a return on your investment in us will be if you sell your shares of common stock at a price greater than you paid for it. There is no guarantee that the market price of our common stock will ever exceed the price that you pay.

The obligations associated with being a public company requires significant resources and management attention.

As a public company in the United States, we are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, or the “Exchange Act,” and the Sarbanes-Oxley Act of 2002, or the “Sarbanes-Oxley Act,” the listing requirements of the NYSE and other applicable securities rules and regulations. The Exchange Act requires that we file annual and current reports with respect to our business, financial condition and operating results. The Sarbanes-Oxley Act requires, among other things, that we establish and maintain effective internal controls and procedures for financial reporting. We have made, and will continue to make, changes to our internal controls and procedures for financial reporting and accounting systems to meet our reporting obligations as a public company. However, the measures we continue to take may not be sufficient to satisfy our obligations as a public company.

In addition, changing laws, regulations and standards relating to corporate governance and public disclosure are creating uncertainty for public companies, increasing legal and financial compliance costs and making some activities more time consuming. These laws, regulations and standards are subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. We intend to continue to invest resources to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative costs and a diversion of management’s time and attention from revenue-generating activities to compliance activities. If our efforts to comply with new laws, regulations and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to their application and practice, regulatory authorities may initiate legal proceedings against us and our business, financial condition, operating results and cash flow could be adversely affected.

Effective internal controls over financial reporting are necessary for us to provide reliable financial reports and, together with adequate disclosure controls and procedures, are designed to prevent fraud. Any failure to implement required new or improved controls, or difficulties encountered in their implementation, could cause us to fail to meet our reporting obligations. In addition, any testing we conduct in connection with Section 404 of the Sarbanes-Oxley Act of 2002, or any testing conducted by our independent registered public accounting firm, may reveal deficiencies in our internal controls over financial reporting that are deemed to be material weaknesses or that may require prospective or retroactive changes to our financial statements or identify other areas for further attention or improvement. Ineffective internal controls could subject us to regulatory scrutiny and sanctions and also cause investors to lose confidence in our reported financial information, limit our ability to access capital markets or require us to incur additional costs to improve our internal control and disclosure control systems and procedures, which could harm our business and have a negative effect on the trading price of our securities.

We have identified material weaknesses in our internal control over financial reporting. If we identify additional material weaknesses in the future or otherwise fail to maintain effective internal control over financial reporting, it could result in material misstatements of our financial statements.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial

statements will not be prevented or detected on a timely basis. We have identified three material weaknesses in our internal control over financial reporting due to: (i) a lack of sufficient effective controls around prospective financial information used in our going concern assessment, (ii) a lack of sufficient accounting and financial reporting personnel with requisite knowledge and experience in the application of U.S. GAAP and SEC financial reporting requirements, and (iii) control weaknesses related to manage access and manage change for IT systems at one of our third party technical managers.

Consequently, management concluded that we did not maintain effective internal control over financial reporting as of December 31, 2019 (See “Item 15. Controls and Procedures”). If we are unable to successfully remediate these material weaknesses in a timely manner, or if we identify additional material weaknesses in the future or we are unable to maintain effective internal controls and disclosure controls, investors may lose confidence in our reported financial information, which could lead to a decline in the price of our common stock, limit our ability to access the capital markets in the future, and require us to incur additional costs to improve our internal control and disclosure control systems and procedures. Further, if lenders lose confidence in the reliability of our financial statements, it could have a material adverse effect on our ability to fund our operations.

We may lose our foreign private issuer status in the future, which could result in significant additional costs and expenses.

We are a “foreign private issuer,” as such term is defined in Rule 405 under the Securities Act of 1933, as amended, and therefore, we are not required to comply with all the periodic disclosure and current reporting requirements of the Exchange Act and related rules and regulations. Under Rule 405, the determination of foreign private issuer status is made annually on the last business day of an issuer’s most recently completed second fiscal quarter.

In the future, we would lose our foreign private issuer status if a majority of our shareholders, directors or management are U.S. citizens or residents and we fail to meet additional requirements necessary to avoid loss of foreign private issuer status. The regulatory and compliance costs to us under U.S. securities laws as a U.S. domestic issuer may be significantly higher. If we are not a foreign private issuer, we will be required to file periodic reports and registration statements on U.S. domestic issuer forms with the SEC which are more detailed and extensive than the forms available to a foreign private issuer. For example, the annual report on Form 10-K requires domestic issuers to disclose executive compensation information on an individual basis with specific disclosure regarding the domestic compensation philosophy, objectives, annual total compensation (base salary, bonus, equity compensation) and potential payments in connection with change in control, retirement, death or disability, while the annual report on Form 20-F, including this annual report, permits foreign private issuers to disclose compensation information on an aggregate basis. We would also have to mandatorily comply with U.S. federal proxy requirements, and our officers, directors and principal shareholders would become subject to the short-swing profit disclosure and recovery provisions of Section 16 of the Exchange Act. We may also be required to modify certain of our policies or lose our ability to rely upon exemptions from certain corporate governance requirements on U.S. stock exchanges that are available to foreign private issuers.

We are incorporated in the Republic of the Marshall Islands, which does not have a well-developed body of corporate law.

Our corporate affairs are governed by our articles of incorporation and bylaws and by the Marshall Islands Business Corporations Act, or the “BCA.” The provisions of the BCA resemble provisions of the corporation laws of a number of states in the United States. However, there have been few judicial cases in the Republic of the Marshall Islands interpreting the BCA. The rights and fiduciary responsibilities of directors under the Republic of the Marshall Islands law are not as clearly established as the rights and fiduciary responsibilities of directors under statutes or judicial precedent in existence in certain U.S. jurisdictions. Shareholder rights may differ as well. While the BCA does specifically incorporate the non-statutory law, or judicial case law, of the

State of Delaware and other states with substantially similar legislative provisions, our shareholders may have more difficulty in protecting their interests in the face of actions by the management, directors or controlling shareholders than would shareholders of a corporation incorporated in a U.S. jurisdiction.

Because we are a Marshall Islands corporation, it may be difficult to serve us with legal process or enforce judgments against us, our directors or our management.

We are a Marshall Islands corporation, and substantially all of our assets and several of our executive offices are located outside of the United States. A majority of our directors and officers are non-residents of the United States, and all or a substantial portion of the assets of these non-residents are located outside of the United States. As a result, it may be difficult or impossible for you to bring an action against us or against these individuals in the United States if you believe that your rights have been infringed under securities laws or otherwise. Even if you are successful in bringing an action of this kind, the laws of the Republic of the Marshall Islands and of other jurisdictions may prevent or restrict you from enforcing a judgment against our assets or the assets of our directors and officers.

There is substantial doubt that the courts of the Republic of the Marshall Islands would (1) enter judgments in original actions brought in those courts predicated on U.S. federal or state securities laws; or (2) recognize or enforce against us or any of our officers, directors or experts, judgments of courts of the United States predicated on U.S. federal or state securities laws. The Republic of the Marshall Islands does not have a bankruptcy statute or general statutory mechanism for insolvency proceedings.

Provisions of our articles of incorporation and bylaws may have anti-takeover effects.

Several provisions of our articles of incorporation, which are summarized below, may have anti-takeover effects. These provisions are intended to avoid costly takeover battles, lessen our vulnerability to a hostile change of control and enhance the ability of our board of directors to maximize shareholder value in connection with any unsolicited offer to acquire our company. However, these anti-takeover provisions could also discourage, delay or prevent the merger or acquisition of our company by means of a tender offer, a proxy contest or otherwise that a shareholder may consider in its best interest and the removal of incumbent officers and directors.

Blank Check Preferred Stock. Under the terms of our articles of incorporation our board of directors has the authority, without any further vote or action by our shareholders, to issue up to 40,000,000 shares of “blank check” preferred stock. Our board could authorize the issuance of preferred stock with voting or conversion rights that could dilute the voting power or rights of the holders of our common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change in control of us or the removal of our management and may harm the market price of our common stock.

Election of Directors. Our articles of incorporation provide that directors will be elected at each annual meeting of shareholders to serve until the next annual meeting of shareholders and until his or her successor shall have been duly elected and qualified, except in the event of his or her death, resignation, removal or the earlier termination of his or her term of office. Our articles of incorporation do not provide for cumulative voting in the election of directors. Our bylaws require shareholders to provide advance written notice of nominations for the election of directors. These provisions may discourage, delay or prevent the removal of incumbent officers and directors.

Advance Notice Requirements for Shareholder Proposals and Director Nominations. Our bylaws provide that, with a few exceptions, shareholders seeking to nominate candidates for election as directors or to bring business before an annual meeting of shareholders must provide timely notice of their proposal in writing to the corporate secretary. Generally, to be timely, a shareholder’s notice must be received at our principal executive office not less than 90 days or more than 120 days prior to the first anniversary date of the immediately preceding annual

meeting of shareholders. Our bylaws also specify requirements as to the form and content of a shareholder's notice. These provisions may impede a shareholder's ability to bring matters before an annual meeting of shareholders or make nominations for directors at an annual meeting of shareholders.

Limited Actions by Shareholders. Our bylaws provide that only the board of directors may call special meetings of our shareholders and the business transacted at the special meeting is limited to the purposes stated in the notice.

Tax Risks

In addition to the following risk factors, please read "Item 4—Information on the Company—Business Overview—Taxation of the Company" and "Item 10—Additional Information—Taxation" for a more complete discussion of the expected material U.S. federal and non-U.S. income tax considerations relating to us and the ownership and disposition of our common stock.

We may be subject to additional taxes, which could adversely impact our business and financial results.

We and our subsidiaries are subject to tax in the jurisdictions in which we or our subsidiaries are organized or operate. In computing our tax obligations in these jurisdictions, we are required to take into account various tax accounting and reporting positions on matters that are not entirely free from doubt and for which we have not received rulings from the governing authorities. Upon review of these positions the applicable authorities may disagree with our positions. A successful challenge by a tax authority could result in additional tax imposed on us or our subsidiaries. In addition, changes in our operations or ownership could result in additional tax being imposed on us or our subsidiaries in jurisdictions in which operations are conducted, or deemed to be conducted, which could adversely impact our business and financial results.

U.S. tax authorities could treat us as a "passive foreign investment company," which could have adverse U.S. federal income tax consequences to U.S. shareholders.

A non-U.S. entity treated as a corporation for U.S. federal income tax purposes will be treated as a "passive foreign investment company," or "PFIC," for U.S. federal income tax purposes if at least 75.0% of its gross income for any taxable year consists of "passive income" or at least 50.0% of the average value of its assets produce, or are held for the production of, "passive income." For purposes of these tests, "passive income" includes dividends, interest, gains from the sale or exchange of investment property, and rents and royalties other than rents and royalties that are received from unrelated parties in connection with the active conduct of a trade or business. For purposes of these tests, income derived from the performance of services does not constitute "passive income." U.S. shareholders of a PFIC are subject to a disadvantageous U.S. federal income tax regime with respect to the income derived by the PFIC, the distributions they receive from the PFIC, and the gain, if any, they derive from the sale or other disposition of their interests in the PFIC.

Based on our current and projected method of operation we believe that we were not a PFIC for any prior taxable year, and we expect that we will not be treated as a PFIC for the current or any future taxable year. We believe that more than 25.0% of our gross income for each taxable year was or will be non-passive income, and more than 50.0% of the average value of our assets for each such year was or will be held for the production of such non-passive income. This belief is based on certain valuations and projections regarding our assets and income, and its validity is conditioned on the accuracy of such valuations and projections. While we believe such valuations and projections to be accurate, the shipping market is volatile and no assurance can be given that our assumptions and conclusions will continue to be accurate at any time in the future.

Moreover, there are legal uncertainties involved in determining whether the income derived from our time-chartering activities constitutes rental income or income derived from the performance of services. In *Tidewater Inc. v. United States*, 565 F.3d 299 (5th Cir. 2009), the United States Court of Appeals for the Fifth Circuit, or the

“Fifth Circuit,” held that income derived from certain time-chartering activities should be treated as rental income rather than services income for purposes of a provision of the Internal Revenue Code of 1986, as amended, or the “Code,” relating to foreign sales corporations. In that case, the Fifth Circuit did not address the definition of passive income or the PFIC rules; however, the reasoning of the case could have implications as to how the income from a time charter would be classified under such rules. If the reasoning of the case were extended to the PFIC context, the gross income we derive from our time-chartering activities may be treated as rental income, and we would likely be treated as a PFIC. In published guidance, the Internal Revenue Service, or “IRS,” stated that it disagreed with the holding in *Tidewater* and specified that time charters similar to those at issue in that case should be treated as service contracts. We have not sought, and we do not expect to seek, an IRS ruling on the treatment of income generated from our time-chartering activities. As a result, the IRS or a court could disagree with our position. No assurance can be given that this result will not occur. In addition, although we intend to conduct our affairs in a manner to avoid being classified as a PFIC with respect to each taxable year, we cannot assure shareholders that the nature of our operations will not change in the future and that we will not become a PFIC in the future. If the IRS were to determine that we are or have been a PFIC for any taxable year (and regardless of whether we remain a PFIC for subsequent taxable years), our U.S. shareholders would face adverse U.S. federal income tax consequences. Please read “Item 10—Additional Information—Taxation—Material U.S. Federal Income Tax Consequences—U.S. Federal Income Taxation of U.S. Holders—PFIC Status and Significant Tax Consequences” for a more detailed discussion of the U.S. federal income tax consequences to U.S. shareholders if we are treated as a PFIC.

We may have to pay tax on U.S. source income with respect to the operation of our vessels, and business conducted within the United States, which would reduce our cash flow.

Under the Code, “U.S. source gross transportation income” (as defined below) is subject to a 4.0% U.S. federal income tax without allowance for deductions, unless an exemption from tax applies under a tax treaty or Section 883 of the Code and the Treasury Regulations promulgated thereunder. U.S. source gross transportation income consists of 50.0% of the gross shipping income of a vessel owning or chartering corporation, such as ourselves that is attributable to transportation that either begins or ends, but that does not both begin and end, in the United States.

If a non-U.S. corporation satisfies the requirements of Section 883 of the Code and the Treasury Regulations thereunder, it will not be subject to the 4.0% U.S. federal income tax referenced above on its U.S. source gross transportation income. The Section 883 exemption does not apply to income attributable to transportation that both begins and ends in the United States.

We believe that with respect to the operation of our vessels, we satisfied the requirements to qualify for an exemption from U.S. tax on our U.S. source gross transportation income imposed by Section 883 of the Code for 2019, and we take the position that we will be able to satisfy those requirements for 2020 and future taxable years provided that our common stock satisfies certain listing and trading requirements and not more than 50.0% of our common stock is owned, or is deemed to be owned by operation of certain attribution rules, for more than half of the days of such year, by shareholders with a 5.0% or greater interest in our stock. The composition of owners of our common stock, including the quantity a shareholder may purchase in a given year, and the trading volumes of our common stock, are factual circumstances beyond our control. As a result, there can be no assurance that we can satisfy this stock ownership requirement for the current or any future year. If we did not satisfy the stock ownership requirement, we would likely not qualify for an exemption under Section 883 for such year. If we fail to qualify for this exemption in any taxable year, U.S. source gross transportation income earned by us and our subsidiaries will generally be subject to a 4.0% U.S. federal income tax and would adversely impact our business and financial results. For a more detailed discussion of Section 883 of the Code, the rules relating to exemptions under Section 883 and our ability to qualify for an exemption, please read “Item 4—Information on the Company—Business Overview—Taxation of the Company—U.S. Taxation.”

In addition to our U.S. source gross transportation income, we expect to generate U.S. taxable income that is effectively connected with the conduct of a U.S. trade or business as a result of our Marine Export Terminal in

the U.S. Gulf Coast becoming operational in December 2019. Such U.S. taxable income generally will be subject to U.S. federal income tax on a net income basis (currently at a flat rate of 21%). We do not expect, however, that the generation of U.S. taxable income in respect of the Marine Export Terminal will affect our ability to qualify for the above-described exemption for U.S. source gross transportation income unrelated to the operations of the terminal.

Item 4. Information on the Company

A. History and Development of the Company

General

Navigator Holdings Ltd. was formed in 1997 as an Isle of Man public limited company for the purpose of building and operating a fleet of five semi-refrigerated, ethylene-capable liquefied gas carriers. In January 2003, the previous owners and managers filed voluntary petitions for relief under Chapter 11 of the United States Bankruptcy Code in the United States Bankruptcy Court for the Southern District of New York. On August 9, 2006, the Company emerged from bankruptcy. As part of the plan of reorganization, the bondholders received all of the equity interests in the Company. Lehman Brothers Inc. became our principal shareholder, holding an approximate 44.1% ownership interest (subsequently reduced to 33.0% following the issue of additional shares). In October 2012, the ownership interests held by Lehman Brothers Holdings Inc. were acquired by our principal shareholder, the WLR Group, which currently owns 39.3% of our common stock. Please see “Item 7—Major Shareholders and Related Party Transactions.”

In November 2013, we completed our initial public offering of 13,800,000 shares of our common stock at \$19.00 per share, including the full exercise by the underwriters of their option to purchase an additional 1,800,000 shares of common stock from the selling stockholders. We offered 9,030,000 shares of common stock and certain selling shareholders offered 4,770,000 shares of common stock. As of December 31, 2019 we had 55,826,644 shares of our common stock outstanding.

Our shares of common stock are traded on the New York Stock Exchange under the ticker symbol “NVGS.”

In March 2008, we redomiciled as a corporation in the Republic of the Marshall Islands and we maintain our principal executive offices at 10 Bressenden Place, London, SW1E 5DH. Our telephone number at that address is +44 20 7340 4850. Our agent for service of process in the United States is CT Corporation System and its address is 28 Liberty Street, New York, New York 10005.

We maintain a website on the Internet at www.navigatorgas.com. The SEC maintains a website on the Internet that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC at www.sec.gov.

Investments

Since January 2018, we have owned a 50% joint interest in the Export Terminal Joint Venture, which we account for using the equity method. The Export Terminal Joint Venture was formed to build and operate the Marine Export Terminal, which began commercial operations with the export of commissioning cargoes in December 2019. Refrigerated storage for 30,000 tons of ethylene will also be constructed on-site and, once completed, will have the capacity to export approximately one million tons of ethylene per year and provide the capability to load ethylene at rates of 1,000 tons per hour. Our share of the capital cost for the construction of the Marine Export Terminal is expected to be \$150.0 million, of which we had contributed \$125.5 million to the Export Terminal Joint Venture as of December 31, 2019. We expect to contribute the remaining \$24.5 million of our expected share of the capital contributions towards the cost of the construction during 2020 and early 2021. The results from the Export Terminal Joint Venture are shown as ‘Share of results of equity accounted joint venture’ on the income statement.

On October 21, 2019, we entered into a sale and leaseback transaction with respect to one of our vessels, *Navigator Aurora*, to refinance the vessel's secured tranche of one of our secured term loan facilities. The sale price agreed was \$77.5 million, with the buyer paying 90% of the vessel's value, or \$69.75 million and a seller's credit representing prepaid hire for the remaining 10%. From the proceeds, \$44.5 million was used to repay the vessel's secured tranche of the December 2015 secured revolving credit facility. Simultaneous with this sale, we entered into a bareboat charter for the vessel for a period of up to 13 years, with purchase options at years 5, 7 and 10. The transaction was closed on October 28, 2019. See Note 9 (Variable Interest Entities) to our consolidated financial statements for additional information.

B. Business Overview

We are the owner and operator of 38 semi- or fully-refrigerated liquefied gas carriers, the world's largest fleet of handysize liquefied gas carriers. We also own a 50% share, through a joint venture with Enterprise Products Partners L.P. (the "Export Terminal Joint Venture"), in an ethylene export marine terminal at Morgan's Point, Texas on the Houston Ship Channel (the "Marine Export Terminal").

Our total fleet currently consists of 38 vessels, 33 of which are semi- or fully-refrigerated handysize liquefied gas carriers, and ten of these are ethylene/ethane capable. We define handysize liquefied gas carriers as those liquefied gas carriers with capabilities between 15,000 and 24,999 cubic meters, or "cbm". In addition, we have five 37,300 – 38,000 cbm midsize liquefied gas carriers with four of which are ethylene/ethane-capable semi-refrigerated liquefied gas carriers.

Our handysize liquefied gas carriers typically transport LPG on short or medium routes that may be uneconomical for smaller vessels and can call at ports that are unable to support larger vessels due to limited onshore capacity, absence of fully-refrigerated loading infrastructure and/or vessel size restrictions. These handysize liquefied gas carriers are amongst the largest semi-refrigerated vessels in the world, which also makes them capable of transporting petrochemicals on long routes, typically intercontinental.

We play a vital role in the liquefied gas supply chain for energy companies, industrial consumers and commodity traders, with our sophisticated vessels providing an efficient and reliable 'floating pipeline' between the parties. We carry LPG for major international energy companies, state-owned utilities and reputable commodities traders. LPG, which consists of propane and butane, is a relatively clean alternative energy source with more than 1,000 applications, including as a heating, cooking and transportation fuel and as a petrochemical and refinery feedstock. LPG is a by-product of oil refining and natural gas extraction, and shale gas, principally from the U.S.

We also carry petrochemical gases for numerous industrial users. Petrochemical gases, including ethylene, propylene, butadiene and vinyl chloride monomer, are derived from the cracking of petroleum feedstocks such as ethane, LPG and naphtha and are primarily used as raw materials in various industrial processes, like the manufacture of plastics, vinyl and rubber, with a wide application of end uses.

Our vessels also carry ammonia for the producers of fertilizers, a main use of ammonia for the agricultural industry, and for ammonia traders.

The newly operational Marine Export Terminal will have the capacity to export approximately one million tons of ethylene per year from late 2020, when the on-site construction of refrigerated storage for 30,000 tons of ethylene will be completed and will provide the capability to load ethylene at rates of 1,000 tons per hour. The Marine Export Terminal loaded its first cargo of ethylene in December 2019 and is supported by four off-take contracts of between five and seven years for approximately 75% of the terminal's ultimate one million ton annual capacity. During 2020, prior to the completion of the refrigerated storage, we expect the terminal's annual capacity to be approximately 500,000 – 600,000 tons.

The recent outbreak of the novel strain of coronavirus referred to as COVID-19 ("Coronavirus") negatively affect economic conditions and restricts the seaborne transportation of products, including LPG and petrochemical

products. The COVID-19 pandemic is having numerous negative effects which include reduced demand for LPG, petrochemicals and ammonia that we transport. Any reduction in the supply of or demand for LPG, petrochemicals and ammonia that we transport for a period or periods longer than we anticipate could negatively affect the charter rates and vessel utilization that we are able to achieve and consequently reduce our cashflow and financial condition. These negative impacts of COVID-19 may result in noncompliance of our covenants in our bank and bond loan facilities. We also provide cash collateral as security against unrealized losses on our cross-currency interest rate swap and in the event the Norwegian Kroner weakens further against the U.S. dollar, additional cash security will need to be placed into a collateral account, providing less headroom, or causing us to breach our liquidity maintenance covenant.

Given the recent fluidity of developments and the extensive response to the outbreak, we are continually reviewing the effects of COVID-19 on our operations and we are constantly reassessing its impact. Measures that we are currently taking in response to COVID-19 include:

- All crew changes have been cancelled until it is safe and feasible to do so and this will be continually reviewed as the situation develops;
- Arrangements to accept delivery of additional spare parts and critical supplies are made where possible in supply chains;
- Non-critical boardings are restricted, current visits are limited to vettings inspectors, pilots and port officials, where allowed, and procedures have been implemented on board to limit the risk of human-to-human transmission from visiting personnel;
- Global offices were closed in advance of government-mandated lockdown dates to minimize the opportunity for human-to-human transmission, IT systems and network capacity have proven to be robust, and no interruption to business support functions and no implications to financial reporting systems or internal controls over financial reporting have been identified.

On February 10, 2017, we issued senior unsecured bonds in an aggregate principal amount of \$100.0 million for a period of four years. These bonds mature in full on February 10, 2021 and become repayable on that date. The bonds cannot be repaid from existing cash resources or from cash to be generated from operations prior to the expiry date of the bond. Refinancing this bond is capital markets dependent and although the Company had considered refinancing this bond with a like-for-like bond prior to the virus outbreak, and this remains the Company's preferred plan, because of the current disruption in the capital markets, the Company is evaluating alternative plans in the event the effects of COVID-19 last longer than anticipated. Such considerations include seeking an extension to the maturity of the bond, seeking to raise the capital by a sale and leaseback of a number of the Company's vessels or raising alternative debt on a number of currently unsecured vessels. Please see "Item 5 B. Liquidity and Capital Resources"

We have referred to specific impacts to our operating activities due to COVID-19, however, the extent to which COVID-19 will impact our operations and financial condition will depend on future developments, which are highly uncertain, including the severity of COVID-19 and the actions undertaken to contain its impact. An estimation of its impact cannot therefore be accurately taken at this time.

Our Business Strategies

Our objective is to enhance shareholder value by executing the following business strategies:

- ***Delivering a safe and sustainable future.*** In order to achieve our aspiration of delivering a safe and sustainable future, we need to think about our impact, not only our financial impact but also our environmental and social impact. To achieve this throughout the whole of Navigator Holdings we will be making sure that responsibility for environmental and social impact sits at the highest level of the organization and will be anchored through our values, vision and strategy as we move forward into 2020.

- ***Maintain a customer-driven chartering strategy.*** We will continue to seek and build strong partnerships through open collaboration and by continually meeting our clients' specialist requirements, and in doing so enhance our returns through a flexible vessel employment strategy that includes a base of long-term time charter commitments. In addition, we will seek to further strengthen our existing relationships with customers based on mutual trust, our depth of technical expertise and a modern versatile fleet.
- ***Capitalize on the increasing demand for seaborne transportation of ethane and ethylene.*** We intend to use our ethane and ethylene capable vessels to pursue long-term charter commitments from the anticipated increases in transportation opportunities globally for ethane and ethylene that we expect will result directly and indirectly from the growth in U.S. shale oil and gas production and associated hydro-carbons.
- ***Become a leading participant in the seaborne transportation of the increasing U.S. petrochemicals production.*** We intend to take a leading role in the transportation of the sizeable volumes of additional petrochemical cargos expected to originate from the U.S. following the recent extensive investments in petrochemical production by producers and oil majors.
- ***Assist in the development of global petrochemical infrastructure projects.*** We intend to use our knowledge and expertise in supporting the growth of petrochemical infrastructure projects around the world to provide stable returns and to provide incremental demand for our fleet of versatile liquefied gas carriers. We seek to assist in enabling the global flow of these petrochemical gases by providing an efficient and reliable 'floating pipeline' between the producers and consumers.
- ***Maintain reputation for operational excellence.*** We believe we have established a track record in the industry of operational excellence based on our significant experience in the operation and ownership of highly sophisticated liquefied gas carriers. We will endeavor to maintain and improve these high standards with regard to cargo handling, vessel performance and reliability and operational excellence.
- ***Taking business and asset efficiencies to the next level.*** In a world that has become disrupted by automation, information, and artificial intelligence, all within Navigator Holdings will need to become lifelong learners to adapt and thrive in a changing global economy. We will be exploring current and future fuel options to improve how we operate and reduce our environmental impacts in support of new initiatives and regulations which aim to enhance the maritime shipping industry. We are working with the Poseidon Principles initiative, which aims to contribute to the ambitions of the IMO to reduce shipping's total annual greenhouse gas emissions by at least 50% by 2050.
- ***Create a strong in-house technical management function.*** We plan to increase the number of vessels from our fleet that we technically manage in-house, enabling us to sustain and improve the first-rate quality of our vessels' capabilities. We now provide in-house technical management for 17 of our 38 vessels, as we continue to refine and improve our systems, whilst understanding the importance of complying with health, safety and environmental regulations and well as operating to the highest standards transporting cargoes safely, efficiently and securely around the globe.
- ***Maintain a strong balance sheet with manageable debt levels.*** We will seek to maintain a strong balance sheet by managing our current leverage and in the future by financing our growth with a balanced mix of cash from operations, bank, bond and equity financings.

Our Fleet

The following table sets forth our vessels as of May 7, 2020:

<u>Operating Vessel</u>	<u>Year Built</u>	<u>Vessel Size (CBM)</u>	<u>Employment Status</u>	<u>Charter Expiration Date</u>
<i>Ethylene/ethane capable semi-refrigerated</i>				
Navigator Orion (formerly known as Navigator Mars) . . .	2000	22,085	Spot market	—
Navigator Neptune	2000	22,085	Time charter	October 2020
Navigator Pluto	2000	22,085	Time charter	July 2020
Navigator Saturn	2000	22,085	Spot market	—
Navigator Venus	2000	22,085	Time charter	November 2020
Navigator Atlas	2014	21,000	Spot market	—
Navigator Europa	2014	21,000	Contract of affreightment	May 2020
Navigator Oberon	2014	21,000	Spot market	—
Navigator Triton	2015	21,000	Spot market	—
Navigator Umbrio	2015	21,000	Spot market	—
Navigator Aurora	2016	37,300	Time charter	December 2026
Navigator Eclipse	2016	37,300	Spot market	—
Navigator Nova	2017	37,300	Time charter	June 2020
Navigator Prominence	2017	37,300	Time charter	October 2020
<i>Semi-refrigerated</i>				
Navigator Magellan	1998	20,700	Time charter	May 2020
Navigator Aries	2008	20,750	Time charter	July 2020
Navigator Capricorn	2008	20,750	Time charter	May 2020
Navigator Gemini	2009	20,750	Spot market	—
Navigator Pegasus	2009	22,200	Spot market	—
Navigator Phoenix	2009	22,200	Spot market	—
Navigator Scorpio	2009	20,750	Spot market	—
Navigator Taurus	2009	20,750	Spot market	—
Navigator Virgo	2009	20,750	Spot market	—
Navigator Leo	2011	20,600	Time charter	December 2023
Navigator Libra	2012	20,600	Time charter	December 2023
Navigator Centauri	2015	21,000	Spot market	—
Navigator Ceres	2015	21,000	Spot market	—
Navigator Ceto	2016	21,000	Spot market	—
Navigator Copernico	2016	21,000	Spot market	—
Navigator Luga	2017	22,000	Time charter	February 2022
Navigator Yauza	2017	22,000	Time charter	April 2022
<i>Fully-refrigerated</i>				
Navigator Glory	2010	22,500	Time charter	June 2021
Navigator Grace	2010	22,500	Time charter	May 2020
Navigator Galaxy	2011	22,500	Time charter	May 2020
Navigator Genesis	2011	22,500	Time charter	June 2020
Navigator Global	2011	22,500	Time charter	November 2020
Navigator Gusto	2011	22,500	Time charter	December 2020
Navigator Jorf	2017	38,000	Time charter	August 2027

Following a sale and leaseback transaction in October 2019, *Navigator Aurora*, is owned by OCY Aurora Ltd., a Maltese limited liability company. OCY Aurora Ltd., the “lessor entity”, is a wholly owned subsidiary of Ocean Yield Malta Limited. We do not hold any shares or voting rights in the lessor entity which is accounted for as a fully consolidated VIE in our consolidated financial statements. Please read Note 9 (Variable Interest Entities) to the consolidated financial statements.

Navigator Pluto, *Navigator Aries* and *Navigator Global*, which are chartered to Pertamina, the Indonesian state-owned producer of hydrocarbons, are owned by PT Navigator Khatulistiwa, an Indonesian limited liability company, or “PTNK.” Operations in Indonesia are subject, among other things, to the Indonesian Shipping Act. That law generally provides that in order for certain vessels involved in Indonesian cabotage to obtain the requested licenses, the owners must either be wholly Indonesian owned or have a majority Indonesian shareholding. PTNK is a joint venture of which 49% of the voting and dividend rights are owned by our wholly owned subsidiary, and 51% of such rights are owned by Indonesian limited liability companies. The joint venture agreement for PTNK provides that certain actions relating to the joint venture or the vessels require the prior written approval of our subsidiary, which may be withheld only on reasonable grounds and in good faith. PTNK is accounted for as a fully consolidated VIE in our consolidated financial statements.

As of December 31, 2019, the average monthly time charter rate for the 25 vessels operating under time charters was approximately \$684,396 per calendar month (\$22,501 per day) (December 31, 2018: \$667,784 per calendar month (\$21,955 per day) for 23 vessels operating under time charter). Our current monthly charter rates range from approximately \$413,250 to approximately \$1,095,000. These time charter rates are the gross monthly charter rates before deduction of any address and brokerage commissions payable to charterers and shipbrokers respectively. Address and brokerage commissions typically range between 1.25% and 2.0% of the gross monthly charter rate. On average, we pay a 1.4% address and brokerage commission with respect to our current time charters.

Our Customers

We provide seaborne transportation and distribution services for LPG, ethane, ethylene, petrochemical gases and ammonia to:

- **Major Oil and Gas Companies**, such as ExxonMobil, ENI, Repsol, BP, Shell, and Total SA.; as well as state affiliated companies such as ENAP, PEMEX, Gasmar, BPCL; Pertamina, the Indonesian state-owned producer of hydrocarbons and petrochemicals; Sonatrach, the national oil and gas company of Algeria; and PETRONAS, state-owned oil and gas company of Malaysia;
- **Chemical Companies**, such as SABIC, Ma’aden and Aramco, multi-national chemical manufacturing corporations based in Saudi Arabia; OCP, a world leading fertilizer producer and ammonia importer; INEOS, Reliance, Borealis, Dow and Evonik, all leading multi-national chemical corporations; Muntajat, a Qatari state-owned chemical producer; Braskem, a Brazilian petrochemical manufacturer; and Sibur, a Russian gas processing and petrochemicals company; and
- **Energy Trading Companies**, such as Mitsubishi International Corporation, Marubeni and Mitsui, trading all major commodities, finance and investment conglomerates; Kolmar, Integra, Vinmar and BGN, international commodity trading companies; Geogas and Petredec, LPG trading companies; Trafigura Limited, an international commodities trading and logistics company; SHV, a multi-national energy trader and leading LPG distributor; Vitol Group, an independent energy trading company; EA Temile, a West African offshore oil and gas engineering company; and Glencore PLC, a multi-national commodity trading and mining company.

We have derived, and believe that we will continue to derive, a significant portion of our revenues from a limited number of customers. Our customers include major oil and gas companies, chemical companies, energy trading companies, state owned oil companies and various other entities that depend upon marine transportation. Four of

our customers accounted for more than 10.0% each, and in aggregate, 54.41% of our consolidated revenues during the year ended December 31, 2019, equivalent to \$163.5 million of our total revenue. (Three of our customers accounted for more than 10.0% each, and in aggregate, 45.4% of our consolidated revenues during the year ended December 31, 2018 equivalent to \$140.8 million of our total revenue). During these periods, no other customer accounted for over 10% of our revenues. The loss of any significant customer or a substantial decline in the amount of services requested by a significant customer, or the inability of a significant customer to pay for our services, could have a material adverse effect on our business, financial condition and results of operations.

Vessel Employment

Our chartering strategy is to combine a base of both short and long-term time charters, and COAs with voyage charters. We currently operate a total of 38 vessels. As of December 31, 2019, 25 vessels were employed under time charters, 11 were employed in the spot market and two were employed under contracts of affreightment.

Our voyage charters during 2019 remained focused on the seaborne transportation of petrochemicals. Our semi-refrigerated vessels are highly versatile in that they, unlike fully-refrigerated vessels, can accommodate petrochemicals, LPG and ammonia at ambient as well as fully-refrigerated temperatures.

We have seen a decrease in the amount of ethylene carried across spot and time charter tonnage, from 300,806 mt in 2018 to 275,460 mt in 2019. Ethylene and ethane are highly specialized gases, that require sophisticated ethylene/ethane-capable tonnage to transport. We currently have 14 ethane/ethylene carriers on the water, the largest fleet of such vessels.

Petrochemicals (such as ethylene, ethane, propylene and butadiene) transported on spot voyage contracts during the 12 months of 2019 accounted for 75% of all voyage days compared to 83% of all voyage days in 2018. LPG transported on spot voyage contracts accounted for the remaining 25% of spot voyage days in 2019 compared to 17% in 2018.

A typical petrochemical voyage is categorized as long haul, or deep sea, and is typically much longer in duration compared to handysize LPG voyages, which tend to be regional based.

The underlying petrochemical voyages principally commence in the U.S., South America and the Middle East and sail to the Far East and Europe to discharge. However, these trade routes may change in the future, subject to fluctuating arbitrages between the various geographical regions.

Time Charter

A time charter is a contract under which a vessel is chartered for a defined period of time at a fixed daily or monthly rate. Under time charters, we are responsible for providing crewing and other vessel operating services, the cost of which is intended to be covered by the fixed rate, while the customer is responsible for substantially all of the voyage expenses, including any bunker fuel consumption, port expenses and canal tolls.

Initial Term. The initial term for a time charter commences upon the vessel's delivery to the customer. Under the terms of our charters, the customer may redeliver the vessel to us up to 15 to 30 days earlier or up to 15 to 30 days later than the respective charter expiration dates, upon advance notice to us.

Hire Rate. The hire rate refers to the basic payment by the customer for the use of the vessel. Under our time charters, the hire rate is payable monthly in advance in U.S. Dollars, Euros or in case of the three ships chartered to Pertamina, in Indonesian Rupiah, as specified in the charter.

Hire payments may be reduced if the vessel does not perform to certain of its specifications, such as if the average vessel speed falls below a guaranteed speed or the amount of fuel consumed to power the vessel under normal circumstances exceeds a guaranteed amount, or if the vessel breaks down.

Off-hire. Under our time charters, when the vessel is “off-hire” (or not available for service), the customer generally is not required to pay the charter hire, and the shipowner is responsible for all costs. Prolonged off-hire may lead to vessel substitution or termination of the time charter. A vessel generally will be deemed off-hire if there is a loss of time due to, among other things:

- technical breakdowns; drydocking for repairs, maintenance or inspections; equipment breakdowns; or delays due to accidents, strikes, certain vessel detentions or operational issues; or
- our failure to maintain the vessel in compliance with its specifications and contractual standards or to provide the required crew.

Management and Maintenance. Under our time charters, we are responsible for providing for the technical management of the vessel and for maintaining the vessel, periodic drydocking, cleaning and painting and performing work required by regulations. Currently, we work with two third-party technical managers, Northern Marine Management (“NMM”) and Thome Ship Management (“Thome”) as well as our own in-house technical management function, to arrange for these services to be provided for all of our vessels. Please read “—Technical Management of the Fleet” for a description of the material terms of the technical management agreements.

Termination. Each of our time charters terminates automatically in the event of loss of the applicable vessel. In addition, we are generally entitled to suspend performance (but with the continuing accrual to our benefit of hire payments and default interest) under most of the time charters if the customer defaults in its payment obligations. Under most of the time charters, either party may also terminate the charter in the event of war in specified countries or in locations that would significantly disrupt the free trade of the vessel.

Voyage Charter/ Contract of Affreightment (“COA”)

A voyage charter is a contract, typically for shorter intervals, for transportation of a specified cargo between two or more designated ports. A COA essentially constitutes a series of voyage charters to carry a specified quantity of cargo during a specified time period, or for a specified number of voyages. A voyage charter is priced on a current or “spot” market rate, typically on a price per ton of product carried rather than a daily or monthly rate. Under voyage charters, we are responsible for all of the voyage expenses in addition to providing the crewing and other vessel operating services.

Term. Our voyage charters are typically for periods ranging from 10 days to three months.

Freight Rate. The freight rate refers to the basic payment by the customer for the use of the vessel or movement of cargo. Under our voyage charters, the freight rate is payable upon discharge, in U.S. Dollars, as specified in the charter.

Management, Maintenance and Voyage Expenses. Under our voyage charters, we are responsible for providing for the technical management of the vessel in the same manner as for time charters referred to above.

We are also responsible for all expenses unique to a particular voyage, including any bunker fuel consumption, port expenses and canal tolls.

Termination. Each of our voyage charters terminates automatically upon the discharge of the cargo at the discharge port and a COA terminates when we have discharged the final cargo at its discharge port.

Classification and Inspections

Every seagoing vessel must be “classed” by a classification society. The classification society certifies that the vessel is “in class,” signifying that the vessel has been built and maintained in accordance with the rules of the

classification society and complies with applicable rules and regulations of the vessel's country of registry and the international conventions of which that country is a member. In addition, where surveys are required by international conventions and corresponding laws and ordinances of a flag state, the classification society will undertake them on application or by official order, acting on behalf of the authorities concerned.

The classification society also undertakes on request other surveys and inspections that are required by the regulations and requirements of the flag state. These surveys are subject to agreements made in each individual case and/or to the regulations of the country concerned.

For maintenance of the class, regular and extraordinary surveys of hull and machinery, including the electrical plant, and any special equipment classed are required to be performed as follows:

Annual Surveys. For seagoing ships, annual surveys are conducted for the hull and machinery, including the electrical plant, and where applicable, on special equipment classed at intervals of 12 months from the date of commencement of the class period indicated in the certificate.

Intermediate Surveys. Extended annual surveys are referred to as intermediate surveys and typically are conducted two and a half years after commissioning and each class renewal. Intermediate surveys may be carried out on the occasion of the second or third annual survey.

Class Renewal Surveys. Class renewal surveys (also known as special surveys), which require the vessel to enter drydock, are carried out on the ship's hull and machinery, including the electrical plant, and on any special equipment classed at the intervals indicated by the character of classification for the hull. During the special survey, the vessel is thoroughly examined, including audio-gauging to determine the thickness of the steel structures. Should the thickness be found to be less than class requirements, the classification society would prescribe steel renewals. On vessels which are over 15 years old, substantial amounts of funds may have to be spent for steel renewals to pass a special survey if the vessel experiences excessive wear and tear. In lieu of the special survey, a shipowner has the option of arranging with the classification society for the vessel's hull or machinery to be on a continuous survey cycle, in which every part of the vessel would be surveyed within a five-year cycle. At an owner's application, the surveys required for class renewal may be split according to an agreed schedule to extend over the entire period of class. This process is referred to as continuous class renewal.

Commercial Management of the Fleet

We perform commercial management of our vessels in-house through our wholly-owned subsidiary, Navigator Gas L.L.C., under the terms of individual management contracts between Navigator Gas L.L.C. and each of our vessel-owning subsidiaries. Commercial management includes all chartering services for our vessels. Navigator Gas L.L.C. in turn has appointed its wholly-owned subsidiary, NGT Services (UK) Limited, as its agent for commercial services for our vessels.

Technical Management of the Fleet

General

We outsource the technical management for approximately half of our fleet to NMM and Thome, third-party technical management companies, under the terms of standard BIMCO ship management agreements, or the "technical management agreements." We refer to NMM and Thome herein as our "technical managers." We currently provide in-house technical management for 17 of our 38 vessels.

NMM is a wholly-owned subsidiary of Stena AB Gothenburg, formed in 1983 and located in Clydebank, Scotland. Thome was formed in 1976 and is a wholly owned subsidiary of Thome Group located in Singapore. Each of our technical managers are involved in the management of a wide range of vessels and both are very well established and respected companies within the ship management community. Our technical managers have

fully-owned crew recruitment agencies in major crew recruitment centers around the world and are able to provide us with good quality competent officers and crews, to meet all of our crewing requirements. We believe our technical managers manage our vessels in a safe and proper manner in accordance with owners' requirements, design parameters, flag state and classification society requirements, charter party requirements and the international safety management (ISM) code. Both NMM and Thome are accredited to International Standards Organization ("ISO") 9001 and ISO 14001 standards.

During the year ended December 31, 2019, we continued to expand our in-house technical management activity, transferring a further five vessels in-house from our technical managers. As we grow, we intend to seek opportunities to gain greater control over the management of our vessels and enhance safety, risk management, customer service, reliability and build strong relationships with our charterers. Providing in-house technical management for any vessel in our fleet may impose significant additional responsibilities on our management and staff. Please see "Item 3—Key Information—Risk Factors—Risks Related to Our Business". During 2019, Navigator Gas Shipmanagement Ltd., our wholly-owned subsidiary, was accredited with ISO 14001 (Environmental Management System), having already achieved ISO 9001 (Quality Management System) and ISO 45001 (Occupational Health & Safety) standards in 2018.

We believe our vessels are operated in a manner intended to protect the safety and health of employees, the general public and the environment. We actively manage the risks inherent in our business and are committed to eliminating incidents that threaten safety and the integrity of the vessels, such as groundings, fires, collisions and spills. We are actively committed to reducing greenhouse gas emissions and any waste generated by our activities, as part of our ISO 14001 commitments.

Technical Management Services

Under the terms of our ship management agreements with our technical managers, and under our supervision, our technical managers are responsible for the day-to-day activities of our externally managed fleet and are required to, among other things:

- provide competent personnel to operate and supervise the maintenance and general efficiency of our vessels;
- arrange and supervise the maintenance, drydockings, repairs, alterations and upkeep of our vessels to the standards required by us and in accordance with all requirements and recommendations of our vessels' classification society, flag state and applicable national and international regulations;
- ensure that our vessels comply with the law of their flag state;
- arrange the supply of necessary stores, spares and lubricating oil for our vessels;
- appoint such surveyors and technical consultants as they may consider from time to time necessary;
- operate the vessels in accordance with the ISM Code and The International Security Code for Ports and Ships ("ISPS Code");
- develop, implement and maintain a safety management system in accordance with the ISM Code;
- arrange the sampling and testing of bunkers;
- install planned maintenance system software on-board our vessels;
- provide emergency response services and support to our vessels in case of an incident or accident; and
- operate our vessels in accordance with the agreed budgets.

In the event that our technical managers pay certain expenses attributable to us, we have agreed to indemnify our technical managers against such expenses. In the event that our technical managers (or any of their related

companies) are sued as a result of a breach or alleged breach of an obligation of ours to a third-party, we have agreed to defend our technical managers (or their related companies) and indemnify our technical managers (and their related companies) against certain expenses incurred in their defense.

Fees and Expenses

As consideration for providing us with both technical and crewing management for our fleet, our third-party managers currently receive a management fee of approximately \$0.2 million per vessel per year, payable in equal monthly installments in advance. We pay for any expenses incurred in connection with operating expenses for our vessels.

We carry insurance coverage consistent with industry standards for certain matters, but we cannot assure you that our insurance will be adequate to cover all extraordinary costs and expenses. Please read “—Insurance and Risk Management.”

Notwithstanding the foregoing, if any costs and expenses are caused solely by our technical managers’ negligence or willful default, our technical managers will be responsible for them subject to certain limitations. Our technical managers are insured against claims of errors and omissions by third parties.

Term and Termination Rights

The ship management agreements automatically renew on their termination dates unless terminated by either party with three months’ prior written notice. Our technical managers may also terminate any of the ship management agreements immediately upon written termination notice to us if:

- they do not receive amounts payable by us under the agreement within the time period specified for payment thereof, or if the vessels are repossessed by any vessel mortgagees; or
- after notice to us of the default and a reasonable amount of time to remedy, we fail to:
 - comply with our obligation to indemnify them for any expenses attributable to us or defend them (and their related companies) against any third-party claims based on a breach or alleged breach of an obligation of ours to a third-party; or
 - cease the employment of our vessels in the transportation of contraband, blockage running, or in an unlawful trade, or on a voyage that in their reasonable opinion is unduly hazardous or improper.

If, for any reason under our technical managers’ control, our technical managers fail to provide the services agreed upon under the terms of the management agreements or they fail to provide for the satisfaction of all requirements of the law of the vessels’ flag state or the ISM Code, we may terminate the agreements immediately upon written notice of termination to our technical managers, as applicable, if, after notice to our technical managers of the default and a reasonable amount of time to remedy, they fail to remedy the default to our satisfaction.

The technical management agreements will automatically terminate (i) if the vessels are sold, are requisitioned, become a total loss or are declared as a constructive, compromised or arranged total loss, (ii) in the event of our winding up, dissolution, bankruptcy or the appointment of a receiver, or (iii) if we suspend payments, cease to carry on business or make any special arrangement with our creditors.

Under the terms of the NMM and Thome ship management agreements, in the event that the technical management agreement is terminated for any reason other than by reason of default by either technical manager or the loss, sale or other disposition of the vessels, we are obligated to continue to pay the management fee for three calendar months from the termination date.

Crewing

We have entered into crew management agreements with our technical managers for each of our vessels. Under the terms of the crew management agreements, our technical managers are responsible for arranging crews for our fleet and are required to, among other things:

- select and supply a suitably qualified crew for each vessel in our fleet;
- pay all crew wages and salaries;
- ensure that the applicable requirements of the laws of our vessels' flag states are satisfied in respect of the rank, qualification and certification of the crew;
- pay the costs of obtaining all documentation necessary for the crew's employment, such as vaccination certificates, passports, visas and licenses; and
- pay all costs and expenses of transportation of the crews to and from the vessels while traveling.

Unless two months' prior written notice of termination is given, the agreements are automatically extended. Crewing costs could be higher due to increased demand for qualified officers as the worldwide LNG and LPG carrier fleet continues to grow. Please read "Item 3—Key Information—Risk Factors—Risks Related to Our Business—A shortage of qualified officers makes it more difficult to crew our vessels and increases our operating costs. If a shortage were to develop, it could impair our ability to operate and have an adverse effect on our business, financial condition and operating results."

The crewing management fee is included with the technical management fee referred to above. For our in-house technically managed vessels, NMM provide separate crew management agreements costing approximately \$0.06 million per vessel per year.

We believe that the crewing arrangements ensure that our vessels are crewed with qualified and competent seafarers that have the licenses required by international regulations and conventions. As of December 31, 2019 our vessels were crewed by approximately 1,300 seagoing staff.

Insurance and Risk Management

The operation of any ocean going vessel carries an inherent risk of catastrophic marine disasters, death or injury of persons and property losses caused by adverse weather conditions, mechanical failures, human error, war, terrorism, piracy and other circumstances or events. The occurrence of any of these events may result in loss of revenues or increased costs. While we believe that our present insurance coverage is adequate, not all risks can be insured, and there can be no guarantee that any specific claim will be paid, or that we will always be able to obtain adequate insurance coverage at reasonable rates.

Hull and Machinery

We carry "hull and machinery" insurance for each of our vessels, which insures against the risk of actual or constructive total loss of our vessels. Hull and machinery insurance also covers damage to mechanical equipment on board and loss of, or damage to a vessel due to marine perils such as collisions, grounding and weather. Each vessel in our existing fleet is covered for up to \$100.0 million, with a claim deductible of \$0.1 million per incident or claim.

War Risks Insurance

We also carry insurance policies covering war risks. Each vessel in our existing fleet is covered for up to \$100.0 million, with no deductible. When our vessels travel into certain hostile regions, we are required to notify our war risk insurance carrier and may incur an additional premium, generally for up to seven days. These

additional premiums are declared by the insurance market depending on the region and are typically paid by the charterers pursuant to the terms of our time charter agreements and are paid by us under the terms of our voyage charter and COA agreements.

Protection and Indemnity Insurance Associations

We also carry “protection and indemnity” insurance for each of the vessels in our existing fleet to protect against most of the accident-related risks involved in the conduct of our business. Protection and indemnity insurance is provided by mutual protection and indemnity associations, or “P&I Associations,” and covers our third-party liabilities in connection with our shipping activities. This includes third-party liability and other related expenses of injury or death of crew, passengers and other third parties, loss of or damage to cargo, claims arising from collisions with other vessels, damage to other third-party property, pollution arising from oil or other substances, and salvage, towing and other related costs, including wreck removal. Each of the vessels in our existing fleet is entered in the Standard Steamship Owners’ Protection & Indemnity Association (Bermuda) Limited, or “The Standard Club,” or the Britannia Steam Ship Insurance Association Limited, or “Britannia,” both P&I Associations which are members of The International Group of P&I Clubs, or “The International Group.”

The Standard Club and Britannia each insure in excess of 100 million gross tons of shipping from all parts of the world and from most sectors of the shipping industry. The Standard Club and Britannia each have entered into pooling agreements to reinsure the respective association’s liabilities. Each International Group P&I Association currently bears the first \$10.0 million of each claim. The excess of each claim over \$10.0 million up to \$30.0 million is shared by the P&I Associations under the pooling agreement. The excess of each claim over \$30.0 million is shared by the members of The International Group under a reinsurance contract, which provides coverage of up to \$3.1 billion per claim. Claims which exceed \$3.1 billion are pooled between The International Group by way of “overspill” up to approximately \$5.5 billion, which represents the current coverage limit per vessel per incident. Our current protection and indemnity insurance coverage for pollution is limited to \$1.0 billion per vessel per incident, with the following per vessel per incident deductibles: \$22,000 to \$24,200 for fixed and floating objects claims, \$50,000 to \$55,000 for collisions, \$6,050 to \$7,500 for crew claims, \$8,500 to \$12,500 for cargo damage and \$5,500 to \$7,000 for all other incidents. As a member of both The Standard Club and Britannia, each of which is a member of The International Group, we are subject to calls payable to the associations based on our claim records as well as the claim records of all other members of the individual associations, and members of the pool of P&I Associations comprising The International Group.

Risk Management

To assess and mitigate risk we use computer based risk assessment tools, root cause analysis programs, planned and condition based maintenance programs, seafarers competence training programs, computer based training modules, seafarers workshops and seminars, as well as membership in emergency response organizations.

Environmental and Other Regulation

General

Governmental and international agencies extensively regulate the ownership and operation of our vessels. These regulations include international conventions and national, state and local laws and regulations in the countries where our vessels now or, in the future, will operate or where our vessels are registered. We cannot predict the ultimate cost of complying with these regulations, or the impact that these regulations will have on the resale value or useful lives of our vessels. Various governmental and quasi-governmental agencies require us to obtain permits, licenses and certificates for the operation of our vessels.

Although we believe that we are substantially in compliance with applicable environmental laws and regulations and have all permits, licenses and certificates required for our vessels, future non-compliance or failure to

maintain necessary permits or approvals could require us to incur substantial costs or temporarily suspend operation of one or more of our vessels. A variety of governmental and private entities inspect our vessels on both a scheduled and unscheduled basis. These entities, each of which may have unique requirements and each of which conducts frequent inspections, include local and port state authorities, such as the U.S. Coast Guard, harbor master or equivalent, classification societies, flag state, or the administration of the country of registry and charterers. We expect that our vessels will continue to be subject to inspection by these governmental and private entities on both a scheduled and unscheduled basis.

We believe that the heightened levels of environmental and quality concerns among insurance underwriters, regulators and charterers have led to greater inspection and safety requirements on all vessels and may accelerate the scrapping of older vessels throughout the industry. Increasing environmental concerns have created a demand for tankers that conform to the stricter environmental standards. We will be required to maintain operating standards for all of our vessels that emphasize operational safety, quality maintenance, continuous training of our officers and crews and compliance with applicable local, national and international environmental laws and regulations. We intend to assure that the operation of our vessels will be in substantial compliance with applicable environmental laws and regulations and that our vessels will have all material permits, licenses, certificates or other authorizations necessary for the conduct of our operations. However, because such laws and regulations are frequently changed and may impose increasingly stricter requirements, we cannot predict the ultimate cost of complying with these requirements, or the impact of these requirements on the resale value or useful lives of our vessels. In addition, a future serious marine incident that results in significant oil pollution or otherwise causes significant adverse environmental impact could result in additional legislation or regulation that could negatively affect our results of operations or financial condition.

Navigator Gas Shipmanagement Ltd., NMM and Thome have been certified to the ISO 14001:2015 Environmental Management System standard. NMM has also certified to the ISO 50001:2018 (energy efficiency) standard. In summary terms, ISO 14000 is a family of standards related to environmental management systems that exists to help organizations minimize how their operations negatively affect the environment; comply with applicable laws, regulations, and other environmentally oriented requirements; and continually improve environmental performance

International Maritime Regulations

The IMO is the United Nations' agency that provides international regulations governing shipping and international maritime trade. The requirements contained in the ISM Code, promulgated by the IMO, govern our operations. Among other requirements, the ISM Code requires the party with operational control of a vessel to develop an extensive safety management system that includes, among other things, the adoption of a policy for safety and environmental protection policy setting forth instructions and procedures for operating its vessels safely and also describing procedures for responding to emergencies. We and our ship managers each hold a Document of Compliance under the ISM Code for operation of Gas Carriers.

Vessels that transport gas, including our vessels, are also subject to regulation under the International Gas Carrier Code, or the "IGC Code," published by the IMO. The IGC Code provides a standard for the safe carriage of liquid gases by prescribing the design and construction standards of vessels involved in such carriage. Compliance with the IGC Code must be evidenced by a Certificate of Fitness for the Carriage of Liquefied Gases in Bulk. Each of our vessels is in compliance with the IGC Code. Non-compliance with the IGC Code or other applicable IMO regulations may subject a shipowner or a bareboat charterer to increased liability, may lead to decreases in available insurance coverage for affected vessels and may result in the denial of access to, or detention in, some ports.

The IMO also promulgates ongoing amendments to the international convention for the Safety of Life at Sea 1974 and its protocol of 1988, otherwise known as "SOLAS." SOLAS provides rules for the construction of and equipment required for commercial vessels and includes regulations for safe operation and addresses maritime

security. SOLAS requires the provision of lifeboats and other life-saving appliances, requires the use of the Global Maritime Distress and Safety System, which is an international radio equipment and watchkeeping standard, afloat and at shore stations, and relates to the Treaty on the Standards of Training and Certification of Watchkeeping Officers, or “STCW,” also promulgated by the IMO. The STCW establishes minimum training, certification, and watchkeeping standards for seafarers. Flag states that have ratified SOLAS and STCW generally employ the classification societies, which have incorporated SOLAS and STCW requirements into their class rules, to undertake surveys to confirm compliance.

SOLAS and other IMO regulations concerning safety, including those relating to treaties on training of shipboard personnel, lifesaving appliances, radio equipment and the global maritime distress and safety system, are applicable to our operations. Non-compliance with these types of IMO regulations may subject us to increased liability or penalties, may lead to decreases in available insurance coverage for affected vessels and may result in the denial of access to or detention in some ports. For example, the U.S. Coast Guard and European Union authorities have indicated that vessels not in compliance with the ISM Code will be prohibited from trading in U.S. and European Union ports, respectively.

In January 2016, additional amendments became effective to the International Code for the Construction of Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code) that was adopted in May 2014. The provisions of the IBC Code are mandatory under MARPOL and SOLAS. These amendments, which entered into force in June 2014, pertain to revised international certificates of fitness for the carriage of dangerous chemicals in bulk and identifying new products that fall under the IBC Code.

In the wake of increased worldwide security concerns, the IMO amended SOLAS and added the ISPS Code as a new chapter to that convention effective July 1, 2004. The objective of the ISPS Code is to detect security threats and take preventive measures against security incidents affecting ships or port facilities. NMM has developed Security Plans, appointed and trained Ship and Office Security Officers and all of our vessels have been certified to meet the ISPS Code. See “—Vessel Security Regulations” for a more detailed discussion about these requirements.

The IMO continues to review and introduce new regulations. It is impossible to predict what additional regulations, if any, may be passed by the IMO and what effect, if any, such regulation may have on our operations.

Air Emissions

The International Convention for the Prevention of Marine Pollution from Ships, or “MARPOL,” is the principal international convention negotiated by the IMO governing marine pollution prevention and response. MARPOL imposes environmental standards on the shipping industry relating to oil spills, management of garbage, the handling and disposal of noxious liquids, sewage and air emissions. MARPOL 73/78 Annex VI “Regulations for the prevention of Air Pollution,” or “Annex VI,” entered into force on May 19, 2005, and applies to all ships, fixed and floating drilling rigs and other floating platforms. Annex VI sets limits on sulfur oxide and nitrogen oxide emissions from ship exhausts, emissions of volatile compounds from cargo tanks, incineration of specific substances, and prohibits deliberate emissions of ozone depleting substances. Annex VI also includes a global cap on sulfur content of fuel oil and allows for emission control areas (“ECAs”) to be established with more stringent controls on sulfur emissions. The certification requirements for Annex VI depend on size of the vessel and time of periodical classification survey. Ships weighing more than 400 gross tons and engaged in international voyages involving countries that have ratified the conventions, or ships flying the flag of those countries, are required to have an International Air Pollution Certificate, or an “IAPP Certificate.” Annex VI came into force in the United States on January 8, 2009. As of December 31, 2019, all our ships delivered or drydocked since May 19, 2005, have all been issued with IAPP Certificates.

Annex I to MARPOL, which applies to various ships delivered on or after August 1, 2010, includes requirements for the protected location of the fuel tanks, performance standards for accidental oil fuel outflow, a tank capacity

limit and certain other maintenance, inspection and engineering standards. IMO regulations also require owners and operators of vessels to adopt Ship Oil Pollution Emergency Plans. Periodic training and drills for response personnel and for vessels and their crews are required.

Amendments to Annex VI that states took effect in 2010 required progressively stricter reductions in sulfur emissions from ships. Beginning on January 1, 2012, fuel used to power ships in all seas could contain no more than 3.5% sulfur, and under IMO 2020, with effect from January 1, 2020, no more than 0.5% sulfur, with stricter limits on fuels used in ECAs. For fuels used in ECAs, the cap settled at 0.1% in January 2015. The amendments also established tiers of more stringent nitrogen oxide emissions standards for new marine engines, depending on their date of installation. The European directive 2005/33/EU, effective from January 1, 2010, bans the use of fuel oils containing more than 0.1% sulfur by mass by any merchant vessel while berthed or anchored in any EU port and, as amended, aligns with IMO 2020 requirements. Our vessels have achieved compliance, where necessary, by purchasing and utilizing fuel that meets the low-sulfur requirements.

More stringent emission standards for sulfur and nitrogen oxide apply in United States and Canadian coastal areas designated by the IMO's Marine Environment Protection Committee, as discussed in "—Clean Air Act" below. On March 26, 2010, the IMO designated waters off North American coasts as an ECA in which stringent emission standards would apply. The first-phase fuel standard for sulfur in the North American ECA went into effect in 2012, and the second phase began in 2015. Further, on July 15, 2011, the IMO designated waters around Puerto Rico and the U.S. Virgin Islands as an ECA. The first-phase fuel standard for sulfur in the U.S. Caribbean ECA went into effect in 2014, and the second phase began in 2015. Beginning in 2016, stringent engine standards for nitrogen oxide became effective in both the North American ECA and the U.S. Caribbean ECA. U.S. air emissions standards have incorporated these amended Annex VI requirements, and once these amendments become fully effective, we may incur costs to comply with these revised standards. Finally, China has designated three ECAs at the Pearl River Delta, the Yangtze River Delta and Bohai Bay. Beginning January 1, 2019, vessels operating within these areas were required to use fuels with no more than 0.5% sulfur. Additional or new conventions, laws and regulations may be adopted that could require the installation of expensive emission control systems.

Ballast Water Management Convention

The IMO adopted an International Convention for the Control and Management of Ships' Ballast Water and Sediments, or the "BWM Convention," in February 2004. The BWM Convention's implementing regulations call for a phased introduction of mandatory ballast water exchange requirements, to be replaced in time with a requirement for mandatory ballast water treatment. The BWM Convention entered into force on September 8, 2017; however IMO later decided to postpone the compliance date for existing vessels by 2 years, i.e. until the first renewal survey following September 8, 2019. As referenced below, the U.S. Coast Guard issued new ballast water management rules on March 23, 2012, and the U.S. Environmental Protection Agency, or "EPA," issued a five year Vessel General Permit (VGP) in March 2013 that contains numeric technology-based ballast water effluent limitations. The VGP program is in the process of being phased out and replaced with National Standards of Performance (NSPs) to be developed by EPA and implemented and enforced by the U.S. Coast Guard. From 2016 (or not later than the first intermediate or renewal survey after 2016), only ballast water treatment will be accepted by the BWM Convention. Installation of ballast water treatments systems will be needed on all our vessels to comply with the BWM Convention and U.S. regulations discussed below. We began fitting ballast water treatment system ("BWTS") on the remaining 22 vessels in the fleet that did not already have a BWTS fitted, at an additional cost of approximately \$0.6 million per vessel, commencing on drydocks scheduled from January 1, 2018.

Bunker Convention/CLC State Certificate

The International Convention on Civil Liability for Bunker Oil Pollution 2001, or the "Bunker Convention," entered into force in State Parties to the Convention on November 21, 2008. The Bunker Convention provides a

liability, compensation and compulsory insurance system for the victims of oil pollution damage caused by spills of bunker oil. The Bunker Convention requires the ship owner liable to pay compensation for pollution damage (including the cost of preventive measures) caused in the territory, including the territorial sea of a State Party, as well as its economic zone or equivalent area. Registered owners of any sea going vessel and seaborne craft over 1,000 gross tonnage, of any type whatsoever, and registered in a State Party, or entering or leaving a port in the territory of a State Party, will be required to maintain insurance which meets the requirements of the Bunker Convention and to obtain a certificate issued by a State Party attesting that such insurance is in force. The State issued certificate must be carried on-board at all times.

Although the United States is not a party to these conventions, many countries have ratified and follow the liability plan adopted by the IMO and set out in the International Convention on Civil Liability for Oil Pollution Damage of 1969, as amended in 2000, or the “CLC.” Under this convention and depending on whether the country in which the damage results is a party to the 1992 Protocol to the CLC, a vessel’s registered owner is strictly liable for pollution damage caused in the territorial waters of a contracting state by discharge of persistent oil, subject to certain complete defenses. The limited liability protections are forfeited under the CLC where the spill is caused by the owner’s actual fault and under the 1992 Protocol where the spill is caused by the owner’s intentional or reckless conduct. Vessels trading to states that are parties to these conventions must provide evidence of insurance covering the liability of the owner. In jurisdictions where the CLC has not been adopted, various legislative schemes or common law govern, and liability is imposed either on the basis of fault or on a strict-liability basis.

P&I Clubs in the International Group issue the required Bunkers Convention “Blue Cards” to provide evidence that there is in place insurance meeting the liability requirements. All of our vessels have received “Blue Cards” from their P&I Club and are in possession of a CLC State-issued certificate attesting that the required insurance coverage is in force.

Anti-Fouling Requirements

Anti-fouling systems, such as paint or surface treatment, are used to coat the bottom of vessels to prevent the attachment of molluscs and other sea life to the hulls of vessels. In 2001, the IMO adopted the International Convention on the Control of Harmful Anti-fouling Systems on Ships, or the “Anti-fouling Convention.” The Anti-fouling Convention, which entered into force on September 17, 2008, prohibits the use of organotin compound coatings in anti-fouling systems after September 1, 2003. Vessels of over 400 gross tons engaged in international voyages must obtain an International Anti-fouling System Certificate and undergo a survey before the vessel is put into service or when the anti-fouling systems are altered or replaced. We have obtained Anti-fouling System Certificates for all of our vessels and we do not believe that maintaining such certificates will have an adverse financial impact on the operation of our vessels.

Compliance Enforcement

The flag state, as defined by the United Nations Convention on Law of the Sea, has overall responsibility for the implementation and enforcement of international maritime regulations for all ships granted the right to fly its flag. The “Shipping Industry Guidelines on Flag State Performance” evaluates flag states based on factors such as sufficiency of infrastructure, ratification of international maritime treaties, implementation and enforcement of international maritime regulations, supervision of surveys, casualty investigations, and participation at IMO meetings. As of January 2016, auditing of flag states that are parties to the SOLAS convention is mandatory and will be conducted under the IMO Instruments Implementation Code (III Code), which provides guidance on implementation and enforcement of IMO policies by flag states. These audits may lead the various flag states to be more aggressive in their enforcement, which may in turn lead us to incur additional costs.

Non-compliance with the ISM Code and other IMO regulations may subject the vessel owner or bareboat charterer to increased liability, may lead to decreases in available insurance coverage for affected vessels and

may result in the denial of access to, or detention in, some ports. The U.S. Coast Guard and European Union authorities have indicated that vessels not in compliance with the ISM Code by the applicable deadlines will be prohibited from trading in U.S. and European Union ports, respectively.

The IMO continues to review and introduce new regulations. It is impossible to predict what additional regulations, if any, may be passed by the IMO and what effect, if any, such regulations might have on our operations.

U.S. Environmental Regulation of Our Vessels

Our vessels operating in U.S. waters now or in the future will be subject to various federal, state and local laws and regulations relating to protection of the environment. In some cases, these laws and regulations require us to obtain governmental permits and authorizations before we may conduct certain activities. These environmental laws and regulations may impose substantial penalties for noncompliance and substantial liabilities for pollution. Failure to comply with these laws and regulations may result in substantial civil and criminal fines and penalties. As with the industry generally, our operations will entail risks in these areas, and compliance with these laws and regulations, which may be subject to frequent revisions and reinterpretation, increases our overall cost of business.

Oil Pollution Act of 1990

The U.S. Oil Pollution Act of 1990, or “OPA 90,” established an extensive regulatory and liability regime for environmental protection and cleanup of oil spills. OPA 90 affects all owners and operators whose vessels trade with the United States or its territories or possessions, or whose vessels operate in the waters of the United States, which include the U.S. territorial waters and the two hundred nautical mile exclusive economic zone of the United States. OPA 90 may affect us because we carry oil as fuel and lubricants for our engines, and the discharge of these could cause an environmental hazard. Under OPA 90, vessel operators, including vessel owners, managers and bareboat or “demise” charterers, are “responsible parties” who are all liable regardless of fault, individually and as a group, for all containment and clean-up costs and other damages arising from oil spills from their vessels. These “responsible parties” would not be liable if the spill results solely from the act or omission of a third-party, an act of God or an act of war. The other damages aside from clean-up and containment costs are defined broadly to include:

- natural resource damages and related assessment costs;
- real and personal property damages;
- net loss of taxes, royalties, rents, profits or earnings capacity;
- net cost of public services necessitated by a spill response, such as protection from fire, safety or health hazards; and
- loss of subsistence use of natural resources.

Effective November 12, 2019, the U.S. Coast Guard adjusted the limits of OPA liability to the greater of \$2,300 per gross ton or \$19.9 million for any double-hull tanker that is over 3,000 gross tons (subject to possible adjustment for inflation) (relevant to the Alma Maritime carriers). These limits of liability do not apply, however, where the incident is caused by violation of applicable U.S. federal safety, construction or operating regulations, or by the responsible party’s gross negligence or willful misconduct. These limits likewise do not apply if the responsible party fails or refuses to report the incident or to cooperate and assist in connection with the substance removal activities. This limit is subject to possible adjustment for inflation. OPA 90 specifically permits individual states to impose their own liability regimes with regard to oil pollution incidents occurring within their boundaries, and some states have enacted legislation providing for unlimited liability for discharge of pollutants within their waters. In some cases, states, which have enacted their own legislation, have not yet issued

implementing regulations defining shipowners' responsibilities under these laws. We believe that we are in substantial compliance with OPA 90 and all applicable state regulations in the ports where our vessels call. OPA 90 requires owners and operators of vessels to establish and maintain with the U.S. Coast Guard evidence of financial responsibility sufficient to meet the limit of their potential strict liability under OPA 90. Under the regulations, evidence of financial responsibility may be demonstrated by insurance, surety bond, self-insurance or guaranty. Under OPA 90 regulations, an owner or operator of more than one vessel is required to demonstrate evidence of financial responsibility for the entire fleet in an amount equal only to the financial responsibility requirement of the vessel having the greatest maximum liability under OPA 90. Each of our ship-owning subsidiaries that has vessels trading in U.S. waters has applied for and obtained from the U.S. Coast Guard National Pollution Funds Center, three-year certificates of financial responsibility, or "COFRs," supported by guarantees which we purchased from an insurance based provider. We believe that we will be able to continue to obtain the requisite guarantees and that we will continue to be granted COFRs from the U.S. Coast Guard for each of our vessels that is required to have one.

Future spills could prompt the U.S. Congress to consider legislation to increase or even eliminate the limits of liability under OPA 90. Compliance with any new requirements of OPA 90 may substantially impact our cost of operations or require us to incur additional expenses to comply with any new regulatory initiatives or statutes. Any additional legislation or regulation applicable to the operation of our vessels that may be adopted in the future could adversely affect our business and ability to make distributions to our shareholders.

Clean Water Act

The United States Clean Water Act, or "CWA," prohibits the discharge of oil or hazardous substances in United States navigable waters unless authorized by a permit or exemption and imposes strict liability in the form of penalties for unauthorized discharges. The CWA also imposes substantial liability for the costs of removal, remediation and damages and complements the remedies available under OPA and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The EPA has enacted rules governing the regulation of ballast water discharges and other discharges incidental to the normal operation of vessels within U.S. waters. The rules have historically required commercial vessels 79 feet in length or longer (other than commercial fishing vessels), or "Regulated Vessels," to obtain a CWA permit regulating and authorizing such normal discharges. This permit, which the EPA has designated as the Vessel General Permit for Discharges Incidental to the Normal Operation of Vessels, or "VGP," incorporates the current U.S. Coast Guard requirements for ballast water management as well as supplemental ballast water requirements, including limits applicable to 26 specific discharge streams, such as deck runoff, bilge water and gray water.

The VGP was updated in 2013 to incorporate numeric effluent limits for ballast water expressed as the maximum concentration of living organisms in ballast water, as opposed to the prior non-numeric requirements. These requirements correspond with the IMO's requirements under the BWM Convention, as discussed above. The permit also contains maximum discharge limitations for biocides and residuals. All vessels calling on U.S. ports are now subject to the requirements of the VGP.

The 2013 VGP includes a tiered requirement for obtaining coverage based on the size of the vessel and the amount of ballast water carried. Vessels that are 300 gross tons or larger and have the capacity to carry more than eight cubic meters of ballast water must submit notices of intent (NOIs) to receive permit coverage between six and nine months after the permit's issuance date. Vessels that do not need to submit NOIs are automatically authorized under the permit.

The VGP imposes additional requirements on certain Regulated Vessel types that emit discharges unique to those vessels. Administrative provisions, such as inspection, monitoring, recordkeeping and reporting requirements, are also included for all Regulated Vessels.

In December 2018, the Vessel Incidental Discharge Act (VIDA) was signed into law and restructured the EPA and the U.S. Coast Guard programs for regulating incidental discharges from vessels. Rather than requiring

CWA permits, the discharges will be regulated under a new CWA Section 312(p) establishing Uniform National Standards for Discharges Incidental to Normal Operation of Vessels. Under VIDA, VGP provisions and existing U.S. Coast Guard regulations will be phased out over a period of approximately four years and replaced with National Standards of Performance (NSPs) to be developed by EPA and implemented and enforced by the U.S. Coast Guard. The scheduled expiration date of the 2013 VGP was December 18, 2018, but under VIDA the provisions of the VGP will remain in place until the new regulations are in place.

In addition to the requirements in the VGP (to be replaced by the NSPs established under VIDA), vessel owners and operators must meet 25 sets of state-specific requirements under the CWA's § 401 certification process. Because the CWA § 401 process allows tribes and states to impose their own requirements for vessels operating within their waters, vessels operating in multiple jurisdictions could face potentially conflicting conditions specific to each jurisdiction that they travel through.

National Invasive Species Act

In March 2012, the U.S. Coast Guard issued a final rule establishing standards for the allowable concentration of living organisms in ballast water discharged in U.S. waters and requiring the phase-in of Coast Guard approved BWM Systems. The rule went into effect in June 2012, and adopts ballast water discharge standards for vessels calling on U.S. ports and intending to discharge ballast water equivalent to those set in IMO's BWM Convention. The final rule requires that ballast water discharge have fewer than 10 living organisms per milliliter for organisms between 10 and 50 micrometers in size. For organisms larger than 50 micrometers, the discharge must have fewer than 10 living organisms per cubic meter of discharge. In May 2016, the U.S. Coast Guard published a review of the practicability of implementing a more stringent ballast water discharge standard. The results concluded that the technology to achieve a significant improvement in ballast water treatment efficacy cannot be practically implemented. If Coast Guard type approved technologies are not available by a vessel's compliance date, the vessel may request an extension to the deadline from the U.S. Coast Guard. While the 2012 rule imposes consistent numeric effluent limits for living organisms in ballast water discharges, it does not provide for compliance date extensions if Coast Guard-approved treatment technologies are not available.

In February 2016, the U.S. Coast Guard issued a rule amending the Coast Guard's ballast water management recordkeeping requirements. Effective February 22, 2016, vessels with ballast tanks operating exclusively on voyages between ports or places within a single Captain of the Port zone must submit an annual report of their ballast water management practices. Further, under the amended requirements, vessels may submit their reports after arrival at the port of destination instead of prior to arrival. As discussed above, under VIDA, existing U.S. Coast Guard ballast water management regulations will be phased out over a period of approximately four years and replaced with National Standards of Performance (NSPs) to be developed by EPA and implemented and enforced by the U.S. Coast Guard.

Clean Air Act

The U.S. Clean Air Act of 1970, as amended, or the "CAA," requires the EPA to promulgate standards applicable to emissions of volatile organic compounds and other air contaminants. Our vessels are subject to vapor control and recovery requirements for certain cargoes when loading, unloading, ballasting, cleaning and conducting other operations in regulated port areas and emission standards for so-called "Category 3" marine diesel engines operating in U.S. waters. The marine diesel engine emission standards are currently limited to new engines beginning with the 2004 model year. On April 30, 2010, the EPA promulgated final emission standards for Category 3 marine diesel engines equivalent to those adopted in the amendments to Annex VI to MARPOL. These emission standards require an 80% reduction in nitrogen dioxides for newly-built engines effective 2016. In February 2015, the EPA amended its marine diesel engine requirements to temporarily allow marine equipment manufacturers to use allowances if a compliant marine engine is not available. Compliance with these standards may cause us to incur costs to install control equipment on our vessels in the future.

European Union Regulations

The European Union has also adopted legislation that would: (1) ban manifestly sub-standard vessels (defined as those over 15 years old that have been detained by port authorities at least twice in a six month period) from European waters and create an obligation of port states to inspect vessels posing a high risk to maritime safety or the marine environment; and (2) provide the European Union with greater authority and control over classification societies, including the ability to seek to suspend or revoke the authority of negligent societies.

The European Union has implemented regulations requiring vessels to use reduced sulfur content fuel for their main and auxiliary engines. The EU Directive 2005/EC/33 (amending Directive 1999/32/EC) introduced parallel requirements in the European Union to those in MARPOL Annex VI in respect of the sulfur content of marine fuels. In addition, it introduced a 0.1% maximum sulfur requirement for fuel used by ships at berth in EU ports, effective January 1, 2010. The European Commission amended directive 2005/33/EU to bring it into alignment with the provisions of IMO 2020 on the sulfur content of marine fuels.

In 2005, the European Union adopted a directive on ship-source pollution, imposing criminal sanctions for intentional, reckless or negligent pollution discharges by ships. The directive could result in criminal liability for pollution from vessels in waters of European countries that adopt implementing legislation. Criminal liability for pollution may result in substantial penalties or fines and increased civil liability claims. We cannot predict what regulations, if any, may be adopted by the European Union or any other country or authority.

Regulation of Greenhouse Gas Emissions

Currently, the emissions of greenhouse gases from ships involved in international transport are not subject to the Kyoto Protocol, which entered into force in 2005 and which countries have relied on to produce national plans to reduce greenhouse gas emissions. The Paris Agreement, which was announced by the Parties to the United Nations Framework Convention on Climate Change in December 2015, similarly does not cover international shipping, however the IMO has subsequently reaffirmed its strong commitment to continue to work to address greenhouse gas emissions from ships engaged in international trade. The IMO is evaluating various mandatory measures to reduce greenhouse gas emissions from international shipping, which may include market-based instruments or a carbon tax. In June 2013, the European Commission developed a strategy to integrate maritime emissions into the overall European Union strategy to reduce greenhouse gas emissions. In accordance with this strategy, in April 2015 the European Parliament and Council adopted regulations requiring large vessels using European Union ports to monitor, report and verify their carbon dioxide emissions beginning in January 2018.

As of January 1, 2013, all new ships must comply with mandatory requirements adopted by the MEPC of IMO in July 2011 in part to address greenhouse gas emission. These requirements add energy efficiency standards through an Energy Efficiency Design Index (EEDI). IMO's Greenhouse Gas Working Group agreed on these guidelines to require all ships to develop and implement a Ship Energy Efficiency Plan (SEEMP). The regulations apply to all ships of 400 tonnes gross tonnage and above. The IMO also adopted a mandatory requirement in October 2016 that ships of 5000 gross tonnage and above record and report their fuel oil consumption. The requirement entered into force on March 1, 2018. These new rules will likely affect the operations of vessels that are registered in countries that are signatories to MARPOL Annex VI or vessels that call upon ports located within such countries. In May 2019, the MEPC approved for adoption at its April 2020 session further amendments to MARPOL Annex VI intended to significantly strengthen the EEDI "phase 3" requirements. These amendments would accelerate the entry into effect date of phase 3 from 2025 to 2022 for several ship types, including gas carriers, general cargo ships and LNG carriers and require new ships built from that date to be significantly more energy efficient. The MEPC also is looking into the possible introduction of a phase 4 of EEDI requirements. The IMO is also considering the development of a market-based mechanism for greenhouse gas emissions from ships. At the October 2016 Marine Environmental Protection Committee session, the IMO adopted a roadmap for developing a comprehensive IMO strategy on reduction of GHG emissions. In April 2018, the MEPC adopted an initial strategy designed to reduce the emission of greenhouse gases from

vessels, including short-term, mid-term and long-term candidate measures with a vision of reducing and phasing out greenhouse gas emissions from vessels as soon as possible in the 21st Century and to reduce the total annual GHG emissions by at least 50% by 2050 compared to 2008. According to the “Roadmap” approved by IMO Member States in 2016, the initial strategy is due to be revised by 2023. The EU has indicated that it intends to implement regulation in an effort to limit emissions of greenhouse gases from vessels if such emissions are not regulated through the IMO.

In the United States, the EPA issued a final finding that greenhouse gases threaten public health and safety and has promulgated regulations under the Clean Air Act that control the emission of greenhouse gases from mobile sources, but not from marine shipping vessels and their engines and fuels. The EPA may decide in the future to regulate greenhouse gas emissions from these sources. The Agency has already been petitioned by the California Attorney General to regulate greenhouse gas emissions from oceangoing vessels. Other federal and state regulations relating to the control of greenhouse gas emissions may follow, including climate change initiatives that have recently been considered by the U.S. Congress and by individual states.

Any passage of further climate control legislation or other regulatory initiatives by the IMO, the European Union, the United States, or other countries where we operate, or any treaty adopted at the international level, that restrict emissions of greenhouse gases could require us to make significant financial expenditures that we cannot predict with certainty at this time.

Safety Requirements

The IMO has adopted the International Convention for the Safety of Life at Sea, or “SOLAS Convention,” and the International Convention on Load Lines, 1966, or “LL Convention,” which impose a variety of standards to regulate design and operational features of ships. SOLAS Convention and LL Convention standards are revised periodically. All of our vessels are in compliance with SOLAS Convention and LL Convention standards.

Chapter IX of SOLAS, the requirements contained in the ISM Code, promulgated by the IMO, also affects our operations. The ISM Code requires the party with operational control of a vessel to develop and maintain an extensive safety management system that includes, among other things, the adoption of a safety and environmental protection policy setting forth instructions and procedures for operating its vessels safely and describing procedures for responding to emergencies.

The ISM Code requires that vessel operators obtain a safety management certificate for each vessel they operate. This certificate evidences compliance by a vessel’s management with code requirements for a safety management system. No vessel can obtain a certificate unless its manager has been awarded a document of compliance, issued by each flag state, under the ISM Code. NMM has obtained documents of compliance and safety management certificates for all of our vessels for which certificates are required by the IMO.

The International Labour Organization, or “ILO,” is a specialized agency of the United Nations with headquarters in Geneva, Switzerland. The ILO has adopted the Maritime Labor Convention 2006, or “MLC 2006,” to improve safety on-board merchant vessels. A Maritime Labor Certificate and a Declaration of Maritime Labor Compliance is required to ensure compliance with the MLC 2006 for all ships above 500 gross tons in international trade. On August 20, 2012, the required number of countries ratified the MLC 2006 and it came into force on August 20, 2013. MLC 2006 requires us to develop new procedures to ensure full compliance with its requirements.

Vessel Security Regulations

Since the terrorist attacks of September 11, 2001, there have been a variety of initiatives intended to enhance vessel security. On November 25, 2002, the Maritime Transportation Act of 2002, or “MTSA,” came into effect. To implement certain portions of the MTSA, in July 2003, the U.S. Coast Guard issued regulations requiring the

implementation of certain security requirements aboard vessels operating in waters subject to the jurisdiction of the United States. Similarly, in December 2002, amendments to SOLAS created a new chapter of the convention dealing specifically with maritime security. The new chapter became effective in July 2004 and imposes various detailed security obligations on vessels and port authorities, most of which are contained in the ISPS Code. The ISPS Code is designed to protect ports and international shipping against terrorism. After July 1, 2004, to trade internationally, a vessel must attain an International Ship Security Certificate from a recognized security organization approved by the vessel's flag state.

Among the various requirements are:

- on-board installation of automatic identification systems to provide a means for the automatic transmission of safety-related information from among similarly equipped ships and shore stations, including information on a ship's identity, position, course, speed and navigational status;
- on-board installation of ship security alert systems, which do not sound on the vessel but only alert the authorities on shore;
- the development of vessel security plans;
- ship identification number to be permanently marked on a vessel's hull;
- a continuous synopsis record kept on-board showing a vessel's history including, the name of the ship and of the state whose flag the ship is entitled to fly, the date on which the ship was registered with that state, the ship's identification number, the port at which the ship is registered and the name of the registered owner(s) and their registered address; and
- compliance with flag state security certification requirements.

The U.S. Coast Guard regulations, intended to align with international maritime security standards, exempt non-U.S. vessels from obtaining U.S. Coast Guard-approved MTSA vessel security plans provided such vessels have on-board an International Ship Security Certificate, or "ISSC," that attests to the vessel's compliance with SOLAS security requirements and the ISPS Code.

Our vessels have Security Plans, appointed and trained Ship and Office Security Officers and each of our vessels in our fleet complies with the requirements of the ISPS Code, SOLAS and the MTSA.

Other Regulation

Our vessels may also become subject to the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, 1996 as amended by the Protocol to the HNS Convention, adopted in April 2010, or the "2010 HNS Protocol," and collectively, the "2010 HNS Convention," if it is entered into force. At least 12 states must ratify or accede to the 2010 HNS Protocol for it to enter into effect. In July 2019, South Africa became the fifth state to ratify the protocol. At least seven more states must ratify or accede to the protocol for it to enter into effect.

The Convention creates a regime of liability and compensation for damage from hazardous and noxious substances, or "HNS." The 2010 HNS Convention sets up a two-tier system of compensation composed of compulsory insurance taken out by shipowners and an HNS Fund which comes into play when the insurance is insufficient to satisfy a claim or does not cover the incident. Under the 2010 HNS Convention, if damage is caused by bulk HNS, claims for compensation will first be sought from the shipowner up to a maximum of 100 million Special Drawing Rights, or "SDR," which was equivalent to \$138 million U.S. dollars as of January 31, 2016. SDRs are supplementary, foreign exchange reserve assets created and maintained by the International Monetary Fund, or "IMF," based upon a basket of currencies (consisting of the euro, Japanese yen, pound sterling and U.S. dollar). The SDR basket is reviewed every five years, or earlier if warranted, to ensure that the basket reflects the relative importance of currencies in the world's trading and financial systems. SDRs

are not a currency, but instead represent a claim to currency held by IMF member countries for which SDRs may be exchanged. Monetary values and limits in many international maritime treaties are expressed in terms of SDRs. As of December 31, 2019, the exchange rate was 1 SDR equal to 1.38283 U.S. dollars. If the damage is caused by packaged HNS or by both bulk and packaged HNS, the maximum liability is 115 million SDR (equivalent to \$159 million U.S. dollars as of December 31, 2019). Once the limit is reached, compensation will be paid from the HNS Fund up to a maximum of 250 million SDR (equivalent to \$346 million U.S. dollars as of December 31, 2019). The 2010 HNS Convention has not been ratified by a sufficient number of countries to enter into force, and we cannot estimate the costs that may be needed to comply with any such requirements that may be adopted with any certainty at this time.

In-House Inspections

We, NMM and Thome carry out inspections of the ships under management on a regular basis; to verify conformity with managers' reports on upkeep and maintenance. The results of these inspections, which are conducted both in port and underway, result in a report containing action items and recommendations for improvements to the overall condition of the vessel, maintenance, safety and crew welfare. The vessels we manage in house are inspected on a regular basis to verify their condition and that upkeep, maintenance, crewing standards and welfare are in compliance with the requirements of our Safety Management System.

Corporate and Social Responsibility

We firmly believe that ensuring a safe working environment at sea and on shore is the first priority in a sustainable and efficient business, ensuring the safety of our employees, contractors and assets in everything we do. To achieve this, we do not tolerate any form of bribery, corruption or labour and human rights breaches. We have defined clear policies and expect employees, contractors, suppliers and customers to ensure compliance with the highest ethical standards.

At this time, particularly with the advent of COVID-19, the health and safety of our crew is paramount as we continue our vital role in the supply of liquefied gases worldwide while meeting the needs of our customers, suppliers and other partners. We have introduced significantly enhanced procedures onboard all our vessels, for agents and other shoreside personnel coming on board, as well as other lockdown procedures in the event a crew member to be suspected of contracting the virus. We have no reported cases or suspected cases of COVID-19 on any of our vessels.

Competition

The process of obtaining new charters is highly competitive, generally involves an intensive screening process and competitive bids, and often extends for several months.

A significant proportion of our handysize liquefied gas carriers are contracted on 12 month or shorter time charters. There is competition for the employment of vessels when these charters expire and for the employment of those vessels which trade on the spot market. Competition for mid- or longer-term charters is based primarily on industry relationships, experience and reputation for customer service, reliability, quality operations and safety, the experience and technical capability of the crews, the vessel's efficiency, operational flexibility and physical life, and the competitiveness of the bid in terms of overall price.

Our existing fleet had an average age of 8.8 years as of December 31, 2019, which is significantly less than the average age of the world-wide fleet of handysize liquefied gas carriers. We believe that our relatively young fleet positions us well to compete in terms of our vessels meeting the strategic and operational needs of our charterers. We own and operate the largest fleet in the handysize segment, which, in our view, enhances our position relative to our competitors. While there are some barriers to entry for operating liquefied gas carriers, including the complexity of operating semi-refrigerated gas carriers that constantly require switching between a myriad of cargo types, crew expertise, and the availability of finance, new entrants have entered the market over the last three years.

We believe that the market for obtaining new charters will continue to be highly competitive for the foreseeable future. However, we believe that our relationships, the reliability we strive to provide to our customers, the experience of the crews that service our vessels and the age and technical ability of our versatile fleet will provide us with a competitive advantage, both within the handysize segment and across the broader liquefied gas carrier industry.

Properties

Other than our vessels, we do not own any material property. We lease office space for our representative offices in London, Gdynia and New York.

The lease term for our representative office in London commenced in January 2017 and is for a period of 10 years with a mutual break option in February 2022, which is the fifth anniversary from the lease commencement date. The gross rent per year for our office lease is approximately \$1.1 million.

The lease term for our representative office in Gdynia, Poland is for a period of five years commencing from April 2017. The gross rent per year is approximately \$60,000.

The lease term for our representative office in New York is for a period of five years from June 2017. The total rent per year is approximately \$365,000.

Employees

We had 83 employees as of December 31, 2019. We consider our employee relations to be good. Our crewing and technical managers provide crews for our vessels under separate crew management agreements.

Legal Proceedings

We expect that in the future we will be subject to legal proceedings and claims in the ordinary course of business, principally personal injury and property casualty claims. These claims, even if lacking merit, could result in the expenditure of significant financial and managerial resources. We are not aware of any legal proceedings or claims that we believe will have, individually or in the aggregate, a material adverse effect on us.

Exchange Controls

Under the Republic of the Marshall Islands law, there are currently no restrictions on the export or import of capital, including foreign exchange controls or restrictions that affect the remittance of distributions, interest or other payments to non-resident shareholders.

Taxation of the Company

Certain of our subsidiaries are subject to taxation in the jurisdictions in which they are organized, conduct business or own assets. We intend that our business and the business of our subsidiaries will be conducted and operated in a manner designed to minimize the tax imposed on us and our subsidiaries. However, we cannot assure this result as tax laws in these or other jurisdictions may change or we may enter into new business transactions relating to such jurisdictions, which could affect our tax liability.

U.S. Taxation

The following is a discussion of the material U.S. federal income tax considerations applicable to us. This discussion is based upon provisions of the Code, final and temporary Treasury Regulations thereunder, and administrative rulings and court decisions, all as in effect as of the date hereof and all of which are subject to

change or differing interpretation, possibly with retroactive effect. Changes in these authorities may cause the tax consequences to vary substantially from the consequences described below. The following discussion is for general information purposes only and does not purport to be a comprehensive description of all of the U.S. federal income tax considerations applicable to us.

Status as a Corporation. We are treated as a corporation for U.S. federal income tax purposes. As such, we are subject to U.S. federal income tax on our income to the extent it is from U.S. sources or is effectively connected with the conduct of a trade or business in the United States as discussed below, unless such income is exempt from tax under Section 883 of the Code.

Taxation of Operating Income. Substantially all of our gross income for 2019 and a significant proportion of our future gross income is attributable to the transportation of LPGs and petrochemicals and related products. Gross income that is attributable to transportation that either begins or ends, but that does not both begin and end, in the United States, or “U.S. Source International Transportation Income,” is considered to be 50.0% derived from sources within the United States and may be subject to U.S. federal income tax as described below. Gross income attributable to transportation that both begins and ends in the United States, or “U.S. Source Domestic Transportation Income,” is considered to be 100.0% derived from sources within the United States and generally is subject to U.S. federal income tax. Gross income attributable to transportation exclusively between non-U.S. destinations is considered to be 100.0% derived from sources outside the United States and generally is not subject to U.S. federal income tax. We are not permitted by law to engage in transportation that gives rise to U.S. Source Domestic Transportation Income. However, certain of our activities give rise to U.S. Source International Transportation Income, and we may in the future increase our operations in the United States, which would result in an increase in the amount of our U.S. Source International Transportation Income, all of which would be subject to U.S. federal income taxation unless the exemption from U.S. taxation under Section 883 of the Code, or the “Section 883 Exemption,” applies.

The Section 883 Exemption. In general, the Section 883 Exemption provides that if a non-U.S. corporation satisfies the requirements of Section 883 of the Code and the Treasury Regulations thereunder, or the “Section 883 Regulations,” it will not be subject to the net basis and branch profits taxes or the 4.0% gross basis tax described below on its U.S. Source International Transportation Income. The Section 883 Exemption applies only to U.S. Source International Transportation Income and does not apply to U.S. Source Domestic Transportation Income.

We will qualify for the Section 883 Exemption if, among other things, we meet the following three requirements:

- we are organized in a jurisdiction outside the United States that grants an equivalent exemption from tax to corporations organized in the United States with respect to the types of U.S. Source International Transportation Income that we earn, or an “Equivalent Exemption”;
- we satisfy the Publicly Traded Test (as described below); and
- we meet certain substantiation, reporting and other requirements (or the Substantiation Requirement).

In order for a non-U.S. corporation to meet the Publicly Traded Test, its equity interests must be “primarily traded” and “regularly traded” on an established securities market either in the United States or in a jurisdiction outside the United States that grants an Equivalent Exemption. The Section 883 Regulations provide, in pertinent part, that equity interests in a non-U.S. corporation will be considered to be “primarily traded” on an established securities market in a given country if, with respect to the class or classes of equity relied upon to meet the “regularly traded” requirement described below, the number of shares of each such class that are traded during any taxable year on all established securities markets in that country exceeds the number of shares in such class that are traded during that year on established securities markets in any other single country.

Equity interests in a non-U.S. corporation will be considered to be “regularly traded” on an established securities market under the Section 883 Regulations if one or more classes of such equity interests that, in the aggregate,

represent more than 50.0% of the combined vote and value of all outstanding equity interests in the non-U.S. corporation satisfy certain listing and trading volume requirements. These listing and trading volume requirements will be satisfied with respect to a class of equity interests if trades in such class are effected, other than in de minimis quantities, on an established securities market on at least 60 days during the taxable year and the aggregate number of shares in such class that are traded on an established securities market during the taxable year is at least 10.0% of the average number of shares outstanding in that class during the taxable year (with special rules for short taxable years). In addition, a class of equity interests will be considered to satisfy these listing and trading volume requirements if the equity interests in such class are traded during the taxable year on an established securities market in the United States and are “regularly quoted by dealers making a market” in such class (within the meaning of the Section 883 Regulations).

Even if a class of equity satisfies the foregoing requirements, and thus generally would be treated as “regularly traded” on an established securities market, an exception may apply to cause the class to fail the regularly traded test if, for more than half of the number of days during the taxable year, one or more 5.0% shareholders (i.e., shareholders owning, actually or constructively, at least 5.0% of the vote and value of that class) own in the aggregate 50.0% or more of the vote and value of the class (which we refer to as the “Closely Held Block Exception”). For purposes of identifying its 5.0% shareholders, a corporation is entitled to rely on Schedule 13D and Schedule 13G filings made with the SEC. The Closely Held Block Exception does not apply, however, in the event the corporation can establish that a sufficient proportion of such 5.0% shareholders are Qualified Shareholders (as defined below) so as to preclude other persons who are 5.0% shareholders from owning 50.0% or more of the value of that class for more than half the days during the taxable year. Qualified Shareholders include:

- individual residents of jurisdictions that grant an Equivalent Exemption;
- non-U.S. corporations organized in jurisdictions that grant an Equivalent Exemption and that meet the Publicly Traded Test; and
- certain other qualified persons described in the Section 883 Regulations.

We are organized under the laws of the Republic of the Marshall Islands, which is a jurisdiction that the U.S. Treasury Department has recognized as granting an Equivalent Exemption with respect to the type of U.S. Source International Transportation Income we earn. Provided we satisfy the Substantiation Requirement, which we believe we will be able to satisfy, our U.S. Source International Transportation Income (including for this purpose, any such income earned by our subsidiaries) will be exempt from U.S. federal income taxation provided we meet the Publicly Traded Test.

We did not satisfy the requirements for the Section 883 exemption for our 2013 taxable year because our common stock was not traded on an established securities market for most of the year and therefore we did not satisfy the “regularly traded” requirement of the Publicly Traded Test. However, for 2014 and each year since, we believe that we satisfied the requirements of Section 883 exemption and therefore we were not subject to U.S. federal income taxation on our U.S. Source International Transportation Income. For the current and future taxable years, we believe we will be able to satisfy the Publicly Traded Test, provided we satisfy the listing and trading volume requirements described previously and the Closely Held Block Exception does not apply for such year. Our common stock, which is our only class of equity outstanding, represents more than 50.0% of the total combined voting power and value of all classes of our equity interests entitled to vote. In addition, because our common stock is traded only on the NYSE, which is considered to be an established securities market, our equity interests are “primarily traded” on an established securities market for purposes of the Publicly Traded Test. Further, we anticipate that our common stock will meet the “regularly traded” requirement of the Publicly Traded Test.

According to Schedule 13D and Schedule 13G filings with the SEC, 5.0% shareholders currently own, in the aggregate, less than 50.0% of the total vote and value of our common stock. Provided that in each of the

current and future taxable years, 5.0% shareholders own, in the aggregate, less than 50.0% of the total vote and value of our common stock for more than half the days of such taxable year, and we continue to satisfy the listing and trading volume requirements described previously, we believe that we will satisfy the Publicly Traded Test for such year. However, additional persons that are not Qualified Shareholders may become 5.0% shareholders at any time. If more than 50.0% of our common stock were held by 5.0% shareholders (other than Qualified Shareholders) for more than half of the days of the current or any future year, we would likely not qualify for an exemption under Section 883 for such taxable year, due to the Closely Held Block Exception. Because qualification for the Section 883 Exception depends upon factual matters that are subject to change and are outside of our control, there can be no assurance that we will be able to satisfy the Publicly Traded Test for the current or any future taxable year. Please see “—The Net Basis Tax and Branch Profits Tax” and “—The 4.0% Gross Basis Tax” below for a discussion of the consequences in the event we do not satisfy the Publicly Traded Test or otherwise fail to qualify for the Section 883 Exemption.

The Net Basis Tax and Branch Profits Tax. If we earn U.S. Source International Transportation Income, and, the Section 883 Exemption does not apply, the U.S. source portion of such income may be treated as effectively connected with the conduct of a trade or business in the United States, or “Effectively Connected Income,” if (1) we have a fixed place of business in the United States involved in the earning of U.S. Source International Transportation Income and (2) substantially all of our U.S. Source International Transportation Income is attributable to regularly scheduled transportation or, in the case of vessel leasing income, is attributable to a fixed place of business in the United States. In addition, if we earn other types of income within the territorial seas of the United States, such income may be treated as Effectively Connected Income.

Based on our current and projected methods of operation, we do not believe that any of our U.S. Source International Transportation Income will be treated as Effectively Connected Income for any taxable year. However, there is no assurance that we will not earn substantial amounts of income from regularly scheduled transportation or bareboat charters attributable to a fixed place of business in the United States (or earn income from other activities within the territorial seas of the United States) in the future, which would result in such income being treated as Effectively Connected Income. In addition, we anticipate deriving Effectively Connected Income in the future in respect of any profits derived from our Marine Export Terminal in the U.S. Gulf Coast, which became operational in December 2019.

Any income we earn that is treated as Effectively Connected Income, net of applicable deductions, would be subject to U.S. federal corporate income tax (generally at a rate of 21.0%). In addition, a 30.0% branch profits tax could be imposed on any income we earn that is treated as Effectively Connected Income, as determined after allowance for certain adjustments, and on certain interest paid or deemed paid by us in connection with the conduct of our U.S. trade or business.

On the sale of a vessel that has produced Effectively Connected Income, we could be subject to the net basis U.S. federal corporate income tax as well as branch profits tax with respect to the gain recognized up to the amount of certain prior deductions for depreciation that reduced Effectively Connected Income. Otherwise, we would not be subject to U.S. federal income tax with respect to gain realized on the sale of a vessel, provided the sale is considered to occur outside of the United States under U.S. federal income tax principles. In general, the sale of a vessel will be considered to occur outside of the United States for this purpose if title to the vessel, and risk of loss with respect to the vessel, pass to the buyer outside the United States. It is expected that any sale of a vessel by us will be considered to occur outside the United States.

The 4.0% Gross Basis Tax. If the Section 883 Exemption does not apply and the net basis tax does not apply, we will be subject to a 4.0% U.S. federal income tax on the U.S. source portion of our gross U.S. Source International Transportation Income, without benefit of deductions. Under the sourcing rules described above under “—Taxation of Operating Income,” 50.0% of our U.S. Source International Transportation Income would be treated as being derived from U.S. sources.

As noted above, the Marine Export Terminal on the U.S. Gulf Coast became operational in December 2019. We expect that a portion of our gross income for 2020 and future years will be derived from the operations of this terminal. Our 50% share of any net income from the Marine Export Terminal will be subject to U.S. federal income tax on a net tax basis as Effectively Connected Income.

Republic of the Marshall Islands Taxation

We believe that because we and our controlled affiliates do not, and do not expect to, conduct business or operations in the Republic of the Marshall Islands, neither we nor our controlled affiliates will be subject to income, capital gains, profits or other taxation under current Republic of the Marshall Islands law. As a result, distributions by our controlled affiliates to us will not be subject to Republic of the Marshall Islands taxation.

U.K. Taxation

NGT Services (UK) Limited, Navigator Gas Invest Limited, Navigator Gas Shipmanagement Ltd and Navigator Terminals Invest Ltd, as U.K. incorporated companies, are subject to U.K. corporation tax on all their profits wherever arising. If we and any of our controlled affiliates not incorporated in the United Kingdom ensure that our central management and control is exercised outside of the United Kingdom, and we do not otherwise create a U.K. permanent establishment by carrying on business in the United Kingdom, we should not become subject to U.K. corporation tax. Where a company's central management and control is exercised is a question of fact to be decided in accordance with the particular circumstances of each company. Any distributions paid to us by NGT Services (UK) Limited will not be subject to U.K. taxation.

Singapore Taxation

Falcon Funding PTE Ltd is a Singaporean service company and is subject to Singaporean tax on all its profits wherever arising.

Indonesia Taxation

PT Navigator Khatulistiwa "PTNK" is a joint venture of which 49% of the voting and dividend rights are owned by a subsidiary though ultimately controlled at the shareholder level by our subsidiary, and 51% of such rights are owned by Indonesian limited liability companies. PTNK is subject to Indonesian freight tax on all of its gross shipping transportation revenue at a rate of 1.2%.

Poland Taxation

NGT Services (Poland) Sp. Z O.O. is a Polish service company and is subject to Polish tax on all its profits wherever arising.

Maltese Taxation

OCY Aurora Ltd., the lessor VIE, is a Maltese special purpose company and is subject to Maltese tax on all its profits wherever arising. Please read Note 9 (Variable Interest Entities) to the consolidated financial statements.

C. Organizational Structure

See Note 8 (Group Subsidiaries) to the consolidated financial statements, which is incorporated by reference in this Item 4.C.

D. Property, Plant and Equipment

Other than our vessels mentioned above, we do not have any material property.

Item 4A. Unresolved Staff Comments

Not applicable.

Item 5. Operating and Financial Review and Prospects

A. Operating Results

You should read the following discussion of our financial condition and results of operations in conjunction with our audited consolidated financial statements and related notes included elsewhere in this annual report. Among other things, those consolidated financial statements include more detailed information regarding the basis of presentation for the following information. The consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles, or “U.S. GAAP,” and are presented in U.S. Dollars unless otherwise indicated. Any amounts converted from another non-U.S. currency to U.S. Dollars in this annual report were converted at the rate applicable at the relevant date, or the average rate during the applicable period.

Overview

We are the owner and operator of the world’s largest fleet of handysize liquefied gas carriers. We provide international and regional seaborne transportation services of petrochemical gases, LPG and ammonia for energy companies, industrial users and commodity traders. These gases are transported in liquefied form, by applying cooling and/or pressure, to reduce volume by up to 900 times depending on the cargo, making their transportation more efficient and economical.

We employ our vessels through a combination of time charters, voyage charters and COAs. Our fleet consists of 38 vessels; 33 of these are semi- or fully-refrigerated liquefied handysize gas carriers; four are midsize 37,300 cbm ethylene capable semi-refrigerated liquefied gas carriers and one is a 38,000 cbm fully refrigerated liquefied gas carrier. We define handysize as liquefied gas carriers between 15,000 and 24,999 cbm.

We currently own and operate a total of 38 vessels, of which 20 are employed under time charters, 1 under a contract of affreightment and 17 are employed in the spot market. As of December 31, 2019, 25 vessels were employed under time charters (as of December 31, 2018: 23 vessels), two were employed under contracts of affreightment (As of December 31, 2018: five vessels) and 11 were employed in the spot market (As of December 31, 2018: 10 vessels). Our operated vessels earned an average time charter equivalent rate of approximately \$633,853 per vessel per calendar month (\$20,839 per day) during the year ended December 31, 2019, compared to approximately \$616,965 per vessel per calendar month (\$20,284 per day) for the year ended December 31, 2018.

Our largest customers by revenue for the year ended December 31, 2019, include four companies that currently time charter and voyage charter, either on a spot basis or under a contract of affreightment, a total of 17 of our 38 operated vessels: Mitsubishi International Corporation, a leading trade, commodities, finance and investment company; Pertamina, the Indonesian state-owned producer of hydrocarbons; Braskem S.A. a leading Brazilian petrochemical gas producer and Sibur, a Russian gas processing and petrochemicals company. For the year ended December 31, 2019, these customers accounted for approximately 51.4% of our revenue in the aggregate. Other than those customers listed above we have in the past and still currently in some cases, chartered vessels to a range of trading, shipping and other customers on both time charter and voyage charter bases including PDVSA, the Venezuelan state-owned integrated oil and petrochemical company, prior to the implementation of US sanctions in February 2019.

The recent outbreak of the novel strain of coronavirus referred to as COVID-19 (“Coronavirus”) negatively affect economic conditions and restricts the seaborne transportation of products, including LPG and petrochemical

products. The COVID-19 pandemic is having numerous negative effects which include reduced demand for LPG, petrochemicals and ammonia that we transport. Any reduction in the supply of or demand for LPG, petrochemicals and ammonia that we transport for a period or periods longer than we anticipate could negatively affect the charter rates and vessel utilization that we are able to achieve and consequently reduce our cashflow and financial condition. These negative impacts of COVID-19 may result in noncompliance of our covenants in our bank and bond loan facilities. We also provide cash collateral as security against unrealized losses on our cross-currency interest rate swap and in the event the Norwegian Kroner weakens further against the U.S. dollar, additional cash security will need to be placed into a collateral account, providing less headroom, or causing us to breach our liquidity maintenance covenant.

With regard to the supply side aspects of LPG production, the collapse in the demand for oil and refined products due to recession and lack of consumption of key products such as aircraft fuel and an increasing lack of storage capacity for refined products may lead to refineries needing to substantially reduce operating rates or at worst case cease production. Approximately one third of global LPG production originates from refineries, the other two thirds from gas processing from liquid rich natural gas fields and from shale gas production, which currently appears to be uninterrupted by the effects of COVID-19. However, reduced power consumption caused by lockdowns and closures of production facilities could weaken demand for natural gas and therefore LPG production. Any reduction in supply of LPG could reduce demand for the company's vessels.

Given the recent fluidity of developments and the extensive response to the outbreak, we are continually reviewing the effects of COVID-19 on our operations and we are constantly reassessing its impact. Measures that we are currently taking in response to COVID-19 include:

- All crew changes have been cancelled until it is safe and feasible to do so and this will be continually reviewed as the situation develops;
- Arrangements to accept delivery of additional spare parts and critical supplies are made where possible in supply chains;
- Non-critical boardings are restricted, current visits are limited to vettings inspectors, pilots and port officials, where allowed, and procedures have been implemented on board to limit the risk of human-to-human transmission from visiting personnel;
- Global offices were closed in advance of government-mandated lockdown dates to minimize the opportunity for human-to-human transmission, IT systems and network capacity have proven to be robust, and no interruption to business support functions and no implications to financial reporting systems or internal controls over financial reporting have been identified.

On February 10, 2017, we issued senior unsecured bonds in an aggregate principal amount of \$100.0 million for a period of four years. These bonds mature in full on February 10, 2021 and become repayable on that date. The bonds cannot be repaid from existing cash resources or from cash to be generated from operations prior to the expiry date of the bond. Refinancing this bond is capital markets dependent and although the Company had considered refinancing this bond with a like-for-like bond prior to the virus outbreak, and this remains the Company's preferred plan, because of the current disruption in the capital markets, the Company is evaluating alternative plans in the event the effects of COVID-19 last longer than anticipated. Such considerations include seeking an extension to the maturity of the bond, seeking to raise the capital by a sale and leaseback of a number of the Company's vessels or raising alternative debt on a number of currently unsecured vessels. Please see "B. Liquidity and Capital Resources"

We have referred to specific impacts to our operating activities due to COVID-19, however, the extent to which COVID-19 will impact our operations and financial condition will depend on future developments, which are highly uncertain, including the severity of COVID-19 and the actions undertaken to contain its impact. An estimation of its impact cannot therefore be accurately taken at this time.

Vessel Contracts

We generate revenue by providing seaborne transportation services to customers pursuant to the following three types of contractual relationships:

Time Charters. A time charter is a contract under which a vessel is chartered for a defined period of time at a fixed daily or monthly rate. Under time charters, we are responsible for providing crewing and other vessel operating services, the cost of which is intended to be covered by the fixed rate, while the customer is responsible for substantially all of the voyage expenses, including any bunker fuel consumption, port expenses and canal tolls. LPG is typically transported under a time charter arrangement, generally with a term of 12 months. However, seven of our current 25 time charters are for long-term charters exceeding 12 months. For the year ended December 31, 2019, approximately 55.9% of our revenue was generated pursuant to time charters, compared to the approximately 54.3% for the year ended December 31, 2018 and 48.2% for the year ended December 31, 2017.

Voyage Charters. A voyage charter is a contract, typically for shorter intervals, for transportation of a specified cargo between two or more designated ports. This type of charter is priced on a current or “spot” market rate, typically on a price per ton of product carried rather than a daily or monthly rate. Under voyage charters, we are responsible for all of the voyage expenses in addition to providing the crewing and other vessel operating services. Petrochemical gases have typically been transported pursuant to voyage charters, as the seaborne transportation requirements of petrochemical product traders have historically resulted from a particular product arbitrage at a point in time. For the year ended December 31, 2019, approximately 29.1% of our revenue was generated pursuant to voyage charters, compared to approximately 29.1% for the year ended December 31, 2018 and 24.5% for the year ended December 31, 2017.

Contracts of Affreightment. A COA is a contract to carry specified quantities of cargo, usually over prescribed shipping routes, at a fixed price per ton basis (often subject to fuel price or other adjustments) over a defined period of time. As such, a COA essentially consists of a number of voyage charters to carry a specified amount of cargo over a specified time period (i.e., the term of the COA), which can span for months to potentially years. Similar to a voyage charter, we are typically responsible for all voyage expenses in addition to providing all crewing and other vessel operating services when trading under a COA. For the year ended December 31, 2019, approximately 15.0% of our revenue was generated pursuant to COAs, compared to approximately 16.6% for the year ended December 31, 2018 and 27.3% for the year ended December 31, 2017.

Vessels operating on time charters and longer-term COAs provide more predictable cash flows but can potentially yield lower profit margins than vessels operating in the spot charter market during periods of favorable market conditions. Accordingly, as a result of a portion of our fleet being committed on time charters and COAs, we will be unable to take full advantage of improving charter rates to the same extent as we would if our liquefied gas carriers were employed only on spot charters. Conversely, vessels operating in the spot charter market generate revenue that is less predictable, but they may enable us to capture increased profit margins during periods of improving charter rates. However, operating in the spot charter market exposes us to the risks of declining liquefied gas carrier charter rates and relatively lower utilization rates as compared to time charters and certain COAs, which may have a materially adverse impact on our financial performance. Notwithstanding these risks, we believe that providing liquefied gas transportation services in the spot charter market is important to us, as it provides us with greater insight into market trends and opportunities.

We believe that the size and versatility of our fleet, which enables us to carry the broadest set of liquefied gases subject to seaborne transportation across a diverse range of conditions and geographies, together with our track record of operational excellence, positions us as the partner of choice for many companies requiring handysize liquefied gas transportation and distribution solutions. In addition, we believe that the versatility of our fleet affords us with backhaul and triangulation opportunities not available to many of our competitors, thereby providing us with opportunities to increase utilization and profitability. We seek to enhance our returns through a flexible, customer-driven chartering strategy that combines a base of time charters and COAs with more opportunistic, higher-rate voyage charters.

Important Financial and Operational Terms and Concepts

We use a variety of financial and operational terms and concepts in the evaluation of our business and operations. These include the following:

Operating Revenue. Our operating revenue includes revenue from time charters, voyage charters and COAs. Operating revenue is affected by charter rates and the number of days a vessel operates, as well as address commissions deducted by charterers. Rates for voyage charters are more volatile as they are typically tied to prevailing market rates at the time of the voyage. Historically, voyage charters have usually represented a minority of our annual operating revenue, which is consistent with our vessel employment strategy for the near future.

Address Commissions. Address commissions are amounts deducted by charterers from revenue for placing business with our vessels and are calculated as a percentage of chartering income. Address commissions are deducted from operating revenue.

Brokerage Commissions. Brokerage commissions are costs remitted to shipping brokers for placing business with our vessels and are calculated as a percentage of chartering income.

Voyage Expenses. Voyage expenses are all expenses unique to a particular voyage, principally bunker fuel consumption, port expenses and canal tolls. Voyage expenses are typically paid by the shipowner under voyage charters and contracts of affreightment and by the charterer under time charters. Accordingly, we generally only incur voyage expenses when performing voyage charters and COAs or during repositioning voyages between time charters for which no cargo is available. The gross revenue received by the shipowner under voyage charters and COAs are higher than those received under comparable time charters so as to compensate the shipowner for bearing all voyage expenses. As a result, our operating revenue and voyage expenses may vary significantly depending on our mix of time charters, voyage charters and COAs.

Vessel Operating Expenses. Vessel operating expenses are expenses that are not unique to a specific voyage. Vessel operating expenses include crew wages and related costs, the cost of insurance, expenses relating to repairs and maintenance, the cost of spares and consumable stores, tonnage taxes and other miscellaneous expenses. Our vessel operating expenses will increase with the expansion of our fleet. Other factors that are beyond our control may also cause these expenses to increase, including developments relating to market prices for insurance and crewing costs.

In connection with providing us with technical management for our fleet, NMM and Thome currently receive crewing and technical management fees of approximately \$0.2 million per vessel per year in the aggregate, which fees are considered to be vessel operating expenses. The vessels which are under in-house technical management have the crewing function managed by one of our third-party technical managers for a fee. In-house technical management costs are included in general and administrative costs. Our technical and crew management agreements have terms through December 2021 and thereafter continue until terminated on at least three months' notice by either party, subject to certain exceptions. During 2019 we continued to expand our in-house technical management scope, transferring a further five vessels to in-house technical management. As of December 31, 2019, we directly managed 17 of the vessels in our fleet, compared to twelve as of December 31, 2018. We expect to continue into 2020 with additional vessels being integrated into our in-house technical management. See "Item 4—Information on the Company—Business Overview—Technical Management of the Fleet."

Depreciation and Amortization. Depreciation and amortization expense consists of:

- charges related to the depreciation of the historical cost of our fleet (or the revalued amount), less the estimated residual value of our vessels, calculated on a straight-line basis over their useful life, which is estimated to be 30 years; and

- charges related to the amortization of capitalized drydocking expenditures relating to our fleet over the period between drydockings.

General and Administrative Costs. General and administrative costs principally consist of the costs incurred in operating our London representative office, which manages our chartering, operations, accounting and administrative functions, in-house technical management for some of our vessels and oversees the technical management of our other vessels; our Gdynia representative office, which manages part of our in-house technical management; our New York representative office; our advisors' services, including ongoing audit, taxation, legal and corporate services; and certain costs and expenses attributable to our board of directors. Please read "Item 4—Information on the Company—Business Overview—Commercial Management of the Fleet." We incur additional expenses as a result of being a publicly-traded corporation, including costs associated with maintaining internal controls, quarterly and annual reports to shareholders and SEC filings, investor relations and NYSE annual listing fees. We may also grant equity compensation that would result in an expense to us. Please read "Item 6—Directors, Senior Management and Employees—Compensation—Equity Compensation Plans—2013 Long-Term Incentive Plan."

Interest expense and interest income. Interest expense depends on our level of borrowings and may also change with prevailing interest rates, although our interest rate swap or other derivative instruments may reduce the effect of these changes. Interest income will depend on prevailing interest rates and the level of our cash deposits and restricted cash deposits. Interest expense may also depend on our consolidated lessor VIE entity's overall level of borrowing, including costs associated with such borrowing. By virtue of the sale and leaseback transaction we have entered into with a lessor VIE, where we are deemed to be the primary beneficiary, we are required to consolidate this VIE into our results. Accordingly, although consolidated into our results, we have no control over the funding arrangements negotiated by this lessor VIE entity including the interest rates to be applied. In consolidating the lessor VIE into our financial results, we must make assumptions regarding the debt amortization profile and the interest rate to be applied against the lessor VIE's debt principal. Furthermore, our estimation process is dependent upon the timeliness of receipt and accuracy of financial information provided by the lessor VIE entity. For additional detail refer to Note 9 (Variable Interest Entities) to our consolidated financial statements. As of December 31, 2019, we consolidated one lessor VIE in connection with the lease financing transaction for one of our vessels. For descriptions of our current financing arrangements including those of our lessor VIE, please read "Item 5—Operating and Financial Review and Prospects—Liquidity and Capital Resources—Secured Term Loan Facilities and Revolving Credit Facilities"

Drydocking. We must periodically drydock each of our vessels for any major repairs and maintenance, for inspection of the underwater parts of the vessel, that cannot be performed while the vessels are operating and for any modifications to comply with industry certification or governmental requirements. We are required to drydock a vessel once every five years until it reaches 15 years of age, after which we are required to drydock the applicable vessel every two and a half to three years.

We capitalize costs associated with the drydockings as "built in overhauls" in accordance with U.S. GAAP and amortize these costs on a straight-line basis over the period between drydockings. Costs incurred during the drydocking period which relate to routine repairs and maintenance are expensed as incurred. The number of drydockings undertaken in a given period and the nature of the work performed determine the level of drydocking expenditures.

Ownership Days. We define ownership days as the aggregate number of days in a period that each vessel in our fleet has been owned by us. Ownership days are an indicator of the size of our fleet over a period and the potential amount of revenue and expenses that we record during a period.

Available Days. We define available days as ownership days less aggregate off-hire days associated with major scheduled maintenance, which principally include drydockings, special or intermediate surveys, vessel

upgrades or major repairs. We use available days to measure the number of days in a period that our operated vessels should be capable of generating revenues.

Operating Days. We define operating days as available days less the aggregate number of days that our operated vessels are not generating revenue, which includes idle days and off-hire days for any reason other than major scheduled maintenance. We use operating days to measure the aggregate number of days in a period that our operated vessels are servicing our customers.

Fleet Utilization. We define fleet utilization as the total number of operating days in a period divided by the total number of available days during that period.

Time Charter Equivalent Rate. TCE rate is not calculated in accordance with U.S. GAAP. TCE rate is a shipping industry performance measure used primarily to compare period-to-period changes in a company's performance despite changes in the mix of charter types (i.e., spot charters, time charters and contracts of affreightment) under which the vessels may be employed between the periods. Under a time charter, the charterer pays substantially all of the vessel voyage related expenses, whereas for voyage charters, also known as spot market charters, we pay all voyage expenses. For all charters, we calculate TCE by dividing operating revenue for the charter, less any voyage expenses, by the number of operating days for the relevant time period of that charter.

Daily Vessel Operating Expenses. Daily vessel operating expenses are calculated by dividing vessel operating expenses by ownership days for the relevant time period.

Results of Operations

Factors Affecting Comparability

You should consider the following factors when evaluating our historical financial performance and assessing our future prospects:

- **Historical fleet size.** Our consolidated financial statements for the years ended December 31, 2018 and 2019 reflect the results of a fleet size of 38 owned and operated vessels for the year, compared to a weighted average fleet size of 36.2 for the year ended December 31, 2017.
- **Investment in Export Terminal Joint Venture.** On January 31, 2018, we entered into the Export Terminal Joint Venture to build and operate the Marine Export Terminal, which began commercial operations with the export of commissioning cargoes in December 2019. Refrigerated storage for 30,000 tons of ethylene will also be constructed on-site and, once completed, will have the capacity to export approximately one million tons of ethylene per year and provide the capability to load ethylene at rates of 1,000 tons per hour. The project is supported by four contracts of five to seven years with customers. The results from the Export Terminal Joint Venture are shown as "Share of results of equity accounted joint venture" on the income statement.
- **We will have different financing arrangements.** Our current financing arrangements may not be representative of our historical arrangements or the arrangements we will enter into in the future. We may amend our existing credit facilities or enter into other financing arrangements. In March 2019 we entered into a secured term loan to re-finance four of our vessels as well as entering into a credit agreement, the proceeds of which will be used solely for the payment of project costs relating to our Marine Export Terminal. In November 2018, we issued senior secured bonds. These bonds were issued to partially finance our portion of the capital contributions for the construction of the Marine Export Terminal and will incur interest expense from the date of issue. Please read "—Liquidity and Capital Resources—Secured Term Loan Facilities and Revolving Credit Facilities," "2017 Senior Unsecured Bonds," "2018 Senior Secured Bonds" and "Terminal facility".

In addition, in October 2019, we entered into a sale and leaseback to refinance one of our vessels, *Navigator Aurora*. By virtue of the sale and leaseback transaction we have entered into with a lessor VIE (Variable Interest Entity), where we are deemed to be the primary beneficiary of the VIE, we are required by U.S. GAAP to consolidate the VIE into our results. Although consolidated into our results, we have no control over the funding arrangements negotiated by the lessor VIE such as interest rates, maturity and repayment profiles. Please refer to Note 9 (Variable Interest Entities) to our consolidated financial statements.

- ***Our results are affected by fluctuations in the fair value of our derivative instruments.*** The change in fair value of our derivative instrument is included in our net income. These changes may fluctuate significantly as interest rates or currency exchange rates fluctuate. This includes changes in the fair value of the derivative instrument. If the Norwegian Kroner depreciates relative to the U.S. Dollar beyond a certain threshold, we are required to place cash collateral with our swap providers for the forecast future liability on the cross-currency interest rate swap agreement at the reporting date. In the event the depreciation of the Norwegian Kroner relative to the U.S. Dollar is significant, the cash collateral requirements could adversely affect our liquidity and financial position. Please read Note 3 (Fair Value of Derivative Instruments) and Note 19 (Cash, Cash Equivalents and Restricted Cash) to the consolidated financial statements.
- ***Changes in Accounting Standards.*** On January 1, 2019 we adopted the new accounting standard described below. Please read Note 2 (Summary of Significant Accounting Policies) to our consolidated financial statements attached hereto for more information regarding this standard and other recently adopted new accounting standards.
 - *Accounting Standards Update (“ASU”) No. 2016-02, Leases (Topic 842)* and subsequent amendments. We have adopted the new accounting standard on leases using the “Comparatives Under ASC 840” option on transition to incorporate the cumulative effect at the date of initial application for reporting periods presented beginning January 1, 2019. By using this transition method, we have made an adjustment to the consolidated statement of shareholders’ equity which represents the amounts of expense that would not have been recognized in retained earnings for the year ended December 31, 2018 under the previously applicable standard, Topic 840. Consequently, the comparable amounts for the years ended December 31, 2018 have not been adjusted.

On January 1, 2018 we adopted the new accounting standard described below. Please read Note 2 (Summary of Significant Accounting Policies) to our consolidated financial statements attached hereto for more information regarding this standard and other recently adopted new accounting standards.

- *ASU No. 2014-09, Revenue from Contracts with Customers (Topic 606)*. We have adopted the new accounting standard on revenue recognition using the modified retrospective method to incorporate the cumulative effect at the date of initial application for reporting periods presented beginning January 1, 2018. By using the modified retrospective method approach, we have made an adjustment to the consolidated statement of shareholders’ equity which represents the amount of net revenue that would not have been recognized in retained earnings for the year ended December 31, 2017 under ASU 2014-09. Consequently, the comparable amounts for the years ended December 31, 2017 have not been adjusted.

Results of Operations for the Year Ended December 31, 2018 Compared to Year Ended December 31, 2019

The following table compares our operating results for the years ended December 31, 2018 and 2019:

	Year Ended December 31, 2018	Year Ended December 31, 2019	Percentage Change
	(in thousands, except percentages)		
Operating revenue	\$310,046	\$301,385	(2.8%)
Operating expenses:			
Brokerage Commissions	5,142	4,938	(4.0%)
Voyage expenses	61,634	55,310	(10.3%)
Vessel operating expenses	106,719	111,475	4.5%
Depreciation and amortization	76,140	76,173	0.0%
General and administrative costs	18,931	20,878	10.3%
Total operating expenses	<u>\$268,566</u>	<u>\$268,774</u>	0.1%
Operating income	\$ 41,480	\$ 32,611	(21.4%)
Foreign currency exchange gain on senior secured bonds	2,360	969	(58.9%)
Unrealized loss on non-designated derivative instruments	(5,154)	(615)	(88.1%)
Interest expense	(44,908)	(48,611)	8.2%
Write off of deferred financing costs	—	(403)	—
Interest income	<u>854</u>	<u>920</u>	7.7%
Loss before income taxes and share of result of equity accounted joint venture	\$ (5,368)	\$ (15,129)	181.8%
Income taxes	(333)	(352)	5.7%
Share of result of equity accounted joint venture	<u>(38)</u>	<u>(1,126)</u>	2863.2%
Net loss	\$ (5,739)	\$ (16,607)	189.4%
Net income attributable to non-controlling interest	<u>—</u>	<u>(99)</u>	—
Net loss attributable to stockholders of Navigator Holdings Ltd.	<u>\$ (5,739)</u>	<u>\$ (16,706)</u>	191.1%

Operating Revenue. Operating revenue net of address commission, decreased by \$8.7 million or 2.8% to \$301.4 million for the year ended December 31, 2019, from \$310.0 million for the year ended December 31, 2018. This decrease was primarily due to:

- a decrease in operating revenue of approximately \$6.1 million attributable to a decrease in fleet utilization from 89.0% for the year ended December 31, 2018 to 86.8% for the year ended December 31, 2019, primarily due to the weak LPG and petrochemical markets;
- a decrease in operating revenue of approximately \$6.3 million primarily attributable to a decrease in pass through voyage costs, as the number and duration of voyage charters during the year ended December 31, 2019 decreased, compared to the year ended December 31, 2018;
- a decrease in operating revenue of approximately \$2.9 million attributable to a decrease in vessel available days of 159 days or 1.2% for the year ended December 31, 2019 due to an increase in the number and duration of vessel drydocks when the vessels are unavailable for charter, compared to the year ended December 31, 2018; and

- an increase in operating revenue of approximately \$6.6 million attributable to an increase in average monthly time charter equivalent rates, which increased to an average of approximately \$633,584 per vessel per calendar month (\$20,831 per day) for the year ended December 31, 2019, compared to an average of approximately \$616,965 per vessel per calendar month (\$20,284 per day) for the year ended December 31, 2018.

The following table presents selected operating data for the years ended December 31, 2018 and 2019, which we believe are useful in understanding the basis for movements in operating revenue:

Fleet Data:	<u>Year Ended December 31, 2018</u>	<u>Year Ended December 31, 2019</u>
Weighted average number of vessels	38.0	38.0
Ownership days	13,870	13,870
Available days	13,767	13,608
Operating days	12,247	11,813
Fleet utilization	89.0%	86.8%
Average daily time charter equivalent rate (*)	\$20,284	\$20,831

- * **Non-GAAP Financial Measure -Time charter equivalent:** Time charter equivalent (“TCE”), rate is a measure of the average daily revenue performance of a vessel. TCE is not calculated in accordance with U.S. GAAP. For all charters, we calculate TCE by dividing total operating revenues, less any voyage expenses, by the number of operating days for the relevant period. Under a time charter, the charterer pays substantially all of the vessel voyage related expenses, whereas for voyage charters, also known as spot market charters, we pay all voyage expenses. TCE rate is a shipping industry performance measure used primarily to compare period-to-period changes in a company’s performance despite changes in the mix of charter types (i.e., spot charters, time charters and contracts of affreightment) under which the vessels may be employed between the periods. We include average daily TCE rate, as we believe it provides additional meaningful information in conjunction with net operating revenues, because it assists our management in making decisions regarding the deployment and use of our vessels and in evaluating their financial performance. Our calculation of TCE rate may not be comparable to that reported by other companies.

Reconciliation of Operating Revenue to TCE rate

The following table represents a reconciliation of operating revenue to TCE rate. Operating revenue is the most directly comparable financial measure calculated in accordance with U.S. GAAP for the periods presented.

Fleet Data:	<u>Year Ended December 31, 2018</u>	<u>Year Ended December 31, 2019</u>
Operating revenue	310,046	301,385
Voyage expenses	61,634	55,310
Operating revenue less Voyage expenses . .	248,412	246,075
Operating days	12,247	11,813
Average daily time charter equivalent rate	\$ 20,284	\$ 20,831

Brokerage Commissions. Brokerage commissions, which typically vary between 1.25% and 2.0% of revenue, decreased by 4.0% to \$4.9 million for the year ended December 31, 2019, from \$5.1 million for the year ended December 31, 2018. This was primarily due to a decrease in operating revenue on which brokerage commissions are based and a change in the mix of charters between time and voyage charters. Generally, time charters command a lower brokerage commission percentage than voyage charters.

Voyage Expenses. Voyage expenses decreased by 10.3% to \$55.3 million for year ended December 31, 2019, from \$61.6 million for the year ended December 31, 2018. This was primarily due to a decrease in the number and duration of voyage charters undertaken during the year ended December 31, 2019, compared to the year ended December 31, 2018, with these decreased voyage costs being pass through costs, corresponding to a decrease in operating revenue of the same amount.

Vessel Operating Expenses. Vessel operating expenses increased by 4.5% to \$111.5 million for the year ended December 31, 2019, from \$106.7 million for the year ended December 31, 2018. Average daily vessel operating expenses increased by \$343 per vessel per day, or 4.5%, to \$8,037 per vessel per day for the year ended December 31, 2019, compared to \$7,694 per vessel per day for the year ended December 31, 2018.

Depreciation and Amortization. Depreciation and amortization expense increased by 0.04% to \$76.2 million for the year ended December 31, 2019, from \$76.1 million for the year ended December 31, 2018. Depreciation and amortization expense included amortization of capitalized drydocking costs of \$7.9 million for the years ended December 31, 2019 and 2018.

General and Administrative Costs. General and administrative costs increased by \$1.9 million or 10.3% to \$20.9 million for the year ended December 31, 2019, from \$18.9 million for the year ended December 31, 2018. The increase in general and administrative costs was primarily due to an increase in the number of employees during the year ended December 31, 2019, compared to the year ended December 31, 2018, to enable us to provide in-house technical management for an increasing number of our vessels; professional fees in relation to the recruitment of senior executives; and a provision for doubtful debts against outstanding revenue from our time charters with PDVSA.

Non-operating Results

Foreign currency exchange gain on senior secured bonds. Exchange gains and losses relate to non-cash movements on our 2018 Bonds which are denominated in Norwegian Kroner and translated to U.S. Dollar at the prevailing exchange rate as of December 31, 2019. The foreign currency exchange gain on translation decreased by 58.9% to \$1.0 million for the year ended December 31, 2019, from \$2.4 million for the year ended December 31, 2018, as the Norwegian Kroner continued to weaken, but at a reduced level.

Unrealized loss on non-designated derivative instruments. The unrealized loss on non-designated derivative instruments of \$0.6 million relates to the fair value movement in our cross-currency interest rate swap for the year ended December 31, 2019. The unrealized loss on this swap for the period from inception on November 2, 2018 to December 31, 2018 was \$5.2 million.

Interest Expense. Interest expense increased by \$3.7 million, or 8.2%, to \$48.6 million for the year ended December 31, 2019, from \$44.9 million for the year ended December 31, 2018. The increase was primarily due to interest on our 2018 Bonds for the full 12 months for the year ended December 31, 2019, compared to two months expense for the year ended December 31, 2018, offset by a decrease in interest costs as a result of reductions in U.S. LIBOR. Interest expense is shown net of interest capitalized. Interest capitalized in the year ended December 31, 2019 of \$4.5 million compared to \$1.0 million for the year ended December 31, 2018, relates to interest on capital contributions to the Export Terminal Joint Venture.

Write off of Deferred Financing Costs. The write off of deferred financing costs of \$0.4 million for the year ended December 31, 2019 related to certain third party legal costs for \$0.1 million when we partially refinanced our January 2015 secured term loan facility and \$0.3 million upon the refinancing of Navigator Aurora into a sale and leaseback transaction with OCY Aurora Ltd. This vessel had until the refinancing been part of our December 2015 secured revolving credit facility.

Income Taxes. Income tax relates to taxes on our subsidiaries incorporated in the United Kingdom, Poland and Singapore and our consolidated VIE, incorporated in Malta. Two of our United Kingdom subsidiaries earn

management and other fees from affiliates, and our Singaporean subsidiary earns interest from loans to our variable interest entity in Indonesia. The main corporate tax rates are 19%, 19%, 17% and 35% in the United Kingdom, Poland and Singapore and Malta, respectively. For the year ended December 31, 2019, we incurred taxes of \$351,518 compared to taxes for the year ended December 31, 2018 of \$332,890.

Share of result of equity accounted joint venture. The share of result of the Company’s 50% ownership in the Export Terminal Joint Venture was a loss of \$1.1 million for the year ended December 31, 2019, principally relating to commissioning costs, compared to a loss of \$0.04 million for the year ended December 31, 2018.

Non-Controlling Interest. We have entered into various sale and leaseback arrangements with a wholly-owned special purpose vehicle (“lessor SPV”) of a financial institution. While we do not hold any equity investments in this lessor SPV, we have determined that we are the primary beneficiary of this entity and accordingly, we are required to consolidate this variable interest entity (“VIE”) into our financial results. Thus, the equity attributable to the financial institution is presented as the non-controlling interest in our financial results. For additional details, see Note 9 (Variable Interest Entities) to our consolidated financial statements.

Results of Operations for the Year Ended December 31, 2017 Compared to Year Ended December 31, 2018

The following table compares our operating results for the years ended December 31, 2017 and 2018:

	Year Ended December 31, 2017	Year Ended December 31, 2018	Percentage Change
	(in thousands, except percentages)		
Operating revenue	\$298,595	\$310,046	3.8%
Operating expenses:			
Brokerage Commissions	5,368	5,142	(4.2%)
Voyage expenses	55,542	61,634	11.0%
Vessel operating expenses	100,968	106,719	5.7%
Depreciation and amortization	73,588	76,140	3.5%
General and administrative costs	15,947	18,931	18.7%
Total operating expenses	<u>\$251,413</u>	<u>\$268,566</u>	6.8%
Operating income	\$ 47,182	\$ 41,480	(12.1%)
Foreign currency exchange gain on senior secured bonds	—	2,360	—
Unrealized loss on non-designated derivative instruments	—	(5,154)	—
Interest expense	(37,691)	(44,908)	19.2%
Write off of deferred financing costs	(786)	—	—
Write off of call premium and redemption charges on 9.00% unsecured bond	(3,517)	—	—
Interest income	<u>519</u>	<u>854</u>	64.5%
Income/(loss) before income taxes and share of result of equity accounted joint venture	\$ 5,707	\$ (5,368)	(194.7%)
Income taxes	(397)	(333)	(16.1%)
Share of result of equity accounted joint venture	—	(38)	—
Net income/(loss)	<u>\$ 5,310</u>	<u>\$ (5,739)</u>	(208.1%)

Operating Revenue. Operating revenue net of address commission, increased by \$11.4 million or 3.8% to \$310.0 million for the year ended December 31, 2018, from \$298.6 million for the year ended December 31, 2017. This increase was primarily due to:

- an increase in operating revenue of approximately \$10.5 million attributable to an increase in the weighted average number of vessels from 36.2 for the year ended December 31, 2017, to 38.0 for the year ended December 31, 2018, and a corresponding increase in vessel ownership days by 642 days, or 4.9%, for the year ended December 31, 2018, as compared to the year ended December 31, 2017;
- a decrease in operating revenue of approximately \$8.8 million attributable to a reduction in average monthly time charter equivalent rates, which decreased to an average of approximately \$616,965 per vessel per calendar month (\$20,284 per day) for the year ended December 31, 2018, compared to an average of approximately \$639,318 per vessel per calendar month (\$21,018 per day) for the year ended December 31, 2017. This was primarily as a result of a weak LPG market which accounted for a decrease of \$9.9 million, offset by the adoption of ASU 2014-09, the new accounting standard that requires revenue for voyage charters to be recognized between load port and discharge port only, rather than the previous method of recognizing revenue between the prior discharge port to the following discharge port, accounting for an increase of \$1.1 million;
- an increase in operating revenue of approximately \$3.7 million attributable to an increase in fleet utilization from 87.6% for the year ended December 31, 2017 to 89.0% for the year ended December 31, 2018, primarily due to a lower number of idle days as a percentage of available days, for the year ended December 31, 2018 compared to the year ended December 31, 2017 and
- an increase in operating revenue of approximately \$6.0 million primarily attributable to an increase in pass through voyage costs, compensated by increased operating revenue, as the number and duration of voyage charters during the year ended December 31, 2018 increased, compared to the year ended December 31, 2017.

The following table presents selected operating data for the years ended December 31, 2017 and 2018, which we believe are useful in understanding the basis for movements in operating revenue:

Fleet Data:	<u>Year Ended December 31, 2017</u>	<u>Year Ended December 31, 2018</u>
Weighted average number of vessels	36.2	38.0
Ownership days	13,228	13,870
Available days	13,195	13,767
Operating days	11,564	12,247
Fleet utilization	87.6%	89.0%
Average daily time charter equivalent rate (*)	\$21,018	\$20,284

* **Non-GAAP Financial Measure -Time charter equivalent:** Time charter equivalent, or “TCE”, rate is a measure of the average daily revenue performance of a vessel. TCE is not calculated in accordance with U.S. GAAP. For all charters, we calculate TCE by dividing total operating revenues, less any voyage expenses, by the number of operating days for the relevant period. Under a time charter, the charterer pays substantially all of the vessel voyage related expenses, whereas for voyage charters, also known as spot market charters, we pay all voyage expenses. TCE rate is a shipping industry performance measure used primarily to compare period-to-period changes in a company’s performance despite changes in the mix of charter types (i.e., spot charters, time charters and contracts of affreightment) under which the vessels may be employed between the periods. We include average daily TCE rate, as we believe it provides additional meaningful information in conjunction with net operating revenues, because it assists our management in making decisions regarding the deployment and use of our vessels and in evaluating their financial performance. Our calculation of TCE rate may not be comparable to that reported by other companies.

Reconciliation of Operating Revenue to TCE rate

The following table represents a reconciliation of operating revenue to TCE rate. Operating revenue is the most directly comparable financial measure calculated in accordance with U.S. GAAP for the periods presented.

Fleet Data:	Year Ended December 31, 2017	Year Ended December 31, 2018
Operating revenue	298,595	310,046
Voyage expenses	<u>55,542</u>	<u>61,634</u>
Operating revenue less Voyage expenses . .	243,053	248,412
Operating days	11,564	12,247
Average daily time charter equivalent rate	\$ 21,018	\$ 20,284

Brokerage Commissions. Brokerage commissions, which typically vary between 1.25% and 5% of revenue, decreased by 4.2% to \$5.1 million for the year ended December 31, 2018, from \$5.4 million for the year ended December 31, 2017. This was primarily due to an increase in the amount of time charter hire for the year ended December 31, 2018 from the year ended December 31, 2017 and a decrease in the voyage charter revenue over the same period. Generally, time charter hire commands a lower brokerage commission percentage than voyage charters which predominately carry petrochemicals and command a higher brokerage commission.

Voyage Expenses. Voyage expenses increased by 11.0% to \$61.6 million for year ended December 31, 2018, from \$55.5 million for the year ended December 31, 2017. This was primarily due to an increase in the number and duration of voyage charters undertaken during the year ended December 31, 2018, compared to the year ended December 31, 2017, with these increased voyage costs being pass through costs, compensated for by increased revenue of the same amount.

Vessel Operating Expenses. Vessel operating expenses increased by 5.7% to \$106.7 million for the year ended December 31, 2018, from \$101.0 million for the year ended December 31, 2017, as the number of vessels in our fleet increased. Average daily vessel operating expenses increased by \$59 per vessel per day, or 0.7%, to \$7,694 per vessel per day for the year ended December 31, 2018, compared to \$7,635 per vessel per day for the year ended December 31, 2017. During the year ended December 31, 2018, we received amounts from insurance claims on a number of our vessels, relating to costs for auxiliary engine repairs that had been expensed in prior years. These receipts reduced the daily operating expenses by \$50 per vessel per day and were credited back to vessel operating expenses in the year ended December 31, 2018.

Depreciation and Amortization. Depreciation and amortization expense increased by 3.5% to \$76.1 million for the year ended December 31, 2018, from \$73.6 million for the year ended December 31, 2017. This increase was primarily due to an increase in our fleet size. Depreciation and amortization expense included amortization of capitalized drydocking costs of \$7.9 million for the year ended December 31, 2018, and \$9.2 million for the year ended December 31, 2017.

General and Administrative Costs. General and administrative costs increased by \$3.0 million or 18.7% to \$18.39 million for the year ended December 31, 2018, from \$15.9 million for the year ended December 31, 2017. The increase in general and administrative costs was primarily due to an increase in the number of employees during the year ended December 31, 2018, compared to the year ended December 31, 2017, to enable us to provide in-house technical management for an increasing number of our vessels.

Non-operating Results

Foreign currency exchange gain on senior secured bonds. The primary source of our foreign exchange gains and losses are the movements on our NOK-denominated 2018 Bonds. The foreign currency exchange gain

of \$2.4 million relates to the translation of our 2018 Bonds which are denominated in Norwegian Kroner and translated as of December 31, 2018, at the prevailing exchange rate. As of December 31, 2017, we did not hold any non-U.S. Dollar denominated financial instruments.

Unrealized loss on non-designated derivative instruments. The unrealized loss on non-designated derivative instruments of \$5.2 million relates to the fair value movement in our cross-currency interest rate swap from its inception on November 2, 2018 until December 31, 2018. As of December 31, 2017, we did not hold any non-U.S. Dollar denominated financial instruments.

Interest Expense. Interest expense increased by \$7.2 million, or 19.2%, to \$44.9 million for the year ended December 31, 2018, from \$37.7 million for the year ended December 31, 2017. The increase was primarily due to an increase in U.S. LIBOR. Interest expense is shown net of interest capitalized. Interest capitalized in the year ended December 31, 2018 of \$1.0 million relates to capital expenditures for the investment in the Export Terminal Joint Venture. Interest capitalized on newbuilding installment payments for the year ended December 31, 2017 was \$1.7 million, prior to the completion of our newbuilding program in November 2017.

Write off of Deferred Financing Costs. The write off of deferred financing costs of \$0.8 million for the year ended December 31, 2017 related to the remaining unamortized deferred financing costs of bonds issued in 2012 (the “2012 Bonds”) that we redeemed prior to their maturity date and a \$270.0 million secured term loan facility (the “February 2013 Secured Term Loan Facility”) that was re-financed prior to its maturity date. No loan refinancing occurred in the year ended December 31, 2018.

Write off of Call Premium and Redemption Charges on 9.0% Senior Unsecured Bond. In connection with a call option under the terms of the 2012 Bonds, pursuant to which we redeemed all of the outstanding principal amount thereof in February 2017, we incurred \$3.5 million in charges for the year ended December 31, 2018 that were written off, consisting of a redemption charge of \$2.5 million and \$1.0 million in interest notice penalty on such bonds prior to maturity.

Income Taxes. Income tax relates to taxes on our subsidiaries incorporated in the United Kingdom, Poland and Singapore. Two of our United Kingdom subsidiaries earn management and other fees from affiliates, and our Singaporean subsidiary earns interest from loans to our variable interest entity in Indonesia, the main corporate tax rates are 19%, 19% and 17% in the United Kingdom, Poland and Singapore, respectively. For the year ended December 31, 2018, we incurred taxes of \$332,890 as compared to taxes for the year ended December 31, 2017 of \$397,381.

Share of result of equity accounted joint venture. The Company’s 50% share of the results of the Export Terminal Joint Venture was a loss of \$0.04 million for the year ended December 31, 2018. There was no charge to the income statement for the year ended December 31, 2017.

B. Liquidity and Capital Resources

Liquidity and Cash Needs

Our primary sources of funds are cash and cash equivalents, cash from operations, undrawn bank borrowings and proceeds from bond issuances. As of December 31, 2019, we had cash, cash equivalents and restricted cash of \$66.1 million along with \$36.0 million available under the March 2019 Terminal Credit Facility to be used solely to pay capital contributions to the Export Terminal Joint Venture. Our secured term loan facilities and revolving credit facilities require that the borrowers have liquidity (including undrawn available lines of credit with a maturity exceeding 12 months) of no less than (i) \$25.0 million or \$35.0 million, or (ii) 5% of Net Debt or total debt as applicable, whichever is greater, which was \$41.2 million, as of December 31, 2019.

Amounts included in restricted cash represent those required to be set aside as collateral by a contractual agreement with a banking institution for the forecast future liability on the cross-currency interest rate swap

agreement at the reporting date. Please read Note 3 (Fair Value of Derivative Instruments) and Note 19 (Cash, Cash Equivalents and Restricted Cash) to the consolidated financial statements. If the Norwegian Kroner depreciates relative to the U.S. Dollar beyond a certain threshold, we are required to place cash collateral with our swap providers. In the event the depreciation of the Norwegian Kroner relative to the U.S. Dollar is significant, the cash collateral requirements could adversely affect our liquidity and financial position. As of December 31, 2019, the collateral amount held with the swap provider was \$1.3 million (December 31, 2018, \$0.2 million).

Included within cash, cash equivalents and restricted cash as of December 31, 2019 is an amount of \$0.8 million relating to the cash belonging to the lessor VIE that we are required to consolidate under U.S. GAAP. We had no lessor VIEs as of December 31, 2018. Please read Note 9 (Variable Interest Entities) to our consolidated financial statements.

Since the balance sheet date, the Covid-19 virus has spread around the world and many governments, have introduced strict measures to limit social contact in order to contain the spread of the virus. The negative effects of the current COVID-19 pandemic are numerous and may reduce the supply of or demand for LPG, petrochemicals and ammonia that we transport for a period or periods longer than we anticipate and the risk that our counter parties may not honour their commitments to us or may seek to renegotiate them. This could negatively affect the charter rates and vessel utilization that we are able to achieve and consequently reduce our cashflow and financial condition.

We also provide cash collateral as security against unrealized losses on our cross-currency interest rate swap and in the event the Norwegian Kroner weakens further against the U.S. dollar, additional cash security will need to be placed into a collateral account, providing less headroom, or causing us to breach our liquidity maintenance covenant. Since the year end, adverse movements in the exchange rate have resulted in the need to deposit significant funds into the collateral account, as of May 7, 2020 \$12.6 million has been deposited. These negative impacts of COVID-19 and the uncertainty related to our potential cash collateral obligations may result in noncompliance of our covenants in our bank and bond loan facilities.

Management have been developing plans to mitigate the potential impacts of the virus and manage its liquidity and covenant compliance, including deferring planned non essential vessel upgrade expenditure, deferring a number of planned dry dockings, reducing non business critical operating expenses,

In addition, to provide additional liquidity, Management is currently in discussion with its lenders to seek amendments to our Terminal Credit Facility to enable the drawdown of up to \$42.5 million immediately rather than waiting for a true up on practical completion at the end of this year. Such an amendment is dependent on a number of factors, such as lender credit committee approval and acceptance by the lenders of recently executed offtake agreements as suitable credit quality. Management are confident its lenders will agree to amend the facility to enable an earlier drawn down. However, there can be no certainty the lenders will agree to a facility amendment.

Further management are also considering other plans to increase liquidity if it should be required including:

- refinancing one or more secured credit facilities to raise additional debt of up to \$82 million;
- raising debt against the Company's four unsecured vessels of up to \$60 million;
- seeking the agreement of its lenders to defer one or more quarterly loan amortization payments of approximately \$17 million per quarter;

The above plans are as of the date of this report yet to be initiated and accordingly whilst Management are confident they will be successful in progressing these options to a successful conclusion, there can be no certainty the Company will be successful in implementing them. It is also possible that in implementing the

above plans, which will increase debt levels and interest costs, that the Company will need to seek an extension of its waiver on its Interest Coverage Ratio. If the above plans are not successful we may also need to seek a waiver of our minimum liquidity covenant from our lenders.

On February 10, 2017, we issued senior unsecured bonds in an aggregate principal amount of \$100.0 million for a period of four years. These bonds mature in full on February 10, 2021 and become repayable on that date. The bonds cannot be repaid from existing cash resources or from cash to be generated from operations prior to the expiry date of the bond. Refinancing this bond is capital markets dependent and although the Company had considered refinancing this bond with a like-for-like bond prior to the virus outbreak, and this remains the Company's preferred plan, because of the current disruption in the capital markets, the Company is evaluating alternative plans in the event the effects of COVID-19 last longer than anticipated. Such considerations include:

- seeking an extension to the maturity of the bond;
- seeking to raise the capital required by a sale and leaseback of up to seven of the Company's vessels which the Company estimates could yield up to \$138 million of additional funding after repaying existing debt facilities which are secured on the Company's vessels; or
- raising alternative debt through a combination of the options set out above under the increasing liquidity discussion.

All of the above options are subject to uncertainty, which is worsened by the many impacts and effects of Covid 19 and whilst management are confident of their ability to successfully conclude one or more of the options being considered, it may not be possible to do so.

Our primary uses of funds are capital contributions for the investment in the Export Terminal Joint Venture, drydocking expenditures, voyage expenses, vessel operating expenses, general and administrative costs, expenditures incurred in connection with ensuring that our vessels comply with international and regulatory standards, financing expenses and repayment of bank loans. In addition to operating expenses, our medium-term and long-term liquidity needs relate to debt repayments, potential future newbuildings or acquisitions and the development of the Marine Export Terminal in our Export Terminal Joint Venture. We are required to maintain certain minimum liquidity amounts in order to comply with our various debt instruments. Please see "—Secured Term Loan Facilities and Revolving Credit Facilities" and "2017 Senior Unsecured Bonds" and "2018 Senior Secured Bonds" below.

As of December 31, 2019, we had made capital contributions to the Export Terminal Joint Venture of \$125.5 million of our expected \$150.0 million share of the capital cost for the construction of the Marine Export Terminal. We expect the remaining \$24.5 million of our share of the capital contributions towards the cost of the construction will be required during 2020 and early 2021.

Capital Expenditures

Liquefied gas transportation is a capital-intensive business, requiring significant investment to maintain an efficient fleet and to stay in regulatory compliance.

We currently have no newbuildings on order. However, we may place newbuilding orders or acquire additional vessels as part of our growth strategy, or may invest further in terminal infrastructures, such as import or export terminals.

Cash Flows

The following table summarizes our cash, cash equivalents and restricted cash provided by (used in) operating, financing and investing activities for the periods presented:

	Year Ended December 31,		
	2017	2018	2019
	(in thousands)		
Net cash provided by operating activities	\$ 75,921	\$ 77,517	\$ 49,700
Net cash used in investing activities	(183,025)	(42,327)	(90,409)
Net cash provided by / (used in) financing activities	111,941	(25,784)	35,324
Net increase / (decrease) in cash, cash equivalents and restricted cash	4,837	9,406	(5,385)

Operating Cash Flows. Net cash provided by operating activities for the year ended December 31, 2019, decreased to \$49.7 million, from \$77.5 million for the year ended December 31, 2018, a decrease of 35.9%. This decrease was due to lower net income of \$11.0, primarily as a result of increases in both vessels operating expenses and interest expense; changes in working capital movements of \$7.7 million and an increase in payments for drydocking costs of \$5.7 million.

Net cash provided by operating activities for the year ended December 31, 2018, increased to \$77.5 million, from \$75.9 million for the year ended December 31, 2017, an increase of 2.0%. This increase was primarily due to changes in working capital movements, reduced by lower net income and payments for dry docking costs.

Net cash flow from operating activities depends upon the size of our fleet, charter rates attainable, fleet utilization, fluctuations in working capital balances, repairs and maintenance activity and changes in interest rates and foreign currency rates.

We are required to drydock each vessel once every five years until it reaches 15 years of age, after which we are required to drydock the applicable vessel every two and a half to three years. Drydocking each vessel takes approximately 20-30 days. Drydocking days generally include approximately 5-10 days of travel time to and from the drydocking shipyard and approximately 15-20 days of actual drydocking time. Nine of our vessels required a scheduled drydocking during 2019 compared to six in 2018 and an expected eleven dry dockings during 2020.

We spend significant amounts of funds on scheduled drydocking (including the cost of classification society surveys) of each of our vessels. As our vessels age and our fleet expands, our drydocking expenses will increase. We estimate the current cost of the five-year drydocking of one of our vessels is approximately \$1.0 million, the ten-year drydocking cost is approximately \$1.3 million, and the 15 and 17 year drydocking costs are approximately \$1.5 million each. Ongoing costs for compliance with environmental regulations are primarily included as part of our drydocking, such as the requirement to install ballast water treatment plants, and classification society survey costs, with a balance included as a component of our operating expenses. Please see “Item 3—Key Information—Risk Factors—Risks Related to Our Business—Over the long-term, we will be required to make substantial capital expenditures to preserve the operating capacity of, and to grow, our fleet.”

Investing Cash Flows. Net cash used in investing activities of \$90.4 million for the year ended December 31, 2019, primarily represents \$84.5 million in capital contributions made to our Export Terminal Joint Venture together with capitalized interest for the investment of \$4.8 million.

Net cash used in investing activities of \$42.3 million for the year ended December 31, 2018, primarily represents \$41.0 million in capital contributions made to our Export Terminal Joint Venture together with associated issuance costs for the investment of \$1.5 million.

Net cash used in investing activities of \$183.0 million for the year ended December 31, 2017, primarily represents \$170.8 million for payments made to Jiangnan Shipyard (Group) Co. Ltd (“Jiangnan”) and Hyundai Mipo Dockyard Co. Ltd (“HMD”), representing installments on the deliveries of *Navigator Nova*, *Navigator Luga*, *Navigator Yauza*, *Navigator Jorf* and *Navigator Prominence* and \$13.5 million of other costs including capitalized interest of \$1.7 million associated with newbuildings offset by \$1.0 million received from insurances payments and \$0.3 million in receipt of a penalty for the delay in delivery of *Navigator Nova*.

Financing Cash Flows. Net cash provided by financing activities of \$35.3 million for the year ended December 31, 2019, relates to the net proceeds of \$69.8 million from the refinancing of *Navigator Aurora* (from which \$44.5 million was used to repay the vessel’s secured tranche of the December 2015 secured revolving credit facility); a drawdown of \$107.0 million on the March 2019 Secured term loan facility (from which \$75.6 million was used to partially repay the January 2015 secured term loan of \$75.6 million); \$55.0 million drawn from the October 2016 revolving credit facility offset by \$69.2 million relating to regular quarterly loan repayments and \$6.5 million issuance costs for a combination of the 2017 Bond amendment, refinancing of *Navigator Aurora*, March 2019 Secured Term Loan, Terminal Credit Facility and 2018 Bonds.

Net cash used in financing activities of \$25.8 million for the year ended December 31, 2018, primarily represents \$83.4 million in regular quarterly loan repayments and a net repayment of \$13.1 million against our secured term revolving credit facility, partially offset by the net proceeds of issuance of senior secured bonds for \$70.7 million.

Net cash provided by financing activities of \$111.9 million for the year ended December 31, 2017, primarily represents \$208.2 million drawn from secured term loan and revolving credit facilities to partially finance the delivery installments of *Navigator Nova*, *Navigator Luga*, *Navigator Yauza*, *Navigator Jorf* and *Navigator Prominence* as well as for general corporate purposes and a further \$167.0 million drawn for refinancing an existing facility and for general corporate purposes. These inflows were partially offset by the repayment of a net \$27.5 million in our bonds being the difference between our issuance of \$100.0 million in aggregate principal amount of our 2017 Bonds less the repayment of \$127.5 million in outstanding principal and redemption premium of our 2012 Bonds. In addition, \$143.1 million was used to redeem the February 2013 Secured Term Loan Facility; \$88.8 million was repaid in regular quarterly loan repayments and refinancing costs of \$3.9 million on our bond and bank loan refinanced during 2017.

Terminal Facility

General. On March 29, 2019, Navigator Ethylene Terminals LLC (“Marine Terminal Borrower”), our wholly-owned subsidiary, entered into a Credit Agreement (the “Terminal Facility”) with ING Capital LLC and SG Americas Securities, LLC for a maximum principal amount of \$75.0 million, to be used solely for the payment of project costs relating to our Marine Export Terminal, as summarized in the table below.

Term and Facility Limits; Conditions to Initial Borrowing. The Terminal Facility is comprised of an initial construction loan, followed by a term loan with a final maturity occurring on the earlier of (i) five years from completion of the Marine Export Terminal and (ii) December 31, 2025. Initial borrowing under the Terminal Facility may only occur after the Marine Terminal Borrower has made equity contributions required under the terminal facility to the Export Terminal Joint Venture, which together with available borrowings under the Terminal Facility, will fund its entire portion of the capital cost for the construction of the Marine Export Terminal. In addition, the ability of the Marine Terminal Borrower to borrow under the Terminal Facility is subject to the satisfaction of certain conditions. There can be no assurance that all conditions to borrowing will be satisfied.

The table below summarizes the Terminal Facility as of December 31, 2019:

<u>Facility agreement date</u>	<u>Original Facility amount</u>	<u>Principal Amount outstanding</u> (in millions)	<u>Amounts available for drawdown at December 31, 2019</u>	<u>Interest rate</u>	<u>Loan Maturity date</u>
March 2019	\$75.0	—	36.0*	US LIBOR + 250 to 300 BPS	December 2025**

* Initial borrowing under the Terminal Facility may only occur after the Marine Terminal Borrower has made equity contributions required under the Terminal Facility to the Export Terminal Joint Venture, which together with available borrowings under the Terminal Facility, will fund its entire portion of the capital cost for the construction of the Marine Export Terminal.

** The Terminal Facility is comprised of an initial construction loan, followed by a term loan with a final maturity occurring on the earlier of (i) five years from completion of the Marine Export Terminal and (ii) December 31, 2025.

As of December 31, 2019, based on the existing committed throughput for the Marine Export Terminal and subject to the satisfaction of certain conditions to the ability to borrow under the Terminal Facility, \$36.0 million would have been available to be drawn down under this Credit Agreement. Available amounts are expected to increase as additional throughput agreements are committed.

Fees and Interest. The loans are subject to quarterly repayments of principal and interest beginning three months after the completion of the Marine Export Terminal. Interest on amounts drawn is payable at a rate of U.S. LIBOR plus 250 to 300 basis points per annum over the term of the facility, for interest periods of three or six months.

Prepayments/Repayments. The Marine Terminal Borrower may voluntarily prepay indebtedness at any time, without premium or penalty, in whole or in part upon prior written notice to the facility agent, provided that any partial prepayments prior to the completion of the Marine Export Terminal are subject to confirmation by an independent engineer that, after giving effect to such prepayments, the funds committed to project costs relating to the Marine Export Terminal are sufficient to pay the estimated remaining project costs and achieve the completion of the Marine Export Terminal by December 31, 2020.

The Marine Terminal Borrower must make mandatory prepayments of indebtedness upon specified amounts of excess cash flow, the receipt of performance liquidated damages pursuant to certain material contracts related to the Marine Export Terminal, the receipt of proceeds in connection with an event of loss (as defined in the Terminal Facility), the receipt of proceeds in connection with termination payments (as defined in the Terminal Facility), the receipt of proceeds in connection with certain dispositions by the Marine Terminal Joint Venture, the incurrence of certain specified indebtedness, the inability to meet the conditions for paying a dividend for four or more consecutive quarters, dispositions of the Marine Terminal Borrower's equity interests in the Marine Terminal Joint Venture, the receipt of indemnity payments in excess of \$500,000 and certain amounts of any loans outstanding upon the conversion date.

Financial Covenants. Under the Terminal Facility, the Marine Terminal Borrower must maintain a minimum debt service coverage ratio (as defined in the Terminal Facility) for the prior four calendar fiscal quarters (or shorter period of time if data for the prior four fiscal quarters is not available) of no less than 1.10 to 1.00 from the beginning of the second full fiscal quarter of the term loan.

Restrictive Covenants. Following completion of the Marine Export Terminal, the Marine Terminal Borrower can only pay dividends if the Marine Terminal Borrower satisfies certain customary conditions to paying a dividend, including maintaining a debt service coverage ratio for the immediately preceding four consecutive fiscal quarters and the projected immediately succeeding four consecutive fiscal quarters of not less than 1.20 to 1.00 and no default or event of default has occurred or is continuing. The Terminal Facility also

limits the Marine Terminal Borrower from, among other things, incurring indebtedness or entering into mergers and divestitures. The Terminal Facility also contains general covenants that will require the Marine Terminal Borrower to vote its interest in the Marine Terminal Joint Venture to cause the Marine Terminal Joint Venture to maintain adequate insurance coverage, complete the Marine Export Terminal and maintain its property (but only to the extent the Marine Terminal Borrower has the power under the organizational documents of the Marine Terminal Joint Venture to so cause such actions).

The Terminal Facility includes events of default for the failure to achieve the completion of the Marine Export Terminal by December 31, 2020, the abandonment of all or substantially all activities relating to the Marine Export Terminal for 90 consecutive days and if certain material contracts relating to the Marine Export Terminal are terminated, as well as customary events of default including those relating to a failure to pay principal or interest, a breach of covenant, representation or warranty, a cross-default to other indebtedness and non-compliance with security documents.

Security. The loans under the Terminal Facility are secured by first priority liens on the rights to the Marine Terminal Borrower’s distributions from the Marine Terminal Joint Venture, the Marine Terminal Borrower’s assets and properties and the company’s equity interests in the Marine Terminal Borrower.

Secured Term Loan Facilities and Revolving Credit Facilities

General. Navigator Gas L.L.C., our wholly-owned subsidiary, and certain of our vessel-owning subsidiaries have entered into a series of secured term loan facilities and revolving credit facilities beginning in January 2015, or the “January 2015 secured term loan facility,” and in December 2015 or the “December 2015 secured revolving credit facility,” and in October 2016, or the “October 2016 secured term loan and revolving credit facility” and in June 2017, or the “June 2017 secured term loan and revolving credit facility” and in March 2019, or the “March 2019 secured term loan facility”. Collectively, we refer to the debt thereunder as our “secured facilities.” Proceeds of the loans under our secured facilities are used to finance newbuildings, acquisitions and for general corporate purposes. The full commitment amounts have been drawn under all of the facilities. Please read Note 10 (Secured Term Loan Facilities and Revolving Credit Facilities) to the consolidated financial statements.

The table below summarizes our secured term loan and revolving credit facilities as of December 31, 2019:

<u>Facility agreement date</u>	<u>Original facility amount</u>	<u>Principal amount outstanding</u>	<u>Interest rate</u>	<u>Loan maturity date</u>
January 2015*	278.1	111.3	US Libor + 270 BPS	March 2022—April 2023
December 2015	290.0	186.8	US Libor + 210 BPS	December 2022
October 2016	220.0	130.9	US Libor + 260 BPS	November 2023
June 2017	160.8	119.6	US Libor + 230 BPS	June 2023
March 2019	107.0	100.1	US Libor + 240 BPS	March 2025
October 2019**	69.1	68.2	US Libor + 185 BPS	October 2026
Total	\$1,125.0	\$716.9		

* The January 2015 facility tranches mature over a range of dates, from March 2022 to April 2023.

** The October 2019 loan facility relates to the Navigator Aurora Facility held within a lessor entity (for which legal ownership resides with financial institutions) that we are required to consolidate under U.S. GAAP into our financial statements as a variable interest entity (Please read Note 9 (Variable Interest Entities) to our consolidated financial statements).

Fees and Interest. We paid arrangement and agency fees at the time of the closing of our secured term loan and revolving credit facilities. Agency fees are due annually. Interest on amounts drawn is payable at a rate of U.S. LIBOR plus a bank margin, for interest periods of one, three or six months or longer if agreed by all lenders.

Term and Facility Limits

January 2015 Secured Term Loan Facility. The January 2015 secured term loan facility was entered into to refinance an April 2013 secured term loan facility, as well as to provide financing for nine of our vessels. The January 2015 secured term loan facility has a term of up to seven years from the individual vessel loan drawdown date with a maximum principal amount of up to \$278.1 million. The facility is fully drawn. The aggregate fair market value of the collateral vessels must be no less than 135% of the aggregate outstanding borrowings under the facility. Interest on amounts drawn is payable at a rate of U.S. LIBOR plus 270 basis points per annum.

December 2015 Secured Revolving Credit Facility. The December 2015 secured revolving credit facility was entered into to provide financing for six of our vessels and has a term of seven years from the loan arrangement date (and will expire in December 2022) with a maximum principal amount of up to \$290.0 million available on a revolving basis. The facility is fully drawn. The aggregate fair market value of the collateral vessels must be no less than 125% of the aggregate outstanding borrowings under the facility. The facility is currently fully drawn. Interest on amounts drawn is payable at a rate of U.S. LIBOR plus 210 basis points per annum. Following the October 2019 sale and leaseback transaction with respect to *Navigator Aurora* and the use of the proceeds therefrom to refinance the vessel's secured tranche of the December 2015 secured revolving credit facility, five of our vessels remain financed under this facility.

October 2016 Secured Term Loan and Revolving Credit Facility. The October 2016 secured term loan and revolving credit facility has a term of seven years from the first utilization date (and will expire in November 2023) with a maximum principal amount of up to \$220.0 million of which \$130.0 million is available as a secured term loan and \$55.0 million is available as a revolving credit facility. The facility is currently fully drawn. The aggregate fair market value of the collateral vessels must be no less than 125% of the aggregate outstanding borrowings under the facility. Interest on amounts drawn is payable at a rate of U.S. LIBOR plus 260 basis points per annum.

June 2017 Secured Term Loan and Revolving Credit Facility. The June 2017 secured term loan and revolving credit facility has a term of six years from the date of the agreement and expires in June 2023, with a maximum principal amount of \$160.8 million and was entered into to re-finance the February 2013 Secured Term Loan Facility and for general corporate purposes. The facility has \$100.0 million as a secured term loan and \$60.8 million available as a revolving credit facility. The facility is currently fully drawn. The aggregate fair market value of the collateral vessels must be no less than 125% of the aggregate outstanding borrowing under the facility. Interest on amounts drawn is payable at a rate of U.S. LIBOR plus 230 basis points per annum.

March 2019 Secured Term Loan. On March 25, 2019 the Company entered into a secured term loan with Credit Agricole Corporate and Investment Bank, ING Bank, a branch of ING-DIBA AG and Skandinaviska Enskilda Banken AB (Publ.) for a maximum principal amount of \$107.0 million (the "March 2019 Secured Term Loan"), to re-finance four of our vessels that were secured within our January 2015 secured term loan facility and that were due to mature from June 2020. The full amount of \$107.0 million was drawn on March 28, 2019. The repayment of the loan on the four vessels was \$75.6 million, leaving net proceeds of \$31.4 million for general corporate purposes. The facility has a term of six years from the date of the agreement and expires in March 2025. Under this agreement, the aggregate fair market value of the collateral vessels must be no less than 130% of the aggregate outstanding borrowing under the facility. Interest on amounts drawn is payable at a rate of U.S. LIBOR plus 240 basis points per annum.

Prepayments/Repayments. The borrowers may voluntarily prepay indebtedness under our secured term loan facilities at any time, without premium or penalty, in whole or in part upon prior written notice to the facility agent, subject to customary compensation for LIBOR breakage costs. For the January 2015 and the March 2019 secured term loan facilities referred to above, the borrowers may not re-borrow any amount that has been so prepaid. For the December 2015 revolving credit facility and the revolving elements of both the October 2016 and June 2017 secured term loan and revolving credit facilities, the borrowers may re-borrow and prepay amounts.

The loans are subject to quarterly amortization repayments beginning three months after the initial borrowing date or delivery dates of the newbuildings or delivered ships, as applicable. Any remaining outstanding principal amount must be repaid on the expiration date of the facilities.

The borrowers are also required to deliver semi-annual compliance certificates, which include valuations of the vessels securing the applicable facility from an independent ship broker. Upon delivery of the valuation, if the market value of the collateral vessels is less than 125% to 135% of the outstanding indebtedness under the facilities, as applicable, the borrowers must either provide additional collateral or repay any amount in excess of 125% to 135% of the market value of the collateral vessels, as applicable. This covenant is measured semi-annually on June 30 and December 31. As of December 31, 2019, we had an aggregate excess of \$369.3 million above the levels required by these covenants, in addition to four additional vessels that are unsecured.

On June 29, 2018 the Company obtained approval to amend one of the covenants in each of its then secured term loan and revolving credit facilities. The covenant, requiring the ratio of Earnings before Interest, Tax, Depreciation and Amortization (“EBITDA”) to be at least two and a half times or three times interest has been amended to a requirement of two times interest, up to and including September 30, 2020, before then reverting back to the original requirements of two and a half times or three times interest, dependent upon the facility. In addition, the definition of interest under these facilities now excludes interest due or payable relating to debt financing obtained by the Company in relation to its obligations associated with the construction of the Marine Export Terminal.

Under the terms of these amendments, dividends may not be declared or paid by the Company until on or after December 31, 2020.

Financial Covenants. The secured term loan facilities and revolving credit facilities contain financial covenants requiring the borrowers, among other things, to ensure that:

- the borrowers have liquidity (including undrawn available lines of credit with a maturity exceeding 12 months) of no less than (i) \$25.0 or \$35.0 million, or (ii) 5% of Net Debt or total debt, as applicable, whichever is greater;
- the ratio of EBITDA to Interest Expense (each as defined in the applicable secured term loan facility and revolving credit facility or as amended), on a trailing four quarter basis, is no less than 2.00 to 1.00, until September 30, 2020 and no less than 2.50 to 1.00 or 3.00 to 1.00 thereafter; and
- the borrower must maintain a minimum ratio of shareholder equity to total assets of 30%;

Restrictive Covenants. The secured facilities provide that the borrowers may not declare or pay dividends to shareholders out of operating revenues generated by the vessels securing the indebtedness until December 31, 2020 or thereafter, if an event of default has occurred or is continuing. The secured term loan facilities and revolving credit facilities also limit the borrowers from, among other things, incurring indebtedness or entering into mergers and divestitures. The secured facilities also contain general covenants that will require the borrowers to maintain adequate insurance coverage and to maintain their vessels. In addition, the secured term loan facilities include customary events of default, including those relating to a failure to pay principal or interest, a breach of covenant, representation and warranty, a cross-default to other indebtedness and non-compliance with security documents.

As of December 31, 2018, and 2019, we were in compliance with all covenants under the secured term loan facilities and revolving credit facilities, including with respect to the aggregate fair market value of our collateral vessels.

2017 Senior Unsecured Bonds

General. On February 10, 2017, we issued senior unsecured bonds in an aggregate principal amount of \$100.0 million with Nordic Trustee AS as the bond trustee (the “2017 Bonds”). The net proceeds of the issuance

of the 2017 Bonds, together with cash on hand, were used to redeem in full all of our outstanding 2012 Bonds. The bond agreement governing the 2017 Bonds (as amended by the 2017 Bonds Amendment described below, the “2017 Bond Agreement”) has the option to issue additional bonds up to maximum issue amount of a further \$100.0 million, at identical terms as the original bond issue, except that additional bonds may be issued at a different price. The 2017 Bonds are governed by Norwegian law and listed on the Nordic ABM which is operated and organized by Oslo Børs ASA. Please read Note 12 (Senior Unsecured Bond) to the consolidated financial statements.

On September 30, 2019 the Company entered into the 2017 Bonds Amendment, with the bondholders’ approval, to amend one of the covenants in the 2017 Bonds. The covenant, requiring our interest coverage ratio, on a trailing four quarter basis, to be no less than 2.25 to 1.00 was amended to be a requirement of no less than 2.00 to 1.00, in line with a similar covenant in our secured term loan facilities and revolving credit facilities. In addition, the definition of interest under the 2017 Bonds now excludes interest due or payable relating to debt financing associated with our obligations on the construction of the Marine Export Terminal. In accordance with the terms of the 2017 Bonds Amendment, dividends may not be declared or paid by the Company until on or after December 31, 2020. An amendment fee and corporate fees associated with obtaining the 2017 Bonds Amendment of \$1.3 million have been deferred and are being amortized over the period the amendment is in force.

Interest. Interest on the 2017 Bonds is payable at a fixed rate of 7.75% per annum, calculated on a 360-day year basis. Interest is payable semi-annually on August 10 and February 10 of each year.

Optional Redemption. We may redeem the 2017 Bonds, in whole or in part at 101.9375% of par until August 11, 2020 when the 2017 Bonds will be redeemable at 100% of par, in each case, in cash plus accrued interest.

Maturity. The 2017 Bonds mature in full on February 10, 2021 and become repayable on that date. The bonds cannot be repaid from existing cash resources or from cash to be generated from operations prior to the expiry date of the bond. Refinancing the bond is capital markets dependent and although the Company had considered refinancing this bond with a like-for-like bond prior to the virus outbreak, and this remains the Company’s preferred plan, because of the current disruption in the capital markets, the Company is evaluating alternative plans in the event the effects of COVID-19 last longer than anticipated. Such considerations include seeking an extension to the maturity of the bond, seeking to raise the capital by a sale and leaseback of a number of the Company’s vessels or raising alternative debt on a number of currently unsecured vessels.

Additionally, upon the occurrence of a “Change of Control Event” (as defined in the 2017 Bond Agreement), the holders of 2017 Bonds have an option to require us to repay such holders’ outstanding principal amount of 2017 Bonds at 101% of par, plus accrued interest.

Financial Covenants. The 2017 Bond Agreement contains financial covenants requiring us, among other things, to ensure that:

- we and our subsidiaries maintain a minimum liquidity of no less than \$25.0 million;
- we and our subsidiaries maintain an Interest Coverage Ratio (as defined in the 2017 Bond Agreement) of not less than 2.0 to 1.0; and
- we and our subsidiaries maintain an Equity Ratio (as defined in the amended 2017 Bond Agreement) of at least 30%.

Our compliance with the covenants listed above is measured as of the end of each fiscal quarter. As of December 31, 2019, we were in compliance with all covenants under the 2017 Bonds.

Restrictive Covenants. The amendment obtained on September 30, 2019 for the 2017 Bonds provides that we may not declare or pay dividends to shareholders until December 31, 2020 or, thereafter if an event of default has

occurred or is continuing. The 2017 Bond Agreement also limits us and our subsidiaries from, among other things, entering into mergers and divestitures, engaging in transactions with affiliates or incurring any additional liens which would have a material adverse effect. In addition, the 2017 Bond Agreement includes customary events of default, including those relating to a failure to pay principal or interest, a breach of covenant, false representation and warranty, a cross-default to other indebtedness, the occurrence of a material adverse effect, or our insolvency or dissolution.

2018 Senior Secured Bonds

General. On November 2, 2018, we issued senior secured bonds in an aggregate principal amount of 600 million Norwegian Kroner (“NOK”) (approximately \$71.7 million) with Nordic Trustee AS, as bond trustee and security agent (the “2018 Bonds”). The net proceeds are being used to partially finance our portion of the capital cost for the construction of the Marine Export Terminal. The 2018 Bonds are governed by Norwegian law and are listed on the Nordic ABM which is operated and organized by Oslo Børs ASA. Please read Note 11 (Senior Secured Bond) to the consolidated financial statements.

Security. The 2018 Bonds are secured by four of the Company’s ethylene capable semi-refrigerated liquefied gas carriers.

Interest. Interest on the 2018 Bonds is payable quarterly at a rate equal to the 3-month NIBOR plus 6.0% per annum, calculated on a 360-day year basis. We have entered into a cross-currency interest rate swap agreement whereby interest is payable at a rate equal to the 3-month LIBOR plus 6.608% throughout the life of the bond. Please read Note 3 (Fair Value of Derivative Instruments) to the consolidated financial statements.

Maturity. The 2018 Bonds will mature in full on November 2, 2023.

Optional Redemption. We may redeem the 2018 Bonds, in whole or in part, at any time beginning on or after November 2, 2021. Any 2018 Bonds redeemed from November 2, 2021 until November 1, 2022, are redeemable at 102.4% of par, from November 2, 2022 until May 1, 2023, are redeemable at 101.5% of par, and from May 2, 2023 to the maturity date are redeemable at 100% of par, in each case, in cash plus accrued interest.

Additionally, upon the occurrence of a “Change of Control Event” (as defined in the bond agreement governing the 2018 Bonds (the “2018 Bond Agreement”)), the holders of 2018 Bonds have an option to require us to repay such holders’ outstanding principal amount of 2018 Bonds at 101% of par, plus accrued interest.

Financial Covenants. The 2018 Bond Agreement contains financial covenants requiring us, among other things, to ensure that:

- we and our subsidiaries maintain a minimum liquidity of no less than \$25.0 million; and
- we and our subsidiaries maintain an Equity Ratio of at least 30%.

Our compliance with the covenants listed above is measured as of the end of each fiscal quarter. As of December 31, 2019, we were in compliance with all covenants under the 2018 Bonds.

Restrictive Covenants. The 2018 Bond Agreement provides that we may declare dividends so long as such dividends do not exceed 50% of our cumulative consolidated net profits after taxes since January 1, 2020, payable at the earliest from January 1, 2021. The 2018 Bond Agreement also limits us and our subsidiaries from, among other things, entering into mergers and divestitures, engaging in transactions with affiliates or incurring any additional liens which would have a material adverse effect. In addition, the 2018 Bond Agreement includes a put option exercisable following a change of control and customary events of default, including those relating to a failure to pay principal or interest, a breach of covenant, false representation and warranty, a cross-default to other indebtedness, the occurrence of a material adverse effect, or our insolvency or dissolution.

Lessor VIE Debt

In October 2019, we entered into a sale and leaseback transaction to refinance one of our vessels, *Navigator Aurora*, with a lessor, OCY Aurora Ltd, which is a newly formed special purpose vehicle (“SPV”) and wholly-owned subsidiary of Ocean Yield Malta Limited. The SPV was determined to be a variable interest entity (“VIE”). We are deemed to be the primary beneficiary of the VIE, and as a result, we are required by U.S. GAAP to consolidate the SPV into our results. The loan described below under “—Navigator Aurora Facility” relates to the VIE. Although we have no control over the funding arrangements of this entity, we are required to consolidate these loan facilities into our financial results. Please read note 9 (Variable Interest Entities) to our consolidated financial statements for further information.

Upon the occurrence of a “Change of Control Event” (as defined in the sale and leaseback agreement), the lessor has an option to require us to repurchase *Navigator Aurora* at 103% of the outstanding lease amount, plus costs and expenses directly attributable to the termination of the lessor’s financing arrangements, such as break costs for swap arrangements.

Navigator Aurora Facility

In October 2019, the SPV, which owns *Navigator Aurora*, entered into secured financing agreements for \$69.1 million consisting of a USD denominated loan facility, the “Navigator Aurora Facility”. The Navigator Aurora Facility is a seven year unsecured loan provided by OCY Malta Limited, the parent of OCY Aurora Ltd., The Navigator Aurora Facility is subordinated to a further bank loan where OCY Aurora Ltd is the guarantor and *Navigator Aurora* is pledged as security. The Navigator Aurora Facility bears interest at 3 month U.S. LIBOR plus a margin of 185 basis points and is repayable by the SPV with a balloon payment on maturity. As of December 31, 2019, there was \$68.1 million in borrowings outstanding under the Navigator Aurora Facility.

C. Research and Development Patents and Licenses etc.

We do not undertake any significant expenditure on research and development and have no significant interests in patents or licenses.

D. Trend Information

The supply of LPG for seaborne export markets are most likely flatlining during 2020 from a high of 105 million metric tons shipped in 2019. The previously forecasted growth scenario has been softening due to the effect of the COVID-19 pandemic and its subsequent impact on capital allocation for the upstream exploration and production sector. The industry is expecting a return to growth for the availability of export volumes of LPG from 2021 onwards, although the extent to which COVID-19 will impact the industry will depend on future developments, which are highly uncertain, including the severity of COVID-19 and the actions undertaken to contain its impact. An accurate prediction of its impact therefore cannot be accurately made at this time. U.S. LPG exports of nearly 40 million metric tons in 2019 overtook the Middle East region for the first time and we expect the U.S. to continue to play an important role in the global LPG supply demand balances.

The demand for LPG is concentrated to domestic consumption and for the petrochemical industry. We expect that the former demand centre is somewhat resilient to COVID-19 as the fundamental need for heating and cooking energy among the world population remains in place, if not increasing as a result of the virus outbreak, as more of the world’s population stay at home. Most of the transportation need for handysize LPG caters for this source of demand and we expect the traditional intra-continent handysize LPG trades to remain largely unaffected. The latter demand centre typically has the capability to switch between the type of feedstock that each petrochemical facility can consume. Therefore if naphtha is more economical compared to LPG, or vice versa, the petrochemical industry will shift its feedstock consumption accordingly which in turn affects the

demand situation for naphtha or LPG. COVID-19 has softened global demand for petrochemical products that typically goes into consumer goods, car manufacturing and other plastic products, and combined with lower naphtha prices, are impacting LPG demand. This part of the LPG demand is typically linked to the trades of Very Large Gas Carriers as opposed to the smaller vessels. However, when petrochemical crackers use naphtha as opposed to LPG, the C4 product yield will increase, and production such as butadiene will increase. Handysize vessels are traditionally employed for such trades balancing the supply demand fluctuations between continents. Petrochemical producers and consumers are increasingly accommodating larger size parcels of propylene, butadiene, ethylene and other petrochemical liquid gases, due to increases with the geographical distance between the producing and consuming regions, thus providing economic advantage compared to transporting smaller quantities.

We see European and American exports particularly motivating the upsizing of cargo-sizes as the main consuming countries are located East of Suez Canal.

Charter rates and vessel values are influenced by the supply and demand for seaborne gas cargo carrying capacity and are consequently volatile. The supply of gas carrier capacity is primarily a function of the size of the existing world fleet, the number of newbuildings being delivered and the scrapping of older vessels. The world fleet of handysized liquefied gas carriers has increased steadily over the past ten years totaling 119 vessels as of December 31, 2019, with five vessels on order. The segment has accommodated 40 new vessels during the period between 2015-2019 and the newbuilding cycle has now dramatically reduced. Demolition, scrapping or recycling vessels is largely a function of vessel age, as all ships have finite lives and the profitability of the relevant shipping segment. There was only one handysize vessel recycled in 2019.

With regard to the supply side aspects of LPG production, the collapse in the demand for oil and refined products due to recession and lack of consumption of key products such as aircraft fuel and an increasing lack of storage capacity for refined products may lead to refineries needing to substantially reduce operating rates or at worst case cease production. Approximately one third of global LPG production originates from refineries, the other two thirds from gas processing from liquid rich natural gas fields and from shale gas production, which currently appears to be uninterrupted by the effects of COVID-19. However, reduced power consumption caused by lockdowns and closures of production facilities could weaken demand for natural gas and therefore LPG production. Any reduction in supply of LPG could reduce demand for the company's vessels.

E. Off-Balance Sheet Arrangements

We currently do not have any off-balance sheet arrangements.

F. Tabular Disclosure of Contractual Obligations

The contractual obligations schedule set forth below summarizes our contractual obligations as of December 31, 2019.

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>Thereafter</u>	<u>Total</u>
	(in thousands)							
Marine Export Terminal capital contributions	17,100	7,400	—	—	—	—	—	24,500
Secured term loan facilities and revolving credit facilities	66,534	66,534	259,053	193,078	9,150	54,387	—	648,736
2017 Bonds	—	100,000	—	—	—	—	—	100,000
2018 Bonds	—	—	—	71,697	—	—	—	71,697
Office operating leases**	1,534	1,534	249	—	—	—	—	3,317
Navigator Aurora Facility*	—	—	—	—	—	—	68,206	68,206
Total contractual obligations	<u>\$85,168</u>	<u>\$175,468</u>	<u>\$259,302</u>	<u>\$264,775</u>	<u>\$9,150</u>	<u>\$54,387</u>	<u>\$68,206</u>	<u>\$916,456</u>

- * The Navigator Aurora Facility is a loan facility held within a lessor entity (for which legal ownership resides with financial institutions) that we are required to consolidate under U.S. GAAP into our financial statements as a variable interest entity (Please read Note 9 (Variable Interest Entities) to our consolidated financial statements.
- ** The Company occupies office space in London with a lease that commenced in January 2017 for a period of 10 years with a mutual break option in January 2022, which is the fifth anniversary from the lease commencement date. This break option is recognized in the table above but has not been included as part of the right-of-use asset and lease liability associated with the lease. Please read Note 21 (Operating Lease Liabilities) to our consolidated financial statements.

As part of our growth strategy, we will continue to consider strategic opportunities, including the acquisition of additional vessels. We may choose to pursue such opportunities through internal growth or joint ventures or business acquisitions. We intend to finance any future acquisitions through various sources of capital, including credit facilities, debt borrowings and the issuance of additional shares of common stock.

G. Safe Harbor

See “Cautionary Statement Regarding Forward Looking Statements” at the beginning of this annual report.

Critical Accounting Estimates

We prepare our consolidated financial statements in accordance with U.S. GAAP, which requires us to make estimates in the application of our accounting policies based on our best assumptions, judgments and opinions. On a regular basis, management reviews the accounting policies, assumptions, estimates and judgments to ensure that our consolidated financial statements are presented fairly and in accordance with U.S. GAAP. However, because future events and their effects cannot be determined with certainty, actual results could differ from our assumptions and estimates, and such differences could be material. For a description of our material accounting policies, please read Note 2 (Summary of Significant Accounting Policies) to the consolidated financial statements.

Going Concern. Since the balance sheet date, the Covid-19 virus has spread around the world and many governments, have introduced strict measures to limit social contact in order to contain the spread of the virus. The negative effects of the current COVID-19 pandemic are numerous and may reduce demand for LPG, petrochemicals and ammonia that we transport for a period or periods longer than we anticipate and the risk that our counter parties may not honour their commitments to us or may seek to renegotiate them. This could negatively affect the charter rates and vessel utilization that we are able to achieve and consequently reduce our cashflow and financial condition.

We also provide cash collateral as security against unrealized losses on our cross-currency interest rate swap and in the event the Norwegian Kroner weakens further against the U.S. dollar, additional cash security will need to be placed into a collateral account, providing less headroom, or causing us to breach our liquidity maintenance covenant. Since the year end, adverse movements in the exchange rate have resulted in the need to deposit significant funds into the collateral account, as of the date of May 7, 2020 \$12.6 million has been deposited. The negative impacts of COVID-19 and the uncertainty related to our potential cash collateral obligations may result in noncompliance of our minimum liquidity and interest coverage ratio covenants in our bank and bond loan facilities. This raises substantial doubt about the Company’s ability to continue as a going concern.

Management have been developing plans to mitigate the potential impacts of the virus and manage its liquidity and covenant compliance, including deferring planned non essential vessel upgrade expenditure, deferring a number of planned dry dockings, reducing non business critical operating expenses

In addition, to provide additional liquidity Management is currently in discussion with its lenders to seek amendments to our Terminal Credit Facility to enable the drawdown of up to \$42.5 million immediately rather

than waiting for a true up on practical completion at the end of this year. Such an amendment is dependent on a number of factors, such as lender credit committee approval and acceptance by the lenders of recently executed offtake agreements as suitable credit quality. Management are confident its lenders will agree to amend the facility to enable an earlier drawn down. However, there can be no certainty the lenders will agree to a facility amendment.

Further management are also considering other plans to increase liquidity if it should be required including:

- refinancing one or more secured credit facilities to raise additional debt of up to \$82 million;
- raising debt against the Company's four unsecured vessels of up to \$60 million;
- seeking the agreement of its lenders to defer one or more quarterly loan amortization payments of approximately \$17 million per quarter;

The above plans are as of the date of this report yet to be initiated and accordingly whilst Management are confident they will be successful in progressing these options to a successful conclusion, there can be no certainty the Company will be successful in implementing them. It is also possible that in implementing the above plans, which will increase debt levels and interest costs, that the Company will need to seek an extension of its waiver on its Interest Coverage Ratio. If the above plans are not successful we may also need to seek a waiver of our minimum liquidity covenant from our lenders.

On February 10, 2017, we issued senior unsecured bonds in an aggregate principal amount of \$100.0 million for a period of four years. These bonds mature in full on February 10, 2021 and become repayable on that date. The bonds cannot be repaid from existing cash resources or from cash to be generated from operations prior to the expiry date of the bond. This raises substantial doubt about the Company's ability to continue as a going concern. Refinancing this bond is capital markets dependent and although the Company had considered refinancing this bond with a like-for-like bond prior to the COVID-19 outbreak, and this remains the Company's preferred plan. Due to the current disruption in the capital markets, the Company is evaluating alternatives in the event the effects of COVID-19 last longer than the anticipated timescale. Such considerations include:

- seeking an extension to the maturity of the bond;
- seeking to raise the capital required by a sale and leaseback of up to seven of the Company's vessels which the Company estimates could yield up to \$138 million of additional funding after repaying existing debt facilities which are secured on the Company's vessels; or
- raising alternative debt through a combination of the options set out above under the increasing liquidity discussion.

All of the above options are subject to uncertainty, which is worsened by the many impacts and effects of Covid 19 and whilst management are confident of their ability to successfully conclude one or more of the options being considered, it may not be possible to do so.

Accordingly, there is substantial doubt that the Company will be able to pay its obligations as they fall due, and this substantial doubt is not alleviated by management plans.

The consolidated financial statements as of December 31, 2019 have been prepared assuming that the Company will continue as a going concern. Accordingly, the consolidated financial statements do not include any adjustments to the amounts and classification of assets and liabilities that may be necessary should the Company be unable to continue as a going concern.

Revenue Recognition. We employ our vessels under time charters, voyage charters or COAs. With time charters, we receive a fixed charter rate per on-hire day and revenue is recognized ratably over the term of the charter. Time charters are considered operating leases and since January 1, 2019 we apply revenue recognition

guidance in ASC 842 following the adoption of that standard. In addition, the Company has performed a qualitative analysis of each of its time charter contracts and concluded that the lease component is the predominant component as the lessee would attribute most value to the ability to direct the use of the vessel rather than to the technical and crewing services to operate the vessel which are add-on services to the lessee. Accordingly, revenue from vessels under time charters are presented as a single lease component.

For each year presented prior to January 1, 2019, we recognized revenue for time charters under the previous leasing standard, ASC 840, and recorded operating lease revenue over the term of the charter as the service was provided.

In the case of voyage charters, the vessel is contracted for a voyage between two or several ports, and we are paid for the cargo transported. Revenue from COAs is recognized on the same basis as revenue from voyage charters, as they are essentially a series of consecutive voyage charters. Since January 1, 2018, following adoption of ASU No. 2014-09, Revenue from Contracts with Customers, our basis for revenue recognition for voyage charters and COA's has changed to recognize revenue on a load to discharge basis. (See Note 2(a) (Basis of Presentation) within the consolidated financial statements). Previously, we recognized revenue on a discharge-to-discharge basis in determining the percentage of completion for all voyage charters, but did not begin recognizing revenue until a charter had been agreed, even if the vessel had discharged its prior cargo and was sailing to the anticipated load port for its next voyage.

Impairment of Equity Method Investment. The equity method investment is reviewed for indicators of impairment when events or circumstances indicate the carrying amount of the investment may not be recoverable. When such indicators are present, we determine if the indicators are 'other than temporary' to determine if an impairment exists. If we determine that an impairment exists, a discounted cash flow analysis is carried out based on the future cash flows expected to be generated over the investment's estimated remaining useful life. The resulting net present value is compared to the carrying value and we would recognize an impairment loss equal to the amount by which the carrying amount exceeds its fair value.

Considerations in identifying if indicators of impairment are present for the equity method investment include significant incidents that have resulted in the forecast future operating cash flows to be amended, such as significant market events that impact the terminal operations and cashflow, physical damage to assets, recurring financial losses for consecutive periods or changes to the Company's equity holding in the investment. As of December 31, 2019, the aggregate carrying value of our investment in the Export Terminal Joint Venture was \$130.7 million. Although management believes that the assumptions used to evaluate potential impairment are reasonable and appropriate at the time they were made, such assumptions are highly subjective and likely to change, possibly materially, in the future. We believe that there are no events or circumstances that indicate that the value of the investment in the Export Terminal Joint Venture should be impaired as of December 31, 2019.

Our joint venture partner, and operator of the terminal have a robust business continuity process in place following CDC guidance and have adapted their existing HSE policy following the outbreak of COVID-19. They team onsite adhere to social distancing procedures and are currently operating efficiently and have seen little impact from COVID-19 with vessels continuing to load ethylene and with committed throughput contracts now scheduled to commence from June 1, 2020. As the completion of the cryogenic storage tank continues on schedule and the committed throughput volumes are scheduled to commence, there are no current indicators to suggest an impairment of our investment is required as a result of the COVID-19 pandemic.

Vessels Depreciation. The cost of our vessels (excluding the estimated initial built-in overhaul cost) less their estimated residual value is depreciated on a straight-line basis over the vessels' estimated useful lives. We estimate the useful life of each of our vessels to be 30 years from the date the vessel was originally delivered from the shipyard. The actual life of a vessel, however, may be different, with a life less than 30 years resulting in an increase in the quarterly depreciation and potentially resulting in an impairment loss. The estimated residual value is based on the steel value of the tonnage for each vessel.

Impairment of Vessels. We review our vessels for impairment when events or circumstances indicate the carrying amount of the vessel may not be recoverable. When such indicators are present, a vessel is tested for recoverability and we recognize an impairment loss if the sum of the expected future cash flows (undiscounted and excluding interest charges that will be recognized as an expense when incurred) expected to be generated by the vessel over its estimated remaining useful life is less than its carrying value. If we determine that a vessel's undiscounted cash flows are less than its carrying value, we record an impairment loss equal to the amount by which its carrying amount exceeds its fair value. The new lower cost basis would result in a lower annual depreciation than before the impairment.

Considerations in making such an impairment evaluation include comparison of current carrying values to anticipated future operating cash flows, expectations with respect to future operations and other relevant factors. The estimates and assumptions regarding expected cash flows require considerable judgment and are based upon historical experience, financial forecasts and industry trends and conditions.

As of December 31, 2019, the aggregate carrying value of our 38 vessels in operation was \$1,609.5 million. We determined the aggregate undiscounted cash flows of those vessels as of December 31, 2019, to be \$3,243.6 million. The undiscounted future cash flows used to support vessel values were determined by applying various assumptions regarding future revenues, vessel utilization rates, operating expenses and residual values. These assumptions are based on historical trends as well as future expectations. Specifically, in estimating future charter rates, management took into consideration estimated daily TCE rates for each vessel over the estimated remaining lives of each of the vessels. Management takes into consideration rates currently in effect for existing time charters and the estimated daily TCE rates used for unfixed vessels, which were based on the trailing 10-year historical average one-year time charter rates, an average rate depending on vessel type of between approximately \$620,000 and \$720,000 per calendar month as of December 31, 2019. Recognizing that rates tend to be cyclical, and subject to some volatility based on factors beyond our control, management believes the use of estimates based on the 10-year historical average rates calculated as of the reporting date to be appropriate. In addition, our vessels operate in a sector that is relatively young and data beyond 10 years is limited, while rates for one and five year periods would not necessarily include the peaks and troughs of a typical shipping cycle. Estimated vessel utilization rates used are also based on the average utilization rates achieved by us on the trailing 10-year historical average. Estimated outflows for operating expenses are based on costs incurred over the past twelve months and are adjusted for assumed inflation. Estimates of a residual value are consistent with scrap rates used in management's evaluation of scrap value.

Although management believes that the assumptions used to evaluate potential impairment are reasonable and appropriate at the time they were made, such assumptions are highly subjective and likely to change, possibly materially, in the future. A 15% reduction in the estimated vessel TCE rate or a reduction in the average utilization rates by 10% used in connection with our calculations would result in a \$885.4 million decrease or a \$635.5 million decrease respectively in the aggregate undiscounted cash flows of our vessels in operation as of December 31, 2019 which would not result in an impairment. A 10% increase in estimated vessel operating expenses used in connection with our calculations would result in a \$271.3 million decrease in the aggregate undiscounted cash flows of our vessels in operation as of December 31, 2019 which would not result in an impairment.

We obtain shipbroker appraisals of our vessels principally for the purposes of bank covenant compliance. These appraisals are generally performed without examination of the vessel and without an attempt to market a vessel, and no consideration is given to whether a group of vessels could be sold for higher valuation than on an individual basis. In addition, with respect to the class of vessels we own, we believe that relative to the worldwide oceangoing vessel fleet, the market for the sale of our vessels is particularly illiquid, due to the relatively limited number of vessels in the global handysize fleet and the specialized nature of these vessels, difficult to observe and, therefore, speculative, given the extremely limited secondary sales data. Given this lack of secondary sales data available for our specific vessels, these appraisals have been used by us as an approximation of our vessels' market values. However, because these appraisals are primarily prepared for the

purpose of valuing collateral and given the lack of comparable market transactions, shipbroker appraisals are predominantly prepared on a depreciated replacement cost, *charter-free* basis (i.e. vessel only, without the benefit of a revenue stream), which we believe significantly discounts the value of our vessels. As a result, we believe that the ultimate value that could be obtained from the sale of any one of our vessels to a willing third-party would likely, and in many cases meaningfully, exceed the vessel’s appraised value on this basis. The table below indicates the carrying value of each of our owned vessels as of December 31, 2019.

<u>Operating Vessel</u>	<u>December 31, 2019</u> <u>Carrying Value</u>
	<i>(in millions)</i>
Navigator Aries	\$40.1
Navigator Atlas	44.9
Navigator Aurora	73.7
Navigator Capricorn	35.7
Navigator Centauri	40.7
Navigator Ceres	40.8
Navigator Ceto	40.8
Navigator Copernico	41.2
Navigator Eclipse	74.3
Navigator Europa	44.5
Navigator Galaxy	35.6
Navigator Gemini	42.2
Navigator Genesis	35.7
Navigator Global	35.5
Navigator Glory	34.0
Navigator Gusto	36.1
Navigator Grace	33.4
Navigator Jorf	49.0
Navigator Leo	41.2
Navigator Libra	41.5
Navigator Luga	49.7
Navigator Magellan	18.1
Navigator Mars	28.4
Navigator Neptune	28.7
Navigator Nova	75.4
Navigator Oberon	44.6
Navigator Pegasus	38.7
Navigator Phoenix	39.6
Navigator Pluto	29.0
Navigator Prominence	79.5
Navigator Saturn	28.6
Navigator Scorpio	38.3
Navigator Taurus	43.1
Navigator Triton	44.6
Navigator Umbrio	45.1
Navigator Venus	28.6
Navigator Virgo	38.8
Navigator Yauza	49.8

Following a sale and leaseback transaction in October 2019, *Navigator Aurora*, is now owned by OCY Aurora Ltd., a Maltese limited liability company. OCY Aurora Ltd., the “lessor entity”, is a wholly owned subsidiary of Ocean Yield Malta Limited. We do not hold any shares or voting rights in the lessor entity, which is accounted

for as a fully consolidated VIE in our consolidated financial statements. Please read Note 9 (Variable Interest Entities) to the consolidated financial statements.

We believe that the future undiscounted cash flows expected to be earned by our vessels over their operating lives exceeded the vessels' carrying amounts as of December 31, 2019. Accordingly, no impairment charge has been recorded as of December 31, 2019 following the requirements of our U.S. GAAP impairment accounting policy. The carrying value of 35 out of 38 of our vessels was higher than its shipbroker appraised value as of December 31, 2019. The aggregate carrying value of these vessels exceeded the aggregate shipbroker appraised values by approximately \$138.0 million as of December 31, 2019.

We have assessed whether the effects of COVID-19 pandemic on the carrying values of its vessels and has concluded that although the Company has not experienced any significant decrease in charter rates thus far as a result of the COVID-19 pandemic, our vessel utilization has been negatively impacted reducing from 96.3% and 97.3% achieved in December 2019 and January 2020 respectively, to mid 80% levels in more recent months. However as outlined above, this reduction along with a 15% reduction in charter rates would not suggest an impairment of our vessels is required as a result of the COVID-19 pandemic.

Drydocking Costs. Each of our vessels is required to be drydocked every five years until it reaches 15 years of age, after which each vessel is required to be drydocked every two and a half to three years for any major repairs and maintenance and for inspection of the underwater parts of the vessel, which cannot be performed while the vessel is operating. We capitalize costs associated with the drydockings as "built in overhauls" in accordance with U.S. GAAP and amortize these costs on a straight-line basis over the period between drydockings.

Amortization of capitalized drydocking expenditures requires us to estimate the period until the next drydocking. While we typically drydock each vessel every two and a half to five years, we may drydock the vessels on a more frequent basis. If we change our estimate of the next drydock date, we will adjust our annual amortization of drydocking expenditures. Amortization of drydockings is included in our depreciation and amortization expense.

Valuation of Derivative Instruments. Our risk management policies permit the use of derivative financial instruments to manage interest rate and foreign currency risk. Changes in the fair value of derivative instruments that are not designated as hedging instruments for accounting purposes are recognized in earnings but do not impact our cash flows.

The fair value of our derivative instruments and the changes in fair value of our derivative instruments result from our cross-currency interest rate swap agreement. The fair value of our derivative instruments is the estimated amount that we would receive to sell or transfer the agreement at the reporting date, taking into account current interest rates and the current credit worthiness of the swap counterparties. The estimated amount is the present value of estimated future cash flows, being equal to the difference between the benchmark interest rate and the rate in the cross-currency interest rate swap agreement, multiplied by the notional principal amount of the cross-currency interest rate swap agreement at each interest reset date.

The fair value of our cross-currency interest rate swap agreement at the end of each period is most significantly affected by the interest rate implied by the benchmark interest yield curve, including its relative steepness, and forward foreign exchange rates. Interest rates and foreign exchange rates have experienced significant volatility in recent years in both the short and long term. While the fair value of our cross-currency interest rate swap agreement is typically more sensitive to changes in short-term rates, significant changes in the long-term benchmark interest and foreign exchange rates also materially impact our cross-currency interest rate swap agreement.

The fair value of our cross-currency interest rate swap agreement is also affected by changes in our specific credit risk included in the discount factor. We discount our swap agreement with reference to the credit default

swap spreads of similarly rated global industrial companies and by considering any underlying collateral. The process of determining credit worthiness requires significant judgment in determining which source of credit risk information most closely matches our risk profile.

The benchmark interest rate yield curve and our specific credit risk are expected to vary over the life of the cross-currency interest rate swap agreement.

The larger the notional amount of the cross-currency interest rate swap agreement outstanding and the longer the remaining duration of the cross-currency interest rate swap agreement, the larger the impact of any variability in these factors will be on the fair value of our cross-currency interest rate swap. We economically hedge the interest rate exposure on a significant amount of our long-term debt and for long durations. As such, we have experienced, and we expect to continue to experience, material variations in the period-to-period fair value of our derivative instruments.

Effect if Actual Results Differ from Assumptions. We measure the fair value of our derivative instruments utilizing the inputs and assumptions described above. If we were to terminate the agreement at the reporting date, the amount we would pay or receive to terminate the derivative instruments may differ from our estimate of fair value. If the estimated fair value differs from the actual termination amount, an adjustment to the carrying amount of the applicable derivative asset or liability would be recognized in earnings for the current period. Such adjustments could be material. See Note 18 (Derivative Instruments) to the consolidated financial statements for the effects on the change in fair value of our derivative instruments on our consolidated statements of operations and statements of comprehensive income.

Item 6. Directors, Senior Management and Employees

A. Directors and Senior Management

Directors

Set forth below are the names, ages and positions of our directors.

<u>Name</u>	<u>Age</u>	<u>Position</u>
David J. Butters	79	Chairman of the Board
Dr. Henry Deans	52	Director and Chief Executive Officer
Dr. Heiko Fischer	52	Director
David Kenwright	72	Director
Hal Malone	45	Director
Alexander Oetker	44	Director
Florian Weidinger	38	Director

Our board of directors is elected annually. Each director holds office until his successor shall have been duly elected and qualified, except in the event of his death, resignation, removal or the earlier termination of his term of office. Officers are elected from time to time by vote of our board of directors and hold office until a successor is elected.

Biographical information with respect to each of our directors and our executive officers is set forth below. The business address for our directors is 650 Madison Avenue, 25th Floor, New York, New York 10022.

David J. Butters. David J. Butters has been a member of the Board since September 2008. Mr. Butters relinquished his role as President and Chief Executive Officer to Dr. Deans on August 22, 2019 and continues to serve as Chairman of the Board. Prior to September 2008, Mr. Butters served as a managing director of Lehman Brothers Inc., a subsidiary of Lehman Brothers Holdings Inc., where he had been employed for more than 37 years.

Dr. Henry Deans. Dr. Henry Deans was appointed to serve as the Chief Executive Officer of the Company starting August 22, 2019 and has been a member of the Board since November 2018. Dr. Deans was Chief EH&S and Operations Officer of Johnson Matthey plc London, until August 2019. Dr. Deans served as the Executive Vice President and President of the nitrogen division of Nutrien Ltd. (“Nutrien”), a fertilizer producer and distributor, from January 2018 to May 2018. From August 2015 to December 2017, Dr. Deans was the Senior Vice President of Agrium Inc., a fertilizer producer and distributor, prior to its merger with Potash Corporation of Saskatchewan to form Nutrien. From August 2015 to December 2017, he served as a member of the board of directors of Canpotex Potash Export Company. From 2006 to 2014, Dr. Deans held a series of positions as the chief executive officer of multiple affiliates and directly owned subsidiaries of INEOS Group Holdings S.A., a chemical company. Dr. Deans holds a Ph.D and M.Phil. in chemistry from Strathclyde University as well as a B.Sc. in chemistry from Glasgow University.

Dr. Heiko Fischer. Dr. Heiko Fischer has been a member of the Board since December 2011. Dr. Fischer has been Chief Executive Officer and Chairman of the Executive Board of VTG Aktiengesellschaft, a German railroad freightcar lessor and logistics company traded on the Frankfurt Stock Exchange, since May 1, 2004. He was a member of the Supervisory Board of Hapag-Lloyd AG, a German container shipping company. He is the Chairman of the Advisory Board of TRANSWAGGON-Gruppe and a member of the Advisory Boards of Brueckenhaus Grundstueckgesellschaft m.b.h. and Kommanditgesellschaft Brueckenhaus Grundstueckgesellschaft m.b.H. & Co. as well as a member of the Administrative Boards of TRANSWAGGON AG, Waggon Holding AG, AAE Holding AG, AAE Capital AG and VTG Cargo AG. Dr. Fischer graduated from the University at Albany (SUNY) with an MBA in 1992, and from Julius-Maximilian University in Wuerzburg, Germany with a PhD in Economic Sciences in 1996.

David Kenwright. David Kenwright has been a member of the Board since March 2007. Mr. Kenwright is a managing director of Achater Offshore Ltd., the Aberdeen Business Centre, and Chairman of the U.K. Emergency Response and Rescue Vessel Association Ltd., is also a non-executive director of Oxford Electromagnetic Systems Limited and was previously a managing director of Gulf Offshore N.S. Ltd. for seven years. Mr. Kenwright is a Chartered Engineer and a Fellow of the Institute of Marine Engineering, Science and Technology.

Hal Malone. Harold L. (Hal) Malone has been a member of the Board since July 2017. Mr. Malone is the Head of Transportation at Invesco Private Markets, a private investing division of Invesco Ltd. Mr. Malone is currently a director of Diamond S Shipping Inc., a NYSE-listed crude and product tanker shipping company, and Nautical Bulk Holdings Ltd, a dry bulk shipping company. Prior to Invesco, Mr. Malone served as the chief strategic officer of the Navig8 Group, a fully integrated provider of shipping management services. Before joining Navig8, Mr. Malone spent over 18 years in investment banking, most recently as a managing director in the maritime group at Jefferies LLC. Mr. Malone earned a B.S. in economics from the Wharton School of Business at the University of Pennsylvania.

Alexander Oetker. Alexander Oetker has been a member of the Board since September 2006. Mr. Oetker is a Shareholder of the Oetker Group with interests in food, beer, hotels, banking and chemical companies. In addition, Mr. Oetker is the Founder and Chief Executive Officer of A. O. Schifffahrt GmbH, a bulk shipping company based in Hamburg, Germany. Before founding A. O. Schifffahrt in 2003, Mr. Oetker was employed as chartering manager of Hamburg Sud and by Hutchison Port Holdings in Hong Kong.

Florian Weidinger. Florian Weidinger has been a member of the Board since March 2007. Mr. Weidinger previously worked as a vice president at Lehman Brothers’ principal investment division, Global Trading Strategies in London prior to becoming chief executive officer of Hansabay, a Singapore based fund management business. Mr. Weidinger holds a BSc from Cass Business School, City University, London, an MBA from the Stanford Graduate School of Business and an MS in Environment and Resources from Stanford University.

The WLR Group has the right to designate two individuals to be nominated to our Board. Mr. Malone and Dr. Fischer are the designees of the WLR Group. See “Item 7—Major Shareholders and Related Party Transactions—Related Party Transactions—Investor Rights Agreement.”

Executive Officers

The following table provides information about our executive officers. NGT Services (UK) Limited, our wholly-owned subsidiary and commercial manager, provides us with certain of our officers, including our chief financial officer and our chief commercial officer. All references in this annual report to “our officers” refer to our president and chief executive officer and those officers of NGT Services (UK) Limited who perform executive officer functions for our benefit.

<u>Name</u>	<u>Age</u>	<u>Position</u>
David J. Butters	79	Executive Chairman
Dr. Henry Deans	52	Chief Executive Officer
Niall Nolan	56	Chief Financial Officer
Oeyvind Lindeman	40	Chief Commercial Officer
Paul Flaherty	55	Director of Fleet & Technical Operations
Demetris Makaritis	36	Director of Commercial Operations

David J. Butters. David J. Butters relinquished his role as President and Chief Executive Officer to Dr. Deans on August 22, 2019. Mr. Butters has been a member of the Board since September 2008 and continues to serve as Executive Chairman.

Dr. Henry Deans. Dr. Henry Deans was appointed to serve as the Chief Executive Officer of the Company on August 22, 2019. Dr. Deans has been a member of the Board since November 2018.

Niall Nolan. Niall Nolan was appointed Chief Financial Officer of NGT Services (UK) Limited in August 2006. Mr. Nolan was appointed to the Members’ Representative Committee of Britannia Steam Ship Insurance Association Limited in November 2017 and became a member on its board in May 2018. Prior to his appointment as Chief Financial Officer, Mr. Nolan worked for Navigator Holdings Ltd. as representative of the creditors committee during Navigator Holdings’ bankruptcy proceedings. Prior to that, Mr. Nolan was group finance director of Simon Group PLC, a U.K. public company. Mr. Nolan is a fellow of the Association of Chartered Certified Accountants.

Oeyvind Lindeman. Oeyvind Lindeman was appointed Chartering Manager of the Company in November 2007, before being appointed chief commercial officer in January 2014. Prior to this, Mr. Lindeman was employed for five years at A.P. Møller Maersk, a gas transport company as charterer. Mr. Lindeman holds a BA with honors from the University of Strathclyde and an Executive MBA with distinction from Cass Business School.

Paul Flaherty. Paul Flaherty was appointed Director of Fleet and Technical Operations in December 2014. Prior to this, he was employed by JP Morgan Global Maritime as VP, Asset Management. Previously, he spent 17 years with BP Shipping Ltd as a Fleet and Technical Manager for both Oil and Gas vessels. Mr. Flaherty is a Chartered Engineer and a Fellow of the Institute of Marine Engineers & Science Technicians (IMarEST).

Demetris Makaritis. Demetris Makaritis was appointed Director of Commercial Operations in April 2016 having been an Operations & Vetting Manager as well as a Technical Superintendent for the Company since joining in 2010. Prior to joining the Company, Demetris worked as an operations supervisor for Zodiac Maritime Ltd. and as a naval architect for SeaTec (V.Ships Group) in Glasgow, Scotland. Demetris holds a BEng (Hons) in Naval Architecture from Newcastle upon Tyne University, an MSc in Shipping, Trade & Finance from Cass Business School, London and is a Chartered Engineer.

B. Compensation

Compensation of Management

Our officers receive compensation for the services they provide to us. Five of our six officers (Dr. Deans and Messrs. Nolan, Lindeman, Flaherty, and Makaritis) are remunerated in pounds sterling, while Mr. Butters is remunerated in U.S. dollars. For purposes of this annual report, all forms of compensation paid to our officers have been converted to U.S. dollars. For the year ended December 31, 2019, the aggregate cash compensation paid to all officers as a group was approximately \$3,400,470. The cash compensation for each officer is comprised of base salary, amounts in lieu of pension contributions and bonus. Our officers are eligible to receive a discretionary annual cash bonus based on certain performance criteria determined by the compensation committee of our Board, or the “Compensation Committee,” and approved by our Board. Regardless of performance, the annual cash bonuses are paid at the sole discretion of the Compensation Committee, subject to approval by our Board.

For the year ended December 31, 2019, we granted a total of 134,398 shares of restricted stock to officers of the company under the Navigator Holdings Ltd. 2013 Long-Term Incentive Plan, or the “LTIP” (as described in further detail below under “—2013 Long-Term Incentive Plan”), which such awards vest and become free of restrictions on the third anniversary of the grant date.

Dr. Deans and Messrs. Nolan, Lindeman, Flaherty and Makaritis are eligible to participate in certain welfare benefit programs we offer, including life insurance, permanent health insurance, and private medical insurance. For the year ended December 31, 2019, the aggregate cost of these benefits provided to each of Dr. Deans and Messrs. Nolan, Lindeman, Flaherty and Makaritis was approximately \$25,774. While Mr. Butters is not eligible to participate in the same welfare benefit programs as our other officers, he is entitled to reimbursement by us for the Medicare portion of the FICA tax withheld from his compensation. For the year ended December 31, 2019, we paid Mr. Butters an amount of \$50,078 towards his Medicare costs. Dr. Deans and Messrs. Nolan, Lindeman, Flaherty and Makaritis are also eligible to participate in a defined contribution personal pension plan, described below under “—Benefit Plans and Programs.”

Compensation of Directors

Officers who also serve as members of our Board do not receive additional compensation for their services as directors. Each non-employee director who serves as a member of our Board receives an annual fee of \$120,000, of which \$60,000 is paid in cash and \$60,000 in shares of restricted stock granted under the LTIP which vest on the first anniversary of the grant date. In addition, the Audit Committee chair and Compensation Committee chair each receive an additional amount of \$5,000 per annum while members of each committee receive a meeting fee of \$1,500 for each committee meeting attended.

For the year ended December 31, 2019, we granted a total of 21,700 shares of restricted stock pursuant to awards under the LTIP to non-employee directors of the company as part of their compensation, which such awards vest and become free of restrictions on the first anniversary of the grant date.

Each director will be fully indemnified by us for actions associated with being a director to the extent permitted under Marshall Islands law.

Equity Compensation Plans

2013 Long-Term Incentive Plan

In connection with our initial public offering, we adopted the Navigator Holdings Ltd. 2013 Long-Term Incentive Plan, or the “LTIP,” for our and our affiliates’ employees and directors as well as consultants who perform services for us. The LTIP provides for the award of restricted stock, stock options, performance awards, annual incentive awards, restricted stock units, bonus stock awards, stock appreciation rights, dividend equivalents, and other share-based awards.

Administration. The LTIP is administered by the Compensation Committee, or the “Plan Administrator,” with certain decisions subject to approval of our Board. The Plan Administrator will have the authority to, among other things, designate participants under the LTIP, determine the type or types of awards to be granted to a participant, determine the number of shares of our common stock to be covered by awards, determine the terms and conditions applicable to awards and interpret and administer the LTIP. The Plan Administrator may terminate or amend the LTIP at any time with respect to any shares of our common stock for which a grant has not yet been made. The Plan Administrator also has the right to alter or amend the LTIP or any part of the plan from time to time, including increasing the number of shares of our common stock that may be granted, subject to shareholder approval as required by the exchange upon which our common stock is listed at that time. However, no change in any outstanding grant may be made that would materially reduce the benefits of the participant without the consent of the participant.

Number of Shares. Subject to adjustment in the event of any distribution, recapitalization, split, merger, consolidation or similar corporate event, the number of shares available for delivery pursuant to awards granted under the LTIP is 3,000,000 shares. There is no limit on the number of awards that may be granted and paid in cash. Shares subject to an award under the LTIP that are canceled, forfeited, exchanged, settled in cash or otherwise terminated, including withheld to satisfy exercise prices or tax withholding obligations, are available for delivery pursuant to other awards. The shares of our common stock to be delivered under the LTIP will be made available from authorized but unissued shares, shares held in treasury, or previously issued shares reacquired by us, including by purchase on the open market.

Restricted Shares. A restricted share grant is an award of common stock that vests over a period of time and that during such time is subject to forfeiture. The Plan Administrator may determine to make grants of restricted shares under the plan to participants containing such terms as the Plan Administrator shall determine. The Plan Administrator will determine the period over which restricted shares granted to participants will vest. The Plan Administrator, in its discretion, may base its determination upon the achievement of specified financial objectives. Dividends made on restricted shares may or may not be subjected to the same vesting provisions as the restricted shares.

Share Options. A share option is a right to purchase shares at a specified price during specified time periods. The LTIP permits the grant of options covering our common stock. The Plan Administrator may make grants under the plan to participants containing such terms as the Plan Administrator shall determine. Share options will have an exercise price that may not be less than the fair market value of our common stock on the date of grant. Share options granted under the LTIP can be either incentive share options (within the meaning of section 422 of the Code), which have certain tax advantages for recipients, or non-qualified share options. Share options granted will become exercisable over a period determined by the Plan Administrator. No share option will have a term that exceeds ten years. The availability of share options is intended to furnish additional compensation to plan participants and to align their economic interests with those of common shareholders.

Performance Award. A performance award is a right to receive all or part of an award granted under the LTIP based upon performance criteria specified by the Plan Administrator. The Plan Administrator will determine the period over which certain specified company or individual goals or objectives must be met. The performance award may be paid in cash, shares of our common stock or other awards or property, in the discretion of the Plan Administrator.

Annual Incentive Award. An annual incentive award is a conditional right to receive a cash payment, shares or other award unless otherwise determined by the Plan Administrator, after the end of a specified year. The amount potentially payable will be based upon the achievement of performance goals established by the Plan Administrator.

Restricted Share Unit. A restricted share unit is a notional share that entitles the grantee to receive a share of common stock upon the vesting of the restricted share unit or, in the discretion of the Plan Administrator, cash

equivalent to the value of a share of common stock. The Plan Administrator may determine to make grants of restricted share units under the plan to participants containing such terms as the Plan Administrator shall determine. The Plan Administrator will determine the period over which restricted share units granted to participants will vest.

The Plan Administrator, in its discretion, may grant tandem dividend equivalent rights with respect to restricted share units that entitle the holder to receive cash equal to any cash dividends made on our common stock while the restricted share units are outstanding.

Bonus Shares. The Plan Administrator, in its discretion, may also grant to participants shares of common stock that are not subject to forfeiture. The Plan Administrator can grant bonus shares without requiring that the recipient pay any remuneration for the shares.

Share Appreciation Rights. The LTIP permits the grant of share appreciation rights. A share appreciation right is an award that, upon exercise, entitles participants to receive the excess of the fair market value of our common stock on the exercise date over the grant price established for the share appreciation right on the date of grant. Such excess will be paid in cash or common stock. The Plan Administrator may determine to make grants of share appreciation rights under the plan to participants containing such terms as the Plan Administrator shall determine. Share appreciation rights will have a grant price that may not be less than the fair market value of our common stock on the date of grant. In general, share appreciation rights granted will become exercisable over a period determined by the Plan Administrator.

Other Share-Based Awards. The Plan Administrator, in its discretion, may also grant to participants an award denominated or payable in, referenced to, or otherwise based on or related to the value of our common stock.

Tax Withholding. At our discretion, and subject to conditions that the Plan Administrator may impose, a participant's minimum statutory tax withholding with respect to an award may be satisfied by withholding from any payment related to an award or by the withholding of shares issuable pursuant to the award based on the fair market value of the shares.

Anti-Dilution Adjustments. If any "equity restructuring" event occurs that could result in an additional compensation expense under Financial Accounting Standards Board Accounting Standards Codification Topic 718, or "FASB ASC Topic 718," if adjustments to awards with respect to such event were discretionary, the Plan Administrator will equitably adjust the number and type of shares covered by each outstanding award and the terms and conditions of such award to equitably reflect the restructuring event, and the Plan Administrator will adjust the number and type of shares with respect to which future awards may be granted. With respect to a similar event that would not result in a FASB ASC Topic 718 accounting charge if adjustment to awards were discretionary, the Plan Administrator shall have complete discretion to adjust awards in the manner it deems appropriate. In the event the Plan Administrator makes any adjustment in accordance with the foregoing provisions, a corresponding and proportionate adjustment shall be made with respect to the maximum number of shares available under the LTIP and the kind of shares or other securities available for grant under the LTIP. Furthermore, in the case of (i) a subdivision or consolidation of the common stock (by reclassification, split or reverse split or otherwise), (ii) a recapitalization, reclassification, or other change in our capital structure or (iii) any other reorganization, merger, combination, exchange or other relevant change in capitalization of our equity, then a corresponding and proportionate adjustment shall be made in accordance with the terms of the LTIP, as appropriate, with respect to the maximum number of shares available under the LTIP, the number of shares that may be acquired with respect to an award, and, if applicable, the exercise price of an award, in order to prevent dilution or enlargement of awards as a result of such events.

Change in Control. Upon a "change of control" (as defined in the LTIP), the Plan Administrator may, in its discretion, (i) remove any forfeiture restrictions applicable to an award, (ii) accelerate the time of exercisability or vesting of an award, (iii) require awards to be surrendered in exchange for a cash payment, (iv) cancel

unvested awards without payment or (v) make adjustments to awards as the Plan Administrator deems appropriate to reflect the change of control.

Termination of Employment or Service. The consequences of the termination of a grantee's employment, consulting arrangement, or membership on the board of directors will be determined by the Plan Administrator in the terms of the relevant award agreement.

As described above under “—Compensation of Management” and “—Compensation of Directors,” during the year ended December 31, 2019, we granted a total of (i) 134,398 shares of restricted stock under the LTIP to our officers and (ii) 21,700 shares of restricted stock under the LTIP to our non-employee directors. The restricted stock awards granted to our officers vest and become free of restrictions on the third anniversary of the date of grant while the restricted stock awards granted to our non-employee directors vest and become free of restrictions on the first anniversary of the date of grant.

Benefit Plans and Programs

We sponsor a money purchase defined contribution plan, which we refer to as a personal pension plan, for all employees located in the U.K., including Messrs. Nolan, Lindeman, Flaherty and Makaritis. Each employee is eligible to contribute up to 100% of their annual salary to their personal pension plan and we will match any such contribution up to 15% of the employee's annual salary. For the year ended December 31, 2019, we paid an aggregate of approximately \$48,409 in matching contributions to the personal pension plan for Messrs. Nolan, Lindeman, Flaherty and Makaritis. For the year ended December 31, 2019, we paid an aggregate of approximately \$381,626 in matching contributions to the personal pension plans for all eligible employees (December 31, 2018: \$371,223).

C. Board Practices

While we are not subject to a number of the NYSE's corporate governance standards as a foreign private issuer, we intend to comply voluntarily with a number of those rules. For example, we have a board of directors that is comprised of a majority of independent directors.

Committees of the Board of Directors

We have an audit committee, a compensation committee and a nomination committee comprised entirely of independent directors. In addition, our board of directors may, from time to time, designate one or more additional committees, which shall have the duties and powers granted to it by our board of directors.

Audit Committee

Our audit committee consists of Messrs. Weidinger, Kenwright and Oetker, with Mr. Weidinger as chair. Our board of directors has determined that Messrs. Weidinger, Kenwright and Oetker satisfy the independence standards established by the NYSE and that each qualifies as an “audit committee financial expert,” as such term is defined in Regulation S-K promulgated by the SEC. The audit committee is responsible for, among other things, the hiring or termination of independent auditors; approving any non-audit work performed by such auditor; and assisting the board in monitoring the integrity of our financial statements, the independent auditor's qualifications and independence, the performance of the independent auditor and our compliance with legal and regulatory requirements.

Compensation Committee

Our compensation committee consists of Messrs. Kenwright, Fischer, Oetker and Weidinger, with Mr. Kenwright as chair. The compensation committee is responsible for, among other things, developing and recommending to the board of directors compensation for board members; and overseeing compliance with any applicable compensation reporting requirements of the SEC and the NYSE.

Nominations Committee

Our nominations committee consists of Messrs. Kenwright, Oetker and Malone, with Mr. Kenwright as chair. Mr. Oetker replaced Dr. Deans on the committee prior to the latter's appointment as Chief Executive Officer of the Company. The nominations committee is responsible for, among other things, the selection and recommendation to the board of prospective directors and committee member candidates.

D. Employees

We had 83 employees as of December 31, 2019 compared to 76 employees as of December 31, 2018 and 60 as of December 31, 2017. We consider our employee relations to be good. Our crewing and technical managers provide crews for our vessels under separate crew management agreements.

E. Share Ownership

See "Item 7—Major Shareholders and Related Party Transactions—Major Shareholders."

Item 7. Major Shareholders and Related Party Transactions

A. Major Shareholders

The following table sets forth certain information regarding the beneficial ownership of our common stock as of May 7, 2020:

- each person known by us to be a beneficial owner of more than 5.0% of our common stock;
- each of our directors;
- each of our named executive officers; and
- all directors and executive officers as a group.

The data set forth below is based on information filed with the SEC and information provided to us prior to May 7, 2020. Except as otherwise indicated, the person or entities listed below have sole voting and investment power with respect to all of our shares of common stock beneficially owned by them, subject to community property laws where applicable.

<u>Name of Beneficial Owner</u>	<u>Common Stock Beneficially Owned</u>	
	<u>Shares⁽¹⁾</u>	<u>Percent</u>
WLR Group ⁽²⁾	21,863,874	39.2%
David J. Butters ⁽³⁾	2,195,430	3.9%
Dr. Henry Deans	5,000	*
Dr. Heiko Fischer ⁽⁴⁾	58,771	*
David Kenwright	40,171	*
Hal Malone ⁽⁵⁾	—	*
Alexander Oetker	5,425	*
Florian Weidinger	36,671	*
Paul Flaherty	19,159	*
Oeyvind Lindeman	17,915	*
Demetris Makaritis	12,949	*
Niall Nolan	129,984	*
All executive officers and directors as a group (11 persons)	2,521,475	4.5%

* Less than 1%.

- (1) Unless otherwise indicated, all shares of common stock are owned directly by the named holder and such holder has sole power to vote and dispose of such shares. Unless otherwise noted, the address for each beneficial owner named above is: 650 Madison Avenue, 25th Floor, New York, New York 10022.
- (2) Represents 13,058,516 shares of common stock held directly by WLR Recovery Fund IV DSS AIV, L.P., 4,422,528 shares of common stock held directly by WLR Recovery Fund V DSS AIV, L.P., 4,288,484 shares of common stock held directly by WLR Select Co-Investment, L.P., 52,727 shares of common stock held directly by WLR IV Parallel ESC, L.P. and 41,619 shares of common stock held directly by WLR V Parallel ESC, L.P. (collectively, the “WLR Investors”). Invesco Private Capital, Inc. is the managing member of Invesco WLR IV Associates LLC, which in turn is the general partner of WLR IV Parallel ESC, L.P. Invesco Private Capital, Inc. is also the managing member of Invesco WLR V Associates LLC, which in turn is the general partner of WLR V Parallel ESC, L.P. WLR Select Associates DSS GP, Ltd. is the general partner of WLR Select Associates DSS, L.P. WL Ross & Co. LLC, is the managing member of WLR Select Associates LLC, which in turn is the general partner of WLR Select Co-Investment, L.P. WLR Recovery Associates IV DSS AIV GP, Ltd. is the general partner of WLR Recovery Associates IV DSS AIV, L.P., which in turn is the general partner of WLR Recovery Fund IV DSS AIV, L.P. WLR Recovery Associates V DSS AIV GP, Ltd. is the general partner of WLR Recovery Associates V DSS AIV, L.P., which in turn is the general partner of WLR Recovery Fund V DSS AIV, L.P. The address of each of the entities and persons identified in this note is c/o WL Ross & Co. LLC, 1166 Avenue of the Americas, New York, NY 10036.
- (3) Includes 150,000 shares of common stock that are owned by the spouse of Mr. Butters, for which he disclaims beneficial ownership.
- (4) Represents shares of common stock held directly by Dr. Fischer. Dr. Fischer is a Board designee of WL Ross & Co. LLC. Dr. Fischer disclaims beneficial ownership over the shares held or controlled by the WLR Group.
- (5) Represents shares of common stock held directly by Mr. Malone. Mr. Malone is a Board designee of WL Ross & Co. LLC. Mr. Malone disclaims beneficial ownership over the shares held or controlled by the WLR Group.

B. Related Party Transactions

From time to time we have entered into agreements and have consummated transactions with certain related parties. We may enter into related party transactions from time to time in the future. In connection with our initial public offering, we established an audit committee upon the closing of our initial public offering in order to, among other things, conduct an appropriate review of all related party transactions for potential conflict of interest situations on an ongoing basis and to approve all such transactions. See “Item 6—Directors, Senior Management and Employees—Board Practices—Committees of the Board of Directors.”

The related party transactions that we were party to between January 1, 2019 and December 31, 2019 are described in Note 20 “Related Party Transactions” of our consolidated financial statements.

Investment Agreements

On November 10, 2011, we entered into a certain investment agreement with the WLR Group. Under the investment agreement, we agreed to issue and sell up to 7,500,000 shares of common stock in the aggregate at \$8.33 per share (on a post-split basis). Pursuant to the investment agreement, on December 12, 2011, the WLR Group purchased 1,875,000 shares of common stock (on a post-split basis) and, on March 30, 2012, the WLR Group purchased 5,625,000 shares of common stock (on a post-split basis).

On February 15, 2013, we entered into a certain investment agreement with, among others, the WLR Group and David J. Butters. Under the investment agreement, we agreed to issue and sell up to 7,500,000 shares of common stock in the aggregate at \$10.00 per share (on a post-split basis). Pursuant to the investment agreement, on February 25, 2013, the WLR Group, Mr. Butters and an unrelated third-party purchased 6,499,998, 500,001 and 500,001 shares of our common stock, respectively (on a post-split basis).

Investor Rights Agreement

On November 5, 2013, we amended and restated our existing investor rights agreement with the WLR Group. Under the investor rights agreement, subject to certain exceptions, the WLR Group has the right to designate two individuals to be nominated to our Board. If the WLR Group collectively owns less than 3,750,000 shares of common stock (on a post-split basis), the WLR Group will be entitled to designate only one individual, and if the WLR Group collectively owns less than 937,500 shares of common stock (on a post-split basis), the right to designate an individual to be nominated to our Board will terminate. Mr. Malone and Dr. Fischer are the designees of the WLR Group.

C. Interests of Experts and Counsel

Not applicable.

Item 8. Financial Information

A. Consolidated Statements and Other Financial Information

Please see Item “18—Financial Statements” below for additional information required to be disclosed under this item.

Legal Proceedings

We expect that in the future we will be subject to legal proceedings and claims in the ordinary course of business, principally personal injury and property casualty claims. These claims, even if lacking merit, could result in the expenditure of significant financial and managerial resources. We are not aware of any legal proceedings or claims that we believe will have, individually or in the aggregate, a material adverse effect on the consolidated financial statements.

Dividend Policy

We do not anticipate declaring or paying any cash dividends to holders of our common stock in the near term. We are currently restricted from paying dividends until after December 31, 2020 under a number of our bank credit and bond facilities. We currently intend to retain future earnings, if any, to finance the growth of our business. We may, however, adopt in the future a policy to make cash dividends. Our future dividend policy is within the discretion of our board of directors. Any determination to pay or not pay cash dividends will depend upon then-existing conditions, including our results of operations, financial condition, capital requirements, investment opportunities, statutory and contractual restrictions on our ability to pay dividends and other factors our board of directors may deem relevant.

B. Significant Changes

Since the balance sheet date, the COVID-19 virus has spread around the world and many governments, have introduced strict measures to limit social contact in order to contain the spread of the virus. The negative effects of the current COVID-19 pandemic are numerous and may negatively impact our operations and financial conditions, the extent to which will depend on future developments, which are highly uncertain and cannot be predicted, including the severity of COVID-19 and the actions undertaken to contain its impact. An estimation of its impact cannot therefore be accurately taken at this time. see Item 5—Operating and Financial Review and Prospects (Overview).

As these circumstances were not in place at the balance sheet date, the economic and operating impacts of the Covid-19 virus are a non-adjusting post balance sheet event.

Item 9. The Offer and Listing

A. Offer and Listing Details

Our common stock is traded on the New York Stock Exchange “NYSE” under the symbol “NVGS”.

B. Plan of distribution

Not applicable.

C. Markets

Our common stock started trading on the NYSE on November 21, 2013.

Item 10. Additional Information

A. Share Capital

Not applicable.

B. Memorandum and Articles of Association

The information required to be disclosed under this item is incorporated by reference to exhibit 2.6 filed herein

C. Material Contracts

The following is a summary of each material contract, other than material contracts entered into in the ordinary course of business, to which we or any of our subsidiaries is a party, for the two years immediately preceding the date of this annual report, each of which is included in the list of exhibits in “Item 19—Exhibits”:

- (1) Investor Rights Agreement, dated November 5, 2013, among Navigator Holdings Ltd., WL Ross & Co. LLC and certain of its affiliates named therein. See “Item 7—Major Shareholders and Related Party Transactions—Related Party Transactions—Investor Rights Agreement”.
- (2) Joint Venture Agreement, dated August 4, 2010, among PT Persona Sentra Utama, PT Mahameru Kencana Abadi, Navigator Gas Invest Limited and PT Navigator Khatulistiwa. On August 4, 2010, PT Persona Sentra Utama, PT Mahameru Kencana Abadi, Navigator Gas Invest Limited and PT Navigator Khatulistiwa, an Indonesian limited liability company, or “PTNK,” entered into a Joint Venture Agreement, or the “JV Agreement.” Our operations in Indonesia are subject, among other things, to the Indonesian Shipping Act. That law generally provides that in order for certain vessels involved in Indonesian cabotage to obtain the requested licenses, the owners must either be wholly Indonesian owned or have a majority Indonesian shareholding. *Navigator Pluto* and *Navigator Aries*, which are chartered to Pertamina, the Indonesian state-owned producer of hydrocarbons, are owned by PTNK. PTNK is a joint venture of which 49% of the voting and dividend rights are owned by a subsidiary though ultimately controlled at the shareholder level by a subsidiary of Navigator Holdings, and 51% of such rights are owned by Indonesian limited liability companies. The JV Agreement for PTNK provides that certain actions relating to the joint venture or the vessels require the prior written approval of Navigator Holdings’ subsidiary, which may be withheld only on reasonable grounds and in good faith. Pursuant to the JV Agreement, PTNK is managed by its board of directors under the supervision, in accordance with Indonesian law, of the board of commissioners. The board of directors is comprised of one director nominee from the Indonesian limited liability companies which collectively own 51% of the share capital of PTNK. The board of commissioners is comprised of one nominee from the Indonesian entities and one nominee from Navigator Gas Invest Limited, a subsidiary of Navigator Holdings.

- (3) Supplemental Deed, dated February 13, 2014, among PT Navigator Khatulistiwa, PT Persona Sentra Utama, PT Mahameru Kencana Abadi, Navigator Gas Invest Limited, Falcon Funding Ptd. Ltd. and Navigator Gas L.L.C. On February 13, 2014, PTNK, PT Persona Sentra Utama, PT Mahameru Kencana Abadi, Navigator Gas Invest Limited, Falcon Funding Pte. Ltd and Navigator Gas L.L.C. entered into a Supplemental Deed under which the JV Agreement was amended to include *Navigator Global*, which is currently chartered to Pertamina, along with *Navigator Pluto* and *Navigator Aries*.
- (4) \$278.1 million Facility Agreement, by and among Navigator Atlas L.L.C, Navigator Europa L.L.C., Navigator Oberon L.L.C., Navigator Triton L.L.C., Navigator Umbrio L.L.C., Navigator Centauri L.L.C., Navigator Ceres L.L.C., Navigator Ceto L.L.C. and Navigator Copernico L.L.C, Navigator Holdings Ltd. and Navigator Gas L.L.C., Credit Agricole Corporate and Investment Bank, HSH Nordbank Ag and NIBC Bank N.V. as the arrangers and Credit Agricole as agent, and a group of financial institutions as lenders, dated as of January 27, 2015. See Item 5 “Operating and Financial Review and Prospects—Liquidity and Capital Resources—Secured Term Loan Facilities and Revolving Credit Facilities and Facility Limits—January 2015 Secured Term Loan Facility.”
- (5) \$290.0 million Facility Agreement, by and among Navigator Gas L.L.C., Nordea Bank AB, ABN Amro Bank N.V., Danmarks Skibskredit A/S, National Australia Bank Limited, ING Bank N.V. and Credit Agricole Corporate and Investment Bank as the arrangers and Nordea Bank AB and ABN Amro Bank N.V as agent and a group of financial institutions as lenders, dated as of December 21, 2015. See “Item 5—Operating and Financial Review and Prospects—Liquidity and Capital Resources—Secured Term Loan Facilities and Revolving Credit Facilities and Facility Limits—December 2015 Revolving Credit Facility.”
- (6) Bond Agreement between Navigator Holdings Ltd. and Nordic Trustee AS on behalf of the Bondholders in the bond issue of 7.75% Navigator Holdings Ltd. Senior Unsecured Callable Bonds dated February 10, 2017. See “Item 5—Operating and Financial Review and Prospects—Liquidity and Capital Resources—Secured Term Loan Facilities and Revolving Credit Facilities and Facility Limits—2017 Senior Unsecured Bonds.”
- (7) Amendment to the Bond Agreement, dated September 30, 2019 by and among Navigator Holdings Ltd. and the Nordic Trustee, relating to Bond agreement between Navigator Holdings Ltd. and Nordic Trustee AS on behalf of the Bondholders in the bond issue of 7.75% Navigator Holdings Ltd. Senior Unsecured Callable Bonds dated February 10, 2017. See “Item 5—Operating and Financial Review and Prospects—Liquidity and Capital Resources—Secured Term Loan Facilities and Revolving Credit Facilities and Facility Limits—2017 Senior Unsecured Bonds.”
- (8) \$220.0 million Secured Facility Agreement, dated October 28, 2016, by and among Navigator Gas L.L.C. as borrower, Navigator Holdings Ltd., as guarantor, and the lenders named therein. See “Item 5—Operating and Financial Review and Prospects—Liquidity and Capital Resources—Secured Term Loan Facilities and Revolving Credit Facilities and Facility Limits—October 2016 Secured Term Loan Facility.”
- (9) \$160.8 million Secured Facility Agreement dated June 30, 2017, by and among Navigator Gas L.L.C. as borrower, Navigator Holdings Ltd., as guarantor, and the lenders named therein. See “Item 5—Operating and Financial Review and Prospects—Liquidity and Capital Resources—Secured Term Loan Facilities and Revolving Credit Facilities and Facility Limits—June 2017 Secured Term Loan Facility.”
- (10) Bond Terms between Navigator Holdings Ltd., as issuer, and Nordic Trustee AS, as bond trustee and security agent, in the bond issue of NIBOR+6.0% Navigator Holdings Ltd. Senior Secured Callable NOK Bonds dated November 1, 2018. See “Item 5—Operating and Financial Review and Prospects—Liquidity and Capital Resources—Secured Term Loan Facilities and Revolving Credit Facilities and Facility Limits—2018 Senior Secured Bonds.”

- (11) \$107.0 million Secured Facility Agreement, dated March 25, 2019, by and among Navigator Atlas L.L.C., Navigator Europa L.L.C., Navigator Oberon L.L.C. and Navigator Triton L.L.C. as borrowers, Navigator Gas L.L.C. and Navigator Holdings Ltd. as guarantors, Credit Agricole Corporate and Investment Bank, ING Bank, a branch of ING—DIBA AG and Skandinaviska Enskilda Banken AB (Publ), as arrangers and Credit Agricole Corporate and Investment Bank, as agent. See “Item 5—Operating and Financial Review and Prospects—Liquidity and Capital Resources—Secured Term Loan Facilities and Revolving Credit Facilities and Facility Limits—March 2019 Secured Term Loan Facility.”
- (12) \$75.0 million Credit Agreement dated March 29, 2019, between Navigator Ethylene Terminals L.L.C. as borrower, and ING Capital L.L.C. and SG Americas Securities L.L.C. as arrangers. See “Item 5—Operating and Financial Review and Prospects—Liquidity and Capital Resources—Terminal Facility.”

D. Exchange Controls

We are not aware of any governmental laws, decrees or regulations, including foreign exchange controls, in the Republic of the Marshall Islands that restrict the export or import of capital, or that affect the remittance of dividends, interest or other payments to non-resident holders of our securities.

We are not aware of any limitations on the right of non-resident or foreign owners to hold or vote our securities imposed by the laws of the Republic of the Marshall Islands or our operating agreement.

E. Taxation

Material U.S. Federal Income Tax Consequences

The following is a discussion of the material U.S. federal income tax considerations that may be relevant to our shareholders. This discussion is based upon provisions of the Code, Treasury Regulations, and administrative rulings and court decisions, all as in effect as of the date hereof and all of which are subject to change, possibly with retroactive effect. Changes in these authorities may cause the tax consequences of holding our common stock to vary substantially from the consequences described below. Unless the context otherwise requires, references in this section to “we,” “our” or “us” are references to Navigator Holdings Ltd.

The following discussion applies only to beneficial owners of our common stock that own shares of common stock as “capital assets” within the meaning of Section 1221 of the Code (i.e., generally for investment purposes) and is not intended to be applicable to all categories of investors, such as shareholders subject to special tax rules (e.g., financial institutions, insurance companies, broker-dealers, tax-exempt organizations, retirement plans or individual retirement accounts, or former citizens or long-term residents of the United States), to United States persons (within the meaning of the Code) that own, actually or constructively, 10.0% or more of our stock, to persons that hold the shares as part of a straddle, hedge, conversion, constructive sale or other integrated transaction for U.S. federal income tax purposes, to partnerships or their partners, or to persons that have a functional currency other than the U.S. Dollar, all of whom may be subject to tax rules that differ significantly from those summarized below. If a partnership or other entity classified as a partnership for U.S. federal income tax purposes holds our common stock, the tax treatment of its partners generally will depend upon the status of the partner and the activities of the partnership. If you are a partner in a partnership holding our common stock, we encourage you to consult your own tax advisor regarding the tax consequences to you of the partnership’s ownership of our common stock.

No ruling has been or will be requested from the IRS regarding any matter affecting us or our shareholders. The statements made herein may be challenged by the IRS and, if so challenged, may not be sustained upon review in a court.

This discussion does not contain information regarding any U.S. state or local, estate, gift or alternative minimum tax considerations concerning the ownership or disposition of our common stock. This discussion does not

comment on all aspects of U.S. federal income taxation that may be important to particular shareholders in light of their individual circumstances, and each prospective shareholder is urged to consult its own tax advisor regarding the U.S. federal, state, local, and other tax consequences of the ownership or disposition of our common stock.

Election to be Treated as a Corporation

We are treated as a corporation for U.S. federal income tax purposes. As a result, U.S. Holders (as defined below) will not be directly subject to U.S. federal income tax on our income, but rather will be subject to U.S. federal income tax on distributions received from us and dispositions of shares as described below.

U.S. Federal Income Taxation of U.S. Holders

As used herein, the term “U.S. Holder” means a beneficial owner of our common stock that is:

- an individual U.S. citizen or resident (as determined for U.S. federal income tax purposes);
- a corporation (or other entity that is classified as a corporation for U.S. federal income tax purposes) organized under the laws of the United States or its political subdivisions;
- an estate the income of which is subject to U.S. federal income taxation regardless of its source; or
- a trust if (i) a court within the United States is able to exercise primary jurisdiction over the administration of the trust and one or more U.S. persons have the authority to control all substantial decisions of the trust or (ii) the trust has a valid election in effect to be treated as a U.S. person for U.S. federal income tax purposes.

Distributions

Subject to the discussion below of the rules applicable to PFICs, any distributions to a U.S. Holder made by us with respect to our common stock generally will constitute dividends to the extent of our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Distributions in excess of our earnings and profits will be treated first as a nontaxable return of capital to the extent of the U.S. Holder’s tax basis in its common stock and thereafter as capital gain. U.S. Holders that are corporations generally will not be entitled to claim a dividend received deduction with respect to distributions they receive from us. Dividends received with respect to our common stock generally will be treated as “passive category income” for purposes of computing allowable foreign tax credits for U.S. federal income tax purposes.

Dividends received with respect to our common stock by a U.S. Holder that is an individual, trust or estate, or a “U.S. Individual Holder,” generally will be treated as “qualified dividend income,” which is taxable to such U.S. Individual Holder at preferential tax rates provided that: (i) our common stock is readily tradable on an established securities market in the United States (such as the New York Stock Exchange on which our common stock is listed); (ii) we are not a PFIC for the taxable year during which the dividend is paid or the immediately preceding taxable year (which we do not believe we are, have been or will be, as discussed below under “PFIC Status and Significant Tax Consequences”); (iii) the U.S. Individual Holder has owned the common stock for more than 60 days during the 121-day period beginning 60 days before the date on which the common stock become ex-dividend (and has not entered into certain risk limiting transactions with respect to such common stock); and (iv) the U.S. Individual Holder is not under an obligation to make related payments with respect to positions in substantially similar or related property. Because of the uncertainty of these matters, including whether we are or will be a PFIC, there is no assurance that any dividends paid on our common stock will be eligible for these preferential rates in the hands of a U.S. Individual Holder, and any dividends paid on our common stock that are not eligible for these preferential rates will be taxed as ordinary income to a U.S. Individual Holder.

Special rules may apply to any amounts received in respect of our common stock that are treated as “extraordinary dividends.” In general, an extraordinary dividend is a dividend with respect to a share of our common stock that is equal to or in excess of 10.0% of a shareholder’s adjusted tax basis (or fair market value upon the shareholder’s election) in such share. In addition, extraordinary dividends include dividends received within a one-year period that, in the aggregate, equal or exceed 20.0% of a shareholder’s adjusted tax basis (or fair market value). If we pay an “extraordinary dividend” on shares of our common stock that is treated as “qualified dividend income,” then any loss recognized by a U.S. Individual Holder from the sale or exchange of such shares will be treated as long-term capital loss to the extent of the amount of such dividend.

Sale, Exchange or other Disposition of Common Stock

Subject to the discussion of PFICs below, a U.S. Holder generally will recognize taxable gain or loss upon a sale, exchange or other disposition of shares of our common stock in an amount equal to the difference between the amount realized by the U.S. Holder from such sale, exchange or other disposition and the U.S. Holder’s adjusted tax basis in such shares. The U.S. Holder’s initial tax basis in its common stock generally will be the U.S. Holder’s purchase price for the shares of common stock and that tax basis will be reduced (but not below zero) by the amount of any distributions on the shares that are treated as non-taxable returns of capital (as discussed above under “—Distributions”). Such gain or loss will be treated as long-term capital gain or loss if the U.S. Holder’s holding period is greater than one year at the time of the sale, exchange or other disposition. Certain U.S. Holders (including individuals) may be eligible for preferential rates of U.S. federal income tax in respect of long-term capital gains. A U.S. Holder’s ability to deduct capital losses is subject to limitations. Such capital gain or loss generally will be treated as U.S.-source income or loss, as applicable, for U.S. foreign tax credit purposes.

PFIC Status and Significant Tax Consequences

Adverse U.S. federal income tax rules apply to a U.S. Holder that owns an equity interest in a non-U.S. corporation that is classified as a PFIC for U.S. federal income tax purposes. In general, we will be treated as a PFIC with respect to a U.S. Holder if, for any taxable year in which the holder held our common stock, either:

- at least 75.0% of our gross income (including the gross income of our vessel-owning subsidiaries) for such taxable year consists of passive income (e.g., dividends, interest, capital gains from the sale or exchange of investment property and rents derived other than in the active conduct of a rental business), or
- at least 50.0% of the average value of the assets held by us (including the assets of our vessel-owning subsidiaries) during such taxable year produce, or are held for the production of, passive income.

Income earned or treated as earned (for U.S. federal income tax purposes) by us in connection with the performance of services should not constitute passive income for PFIC purposes. By contrast, rental income generally would constitute passive income unless we were treated as deriving our rental income in the active conduct of a trade or business under the applicable rules.

Based on our current and projected method of operation we believe that we were not a PFIC for any taxable year, and we expect that we will not be treated as a PFIC for the current or any future taxable year. We believe that more than 25.0% of our gross income for each taxable year was or will be non-passive income, and more than 50.0% of the average value of our assets for each such year was or will be held for the production of such non-passive income. This belief is based on certain valuations and projections regarding our assets, income and charters, and its validity is conditioned on the accuracy of such valuations and projections. While we believe such valuations and projections to be accurate, the shipping market is volatile and no assurance can be given that our assumptions and conclusions will continue to be accurate at any time in the future.

Moreover, there are legal uncertainties involved in determining whether the income derived from our time-chartering activities constitutes rental income or income derived from the performance of services. In *Tidewater*

Inc. v. United States, 565 F.3d 299 (5th Cir. 2009), the Fifth Circuit held that income derived from certain time-chartering activities should be treated as rental income rather than services income for purposes of a provision of the Code relating to foreign sales corporations. In that case, the Fifth Circuit did not address the definition of passive income or the PFIC rules; however, the reasoning of the case could have implications as to how the income from a time charter would be classified under such rules. If the reasoning of the case were extended to the PFIC context, the gross income we derive from our time-chartering activities may be treated as rental income, and we would likely be treated as a PFIC. In published guidance, the IRS stated that it disagreed with the holding in *Tidewater* and specified that time charters similar to those at issue in this case should be treated as service contracts.

Distinguishing between arrangements treated as generating rental income and those treated as generating services income involves weighing and balancing competing factual considerations, and there is no legal authority under the PFIC rules addressing our specific method of operation. Conclusions in this area therefore remain matters of interpretation. We are not seeking a ruling from the IRS on the treatment of income generated by our time-chartering operations. It is possible that the IRS or a court could disagree with our position. In addition, although we intend to conduct our affairs in a manner to avoid being classified as a PFIC with respect to any taxable year, we cannot assure shareholders that the nature of our operations will not change in the future, notwithstanding our present expectations, and that we will not become a PFIC in any future taxable year.

As discussed more fully below, if we were to be treated as a PFIC for any taxable year (and regardless of whether we remain a PFIC for subsequent taxable years), a U.S. Holder would be subject to different taxation rules depending on whether the U.S. Holder makes an election to treat us as a “Qualified Electing Fund,” which we refer to as a “QEF election.” As an alternative to making a QEF election, a U.S. Holder should be able to make a “mark-to-market” election with respect to our common stock, as discussed below. In addition, if a U.S. Holder owns our common stock during any taxable year that we are a PFIC, such holder must file an annual report with the IRS.

Taxation of U.S. Holders Making a Timely QEF Election

A U.S. Holder that makes a timely QEF election, or an “Electing Holder,” must report for U.S. federal income tax purposes his pro rata share of our ordinary earnings and net capital gain, if any, for our taxable years that end with or within his taxable year, regardless of whether or not the Electing Holder received distributions from us in that year. The Electing Holder’s adjusted tax basis in its shares of our common stock will be increased to reflect taxed but undistributed earnings and profits. Distributions of earnings and profits that were previously taxed will result in a corresponding reduction in the Electing Holder’s adjusted tax basis in its shares of common stock and will not be taxed again once distributed. An Electing Holder generally will recognize capital gain or loss on the sale, exchange or other disposition of our common stock. A U.S. Holder makes a QEF election with respect to any year that we are a PFIC by filing IRS Form 8621 with his U.S. federal income tax return. If, contrary to our expectations, we determine that we are treated as a PFIC for any taxable year, we will provide each U.S. Holder with the information necessary to make the QEF election described above. Although the QEF election is available with respect to subsidiaries, in the event we acquire or own a subsidiary in the future that is treated as a PFIC, no assurances can be made that we will be able to provide U.S. Holders with the necessary information to make the QEF election with respect to such subsidiary.

Taxation of U.S. Holders Making a “Mark-to-Market” Election

If we were to be treated as a PFIC for any taxable year and, as we anticipate, our common stock was treated as “marketable stock,” then, as an alternative to making a QEF election, a U.S. Holder would be allowed to make a “mark-to-market” election with respect to our common stock, provided the U.S. Holder completes and files IRS Form 8621 in accordance with the relevant instructions and related Treasury Regulations. If that election is made, the U.S. Holder generally would include as ordinary income in each taxable year the excess, if any, of the fair market value of the U.S. Holder’s shares of common stock at the end of the taxable year over the holder’s

adjusted tax basis in its shares of common stock. The U.S. Holder also would be permitted an ordinary loss in respect of the excess, if any, of the U.S. Holder's adjusted tax basis in its shares over the fair market value thereof at the end of the taxable year, but only to the extent of the net amount previously included in income as a result of the mark-to-market election. A U.S. Holder's tax basis in its shares of common stock would be adjusted to reflect any such income or loss recognized. Gain recognized on the sale, exchange or other disposition of our common stock would be treated as ordinary income, and any loss recognized on the sale, exchange or other disposition of the common stock would be treated as ordinary loss to the extent that such loss does not exceed the net mark-to-market gains previously included in income by the U.S. Holder. Because the mark-to-market election only applies to marketable stock, however, it would not apply to a U.S. Holder's indirect interest in any of our subsidiaries that were determined to be PFICs.

Taxation of U.S. Holders Not Making a Timely QEF or Mark-to-Market Election

If we were to be treated as a PFIC for any taxable year, a U.S. Holder who does not make either a QEF election or a "mark-to-market" election for that year, or a "Non-Electing Holder," would be subject to special rules resulting in increased liability with respect to (i) any excess distribution (i.e., the portion of any distributions received by the Non-Electing Holder on our common stock in a taxable year in excess of 125.0% of the average annual distributions received by the Non-Electing Holder in the three preceding taxable years, or, if shorter, the Non-Electing Holder's holding period for the shares), and (ii) any gain realized on the sale, exchange or other disposition of the shares. Under these special rules:

- the excess distribution or gain would be allocated ratably over the Non-Electing Holder's aggregate holding period for the common stock;
- the amount allocated to the current taxable year and any taxable year prior to the taxable year we were first treated as a PFIC with respect to the Non-Electing Holder would be taxed as ordinary income; and
- the amount allocated to each of the other taxable years would be subject to tax at the highest rate of tax in effect for the applicable class of taxpayers for that year, and an interest charge for the deemed deferral benefit would be imposed with respect to the resulting tax attributable to each such year.

These penalties would not apply to a qualified pension, profit sharing or other retirement trust or other tax-exempt organization that did not borrow money or otherwise utilize leverage in connection with its acquisition of our common stock. If we were treated as a PFIC for any taxable year and a Non-Electing Holder who is an individual, dies while owning our common stock, such holder's successor generally would not receive a step-up in tax basis with respect to the common stock.

Medicare Tax on Net Investment Income

Certain U.S. Holders, including individuals, estates and trusts, will be subject to an additional 3.8% Medicare tax on, among other things, dividends and capital gains from the sale or other disposition of equity interests. For individuals, the additional Medicare tax applies to the lesser of (i) "net investment income" or (ii) the excess of "modified adjusted gross income" over \$200,000 (\$250,000 if married and filing jointly or \$125,000 if married and filing separately). "Net investment income" generally equals the taxpayer's gross investment income reduced by deductions that are allocable to such income. Shareholders should consult their tax advisors regarding the implications of the additional Medicare tax resulting from their ownership and disposition of our common stock.

U.S. Federal Income Taxation of Non-U.S. Holders

A beneficial owner of our common stock (other than a partnership or an entity or arrangement treated as a partnership for U.S. federal income tax purposes) that is not a U.S. Holder is referred to as a Non-U.S. Holder. If you are a partner in a partnership (or an entity or arrangement treated as a partnership for U.S. federal income tax purposes) holding our common stock, you should consult your own tax advisor regarding the tax consequences to you of the partnership's ownership of our common stock.

Distributions

Distributions we pay to a Non-U.S. Holder will not be subject to U.S. federal income tax or withholding tax if the Non-U.S. Holder is not engaged in a U.S. trade or business. If the Non-U.S. Holder is engaged in a U.S. trade or business, our distributions will be subject to U.S. federal income tax to the extent they constitute income effectively connected with the Non-U.S. Holder's U.S. trade or business. However, distributions paid to a Non-U.S. Holder that is engaged in a U.S. trade or business may be exempt from taxation under an income tax treaty if the income arising from the distribution is not attributable to a U.S. permanent establishment or fixed base maintained by the Non-U.S. Holder.

Disposition of Shares

In general, a Non-U.S. Holder is not subject to U.S. federal income tax or withholding tax on any gain resulting from the disposition of our common stock provided the Non-U.S. Holder is not engaged in a U.S. trade or business. A Non-U.S. Holder that is engaged in a U.S. trade or business will be subject to U.S. federal income tax in the event the gain from the disposition of shares is effectively connected with the conduct of such U.S. trade or business (provided, in the case of a Non-U.S. Holder entitled to the benefits of an income tax treaty with the United States, such gain also is attributable to a U.S. permanent establishment or fixed base maintained by the Non-U.S. Holder). However, even if not engaged in a U.S. trade or business, individual Non-U.S. Holders may be subject to tax on gain resulting from the disposition of our common stock if they are present in the United States for 183 days or more during the taxable year in which those shares are disposed and meet certain other requirements.

Backup Withholding and Information Reporting

In general, payments to a non-corporate U.S. Holder of distributions or the proceeds of a disposition of common stock will be subject to information reporting. These payments to a non-corporate U.S. Holder also may be subject to backup withholding if the non-corporate U.S. Holder:

- fails to provide an accurate taxpayer identification number;
- is notified by the IRS that he has failed to report all interest or corporate distributions required to be reported on his U.S. federal income tax returns; or
- in certain circumstances, fails to comply with applicable certification requirements.

Non-U.S. Holders may be required to establish their exemption from information reporting and backup withholding by certifying their status on IRS Form W-8BEN, W-8BEN-E, W-8ECI, W-8EXP or W-8IMY, as applicable.

Backup withholding is not an additional tax. Rather, a shareholder generally may obtain a credit for any amount withheld against its liability for U.S. federal income tax (and obtain a refund of any amounts withheld in excess of such liability) by timely filing a U.S. federal income tax return with the IRS.

In addition, individual citizens or residents of the United States holding certain "foreign financial assets" (which generally includes stock and other securities issued by a foreign person unless held in an account maintained by certain financial institutions) that exceed certain thresholds (the lowest being holding foreign financial assets with an aggregate value in excess of: (1) \$50,000 on the last day of the tax year or (2) \$75,000 at any time during the tax year) are required to report information relating to such assets. Significant penalties may apply for failure to satisfy the reporting obligations described above. Our shareholders should consult their tax advisors regarding their reporting obligations, if any, that would result from their purchase, ownership or disposition of our common stock.

Non-U.S. Tax Considerations

Republic of the Marshall Islands Tax Consequences

The following is applicable to persons who do not reside in, maintain offices in or engage in business in the Republic of the Marshall Islands.

Because we and our subsidiaries do not and do not expect to conduct business or operations in the Republic of the Marshall Islands, under current Republic of the Marshall Islands law you will not be subject to Republic of the Marshall Islands taxation or withholding on distributions we make to you as a shareholder. In addition, you will not be subject to Republic of the Marshall Islands stamp, capital gains or other taxes on the purchase, ownership or disposition of common stock, and you will not be required by the Republic of the Marshall Islands to file a tax return relating to your ownership of common stock.

EACH SHAREHOLDER IS URGED TO CONSULT THEIR OWN TAX COUNSEL OR OTHER ADVISOR WITH REGARD TO THE LEGAL AND TAX CONSEQUENCES OF SHARE OWNERSHIP IN THEIR PARTICULAR CIRCUMSTANCES. FURTHER, IT IS THE RESPONSIBILITY OF EACH SHAREHOLDER TO FILE ALL STATE, LOCAL AND NON-U.S., AS WELL AS U.S. FEDERAL INCOME TAX RETURNS, WHICH THE SHAREHOLDER IS REQUIRED TO FILE.

F. Dividends and Paying Agents

Not applicable.

G. Statements by Experts

Not applicable.

H. Documents on Display

Documents concerning us that are referred to herein may be inspected at our principal executive offices at 10 Bressenden Place, London, SW1E 5DH, United Kingdom, and may also be obtained from our website on the Internet at www.navigatorgas.com. Those documents electronically filed via the SEC's Electronic Data Gathering, Analysis, and Retrieval (or EDGAR) system may be obtained from the SEC's website on the Internet at www.sec.gov.

I. Subsidiary Information

Not applicable.

Item 11. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to market risk from changes in interest rates and foreign currency fluctuations, as well as inflation. We use interest rate swaps to manage interest rate risks but will not use these financial instruments for trading or speculative purposes.

Interest Rate Risk

Historically, we have been subject to limited market risks relating to changes in interest rates because we did not have significant amounts of floating rate debt outstanding. Navigator Gas L.L.C., our wholly-owned subsidiary, and certain of our vessel-owning subsidiaries are parties to secured term loan and revolving credit facilities that bear interest at an interest rate of U.S. LIBOR plus 185 to 270 basis points. A variation in U.S. LIBOR of 100 basis points would result in a variation of \$7.2 million in annual interest paid on our indebtedness outstanding as of December 31, 2019, under the secured term loan and revolving credit facilities.

We invest our surplus funds with reputable financial institutions, with original maturities of no more than six months, in order to provide the Company with flexibility to meet all requirements for working capital and for capital investments.

Foreign Currency Exchange Rate Risk

Our primary economic environment is the international shipping market. This market utilizes the U.S. Dollar as its functional currency. Consequently, virtually all of our revenues are in U.S. Dollars. Our expenses, however, are in the currency invoiced by each supplier, and we remit funds in the various currencies invoiced. We incur some vessel operating expenses and general and administrative costs in foreign currencies. During the fiscal years ended December 31, 2018 and 2019, approximately \$16.9 million, or 13.4%, and 24.3 million, or 18.4%, respectively, of vessel operating costs and general and administrative costs were denominated in non-U.S. Dollar currency, principally the British Pound Sterling and the Euro. A hypothetical 10% decrease in the value of the U.S. Dollar relative to the values of the British Pound Sterling; the Euro and the Polish Zloty realized during the year ended December 31, 2018 would have increased our vessel operating costs during the fiscal year ended December 31, 2019, by approximately \$1.0 million, and our general and administrative costs by \$1.4 million (a hypothetical 10% decrease realized during the year ended December 31, 2017 would have increased our vessel operating costs during the fiscal year ended December 31, 2018 by approximately \$0.4 million, and our general and administrative costs by \$1.3 million).

On November 2, 2018, we issued senior secured bonds in an aggregate amount of NOK 600 million. Please read “2018 Senior Secured Bonds”. We have entered into a cross currency interest rate swap to mitigate the risk of currency movements for both interest payments during the five-year tenor of these bonds and for principal repayments at maturity in November 2023. However if the Norwegian Kroner depreciates relative to the U.S. Dollar beyond a certain threshold, we are required to place cash collateral with our swap providers for the forecast future liability on the cross-currency interest rate swap. In the event the depreciation of the Norwegian Kroner relative to the U.S. Dollar is significant, the cash collateral requirements could adversely affect our liquidity and financial position. Please read Note 18 (Derivative Instruments) to the consolidated financial statements.

Inflation

Certain of our operating expenses, including crewing, insurance and drydocking costs, are subject to fluctuations as a result of market forces. Increases in bunker costs could have a material effect on our future operations if the number and duration of our voyage charters or COA’s increases. In the case of the 38 vessels owned as of December 31, 2019, 25 were employed on time charter and as such it is the charterers who pay for the fuel on those vessels. If our vessels are employed under voyage charters or COA’s, freight rates are generally sensitive to the price of fuel. However, a sharp rise in bunker prices may have a temporary negative effect on our results since freight rates generally adjust only after prices settle at a higher level.

Item 12. Description of Securities Other than Equity Securities

Not applicable.

PART II

Item 13. Defaults, Dividend Arrearages and Delinquencies

Neither Navigator Holdings nor any of its subsidiaries have been subject to a material default in the payment of principal, interest, a sinking fund or purchase fund installment or any other material delinquency that was not cured within 30 days.

Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds

None.

Item 15. Controls and Procedures

Disclosure Controls and Procedures

Our Principal Executive Officer and our Principal Financial Officer, after evaluating the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) of the Exchange Act) as of December 31, 2019, have concluded that, as of such date, our disclosure controls and procedures were not effective (see below).

Management's Report on Internal Control over Financial Reporting

In accordance with Rule 13a-15(f) of the Securities Exchange Act of 1934, our management, including our principal executive officer and principal financial officer, is responsible for the establishment and maintenance of adequate internal controls over financial reporting for the Company. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. The Company's system of internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Company's assets that could have a material effect on the financial statements.

Management has performed an assessment of the effectiveness of the Company's internal controls over financial reporting as of December 31, 2019 based on the provisions of Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO").

Material Weakness in Internal Control over Financial Reporting

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis. We have identified three material weaknesses in our internal control over financial reporting due to: (i) a lack of sufficient effective controls over prospective financial information used in our going concern assessment, (ii) a lack of sufficient accounting and financial reporting personnel with requisite knowledge and experience in the application of U.S. GAAP and SEC financial reporting requirements, and (iii) control weaknesses at related to manage access and manage change for IT systems at one of our third party technical managers.

Accordingly, our management has determined that these control deficiencies constitute material weaknesses and therefore management concluded that the Company did not maintain effective internal control over financial reporting as of December 31, 2019.

Remediation Plan for Material Weaknesses

We are taking steps to remediate the deficiencies. We will (i) further enhanced our internal control over financial reporting relating to the preparation of forecasts and assessment of going concern. (ii) implement an enhanced process in preparing technical papers in support of determining the appropriate accounting treatments for certain non-routine transactions and new accounting issues and related disclosures, including the recruitment of additional appropriately qualified staff, or the engagement of third-party specialists if required, and (iii) engage in active dialogue with our third party technical manager to remediate the control deficiencies or design compensating controls. We believe that the above actions, together with any modifications thereto, which we may determine to be appropriate, will be effective in remediating the material weakness described above. However, the material weakness cannot be considered remediated until the controls operate for a sufficient period of time and management has concluded, through testing, that our internal controls are operating effectively.

The Company's internal control over financial reporting, as of December 31, 2019, has been audited by Ernst & Young LLP ("EY"), an independent registered public accounting firm, who also audited the Company's consolidated financial statements for that year. Their audit report on the effectiveness of internal control over financial reporting is presented in "Item 18 Financial Statements".

Changes in Internal Control over Financial Reporting

Other than the changes referred to above, there were no changes in our internal controls over financial reporting that occurred during the period covered by this annual report that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 16A. Audit Committee Financial Expert

Our board of directors has determined that Messrs. Weidinger, Kenwright and Oetker satisfy the independence standards established by the NYSE and that each qualifies as an "audit committee financial expert," as such term is defined in Regulation S-K promulgated by the SEC.

Item 16B. Code of Ethics

We have adopted a Code of Business Conduct and Ethics that applies to all entities controlled by the Company and its employees, directors, officers and agents of the Company. We will provide any person, free of charge, a copy of our Code of Business Conduct and Ethics upon written request to our registered office.

Item 16C. Principal Accountant Fees and Services

Our principal accountant for 2019 was EY. Our principal accountant for 2018 was KPMG.

Audit Fees

Audit fees incurred include \$411,089 in 2019 and \$451,672 in 2018 relating to aggregate fees billed for professional services rendered by the principal accountants for the audit of the Company's annual financial statements and quarterly reviews.

Audit-Related Fees

There were no audit related fees incurred in 2018 and 2019.

Tax Fees

Tax fees incurred include \$3,850 in 2019 and \$41,767 in 2018 relating to general compliance services provided by the principal accountant in connection with our tax.

All Other Fees

There were no fees incurred by the Company for EY's services relating to other fees in 2019 and KPMG's services relating to other fees in 2018.

The audit committee has the authority to pre-approve permissible audit-related and non-audit services not prohibited by law to be performed by our independent auditors and associated fees. Engagements for proposed services either may be separately pre-approved by the audit committee or entered into pursuant to detailed pre-approval policies and procedures established by the audit committee, as long as the audit committee is informed on a timely basis of any engagement entered into on that basis. The audit committee separately pre-approved all engagements and fees paid to our principal accountant for all periods in 2018 and 2019.

Item 16D. Exemptions from the Listing Standards for Audit Committees

Not applicable.

Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers

Not applicable.

Item 16F. Change in Registrant's Certifying Accountant

Not applicable.

Item 16G. Corporate Governance

Overview

While we are not subject to a number of the NYSE's corporate governance standards as a foreign private issuer, we intend to comply voluntarily with a number of those rules. For example, we have a board of directors that is comprised of a majority of independent directors. However, pursuant to Section 303.A.11 of the NYSE Listed Company Manual, we are required to state any significant differences between our corporate governance practices and the practices required by the NYSE for U.S. companies. The significant differences between our corporate governance practices and the NYSE standards applicable to listed U.S. companies are set forth below.

Nominating/Corporate Governance Committee

The NYSE requires that a listed U.S. company have a nominating/corporate governance committee composed entirely of independent directors and a committee charter specifying the purpose, duties and evaluation procedures of the committee. While we are not required under Marshall Islands law and our bylaws to have a nominating/corporate governance committee, we have a nominations committee. However, we do not publish our nominations committee charter on our website, as is required under the NYSE standards applicable to listed U.S. companies, nor do we have a corporate governance committee.

Corporate Governance Guidelines

The NYSE requires U.S. companies to adopt and disclose corporate governance guidelines. The guidelines must address, among other things: director qualification standards, director responsibilities, director access to

management and independent advisers, director compensation, director orientation and continuing education, management succession and an annual performance evaluation. We are not required to adopt such guidelines under Marshall Islands law and we have not adopted such guidelines.

We believe that our established corporate governance practices satisfy the NYSE listing standards.

Item 16H. Mine Safety Disclosure

Not applicable.

PART III

Item 17. Financial Statements

See “Item 18-Financial Statements.”.

Item 18. Financial Statements

The following financial statements listed below and set forth on pages F-6 through F-37, together with the related report of Ernst & Young LLP, Independent Registered Public Accounting Firm thereon, are filed as part of this annual report:

Consolidated Balance Sheets as of December 31, 2018 and 2019	F-7
Consolidated Statements of Operations for the years ended December 31, 2017, 2018 and 2019	F-8
Consolidated Statements of Comprehensive Income for the years ended December 31, 2017, 2018 and 2019	F-9
Consolidated Statements of Stockholders’ Equity for the years ended December 31, 2017, 2018 and 2019	F-10
Consolidated Statements of Cash Flows for the years ended December 31, 2017, 2018 and 2019	F-11
Notes to Consolidated Financial Statements	F-12

Item 19. Exhibits

The following exhibits are filed as part of this annual report:

<u>Exhibit Number</u>	<u>Description</u>
1.1	Amended and Restated Articles of Incorporation of Navigator Holdings Ltd. (incorporated by reference to Exhibit 3.1 to the registrant’s Registration Statement on Form F-1 (File No. 333-191784), filed on November 6, 2013).
1.2	Second Amended and Restated Bylaws of Navigator Holdings Ltd. (incorporated by reference to Exhibit 3.2 to the registrant’s Registration Statement on Form F-1 (File No. 333-191784), filed on November 4, 2013).
2.1	Investment Agreement, dated November 10, 2011, among Navigator Holdings Ltd., WL Ross & Co. LLC and certain of its affiliates named therein (incorporated by reference to Exhibit 4.1 to the registrant’s Registration Statement on Form F-1 (File No. 333-191784), filed on November 4, 2013).
2.2	Investment Agreement, dated February 15, 2013, among Navigator Holdings Ltd., WL Ross & Co. LLC and certain of its affiliates and unrelated third-party investors named therein (incorporated by reference to Exhibit 4.2 to the registrant’s Registration Statement on Form F-1 (File No. 333-191784), filed on November 4, 2013).
2.3	Investor Rights Agreement, dated November 5, 2013, among Navigator Holdings Ltd., WL Ross & Co. LLC and certain of its affiliates named therein (incorporated by reference to Exhibit 4.3 to the registrant’s Registration Statement on Form F-1 (File No. 333-191784), filed on November 6, 2013).
2.5	Form of Common Stock Certificate (incorporated by reference to Exhibit 4.5 to the registrant’s Registration Statement on Form F-1 (File No. 333-191784), filed on November 15, 2013).
2.6	A description of the rights of each class of securities that is registered under Section 12 of the Exchange Act as of December 31, 2019.
4.1	Navigator Holdings Ltd. 2013 Long-Term Incentive Plan, effective as of October 22, 2013 (incorporated by reference to Exhibit 10.1 to the registrant’s Registration Statement on Form F-1 (File No. 333-191784), filed on November 6, 2013).

<u>Exhibit Number</u>	<u>Description</u>
4.2	\$278.1 million Secured Facility Agreement, dated January 27, 2015, by and among Navigator Atlas L.L.C., Navigator Europa L.L.C., Navigator Oberon L.L.C., Navigator Triton L.L.C., Navigator Umbrio L.L.C., Navigator Centauri L.L.C., Navigator Ceres L.L.C., Navigator Ceto L.L.C. and Navigator Copernico L.L.C., as borrowers, Navigator Holdings Ltd., Navigator Gas L.L.C and Credit Agricole Corporate and Investment Bank, HSH Nordbank AG and NIBC Bank N.V., as arrangers and Credit Agricole Corporate and Investment Bank, as agent, and the lenders party thereto (incorporated by reference to Exhibit 10.1 to the registrant's Report on Form 6-K (File No. 001-36202), filed on February 4, 2015).
4.3	\$290.0 million Secured Facility Agreement, dated December 21, 2015, by and among Navigator Gas L.L.C., as borrower, Nordea Bank AB, ABN Amro Bank N.V., Danmarks Skibskredit A/S, National Australia Bank Limited, ING Bank N.V. and Credit Agricole Corporate and Investment Bank as arrangers and Nordea Bank AB and ABN Amro Bank N.V as agent, and the lenders party thereto (incorporated by reference to Exhibit 10.1 to the registrant's Report on Form 6-K (File No. 001-36202), filed on December 23, 2015).
4.4	\$220.0 million Secured Facility Agreement, dated October 28, 2016, by and among Navigator Gas L.L.C. as borrower, Navigator Holdings Ltd., as guarantor, and the lenders named therein (incorporated by reference to Exhibit 10.1 to the registrant's Report on Form 6-K (File No. 001-36202), filed on October 31, 2016).
4.5	Joint Venture Agreement, dated August 4, 2010, among PT Persona Sentra Utama, PT Mahameru Kencana Abadi, Navigator Gas Invest Limited and PT Navigator Khatulistiwa (incorporated by reference to Exhibit 10.8 to the registrant's Registration Statement on Form F-1 (File No. 333-191784), filed on November 4, 2013).
4.6	Supplemental Deed, dated February 13, 2014, among PT Navigator Khatulistiwa, PT Persona Sentra Utama, PT Mahameru Kencana Abadi, Navigator Gas Invest Limited, Falcon Funding Ptd. Ltd. and Navigator Gas L.L.C. (incorporated by reference to Exhibit 4.9 to the registrant's Annual Report on Form 20-F (File No. 001-36202), filed on March 17, 2014).
4.7	Bond agreement between Navigator Holdings Ltd. and Nordic Trustee AS on behalf of the Bondholders in the bond issue of 7.75% Navigator Holdings Ltd. Senior Unsecured Callable Bonds dated February 10, 2017 (incorporated by reference to Exhibit 4.13 to the registrant's Annual Report on Form 20-F (File No. 001-36202), filed on March 5, 2018).
4.8	Bond Terms between Navigator Holdings Ltd., as issuer, and Nordic Trustee AS, as bond trustee and security agent, in the bond issue of NIBOR+6.0% Navigator Holdings Ltd. Senior Secured Callable NOK Bonds dated November 1, 2018 (incorporated by reference to Exhibit 4.1 to the registrant's Report on Form 6-K (File No. 001-36202), filed on November 13, 2018).
4.9	\$160.8 million Secured Facility Agreement, dated June 30, 2017, by and among Navigator Gas L.L.C. as borrower, Navigator Holdings Ltd., as guarantor, and the lenders named therein (incorporated by reference to Exhibit 10.1 to the registrant's Report on Form 6-K (File No. 001-36202), filed on July 6, 2017).
4.10	\$107.0 million Secured Facility Agreement, dated March 25, 2019, by and among Navigator Atlas L.L.C., Navigator Europa L.L.C., Navigator Oberon L.L.C. and Navigator Triton L.L.C. as borrowers, Navigator Gas L.L.C. and Navigator Holdings Ltd. as guarantors, Credit Agricole Corporate and Investment Bank, ING Bank, a branch of ING—DIBA AG, and Skandinaviska Enskilda Banken AB (Publ), as arrangers and Credit Agricole Corporate and Investment Bank, as agent (incorporated by reference to Exhibit 4.14 to the registrant's Annual Report on Form 20-F (File No. 001-36202), filed on April 1, 2019).

<u>Exhibit Number</u>	<u>Description</u>
4.11	\$75.0 million Credit Agreement dated March 29, 2019, between Navigator Ethylene Terminals L.L.C. as borrower, and ING Capital L.L.C. and SG Americas Securities L.L.C. as arrangers (incorporated by reference to Exhibit 4.15 to the registrant's Annual Report on Form 20-F (File No. 001-36202), filed on April 1, 2019).
4.12	Amendment to the Bond Agreement, dated September 30, 2019 by and among Navigator Holdings Ltd. and the Nordic Trustee, relating to Bond agreement between Navigator Holdings Ltd. and Nordic Trustee AS on behalf of the Bondholders in the bond issue of 7.75% Navigator Holdings Ltd. Senior Unsecured Callable Bonds dated February 10, 2017 (incorporated by reference to Exhibit 4.1 to the registrant's Report on Form 6-K (File No. 001-36202), filed on November 13, 2019).
8.1*	List of Subsidiaries of Navigator Holdings Ltd.
12.1*	Rule 13a-14(a)/15d-14(a) Certification of Principal Executive Officer.
12.2*	Rule 13a-14(a)/15d-14(a) Certification of Principal Financial Officer.
13.1*	Certification under Section 906 of the Sarbanes-Oxley Act of 2002 of the Principal Executive Officer.
13.2*	Certification under Section 906 of the Sarbanes-Oxley Act of 2002 of the Principal Financial Officer.
15.1*	Consent of Independent Registered Public Accounting Firm, EY LLP
15.2*	Consent of Independent Registered Public Accounting Firm, KPMG LLP
101. INS*	XBRL Instance Document
101. SCH*	XBRL Taxonomy Extension Schema
101. CAL*	XBRL Taxonomy Extension Schema Calculation Linkbase
101. DEF*	XBRL Taxonomy Extension Schema Definition Linkbase
101. LAB*	XBRL Taxonomy Extension Schema Label Linkbase
101. PRE*	XBRL Taxonomy Extension Schema Presentation Linkbase

* Filed herewith.

SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this Annual Report on its behalf.

NAVIGATOR HOLDINGS LTD.

Date: May 8, 2020

By: /s/ Niall Nolan
Name: Niall Nolan
Title: Chief Financial Officer (Principal Financial Officer)

INDEX TO FINANCIAL STATEMENTS

NAVIGATOR HOLDINGS LTD.

AUDITED CONSOLIDATED FINANCIAL STATEMENTS

Reports of Independent Registered Public Accounting Firm (Ernst & Young LLP)	F-2, F-4
Report of Independent Registered Public Accounting Firm (KPMG LLP)	F-6
Consolidated Balance Sheets as of December 31, 2018 and 2019	F-7
Consolidated Statements of Operations for the years ended December 31, 2017, 2018 and 2019	F-8
Consolidated Statements of Comprehensive Income for the years ended December 31, 2017, 2018 and 2019	F-9
Consolidated Statements of Stockholders' Equity for the years ended December 31, 2017, 2018 and 2019	F-10
Consolidated Statements of Cash Flows for the years ended December 31, 2017, 2018 and 2019	F-11
Notes to Consolidated Financial Statements	F-12

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Navigator Holdings Ltd.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheet of Navigator Holdings Ltd. (the Company) as of December 31, 2019, the related consolidated statements of operations, comprehensive income, stockholders' equity and cash flows for the year then ended, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2019, and the results of its operations and its cash flows for the year then ended, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated May 8, 2020 expressed an adverse opinion thereon.

The Company's Ability to Continue as a Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, the Company may experience significant reductions in revenues and cashflows resulting from uncertainty and economic contraction caused by the COVID-19 pandemic and unexpected calls for deposits into a restricted margin account related to its cross-currency swap, which may cause the Company to breach its loan and bond covenants related to minimum liquidity and interest cover ratio. In addition, the Company cannot repay its bond maturing in February 2021 from projected financial resources and has stated that substantial doubt exists about the Company's ability to continue as a going concern. Management's evaluation of the events and conditions and management's plans regarding these matters are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Adoption of New Accounting Standard

As discussed in Note 2 to the consolidated financial statements, the Company changed its method for accounting for leases in 2019.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audit included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and

disclosures in the financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audit provides a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2019.

London, United Kingdom
May 8, 2020

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Navigator Holdings Ltd.

Opinion on Internal Control Over Financial Reporting

We have audited Navigator Holdings Ltd.'s internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, because of the effect of the material weakness described below on the achievement of the objectives of the control criteria, Navigator Holdings Ltd. (the Company) has not maintained effective internal control over financial reporting as of December 31, 2019, based on the COSO criteria.

A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis. The following material weaknesses have been identified and included in management's assessment:

- a lack of sufficient effective controls over prospective financial information used in the Company's going concern assessment;
- a lack of sufficient accounting and financial reporting personnel with requisite knowledge and experience in the application of U.S. GAAP and SEC financial reporting requirements; and
- manage access and manage change for IT systems at one of the Company's third party technical managers.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheet of the Company as of December 31, 2019, the related consolidated statements of income, comprehensive operations, stockholders' equity and cash flows for the year then ended, and the related notes. These material weaknesses were considered in determining the nature, timing and extent of audit tests applied in our audit of the 2019 consolidated financial statements, and this report does not affect our report dated May 8, 2020, which expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young LLP

London, United Kingdom
May 8, 2020

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors
Navigator Holdings Ltd.:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Navigator Holdings Ltd. and subsidiaries (the Company) as of December 31, 2018, the related consolidated statements of income, comprehensive income, stockholders' equity, and cash flows for each of the years in the two-year period ended December 31, 2018, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018, and the results of its operations and its cash flows for each of the years in the two-year period ended December 31, 2018, in conformity with U.S. generally accepted accounting principles.

Change in Accounting Principle

As discussed in Note 2 to the consolidated financial statements, the Company changed its method of accounting for revenue from contracts with customers in 2018 due to the adoption of ASC Topic 606 – Revenue From Contracts With Customers.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audit included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audit provides a reasonable basis for our opinion.

/s/ KPMG LLP

We served as the Company's auditor from 2012 to 2018.

London, United Kingdom
April 1, 2019

Navigator Holdings Ltd.
Consolidated Balance Sheets

	December 31, 2018	December 31, 2019
	(in thousands, except share data)	
Assets		
Current assets		
Cash, cash equivalents and restricted cash	\$ 71,515	\$ 66,130
Accounts receivable, net	17,033	23,462
Accrued income	4,731	6,280
Prepaid expenses and other current assets	16,043	17,670
Bunkers and lubricant oils	8,789	9,645
Insurance Receivable	14	2,939
Total current assets	118,125	126,126
Non-current assets		
Vessels, net	1,670,865	1,609,527
Property, plant and equipment, net	1,299	1,159
Investment in equity accounted joint venture	42,462	130,660
Right-of-use asset for operating leases	—	6,781
Total non-current assets	1,714,626	1,748,127
Total assets	\$1,832,751	\$1,874,253
Liabilities and stockholders' equity		
Current liabilities		
Current portion of secured term loan facilities, net of deferred financing costs	\$ 68,857	\$ 64,703
Current portion of operating lease liabilities	—	1,178
Accounts payable	10,784	10,472
Accrued expenses and other liabilities	12,798	14,124
Accrued interest	4,613	4,424
Deferred income	8,342	14,154
Amounts due to related parties	—	451
Total current liabilities	105,394	109,506
Non-current Liabilities		
Secured term loan facilities and revolving credit facilities, net of current portion and deferred financing costs	599,676	578,676
Senior secured bond, net of deferred financing costs	68,378	67,503
Senior unsecured bond, net of deferred financing costs	99,039	98,513
Derivative liabilities	5,154	5,769
Operating lease liabilities, net of current portion	—	6,329
Amounts due to related parties	—	68,055
Total non-current liabilities	772,247	824,845
Total Liabilities	877,641	934,351
Commitments and contingencies (see note 15)		
Stockholders' equity		
Common stock—\$.01 par value per share; 400,000,000 shares authorized; 55,826,644 shares issued and outstanding, (2018: 55,657,631)	557	558
Additional paid-in capital	590,508	592,010
Accumulated other comprehensive loss	(363)	(331)
Retained earnings	364,408	347,566
Total Navigator Holdings Ltd. stockholders' equity	955,110	939,803
Non-controlling interest	—	99
Total equity	955,110	939,902
Total liabilities and equity	\$1,832,751	\$1,874,253

See accompanying notes to consolidated financial statements.

Navigator Holdings Ltd.
Consolidated Statements of Operations

	Year ended December 31, 2017	Year ended December 31, 2018	Year ended December 31, 2019
	(in thousands, except per share data)		
Revenues			
Operating revenue	\$ 298,595	\$ 310,046	\$ 301,385
	<u>298,595</u>	<u>310,046</u>	<u>301,385</u>
Expenses			
Brokerage commissions	5,368	5,142	4,938
Voyage expenses	55,542	61,634	55,310
Vessel operating expenses	100,968	106,719	111,475
Depreciation and amortization	73,588	76,140	76,173
General and administrative costs	15,947	18,931	20,878
Total operating expenses	<u>251,413</u>	<u>268,566</u>	<u>268,774</u>
Operating income	47,182	41,480	32,611
Other income/(expense)			
Foreign currency exchange gain on senior secured bonds	—	2,360	969
Unrealized loss on non-designated derivative instruments	—	(5,154)	(615)
Interest expense	(37,691)	(44,908)	(48,611)
Write off of deferred financing costs	(786)	—	(403)
Write off of call premium and redemption charges of 9.00% unsecured bond	(3,517)	—	—
Interest income	519	854	920
Income/(loss) before income taxes and share of result of equity accounted joint venture	5,707	(5,368)	(15,129)
Income taxes	(397)	(333)	(352)
Share of result of equity accounted joint venture	—	(38)	(1,126)
Net income/(loss)	5,310	(5,739)	(16,607)
Net income attributable to non-controlling interest	—	—	(99)
Net income/(loss) attributable to stockholders of Navigator Holdings Ltd.	<u>5,310</u>	<u>(5,739)</u>	<u>(16,706)</u>
Earnings/(loss) per share attributable to stockholders of Navigator Holdings Ltd.:			
Basic:	\$ 0.10	\$ (0.10)	\$ (0.30)
Diluted:	<u>\$ 0.10</u>	<u>\$ (0.10)</u>	<u>\$ (0.30)</u>
Weighted average number of shares outstanding:			
Basic:	55,508,974	55,629,023	55,792,711
Diluted:	<u>55,881,454</u>	<u>55,629,023</u>	<u>55,792,711</u>

See accompanying notes to consolidated financial statements.

Navigator Holdings Ltd.
Consolidated Statements of Comprehensive Income

	Year ended December 31, 2017 <u>(in thousands)</u>	Year ended December 31, 2018 <u>(in thousands)</u>	Year ended December 31, 2019 <u>(in thousands)</u>
Net income/(loss)	\$5,310	\$(5,739)	\$(16,607)
Other comprehensive income / (loss):			
Foreign currency translation gain / (loss)	<u>10</u>	<u>(86)</u>	<u>32</u>
Total comprehensive income / (loss)	<u>\$5,320</u>	<u>\$(5,825)</u>	<u>\$(16,575)</u>
Other comprehensive income / (loss) attributable to:			
Stockholders of Navigator Holdings Ltd:	5,320	(5,825)	(16,674)
Non-controlling interests:	<u>—</u>	<u>—</u>	<u>99</u>
Total comprehensive income / (loss)	<u>\$5,320</u>	<u>\$(5,825)</u>	<u>\$(16,575)</u>

See accompanying notes to consolidated financial statements.

Navigator Holdings Ltd.
Consolidated Statements of Stockholders' Equity

(in thousands, except share data)

	Common stock		Additional Paid-in Capital (Note 13)	Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Non-controlling interest	Total
	Number of shares (Note 13)	Amount 0.01 par value (Note 13)					
January 1, 2017	55,436,087	\$554	\$588,024	\$(287)	\$368,189	\$—	\$956,480
Restricted shares issued							
March 23, 2017	93,675	1	—	—	—	—	1
Net income	—	—	—	—	5,310	—	5,310
Foreign currency translation	—	—	—	10	—	—	10
Share-based compensation plan . . .	—	—	1,412	—	—	—	1,412
December 31, 2017	<u>55,529,762</u>	<u>\$555</u>	<u>\$589,436</u>	<u>\$(277)</u>	<u>\$373,499</u>	<u>\$—</u>	<u>\$963,213</u>
Adjustment to equity for the adoption of the new revenue standard	—	—	—	—	(3,352)	—	(3,352)
Forfeited shares-2013 long-term equity incentive plan	(3,673)	—	—	—	—	—	—
Restricted shares issued							
March 20, 2018	131,542	2	—	—	—	—	2
Net income	—	—	—	—	(5,739)	—	(5,739)
Foreign currency translation	—	—	—	(86)	—	—	(86)
Share-based compensation plan . . .	—	—	1,072	—	—	—	1,072
December 31, 2018	<u>55,657,631</u>	<u>\$557</u>	<u>\$590,508</u>	<u>\$(363)</u>	<u>\$364,408</u>	<u>\$—</u>	<u>\$955,110</u>
Adjustment to equity for the adoption of the new lease standard	—	—	—	—	(136)	—	(136)
Restricted shares issued							
March 20, 2019	174,438	1	—	—	—	—	1
Restricted shares cancelled August 14, 2019	(5,425)	—	—	—	—	—	—
Net income	—	—	—	—	(16,706)	99	(16,607)
Foreign currency translation	—	—	—	32	—	—	32
Share-based compensation plan . . .	—	—	1,502	—	—	—	1,502
December 31, 2019	<u><u>55,826,644</u></u>	<u><u>\$558</u></u>	<u><u>\$592,010</u></u>	<u><u>\$(331)</u></u>	<u><u>\$347,566</u></u>	<u><u>\$ 99</u></u>	<u><u>\$939,902</u></u>

See accompanying notes to consolidated financial statements.

Navigator Holdings Ltd.
Consolidated Statements of Cash Flows

	Year ended December 31, 2017 (in thousands)	Year ended December 31, 2018 (in thousands)	Year ended December 31, 2019 (in thousands)
Cash flows from operating activities			
Net income/(loss)	\$ 5,310	\$ (5,739)	\$ (16,607)
Adjustments to reconcile net income/(loss) to net cash provided by operating activities			
Unrealized loss on non-designated derivative instruments	—	5,154	615
Depreciation and amortization	73,588	76,140	76,173
Payment of drydocking costs	(268)	(5,796)	(11,523)
Amortization of share-based compensation	1,412	1,074	1,503
Amortization of deferred financing costs	3,217	2,292	4,618
Share of result of equity accounted joint venture	—	38	1,126
Call option premium on redemption of 9.00% unsecured bond	2,500	—	—
Prior year expenses recovered from insurance claim	(504)	—	—
Insurance claim receivable	(7)	(642)	(5,107)
Unrealized foreign exchange gain on senior secured bonds	—	(2,360)	(969)
Other unrealized foreign exchange gain/(loss)	3	(12)	239
Changes in operating assets and liabilities			
Accounts receivable	(7,831)	(2,144)	(6,429)
Bunkers and lubricant oils	(1,074)	(781)	(856)
Accrued income, prepaid expenses and other current assets	(5,079)	2,629	(637)
Accounts payable, accrued interest, accrued expenses and other liabilities	4,654	7,664	7,554
Net cash provided by operating activities	<u>75,921</u>	<u>77,517</u>	<u>49,700</u>
Cash flows from investing activities			
Additions to vessels and equipment	(1,940)	(648)	(2,910)
Investment in equity accounted joint venture	—	(42,500)	(89,324)
Payment for vessels under construction	(180,629)	—	—
Purchase of other property, plant and equipment	(1,726)	(182)	(357)
Receipt of shipyard penalty payments	280	—	—
Placement of short term investment	(25,000)	—	—
Release of short term investment	25,000	—	—
Insurance recoveries	990	1,003	2,182
Net cash used in investing activities	<u>(183,025)</u>	<u>(42,327)</u>	<u>(90,409)</u>
Cash flows from financing activities			
Proceeds from secured term loan facilities and revolving credit facilities	395,170	21,900	162,000
Proceeds from refinancing of vessel to related parties	—	—	69,052
Issuance of senior secured bonds	—	71,697	—
Issuance of 7.75% senior unsecured bonds	100,000	—	—
Repayment of 9.00% senior unsecured bonds	(127,500)	—	—
Issuance cost of senior secured bonds	—	(991)	(136)
Issuance costs of unsecured bond amendment	—	—	(1,308)
Issuance cost of 7.75% senior unsecured bonds	(1,819)	—	—
Issuance cost of refinancing of vessel	—	—	(156)
Direct financing cost of secured term loan and revolving credit facilities	(2,058)	(38)	(1,448)
Direct financing cost of terminal credit facility	—	—	(2,833)
Repayment of secured term loan facilities and revolving credit facilities	(251,852)	(118,352)	(189,001)
Repayment of refinancing of vessel to related parties	—	—	(846)
Net cash provided by/(used in) financing activities	<u>111,941</u>	<u>(25,784)</u>	<u>35,324</u>
Net increase/(decrease) in cash, cash equivalents and restricted cash	4,837	9,406	(5,385)
Cash, cash equivalents and restricted cash at beginning of year	<u>57,272</u>	<u>62,109</u>	<u>71,515</u>
Cash, cash equivalents and restricted cash at end of year	<u>\$ 62,109</u>	<u>\$ 71,515</u>	<u>\$ 66,130</u>
Supplemental Information			
Total interest paid during the year, net of amounts capitalized	<u>\$ 35,890</u>	<u>\$ 41,465</u>	<u>\$ 44,859</u>
Total tax paid during the year	<u>\$ 515</u>	<u>\$ 176</u>	<u>\$ 323</u>

See accompanying notes to consolidated financial statements.

Navigator Holdings Ltd.
Notes to the Consolidated Financial Statements
December 31, 2017, 2018 and 2019

1. Description of Business

Navigator Holdings Ltd. (the “Company”), the ultimate parent company of the Navigator Group of companies, is registered in the Republic of the Marshall Islands. The Company has a core business of owning and operating a fleet of gas carriers. As of December 31, 2019, the Company owned and operated 38 gas carriers (the “Vessels”) each having a cargo capacity of between 20,600 cbm and 38,000 cbm, of which 31 were semi-refrigerated, and seven were fully-refrigerated vessels. The Company has an investment in a joint venture to construct and operate a Marine Export Terminal at Morgan’s Point in Texas to export approximately one million tons of ethylene per year. Unless the context otherwise requires, all references in the consolidated financial statements to “our,” “we” and “us” refer to the Company

Going Concern

Since the balance sheet date, the Covid-19 virus has spread around the world and many governments, have introduced strict measures to limit social contact in order to contain the spread of the virus. The negative effects of the current COVID-19 pandemic are numerous and may reduce demand for LPG, petrochemicals and ammonia that we transport for a period or periods longer than we anticipate and the risk that our counter parties may not honour their commitments to us or may seek to renegotiate them. This could negatively affect the charter rates and vessel utilization that we are able to achieve and consequently reduce our cashflow and financial condition.

We also provide cash collateral as security against unrealized losses on our cross-currency interest rate swap and in the event the Norwegian Kroner weakens further against the U.S. dollar, additional cash security will need to be placed into a collateral account, providing less headroom, or causing us to breach our liquidity maintenance covenant. Since the year end, adverse movements in the exchange rate have resulted in the need to deposit significant funds into the collateral account, as of May 7, 2020, \$12.6 million has been deposited. The negative impacts of COVID-19 and the uncertainty related to our potential cash collateral obligations may result in noncompliance of our minimum liquidity and interest coverage ratio covenants in our bank and bond loan facilities. This raises substantial doubt about the Company’s ability to continue as a going concern.

Management have been developing plans to mitigate the potential impacts of the virus and manage its liquidity and covenant compliance, including deferring planned non essential vessel upgrade expenditure, deferring a number of planned dry dockings, reducing non business critical operating expenses

In addition, to provide additional liquidity Management is currently in discussion with its lenders to seek amendments to our Terminal Credit Facility to enable the drawdown of up to \$42.5 million immediately rather than waiting for a true up on practical completion at the end of this year. Such an amendment is dependent on a number of factors, such as lender credit committee approval and acceptance by the lenders of recently executed offtake agreements as suitable credit quality. Management are confident its lenders will agree to amend the facility to enable an earlier drawn down. However, there can be no certainty the lenders will agree to a facility amendment.

Further management are also considering other plans to increase liquidity if it should be required including:

- refinancing one or more secured credit facilities to raise additional debt of up to \$82 million;
- raising debt against the Company’s four unsecured vessels of up to \$60 million;
- seeking the agreement of its lenders to defer one or more quarterly loan amortization payments of approximately \$17 million per quarter;

The above plans are as of the date of this report yet to be initiated and accordingly whilst Management are confident they will be successful in progressing these options to a successful conclusion, there can be no certainty the Company will be successful in implementing them. It is also possible that in implementing the above plans, which will increase debt levels and interest costs, that the Company will need to seek an extension of its waiver on its Interest Coverage Ratio. If the above plans are not successful we may also need to seek a waiver of our minimum liquidity covenant from our lenders.

On February 10, 2017, we issued senior unsecured bonds in an aggregate principal amount of \$100.0 million for a period of four years. These bonds mature in full on February 10, 2021 and become repayable on that date. The bonds cannot be repaid from existing cash resources or from cash to be generated from operations prior to the expiry date of the bond. This raises substantial doubt about the Company's ability to continue as a going concern. Refinancing this bond is capital markets dependent and although the Company had considered refinancing this bond with a like-for-like bond prior to the COVID-19 outbreak, and this remains the Company's preferred plan. Due to the current disruption in the capital markets, the Company is evaluating alternatives in the event the effects of COVID-19 last longer than the anticipated timescale. Such considerations include:

- seeking an extension to the maturity of the bond;
- seeking to raise the capital required by a sale and leaseback of up to seven of the Company's vessels which the Company estimates could yield up to \$138 million of additional funding after repaying existing debt facilities which are secured on the Company's vessels; or
- raising alternative debt through a combination of the options set out above under the increasing liquidity discussion.

All of the above options are subject to uncertainty, which is worsened by the many impacts and effects of Covid 19 and whilst management are confident of their ability to successfully conclude one or more of the options being considered, it may not be possible to do so.

Accordingly, there is substantial doubt that the Company will be able to pay its obligations as they fall due, and this substantial doubt is not alleviated by management plans.

The consolidated financial statements as of December 31, 2019 have been prepared assuming that the Company will continue as a going concern. Accordingly, the consolidated financial statements do not include any adjustments to the amounts and classification of assets and liabilities that may be necessary should the Company be unable to continue as a going concern.

2. Summary of Significant Accounting Policies

(a) Basis of Presentation

The consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP"). The accompanying consolidated financial statements include the accounts of the Company and its subsidiaries (See Note 8 (Group Subsidiaries) to the consolidated financial statements) and Variable Interest Entities ("VIE") (See Note 9 (Variable Interest Entities)). All intercompany accounts and transactions have been eliminated in consolidation.

On October 21, 2019 the Company entered into a sale and leaseback to refinance one of its vessels, *Navigator Aurora*. The sale price agreed was \$77.5 million, with the buyer paying 90% of the vessel's value, or \$69.75 million and prepaid hire representing the remaining 10%. From the proceeds, \$44.5 million was used to repay the vessel's secured tranche of the December 2015 secured revolving credit facility. Simultaneous with this sale, the Company entered into a bareboat charter for the vessel for a period of up to 13 years, with purchase options at years 5, 7 and 10. The transaction was closed on October 28, 2019. The transaction does not meet the

criteria to be accounted for as a sale under U.S. GAAP Accounting Standards Update (“ASU”) No. 2014-09, Revenue from Contracts with Customers (Topic 606), and therefore has been accounted for as a financing transaction.

As of December 31, 2019, the Company has consolidated 100% of OCY Aurora Ltd., the lessor variable interest entity (“lessor VIE”) that we have leased the *Navigator Aurora* from under a sale and leaseback arrangement. The lessor VIE is a wholly-owned, newly formed special purpose vehicle (“SPV”) of a financial institution. We have applied the guidance within Topic 810 – *Consolidation*, and concluded that the SPV was a VIE within the scope of the variable interest model as OCY Aurora Ltd. was formed as a Limited Liability Company and meets the definition of a legal entity in the Codification and none of the VIE scope exemptions in 810-10-15-12 or 810-10-15-17 apply. We have concluded that we have a variable interest in the SPV because the bareboat charter has fixed price call options to acquire *Navigator Aurora* from the SPV at various dates throughout the 13 year lease/bareboat charter term, commencing from the fifth year, initially at USD 44.8 million. The call options are considered to be variable interests as each option effectively transfers substantially all of the rewards from *Navigator Aurora* to us and effectively caps the SPV’s ability to benefit from the rewards of ownership.

The Company must evaluate whether we are the primary beneficiary of a VIE after concluding that the SPV is in the scope of the variable interest model, we have a variable interest in the entity and the SPV is a VIE. As outlined in ASC 810-10-25-38 an entity has a controlling financial interest in a VIE and must consolidate the VIE if it has both power and benefits, that is, it has (1) the power to direct the activities of a VIE that most significantly impact the VIE’s economic performance (power) and (2) the obligation to absorb losses or the right to receive benefits from the VIE that potentially could be significant to the VIE (benefits). The Company has performed an analysis and concluded that the Company exercises power through the exercise of the call options in the lease agreement. The call options, although not an activity of the SPV, if exercised would significantly impact the SPV’s economic performance as the SPV owns no other revenue generating assets. The options transfer to the Company the right to receive benefits as they are struck at a predetermined price. The SPV is not able to benefit from and is protected from decreases in the value of the vessel. If the vessel’s market value declines (either due to market forces or the condition of the vessel), then the call option will provide the SPV protection up to the point where it would not be economically viable for the Company to exercise the option. In addition, the Company has the power to direct decisions over the activities and care of the vessel which directly impact its value such as for the day-to-day commercial, technical management and operation of the vessel. The Company may choose to appoint managers other than those named in the agreement to manage the vessel, to which the SPV must consent and which cannot be “unreasonably withheld”.

While we do not hold any equity investments in this lessor VIE, we have concluded that we are the primary beneficiary of the lessor VIE under U.S. GAAP and accordingly we are required to consolidate this lessor VIE into our financial results. Accordingly, although consolidated into our results, we have no control over the funding arrangements negotiated by this lessor VIE entity including the interest rates to be applied. In consolidating the lessor VIE into our financial results, we must make assumptions regarding the debt amortization profile and the interest rate to be applied against the lessor VIE’s debt principal. Furthermore, our estimation process is dependent upon the timeliness of receipt and accuracy of financial information provided by the lessor VIE entity.

By virtue of the accounting principle of consolidation, transactions between consolidated entities are eliminated and accordingly the sale and leaseback refinancing transaction with OCY Aurora is not shown as a liability in the Company’s consolidated balance sheets, being superseded by the *Navigator Aurora* Facility between OCY Aurora and Ocean Yield Malta Limited. Please read Note 20 (Related Party Transactions) to our consolidated financial statements. Under the sale and leaseback transaction we are committed to monthly principal payments until the year five purchase option which include interest payable at a rate of U.S. LIBOR plus 430 basis points per annum. For additional detail refer to Note 9 (Variable Interest Entities) to our consolidated financial statements.

On January 31, 2018, the Company announced the execution of definitive agreements creating a 50/50 joint venture with Enterprise Products Partners L.P. (the “Export Terminal Joint Venture”) to construct and operate an ethylene export marine terminal at Morgan’s Point, Texas on the Houston Ship Channel (the “Marine Export Terminal”). Enterprise Products Partners, L.P. is the sole managing member of the Export Terminal Joint Venture and it is also the operator of the Marine Export Terminal. Interests in joint ventures are accounted for using the equity method. They are recognized initially at cost, which includes capitalized interest. The capitalised interest will be amortised over the useful life of the terminal. Subsequent to initial recognition, the consolidated financial statements will include the Company’s share of the profit or loss and other comprehensive income (“OCI”) of equity-accounted investees, until the date on which joint control ceases.

The Export Terminal Joint Venture is organized as a limited liability company and maintains separate ownership accounts, consequently we account for our investment using the equity method as our ownership interest is 50% and we exercise joint control over the investee’s operating and financial policies. In consolidation, we disclose our proportionate share of profits and losses from equity method unconsolidated affiliates in the income statement and adjust the carrying amount of our equity method investments accordingly. The equity method investment is reviewed for indicators of impairment when events or circumstances indicate the carrying amount of the investment may not be recoverable. When such indicators are present, we determine if the indicators are ‘other than temporary’ to determine if an impairment exists. If we determine that an impairment exists, a discounted cash flow analysis is carried out based on the future cash flows expected to be generated over the investment’s estimated remaining useful life. The resulting net present value is compared to the carrying value and we would recognize an impairment loss equal to the amount by which the carrying amount exceeds its fair value.

Considerations in identifying if indicators of impairment are present for the equity method investment include significant incidents that have resulted in the forecast future operating cash flows to be amended, such as significant market events that impact the terminal operations and cashflow, physical damage to assets, recurring financial losses for consecutive periods or changes to the Company’s equity holding in the investment. As of December 31, 2019, the aggregate carrying value of our investment in the Export Terminal Joint Venture was \$130.7 million. Although management believes that the assumptions used to evaluate potential impairment are reasonable and appropriate at the time they were made, such assumptions are highly subjective and likely to change, possibly materially, in the future. We believe that there are no events or circumstances that indicate that the value of the investment in the Export Terminal Joint Venture should be impaired as of December 31, 2019. Accordingly, no impairment charge has been recorded as of December 31, 2019 following the requirements of our U.S. GAAP impairment accounting policy.

Our joint venture partner, and operator of the terminal have a robust business continuity process in place following CDC guidance and have adapted their existing HSE policy following the outbreak of COVID-19. The team onsite adheres to social distancing procedures and are currently operating efficiently and have seen little impact from COVID-19 with vessels continuing to load ethylene and with committed throughput contracts now scheduled to commence from June 1, 2020. As the completion of the cryogenic storage tank continues on schedule and the committed throughput volumes are scheduled to commence, there are no current indicators to suggest an impairment of our investment is required as a result of the COVID-19 pandemic.

As of December 31, 2019, the Company has consolidated 100% of PT Navigator Khatulistiwa, a VIE for which the Company is deemed to be the primary beneficiary, i.e. it has a controlling financial interest in this entity. The Company owns 49% of the VIE’s common stock, all of its secured debt and has voting control. All economic interests in the residual net assets reside with the Company. A VIE is an entity that in general does not have equity investors with voting rights or that has equity investors that do not provide sufficient financial resources for the entity to support its activities. A controlling financial interest in a VIE is present when a company has the power to direct the activities of a VIE that most significantly impact the entity’s economic performance and has the right to residual gains or the obligation to absorb losses that could potentially be significant to the VIE.

In June 2018, the FASB issued ASU 2018-07, Improvements to Nonemployee Share-Based Payment Accounting, which more closely aligns the accounting for employee and nonemployee share-based payments. This ASU is effective for Public business entities for annual and interim periods in fiscal years beginning after December 15, 2018. We adopted the new standard with effect from January 1, 2019, and the adoption of this standard did not have a material impact on our consolidated financial statements and related disclosures.

On January 1, 2019, the Company adopted Accounting Standards Update (“ASU”) 2016-02, Leases, (“Topic 842”), which supersedes Topic 840, Leases and requires lessees to recognize most leases on-balance sheet and disclose key information about leasing arrangements. ASU 2016-02 was subsequently amended by ASU 2018-10, Codification Improvements to Topic 842 Leases; ASU 2018-11, Targeted Improvements, which clarifies and corrects errors in ASC 842; and ASU 2018-20, Narrow-Scope Improvements for Lessors. The effective date and transition requirements in ASU 2018-10, ASU 2018-11 and ASU 2018-20 are the same as the effective date and transition requirements of ASU 2016-02.

The Company has elected all of the standard’s practical expedients in ASC 842-10-65-1(f) as a package on adoption. We have not elected the use-of-hindsight or the practical expedient pertaining to land easements; the latter not being applicable to us.

On January 1, 2019, the Company adopted ASU 2018-11, Leases—Targeted Improvements, which created a new, optional, transition method, the “Comparatives Under ASC 840” option, for implementing ASU 2016-02, which can only be adopted by entities either at (1) the beginning of the company’s first reporting period after issuance or (2) the entity’s mandatory ASU 2016-02 effective date. This choice of method affects only the timing of when an entity applies the transition provisions. The Company applied this optional transition method on January 1, 2019. Under this transition method, a cumulative-effect adjustment to the consolidated statement of stockholder’s equity of \$0.1 million was recorded which represents the amounts of expense that would not have been recognized in retained earnings for the year ended December 31, 2018. The presentation of the consolidated financial statements for comparative periods has remained unchanged.

We used the effective date as our date of initial application. Consequently, for dates and periods prior to January 1, 2019, financial information was not updated, and the disclosures required under the new standard were not provided. The Company applied Topic 842 by recognizing the cumulative effect of initially applying Topic 842 as an adjustment to the opening balance of equity as of January 1, 2019. Therefore, the comparative information has not been adjusted and continues to be reported under Topic 840 or Topic 606 as applicable. Under Topic 840, our three office leases were classified as operating leases, with rental costs for the year ended December 31, 2018 of \$1.3 million recognized within General and Administrative costs in the consolidated income statements. Under Topic 840 there were no amounts for operating leases recognized in the consolidated balance sheets at December 31, 2018.

The new standard established a right-of use (“ROU”) model that requires a lessee to recognize a ROU asset, representing the right to use the asset for a specified period of time and corresponding lease liability on the balance sheet for all leases with a term longer than 12 months. Existing leases with a contracted term of less than 12 months on January 1, 2019 are classified as short-term leases on adoption of the new standard and qualify for an exemption from recognizing ROU assets or lease liabilities for periods presented after January 1, 2019. Leases for lessees under ASU 2016-02 are classified as financing or operating, with classification affecting the pattern and classification of expense recognition in the income statement.

Under ASU 2016-02 we have recognized new ROU assets and liabilities on our balance sheet for our operating leases, relating to long-term commitments for our offices in London, New York and Gdynia. At the adoption date of January 1, 2019, we had no short-term lease commitments. Lease liabilities and right-of-use assets for operating leases are initially measured at the present value of the lease payments not yet paid, discounted using the discount rate for the lease determined at the later of the date of initial application or the lease commencement date. As a lessee, the Company has elected not to separate lease and non-lease components pertaining to

operating lease payments. The discount rate used is the Company's incremental borrowing rate, defined as the rate of interest that the Company as lessee would have to pay to borrow on a collateralized basis over a similar term an amount equal to the lease payments in a similar economic environment. Consequently, operating lease liabilities of \$7.5 million, based on the present value of the remaining minimum rental payments; and ROU assets of \$6.8 million have been recognized on the Company's consolidated balance sheets as of December 31, 2019, with accretion of the liabilities and amortization of the ROU assets over the remaining length of the lease terms. At December 31, 2019, based on the remaining lease liabilities, the weighted average remaining lease term was 6.5 years. At December 31, 2019, the weighted average discount rate across the three leases was 5.56%.

The lease for our office in Poland is subject to annual indexation each January according to the Eurozone All Items Monetary Union Index of Consumer Prices ("MUICP") index as quoted for the previous year. ASU 2016-02 requires lessees to include such variable lease payments in the value of the remaining lease payments and, therefore, in the measurement of a lessee's lease liabilities at the adoption date of January 1, 2019. The lease payments relating to the Poland office lease are not remeasured at the beginning of each year, the effect of future increases in MUICP are recognized as part of lease-related costs in each year and classified as variable lease costs. For the year ended December 31, 2019, total operating lease costs were \$1.4 million, which include immaterial variable lease costs and are presented in General and Administrative costs within the consolidated statements of operations and in cash flows from operating activities within the consolidated statements of cash flows.

The new standard also requires lessors to classify leases as a sales-type, direct financing, or operating lease. A lease is a sales-type lease if any one of five criteria are met, each of which indicate that the lease in effect, transfers control of the underlying assets to the lessee. If none of those five criteria are met, but two additional criteria are both met, indicating that the lessor has transferred substantially all of the risks and benefits of the underlying asset to the lessee and a third-party, the lease is a direct financing lease. All lessor leases that are not sales-type or direct financing leases are operating leases.

For the Company as a lessor, in applying ASU 2016-02, we believe that our vessels contracted under voyage charters or contracts of affreightment do not qualify as leases, as the charterer does not have the right to operate the asset and we maintain the right to direct the use of the asset during the period of charter hire. Vessels on time charters will continue to qualify as operating leases, when the charterer has the right to obtain substantially all of the benefits and can direct how and for what purposes the vessel will be used, and the Company has no substantive substitution rights. Time charters do not qualify as direct finance leases under ASU 2016-02 as the present value of the sum of the lease payments does not exceed the fair value of the underlying vessel.

The Company has elected, as a package, the practical expedients available in ASC 842-10-65-1(f) to not re-assess whether any existing or expired contracts are, or contain leases, for voyages in progress at the adoption date of January 1, 2019. We have assessed new charter contracts signed after the adoption date for whether they are, or contain, leases and should be recognized under ASU 2016-02. Charter contracts that do not contain a lease will be accounted for under Topic 606. The adoption of ASU 2016-02 has not resulted in a change to the classification of time charters, voyage charters or contracts of affreightment, the period over which we recognize revenue and, as a lessor, there has been no significant impact on our consolidated financial statements or cash flows as a result.

ASU 2018-11, Leases—Targeted Improvements, which the Company adopted on January 1, 2019, contains an amendment to ASU 2016-02 that would allow lessors to elect, as a practical expedient, by class of underlying asset, not to separate lease and non-lease components of a contract. The amendment allows these components to be accounted for as a single component if the non-lease components otherwise would be accounted for under the new revenue guidance (Topic 606) and both of the following are met: (i) the timing and pattern of transfer for the lease component and non-lease components associated with that lease component are the same and (ii) the lease component, if accounted for separately, would be classified as an operating lease. Also, the ASU states that if the non-lease component or components associated with the lease component are the predominant component of the

combined component, an entity should account for the combined component in accordance with Topic 606. Otherwise, the entity should account for the combined component as an operating lease in accordance with Topic 842. The Company has elected the package of practical expedients, as mentioned above. In addition, the Company has performed a qualitative analysis of each of its time charter contracts to determine whether the lease or non-lease component is the predominant component of the contract. The Company concluded that the lease component is the predominant component as the lessee would attribute more value to the ability to direct the use of the vessel rather than to the technical and crewing services to operate the vessel which are add-on services to the lessee. Accordingly, revenue from vessels under time charters, which are accounted as lease revenue for under ASC 842, are presented as a single lease component.

On January 1, 2019, the Company adopted ASU 2019-01, Leases (Topic 842); Codification Improvements, which, amongst other things, aligns the guidance in Topic 842 for determining fair value and its application to lease classification and measurement for lessors that are not manufacturers or dealers with that of existing guidance; and clarifies that lessees and lessors are exempt from a certain interim disclosure requirement associated with adopting the new leases standard within the fiscal year of adoption. This standard is effective on adoption of ASU 2016-02, the new leasing standard. The Company adopted ASU 2016-02 and ASU 2019-01 on January 1, 2019. Accordingly, interim disclosures about the effect on income of adoption of ASC 842 are excluded from the required disclosures in these financial statements, in a manner similar to the annual disclosures in ASC 250-10-50-1(b)(2).

Operating revenue

The following table compares our operating revenue by the source of revenue stream for the years ended December 31, 2018 and 2019:

	Year ended December 31, (in thousands)	
	2018	2019
Operating revenue:		
Time charters	\$168,500	\$168,641
Voyage charters (*)	141,546	132,744
Total operating revenue	\$310,046	\$301,385

* **Voyage Charter revenues:** Voyage charter revenues, which include revenues from contracts of affreightment, are shown net of address commissions.

As of December 31, 2019, for voyage charters and contracts of affreightment, services accounted for under Topic 606, the amount of contract assets reflected within accrued income on the Company's consolidated balance sheets was \$4.4 million (December 31, 2018: \$4.1 million). The amount of contract liabilities reflected within deferred income on the Company's consolidated balance sheets was \$3.0 million (December 31, 2018: \$1.7 million).

Contract assets relate to our conditional right to consideration for our completed performance under voyage charters and contracts of affreightment and are recognized when the right to consideration becomes unconditional. Contract liabilities include payments received in advance of performance under these contracts and are recognized when performance under the respective contract has been completed.

The amount allocated to costs incurred to obtain and fulfill a contract with a charterer, which are costs incurred following the commencement of a contract or charter party but before the loading of the cargo commences was \$1.3 million (December 31, 2018: \$1.5 million) and is reflected within prepaid expenses and other current assets on the Company's consolidated balance sheets.

Amounts allocated to unsatisfied performance obligations at the reporting date will be recognized over time, which is expected to occur within three months from December 31, 2019. Deferred income of \$1.7 million relating to unsatisfied or partially satisfied performance obligations as at December 31, 2018 has been recognized as revenue in the year ended December 31, 2019 as the performance obligations have been satisfied.

Time charter revenues

As of December 31, 2019, 25 of the Company’s 38 operated vessels, were subject to time charters, 18 of which will expire within one year, three which will expire within three years, and four which will expire within nine years. (December 31, 2018, 23 of the Company’s 38 operated vessels, were subject to time charters, 15 of which will expire within one year, two which will expire within three years, and six which will expire within nine years). The estimated undiscounted cash flows for committed time charter revenue expected to be received on an annual basis for ongoing time charters, as of each December 31, is as follows:

	(in thousands)
2020:	\$123,222
2021:	\$ 62,887
2022:	\$ 43,961
2023:	\$ 38,667
2024:	\$ 21,516
2025 onwards:	\$ 48,330

For time charter revenues accounted for under Topic 842, the amount of accrued income on the Company’s consolidated balance sheets was \$1.8 million (December 31, 2018: \$0.6 million). The amount of hire payments received in advance under time charter contracts, recognized as a liability and reflected within deferred income on the Company’s consolidated balance sheets was \$11.2 million (December 31, 2018: \$6.6 million). Deferred income allocated to time charters will be recognized ratably over time, which is expected to be within one month from December 31, 2019.

(b) Vessels

Vessels are stated at cost, which includes the cost of construction, capitalized interest and other direct costs attributable to the construction. The cost of the vessels (excluding the estimated initial drydocking cost) less their estimated residual value is depreciated on a straight-line basis over the vessel’s estimated useful life. Management estimates the useful life of each of the Company’s vessels to be 30 years from the date of its original construction.

(c) Vessels Under Construction

Vessels under construction are stated at cost, which includes the cost of construction, capitalized interest and other direct costs attributable to the construction. No provision for depreciation is made on construction in progress until such time as the relevant assets are completed and put into use.

(d) Impairment of Vessels

Our vessels are reviewed for impairment when events or circumstances indicate the carrying amount of the vessel may not be recoverable. When such indicators are present, a vessel is tested for recoverability and we recognize an impairment loss if the sum of the future cash flows (undiscounted and excluding interest charges that will be recognized as an expense when incurred) expected to be generated by the vessel over its estimated remaining useful life are less than its carrying value. If we determine that a vessel’s undiscounted cash flows are less than its carrying value, we record an impairment loss equal to the amount by which its carrying amount exceeds its fair value. The new lower cost basis would result in a lower annual depreciation than before the impairment.

Considerations in making such an impairment evaluation include comparison of current carrying values to anticipated future operating cash flows, expectations with respect to future operations and other relevant factors. The estimates and assumptions regarding expected cash flows require considerable judgment and are based upon historical experience, financial forecasts and industry trends and conditions.

(e) Drydocking Costs

Each vessel is required to be dry-docked every 30 to 60 months for classification society surveys and inspections of, among other things, the underwater parts of the vessel. These works include, but are not limited to hull coatings, seawater valves, steelworks and piping works, propeller servicing and anchor chain winch calibrations, all of which cannot be performed while the vessels are operating. The Company capitalizes costs associated with the dry-dockings in accordance with ASC Topic 360 “Property, Plant and Equipment” and amortizes these costs on a straight-line basis over the period to the next expected dry-docking. Amortization of dry-docking costs is included in depreciation and amortization in the Consolidated Statements of Operations. Costs incurred during the dry-docking period which relate to routine repairs and maintenance are expensed. Where a vessel is newly acquired, or constructed, a proportion of the cost of the vessel is allocated to the components expected to be replaced at the next drydocking based on the expected costs relating to the next drydocking, which is based on experience and past history of similar vessels. Drydocking costs are included within operating activities on the cashflow statement.

(f) Cash, Cash Equivalents and Restricted Cash

The Company considers highly liquid investments, such as time deposits and certificates of deposit, with an original maturity of three months or less when purchased, to be cash equivalents. The Company has cash in a U.S. financial institution which is insured by the Federal Deposit Insurance Corporation (“FDIC”) for up to \$0.3 million. As of December 31, 2018, and 2019 and for the years then ended, the Company had balances in this financial institution in excess of the insured amount. The Company also maintains cash balances in foreign financial institutions which are not covered by the FDIC.

Included within cash, cash equivalents and restricted cash as of December 31, 2019 is an amount of \$0.8 million relating to the cash belonging to the lessor VIE that we are required to consolidate under U.S. GAAP. We had no lessor VIEs as of December 31, 2018. Please read Note 9 (Variable Interest Entities) to our consolidated financial statements.

Amounts included in restricted cash represent those required to be set aside as collateral by a contractual agreement with a banking institution for the forecast future liability on the cross-currency interest rate swap agreement at the reporting date, payable on maturity of our 2018 issued senior secured bonds (“2018 Bonds”). If the Norwegian Kroner depreciates relative to the U.S. Dollar beyond a certain threshold, we are required to place cash collateral with our swap providers. As of December 31, 2019, the collateral amount held with the swap provider was \$1.3 million (December 31, 2018, \$0.2 million). The amounts held as collateral within restricted cash are assessed against daily currency movements and are presented as current assets on the Company’s consolidated balance sheets.

(g) Financial Instruments—Debt Securities

The 2017 issued senior unsecured bonds (“2017 Bonds”) and 2018 Bonds are recognized at the net amount of the proceeds received. Subsequent measurement is at amortized cost, net of deferred finance costs. Interest accrued on the 2017 Bonds and the 2018 Bonds is calculated on a 360-day year basis and is included within accrued interest as a current liability. Deferred finance costs are amortized using the effective interest method over the lifetime of the 2017 Bonds and the 2018 Bonds.

(h) Short-Term Investments

Short-term investments represent funds deposited in money market funds with an original maturity of more than three months when purchased. The Company records its short-term investments at fair value. Fair value is a market-based measurement that is determined based on assumptions that market participants would use in pricing an asset or a liability. The fair value hierarchy also requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The Company's short-term investments are classified within Level 1 of the fair value hierarchy.

(i) Accounts Receivable, net

The Company carries its accounts receivable at cost less an allowance for doubtful accounts. As of December 31, 2018, and 2019, the Company evaluated its accounts receivable and established an allowance for doubtful accounts, based on a history of past write-offs, collections and current credit conditions. The Company does not generally charge interest on past-due accounts (unless the accounts are subject to legal action), and accounts are written off as uncollectible when all reasonable collection efforts have failed. Accounts are deemed past-due based on contractual terms.

(j) Bunkers and lubricant oils

Bunkers and lubricant oils include bunkers (fuel), for those vessels under voyage charter, and lubricants. Under a time charter, the cost of bunkers is borne by and remains the property of the charterer. Bunkers and lubricant oils are accounted for on a first in, first out basis and are valued at cost.

(k) Deferred Finance Costs

Costs incurred in connection with obtaining secured term loan facilities, revolving credit facilities and bonds are recorded as deferred financing costs and are amortized to interest expense over the estimated duration of the related debt. Such costs include fees paid to the lenders or on the lenders' behalf and associated legal and other professional fees. Under the Accounting Standards Update (ASU) 2015- 03, Interest—Imputation of Interest the Company has adopted the accounting standard (Subtopic 835-30)—simplifying the presentation of debt issuance cost to present the unamortized debt issuance costs, excluding up front commitment fees, as a direct reduction of the carrying value of the debt.

(l) Deferred Income

Deferred income is the balance of cash received in excess of revenue earned under a time charter or voyage charter arrangement as of the balance sheet date.

(m) Revenue Recognition

The Company receives its revenue streams from three different sources; voyage or 'spot' charters; contracts of affreightment ("COA"), and time charters.

Voyage charter and COA arrangements

In the case of vessels contracted under voyage charters, the vessel is contracted for a voyage, or a series of voyages, between two or more ports and the Company is paid for the cargo transported. Revenue from COAs is recognized on the same basis as revenue from voyage charters, as they are essentially a series of consecutive voyage charters. Payment from voyage charters and COAs is due upon discharge of the cargo at the discharge port. Since January 1, 2018, following adoption of ASU No. 2014-09, Revenue from Contracts with Customers, ("Topic 606"), our basis for revenue recognition for voyage charters and COAs has changed to recognize revenue

on a load port to discharge port basis and determined percentage of completion for all voyage charters and COA's on a time elapsed basis. The Company believes that the performance obligation towards the customer starts to become satisfied once the cargo is loaded and the obligation becomes completely satisfied once the cargo has been discharged at the discharge port.

Under the new revenue recognition standard, the Company has identified certain costs incurred to obtain and fulfill a contract with a charterer, which are costs incurred following the commencement of a contract or charter party but before the loading of the cargo commences. These directly related costs are generally fuel or any canal or port costs incurred to get the vessel from its position at inception of the contract to the load port to commence loading of the cargo. These costs are deferred and amortized over the duration of the performance obligation on a time basis.

Prior to the adoption of Topic 606, under a voyage charter or a COA the revenue was recognized on a discharge-to-discharge basis in determining the percentage of completion commencing from the later of the charter party date and the date of completion of the previous discharge port until the following discharge port. We did not begin recognizing revenue until a charter had been agreed, even if the vessel had discharged its prior cargo and was sailing to the anticipated load port for its next voyage. The adoption of 606 had the effect of recognizing the revenue over a shorter period of time as the performance obligation commences from the loading of the cargo rather than from the inception of the contract.

Time charter arrangements

For vessels contracted under time charters, the arrangements are for a specified period of time. The Company receives a fixed charter rate per on-hire day which is payable monthly in advance and revenue is recognized ratably over the term of the charter. Within our time charter arrangements key decisions concerning the use of the vessel during the duration of the time charter period reside with the charterer. We are responsible for the crewing, maintenance and insurance of the vessel, and the charterer is generally responsible for voyage specific costs, which typically include bunkers and port/canal costs. As the charterer holds rights to determine how and when the vessel is used and is also responsible for voyage specific costs incurred during the voyage, the charterer derives the economic benefits from the use of the vessel, as control over the use of the vessel is transferred to the charterer during the specified time charter period. Time charters are therefore considered operating leases and since January 1, 2019 we apply the revenue recognition guidance in ASC 842 following the adoption of that standard. In addition, the Company has performed a qualitative analysis of each of its time charter contracts and concluded that the lease component is the predominant component as the charterer would attribute most value to the ability to direct the use of the vessel rather than to the technical and crewing services to operate the vessel which are add-on services. Accordingly, revenue from vessels under time charter arrangements are presented as a single lease component.

For each year presented prior to January 1, 2019, we recognized revenue for time charters as operating leases under the previous leasing standard, ASC 840, and recorded time charter revenue ratably over the term of the charter.

(n) Other Comprehensive Income / (Loss)

The Company follows the provisions of ASC Topic 220 "Comprehensive Income," which requires separate presentation of certain transactions, which are recorded directly as components of stockholders' equity. Comprehensive income is comprised of net income/(loss) and foreign currency translation gains and losses.

(o) Voyage Expenses and Vessel Operating Expenses

When the Company employs its vessels on time charter, it is responsible for all the operating expenses of the vessels, such as crew costs, stores, insurance, repairs and maintenance. In the case of voyage charters, the vessel

is contracted only for a voyage between two or more ports, and the Company pays for all voyage expenses in addition to the vessel operating expenses. Voyage expenses consist mainly of in-port expenses, canal fees and bunker (fuel) consumption and are recognized as incurred during the performance obligation (the period of time from load to discharge) of the vessel. The Company has identified certain voyage costs incurred to obtain and fulfill a contract with a charterer, which are costs incurred following the commencement of a contract or charter party but before the loading of the cargo commences. These directly related costs are generally fuel or any canal or port costs to get the vessel from its position at inception of the contract to the load port to commence loading of the cargo. These costs are deferred and amortized over the duration of the performance obligation on a time basis.

(p) Repairs and Maintenance

All expenditures relating to routine maintenance and repairs are expensed when incurred.

(q) Insurance

The Company maintains hull and machinery insurance, war risk insurance, protection and indemnity insurance coverage, increased value insurance, demurrage and defense insurance coverage in amounts considered prudent to cover normal risks in the ordinary course of its operations. Premiums paid in advance to insurance companies are recognized as prepaid expenses and recorded as a vessel operating expense over the period covered by the insurance contract. In addition, the Company maintains Directors and Officers insurance.

(r) Share-Based Compensation

The Company records as an expense in its financial statements the fair value of all equity-settled stock-based compensation awards. The terms and vesting schedules for share-based awards vary by type of grant. Generally, the awards vest subject to time-based (immediate to three years) service conditions. Compensation expense is recognized ratably over the service period.

(s) Critical Accounting Estimates

The preparation of the consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ materially from these estimates.

(t) Foreign Currency Transactions

Substantially all of the Company's cash receipts are in U.S. Dollars. The Company's disbursements, however, are in the currency invoiced by the supplier. The Company remits funds in the various currencies invoiced. The non U.S. Dollar invoices received, and their subsequent payments, are converted into U.S. Dollars when the transactions occur. The movement in exchange rates between these two dates is transferred to an exchange difference account and is expensed each month. The exchange risk resulting from these transactions is not material.

The primary source of our foreign exchange gains and losses are the movements on our Norwegian Kroner denominated 2018 Bonds. The 2018 Bonds are translated into U.S. Dollars at each reporting date at the prevailing exchange rate at the end of the period. The movement in the foreign exchange rates between each reporting date will result in a foreign exchange gain or loss on the 2018 Bonds, which is shown as a single line on the face of the income statement. As of December 31, 2019, the foreign currency exchange gain on the 2018 Bonds for the year was \$1.0 million, compared to December 31, 2018 when the foreign currency exchange gain on the 2018 Bonds was \$2.4 million. In 2017 we did not hold any non-U.S. Dollar denominated financial instruments.

The aggregate amount of all foreign exchange movements recorded in net income for the year ended December 31, 2019, was a \$0.8 million gain compared to a \$1.7 million gain for the year ended December 31, 2018. The movement was primarily as a result of the foreign currency translation of the 2018 Bonds mentioned in the previous paragraph.

(u) Derivative instruments

Derivative instruments are initially recorded at fair value as either assets or liabilities in the accompanying balance sheet and subsequently remeasured to fair value at each reporting date, regardless of the purpose or intent for holding the derivative. The resulting derivative assets or liabilities are shown as a single line and are not net off against one another on the face of the balance sheet. The method of recognizing the resulting gain or loss is dependent on whether the derivative contract qualifies for hedge accounting and has been designated as a hedging instrument. For derivative instruments that are not designated or that do not qualify as hedging instruments under FASB ASC 815, Derivatives and Hedging, the liability has been recognized as 'Derivative liabilities' on the balance sheet and changes in the fair value of the derivative financial instruments are recognized in earnings. Gains and losses from the Company's non-designated cross-currency interest rate swap agreement are recorded in realized and unrealized loss on non-designated derivative instruments in the Company's consolidated statements of operations but do not impact our cash flows.

(v) Income Taxes

Navigator Holdings Ltd. and its Marshall Islands subsidiaries are currently not required to pay income taxes in the Marshall Islands on ordinary income or capital gains as they qualify as exempt companies.

The Company has four subsidiaries incorporated in the United Kingdom where the base tax rate is 19%. One UK subsidiary earns management and other fees from fellow subsidiary companies. The second UK subsidiary holds an investment in PT Navigator Khatulistiwa, a consolidated VIE, and has a loan to our group subsidiary in Poland. The third subsidiary earns management fees from fellow subsidiary companies. The fourth subsidiary is a holding company.

The Company has a subsidiary in Poland where the base tax rate is 19%. The subsidiary earns management fees from fellow subsidiary companies.

The Company has a subsidiary incorporated in Singapore where the base tax rate is 17%. The subsidiary earns management and other fees and receives interest from a VIE, PT Navigator Khatulistiwa.

The Company has consolidated a VIE incorporated in Malta where the base tax rate is 35%. This VIE is the lessor entity for the sale and leaseback of Navigator Aurora and pays interest, management and other fees to its parent entity, Ocean Yield Malta (please read Note 9 (Variable Interest Entities) to the consolidated financial statements).

The Company considered the income tax disclosure requirements of ASC Topic 740 "Income Taxes," with regard to disclosing material unrecognized tax benefits; none were identified. The Company's policy is to recognize accrued interest and penalties for unrecognized tax benefits as a component of tax expense. As of December 31, 2018, and 2019, there were no accrued interest and penalties for unrecognized tax benefits.

(w) Earnings Per Share

Basic earnings per common share ("Basic EPS") is computed by dividing the net income/(loss) available to common stockholders by the weighted-average number of shares outstanding. Diluted earnings per common share ("Diluted EPS") are computed by dividing the net income available to common stockholders by the weighted average number of common shares and dilutive common share equivalents then outstanding.

Shares granted pursuant to the 2013 Restricted Stock Plan are the only dilutive shares, and these shares have been considered as outstanding since their respective grant dates for purposes of computing diluted earnings per share. These shares were only dilutive in the period to December 31, 2017. They were antidilutive in the period to December 31, 2018 and 2019 and thus not included in the calculation of diluted EPS in the last 2 years.

(x) Related parties

Parties are related if one party has the ability, directly or indirectly, to control the other party or exercise significant influence over the other party in making financial and operating decisions. Parties are also related if they are subject to common control or significant influence.

(y) Segment Reporting

Although separate vessel financial information is available, management internally evaluates the performance of the enterprise as a whole and not on the basis of separate business units or different types of charters. As a result, the Company has determined that it operates as one reportable segment. Since the Company's vessels regularly move between countries in international waters over many trade routes, it is impractical to assign revenues or earnings from the transportation of international LPG and petrochemical products by geographic area. As disclosed in Note 2(a) Basis of Presentation – there are two different revenue streams due to the nature of the contracts that we operate. The Company believes that all of these contracts are part of the same operating segment of seaborne transportation.

(z) Recent Accounting Pronouncements

The following accounting standards issued as of December 31, 2019, may affect the future financial reporting by Navigator Holdings Ltd:

In June 2016, the FASB issued ASU 2016-13, Financial Instruments—Credit Losses, which changes the recognition model for the impairment of financial instruments, including accounts receivable, loans and held-to-maturity debt securities, among others. ASU 2016-13 is required to be adopted by public business entities using the modified retrospective method for periods beginning after December 15, 2019, with early adoption permitted for fiscal periods beginning after December 15, 2018. The Company adopted ASU 2016-13 on January 1, 2020. The adoption will not have a material impact on our consolidated financial statements.

In November 2018, the FASB issued ASU 2018-19, Codification Improvements to Topic 326, Financial Instruments—Credit Losses which, amongst other things, clarifies that receivables arising from operating leases are not within the scope of the credit losses standard, but rather, should be accounted for in accordance with the lease standard, ASU 2016-02. ASU 2018-19 is required to be adopted at the same time as ASU 2016-13. We adopted this amendment on January 1, 2020. The adoption will not have a material impact on our consolidated financial statements.

In April 2019, the FASB issued ASU 2019-04, Codification Improvements to Topic 326, Financial Instruments—Credit Losses, Topic 815, Derivatives and Hedging, and Topic 825, Financial Instruments which, amongst other things, clarifies certain aspects of accounting for credit losses, hedging activities and financial instruments respectively. The amendments within ASU 2019-04 have various effective dates of adoption. The amendments within ASU 2019-04 relating to Topic 815, Derivatives and Hedging are effective from the first annual reporting period beginning after April 25, 2019, which for the Company was from January 1, 2020 and we adopted the amendments on that date. The Company has no derivatives for which hedge accounting has been applied and as such, the amendments contained in this section of ASU 2019-04 are not applicable and will have no impact on our consolidated financial statements on adoption. The amendments relating to Topic 326 and Topic 825 are required to be adopted by public business entities for periods after December 15, 2019. We adopted these amendments on January 1, 2020. The adoption of the amendments relating to Topic 825 will not

have a material impact on our consolidated financial statements or related disclosures. ASU 2019-04 provides certain alternatives for the measurement of the allowance for credit losses on accrued interest receivable on adoption of Topic 326. The amendments provide guidance on, amongst other matters, how an entity should consider expected recoveries in its determination of the credit losses allowance and clarify that entities should include expected recoveries on financial assets in the calculation of the current expected credit losses allowance for both pools of financial assets and individual financial assets. We adopted these amendments on January 1, 2020. The adoption of the amendments relating to Topic 326 will not have a material impact on our consolidated financial statements or related disclosures.

In May 2019, the FASB issued ASU 2019-05, Financial Instruments—Credit Losses (Topic 326): Targeted Transition Relief which provides transition relief for entities adopting the credit losses standard, ASU 2016-13. Specifically, ASU 2019-05 amends ASU 2016-13 to allow companies to irrevocably elect, on adoption of ASU 2016-13, the fair value option for financial instruments that were previously recorded at amortized cost, are within the scope of the guidance in ASC 326-20, are eligible for the fair value option under ASC 825-20 and are not held-to-maturity debt securities. ASU 2019-05 is required to be adopted at the same time as ASU 2016-13. We adopted both ASU 2016-13 and ASU 2019-05 on January 1, 2020. The adoption of this amendment will not have a material impact on our consolidated financial statements or related disclosures.

In May 2019, the FASB issued ASU 2019-11, Financial Instruments—Credit Losses (Topic 326): Codification Improvements, which revises certain aspects of the new guidance on Topic 326 for credit losses. Matters addressed in this amendment include purchased credit-deteriorated assets, transition relief for troubled debt restructurings, disclosure relief for accrued interest receivable, and financial assets secured by collateral maintenance provisions. ASU 2019-11 is required to be adopted at the same time as ASU 2016-13. We adopted both ASU 2016-13 and ASU 2019-11 on January 1, 2020 and the adoption of this standard will not have a material impact on our consolidated financial statements and related disclosures.

In February 2020, the FASB issued ASU 2020-02, Financial Instruments—Credit Losses (Topic 326) and Leases (Topic 842): Amendments to the Securities and Exchange Commission (“SEC”) Paragraphs Pursuant to SEC Staff Accounting Bulletin No. 119 and Update to SEC Section on Effective Date Related to Accounting Standards Update No. 2016-02, Leases (Topic 842). ASU 2020-02 adds an SEC paragraph to Topic 326 pursuant to the issuance of SEC Staff Accounting Bulletin No. 119 and applies to all registrants that are creditors in loan transactions that, individually or in the aggregate, have a material effect on the registrant’s financial condition. The staff guidance is applicable upon a registrant’s adoption of ASU 2016-13. We adopted both ASU 2016-13 and ASU 2020-02 on January 1, 2020 and the adoption of this standard will not have a material impact on our consolidated financial statements and related disclosures.

In August 2018, the FASB issued ASU 2018-13, Fair Value Measurement, (Topic 820), which modifies the disclosure requirements for financial instruments measured at fair value. ASU 2018-13 is required to be adopted for public business entities by January 1, 2020, with early adoption permitted from the date of issuance of ASU 2018-13. We adopted the new standard with effect from January 1, 2020, and the adoption of this standard will not have a material impact on our consolidated financial statement disclosures.

In October 2018, the FASB issued ASU 2018-17, Consolidation (Topic 810), which contains updated guidance for the financial reporting associated with consolidation of variable interest entities (VIEs). ASU 2018-17 amends two aspects of the related-party guidance in Topic 810. Specifically, the guidance adds an elective private-company scope exception to the variable interest entity guidance for entities under common control and removes a sentence in ASC 810-10-55-37D regarding the evaluation of fees paid to decision makers. We adopted the new standard with effect from January 1, 2020, and the adoption of this standard will not have a material impact on our consolidated financial statements and related disclosures.

In January 2020, the FASB issued ASU 2020-01, Clarifying the Interactions Between Topic 321, Topic 323, and Topic 815. The amendments in ASU 2020-01 make improvements related to the accounting for (1) an equity

security under the measurement alternative before application or after discontinuation of the equity method of accounting and (2) forward contracts and purchased options to acquire an equity instrument that will be accounted for under Topic 323. The guidance is effective for annual and interim periods beginning after 15 December 2020 for public business entities and an entity may early adopt the guidance in any annual or interim period after issuance. We plan to adopt these amendments on January 1, 2021 and we are currently assessing the impact that the updates will have on our consolidated financial statements.

In March 2020, the FASB issued ASU 2020-04, Reference Rate Reform (Topic 848) - Reference Rate Reform on Financial Reporting. Amendments provide temporary optional expedients and exceptions for applying U.S. GAAP to contracts, hedging relationships, and other transactions affected by reference rate reform if certain criteria are met. ASU 2020-04 applies to contracts that reference LIBOR or another reference rate expected to be terminated because of reference rate reform. This optional guidance may be applied prospectively from any date beginning March 12, 2020 but cannot be applied to modifications that occur after December 31, 2022. We do not currently have any contracts that have been changed to a new reference rate, but we will continue to evaluate our contracts and the effects of this standard on our consolidated financial position, results of operations, and cash flows prior to adoption

3. Fair Value of Derivative Instruments

Fair value is a market-based measurement that is determined based on assumptions that market participants would use in pricing an asset or a liability. The fair value accounting standard establishes a three tier fair value hierarchy, which prioritizes the inputs used in the valuation methodologies in measuring fair value:

Level 1—Observable inputs that reflect quoted prices (unadjusted) for identical assets or liabilities in active markets.

Level 2—Include other inputs that are directly or indirectly observable in the marketplace.

Level 3—Unobservable inputs which are supported by little or no market activity.

The Company held no derivatives designated as hedges as of December 31, 2018 and 2019.

The fair value of the cross-currency interest rate swap agreement is the estimated amount that we would receive to sell or transfer the swap at the reporting date, taking into account current interest rates, foreign exchange rates and the current credit worthiness of the swap counterparties. The estimated amount is the present value of future cash flows. The Company transacts all of these derivative instruments through investment-grade rated financial institutions at the time of the transaction. It is possible that the amount recorded as a derivative asset or liability could vary by a material amount in the near term if there is volatility in the credit markets.

The following table includes the estimated fair value of those assets and liabilities that are measured at fair value on a recurring basis.

<u>Fair Value Hierarchy Level</u>	Fair Value Hierarchy Level	December 31, 2018	December 31, 2019
		Fair Value Asset (Liability)	Fair Value Asset (Liability)
(in thousands)			
Cross-currency interest rate swap agreement	Level 2	(5,154)	(5,769)

4. Fair Value of Financial Instruments Not Accounted For at Fair Value

The principal financial assets of the Company as of December 31, 2018 and 2019 consist of cash, cash equivalents, restricted cash and accounts receivable. The principal financial liabilities of the Company consist of accounts payable, accrued expenses and other liabilities, secured term loan facilities, revolving credit facilities, the 2017 Bonds and the 2018 Bonds.

The carrying values of cash and cash equivalents, restricted cash, accounts receivable, accounts payable, accrued expenses and other liabilities are reasonable estimates of their fair value due to the short-term nature or liquidity of these financial instruments.

The 2017 Bonds and the 2018 Bonds are classified as a level two liability and the fair values have been calculated based on the most recent trades of the bond on the Oslo Børs prior to December 31, 2019. The 2018 Bonds are denominated in Norwegian Kroner (“NOK”) and the fair value has been translated to the functional currency of the Company using the exchange rate as of December 31, 2019.

The fair value of secured term loan facilities and revolving credit facilities is estimated based on the average of the current rates offered to the Company for all debt facilities. This has been categorized at level two on the fair value measurement hierarchy as at December 31, 2019.

The following table includes the estimated fair value and carrying value of those assets and liabilities. The table excludes cash, cash equivalents, restricted cash, accounts receivable, accounts payable, accrued expenses and other liabilities because the fair value approximates carrying value and, for accounts receivable and payable, are due in one year or less.

<u>Fair Value Hierarchy Level</u>	<u>December 31, 2018</u>		<u>December 31, 2019</u>		
	<u>Fair Value Hierarchy Level</u>	<u>Carrying Amount Asset (Liability)</u>	<u>Fair Value Asset (Liability)</u>	<u>Carrying Amount Asset (Liability)</u>	<u>Fair Value Asset (Liability)</u>
		(in thousands)			
2018 Bonds (<i>note 11</i>)	Level 2	(69,337)	(66,004)	(68,368)	(69,052)
2017 Bonds (<i>note 12</i>)	Level 2	(100,000)	(96,481)	(100,000)	(100,500)
Secured term loan facilities and revolving credit facilities (<i>note 10</i>)	Level 2	(675,738)	(588,713)	(716,942)	(614,623)

5. Accounts Receivable, Net

It is a condition of time charter parties that payments of hire are received monthly in advance. Voyage charter contracts require payment upon completion of each discharge, with subsequent demurrage claims payable on submission of invoices. As of December 31, 2019, management has provided for doubtful accounts of \$0.7 million (2018: \$0.3 million).

6. Vessels, net

	Vessel (in thousands)	Drydocking (in thousands)	Total (in thousands)
Cost			
December 31, 2017	2,056,722	36,275	2,092,997
Additions	648	5,796	6,444
Write-offs of fully amortized assets	—	(10,163)	(10,163)
December 31, 2018	2,057,370	31,908	2,089,278
Additions	2,910	11,523	14,433
Write-offs of fully amortized assets	—	(7,203)	(7,203)
December 31, 2019	<u>2,060,280</u>	<u>36,228</u>	<u>2,096,508</u>
Accumulated Depreciation			
December 31, 2017	332,708	20,150	352,858
Charge for the period	67,809	7,909	75,718
Write-offs of fully amortized assets	—	(10,163)	(10,163)
December 31, 2018	400,517	17,896	418,413
Charge for the period	67,886	7,885	75,771
Write-offs of fully amortized assets	—	(7,203)	(7,203)
December 31, 2019	<u>468,403</u>	<u>18,578</u>	<u>486,981</u>
Net Book Value			
December 31, 2017	<u>\$1,724,014</u>	<u>\$ 16,125</u>	<u>\$1,740,139</u>
December 31, 2018	<u>\$1,656,853</u>	<u>\$ 14,012</u>	<u>\$1,670,865</u>
December 31, 2019	<u>\$1,591,877</u>	<u>\$ 17,650</u>	<u>\$1,609,527</u>

The cost and net book value of the 25 vessels that were contracted under time charter agreements (please read Note 16 to the consolidated financial statements) was \$1,374 million and \$1,053 million respectively as of December 31, 2019 (December 31, 2018: \$1,337 million and \$1,084 million respectively for 23 vessels contracted under time charters).

The net book value of vessels that serve as collateral for the Company's secured bond, secured term loan and revolving credit facilities (Note 10 and Note 11 to the consolidated financial statements) was \$1,413 million as of December 31, 2019 (December 31, 2018: \$1,509 million).

The cost and net book value of vessels that are included in the table above and are subject to financing arrangements (please read Note 9 (Variable Interest Entities) to the consolidated financial statements) was \$82.9 million and \$73.7 million respectively as of December 31, 2019. There were no vessels subject to financing arrangements as of December 31, 2018.

7. Investment in Equity Accounted Joint Venture

The table below represents the Company's investment into the Export Terminal Joint Venture, pursuant to which the Company has a 50% economic interest in building and operating the Marine Export Terminal, as of December 31, 2018 and 2019:

	<u>2018</u>	<u>2019</u>
	(in thousands)	
Investment in equity accounted joint venture at January 1	\$ —	\$ 42,462
Equity contributions to joint venture entity	41,000	84,500
Share of results	(38)	(1,126)
Capitalized interest and deferred financing costs	1,024	4,823
Associated costs	<u>476</u>	<u>1</u>
Total investment in equity accounted joint venture at December 31	<u>\$42,462</u>	<u>\$130,660</u>

Interest costs capitalized on the investment in the Export Terminal Joint Venture for the years ended December 31, 2019 and 2018 of \$4.8 million and \$1.0 million, respectively being amortized over the estimated useful life of the Marine Export Terminal, which began commercial operations with the export of commissioning cargoes in December 2019.

8. Group Subsidiaries

As of December 31, 2018, and 2019, the company had the following significant subsidiaries:

Corporation Name	Percentage Ownership as of December 31,		Country of Incorporation	Subsidiary of Limited Liability Company
	2018	2019		
- Navigator Gas US L.L.C.	100%	100%	Delaware (USA)	Service company
- Navigator Gas L.L.C.	100%	100%	Marshall Islands	Holding company
~ Navigator Aries L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Atlas L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Aurora L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Centauri L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Ceres L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Ceto L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Copernico L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Capricorn L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Eclipse L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Europa L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Galaxy L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Gemini L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Genesis L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Glory L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Grace L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Gusto L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Jorf L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Leo L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Libra L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Luga L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Magellan L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Mars L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Neptune L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Nova L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Oberon L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Pegasus L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Phoenix L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Prominence L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Saturn L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Scorpio L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Taurus L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Triton L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Umbrio L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Venus L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Virgo L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Yauza L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ NGT Services (UK) Ltd	100%	100%	England	Service company
~ NGT Services (Poland) Sp. z.o.o. ...	100%	100%	Poland	Service company
~ Navigator Gas Ship Management Ltd.	100%	100%	England	Service company
~ Falcon Funding PTE Ltd	100%	100%	Singapore	Service company
~ Navigator Gas Invest Ltd	100%	100%	England	Investment company
- PT Navigator Khatulistiwa	49%	49%	Indonesia	Vessel-owning company
~ Navigator Terminals L.L.C.	100%	100%	Marshall Islands	Investment company
~ Navigator Terminal Invest Ltd	100%	100%	England	Investment company
- Navigator Ethylene Terminals L.L.C.	100%	100%	Delaware (USA)	Investment company
- Enterprise Navigator Ethylene Terminal L.L.C.	50%	50%	Texas (USA)	Terminal operator

The above table excludes mention of OCY Aurora Ltd, the lessor variable interest entity (“lessor VIE”) that we have leased a vessel from under a finance lease arrangement. The lessor VIE is a wholly-owned, newly formed special purpose vehicle (“SPV”) of a financial institution. While we do not hold any equity investments in this SPV, we have concluded that we are the primary beneficiary of the lessor VIE and accordingly have consolidated this entity into our financial results. Please read Note 9 (Variable Interest Entities) to our consolidated financial statements for further details.

9. Variable Interest Entities

As of December 31, 2019, the Company has consolidated 100% of PT Navigator Khatulistiwa, a VIE for which the Company is deemed to be the primary beneficiary, i.e. it has a controlling financial interest in this entity. The Company owns 49% of the VIE’s common stock, all of its secured debt and has voting control. All economic interests in the residual net assets reside with the Company. A VIE is an entity that in general does not have equity investors with voting rights or that has equity investors that do not provide sufficient financial resources for the entity to support its activities. A controlling financial interest in a VIE is present when a company has the power to direct the activities of a VIE that most significantly impact the entity’s economic performance and has the right to residual gains or the obligation to absorb losses that could potentially be significant to the VIE. The VIE, PT Navigator Khatulistiwa, had total assets and liabilities, as of December 31, 2019, of \$123.1 million (2018: \$125.3 million) and \$20.4 million (2018: \$36.6 million) respectively. These amounts have been included in the Company’s consolidated balance sheets as of December 31, 2018 and 2019.

On October 21, 2019 the Company entered into a sale and leaseback to refinance one of its vessels, *Navigator Aurora*. The sale price agreed was \$77.5 million, with the buyer paying 90% of the vessel’s value, or \$69.75 million and prepaid hire representing the remaining 10%. From the proceeds, \$44.5 million was used to repay the vessel’s secured tranche of the December 2015 secured revolving credit facility. Simultaneous with this sale, the Company entered into a bareboat charter for the vessel for a period of up to 13 years, with purchase options at years 5, 7 and 10 from date of commencement of the charter where we have the option to repurchase the vessel at fixed pre-determined amounts. The transaction was closed on October 28, 2019.

Following the sale and leaseback refinancing transaction, *Navigator Aurora* is owned by OCY Aurora Ltd., a Maltese limited liability company. OCY Aurora Ltd., the “lessor entity”, is a wholly owned subsidiary of Ocean Yield Malta Limited, whose parent is Ocean Yield ASA, a listed company on the Oslo stock exchange. The Company does not hold any shares or voting rights in the lessor entity. Under U.S. GAAP the entity is considered to be a VIE (Variable Interest Entity). By virtue of the sale and leaseback transaction we have entered into with the lessor entity, we are deemed to be the primary beneficiary of the VIE and are required by U.S. GAAP to consolidate the VIE into our results. Although consolidated into our results, we have no control over the funding arrangements negotiated by the lessor VIE such as interest rates, maturity and repayment profiles. Furthermore, our estimation process is dependent upon the timeliness of receipt and accuracy of financial information provided by the lessor VIE entity.

The lessor VIE, OCY Aurora Ltd., was incorporated in 2019 and had total assets and liabilities, as of December 31, 2019, of \$69.1 million and \$69.0 million, respectively. These amounts have been included in the Company’s consolidated balance sheets as of December 31, 2019.

The assets and liabilities of the lessor VIE that most significantly impact the Company's consolidated balance sheets and the financial statement line items in which they are presented as of December 31, 2019, are as follows:

	December 31, 2019
	(in thousands)
Assets	
Cash, cash equivalents and restricted cash	\$ 796
Liabilities	
Amounts due to related parties, current	\$ (451)
Amounts due to related parties, non current	<u>(68,206)</u>
	<u><u>\$(68,657)</u></u>

The most significant impact of the lessor VIE's operations on the Company's consolidated statements of operations is interest expense of \$0.5 million for the year ended December 31, 2019. The most significant impact of the lessor VIE's cash flows on the Company's consolidated statements of cash flows is net cash received in financing activities of \$69.1 million for the year ended December 31, 2019.

10. Secured Term Loan Facilities and Revolving Credit Facilities

The table below represents the annual principal payments to be made under our term loans and revolving credit facilities after December 31, 2019:

	December 31, 2018	December 31, 2019
	(in thousands)	(in thousands)
Due within one year	\$ 70,600	\$ 66,534
Due in two years	128,725	66,534
Due in three years	60,600	259,053
Due in four years	302,461	193,078
Due in five years	113,352	9,150
Due in more than five years*	<u>—</u>	<u>122,593</u>
Total secured term loan facilities and revolving credit facility	\$675,738	\$716,942
Less: current portion	<u>70,600</u>	<u>66,534</u>
Secured term loan facilities and revolving credit facility, non-current portion	<u><u>\$605,138</u></u>	<u><u>\$650,408</u></u>

* Includes amounts relating to the Navigator Aurora Facility held within a lessor entity (for which legal ownership resides with financial institutions) that we are required to consolidate under U.S. GAAP into our financial statements as a variable interest entity (Please read Note 9 (Variable Interest Entities) to our consolidated financial statements.

On June 29, 2018 the Company obtained approval to amend one of the covenants in each of its secured term loan and revolving credit facilities. The covenant, requiring the ratio of Earnings before Interest, Tax, Depreciation and Amortization ("EBITDA") to be at least two and a half times or three times interest has been amended to a requirement of two times interest, up to and including September 30, 2020, before then reverting back to the original requirements of two and a half times or three times interest, dependent upon the facility.

January 2015 Secured Term Loan Facility. On January 27, 2015 the Company entered into a secured term loan facility with Credit Agricole Corporate and Investment Bank as agent as well as HSH Nordbank AG and NIBC Bank N.V. to refinance the April 2013 \$120.0 million secured term loan facility, as well as to provide

financing for an additional five existing newbuildings. The January 2015 secured term loan facility has a term of up to seven years from the loan drawdown date with a maximum principal amount of up to \$278.1 million. The aggregate fair market value of the collateral vessels must be no less than 135% of the aggregate outstanding borrowing under the facility. Interest on amounts drawn is payable at a rate of U.S. LIBOR plus 270 basis points per annum. The deferred finance costs associated with the extinguishment of the previous \$120.0 million facility were written off in full. The facility is fully drawn and as of December 31, 2019 the amount still outstanding was \$111.3 million which is repayable for each vessel tranche in quarterly installments of between \$0.5 million and \$0.6 million for seven years from the date of each vessel drawdown followed by a final payment of between \$15.6 million and \$18.3 million after each seven year term ends. During the year ended December 31, 2019, the Company entered into the March 2019 secured term loan facility which refinanced four of the vessels that were previously in the January 2015 secured term loan facility.

This loan facility is secured by first priority mortgages on each of; *Navigator Umbrio*, *Navigator Centauri*, *Navigator Ceres*, *Navigator Ceto* and *Navigator Copernico* as well as assignments of earnings and insurances on these secured vessels. The financial covenants each as defined within the credit facility are: a) the maintenance at all times of cash and cash equivalents in an amount equal to or greater than (i) \$25.0 million and (ii) 5% of the total indebtedness; b) a ratio of EBITDA to interest expense of not less than 2:1 up to and including September 30, 2020, after which it will revert to 3:1; and c) maintain a ratio of total stockholders' equity to total assets of not less than 30%. As of December 31, 2019, the Company was in compliance with all covenants contained in this credit facility.

December 2015 Secured Revolving Credit Facility. On December 21, 2015 the Company entered into a secured revolving credit facility with Nordea Bank AB and ABN Amro Bank N.V as agents, to provide financing for six vessels. The December 2015 secured revolving credit facility has a term of seven years from the loan arrangement date (expiring in December 2022) with a maximum principal amount of up to \$290.0 million. Interest on amounts drawn is payable at a rate of U.S. LIBOR plus 210 basis points per annum. The aggregate fair market value of the collateral vessels must be no less than 125% of the aggregate outstanding borrowing under the facility. As of December 31, 2019, the facility was fully drawn with an amount still outstanding of \$186.8 million which is repayable over 11 combined quarterly installments of \$3.3 million with the final combined repayment of \$150.5 million on December 21, 2022.

On October 21, 2019 the Company entered into a sale and leaseback to refinance one of its vessels, *Navigator Aurora*. The sale price agreed was \$77.5 million, with the buyer paying 90% of the vessel's value, or \$69.75 million and prepaid hire representing the remaining 10%. From the proceeds, \$44.5 million was used to repay the vessel's secured tranche of December 2015 secured revolving credit facility. The portion of deferred finance costs associated with the extinguishment of this tranche of the December 2015 secured revolving credit facility were written off in full.

This loan facility is secured by first priority mortgages on each of; *Navigator Eclipse*, *Navigator Nova*, *Navigator Prominence*, *Navigator Luga* and *Navigator Yauza* as well as assignments of earnings and insurances on these secured vessels. The financial covenants each as defined within the credit facility are: a) the maintenance at all times of cash and cash equivalents in an amount equal to or greater than (i) \$25.0 million and (ii) 5 per cent of the total indebtedness; b) a ratio of EBITDA to interest expense of not less than 2:1 up to and including September 30, 2020, after which it will revert to 3:1; and c) maintain a ratio of total stockholders' equity to total assets of not less than 30%. The Company also paid a commitment fee of 0.74% per annum based on any undrawn portion of the facility. As of December 31, 2019, the Company was in compliance with all covenants contained in this credit facility.

October 2016 Secured Term Loan and Revolving Credit Facility. On October 28, 2016 the Company entered into a secured term loan and revolving credit facility with ABN Amro Bank N.V as agents as well as Nordea Bank AB, London Branch; DVB Bank SE and Skandinaviska Enskilda Banken AB to provide \$130.0 million to refinance and extinguish the remaining debt under the 2011 secured term loan facility and the

2012 secured term loan facility; to provide \$35 million as a newbuilding term loan to part finance *Navigator Jorf*, which was delivered in July 2017, and to provide a revolving credit facility of \$55.0 million for general corporate purposes. The facility has a term of seven years from the first utilization date (expiring in December 2023) with a maximum principal amount of up to \$220.0 million. The facility is fully drawn and as of December 31, 2019, the outstanding balance drawn on the secured term loan, newbuilding loan and revolving credit facility was \$130.9 million which is repayable in 15 quarterly amounts of \$4.1 million, followed by a final repayment of \$70.0 million on November 28, 2023.

Interest on amounts drawn is payable at a rate of U.S. LIBOR plus 260 basis points per annum. The aggregate fair market value of the collateral vessels must be no less than 125% of the aggregate outstanding borrowing under the facility.

This facility is secured by first priority mortgages on each of: *Navigator Gemini*, *Navigator Leo*, *Navigator Libra*, *Navigator Pegasus*, *Navigator Phoenix*, *Navigator Taurus* and *Navigator Jorf* as well as assignments of earnings and insurances on these secured vessels. The financial covenants each as defined within the credit facility are: a) the maintenance at all times of cash and cash equivalents in an amount equal to or greater than (i) \$25.0 million and (ii) 5 per cent of the total indebtedness; b) a ratio of EBITDA to interest expense of not less than 2:1 up to and including September 30, 2020, after which it will revert to 3:1; and c) maintain a ratio of total stockholders' equity to total assets of not less than 30%. The Company also pays a commitment fee of 0.91% per annum based on any undrawn portion of the facility. As of December 31, 2019, the Company was in compliance with all covenants contained in this credit facility.

June 2017 Secured Term Loan and Revolving Credit Facility. On June 30, 2017 the Company entered into a secured term loan and revolving credit facility with Nordea Bank AB (Publ.), Filial I Norge, BNP Paribas, DVB Bank America N.V., ING Bank N.V. London Branch and Skandinaviska Enskilda Banken AB (Publ.) for a maximum principal amount of \$160.8 million (the "June 2017 Secured Term Loan and Revolving Credit Facility"), to re-finance our \$270.0 million February 2013 secured term loan facility that was due to mature in February 2018 and for general corporate purposes. The facility has \$100.0 million as a secured term loan and \$60.8 million available in a revolving credit facility with a term of six years from the date of the agreement (expiring in June 2023) with a maximum principal amount of up to \$160.8 million. The facility is fully drawn and as of December 31, 2019, the outstanding balance drawn on the loan and credit facility was \$136.1 million which is repayable in 13 quarterly amounts of \$4.1 million followed by a final repayment of \$65.9 million on June 30, 2023.

Interest on amounts drawn is payable at a rate of U.S. LIBOR plus 230 basis points per annum. The aggregate fair market value of the collateral vessels must be no less than 125% of the aggregate outstanding borrowing under the facility.

The facility is secured by first priority mortgages on each of *Navigator Galaxy*, *Navigator Genesis*, *Navigator Grace*, *Navigator Gusto*, *Navigator Glory*, *Navigator Capricorn*, *Navigator Scorpio* and *Navigator Virgo*, as well as assignment of earnings and insurances on these secured vessels. The financial covenants each as defined within the credit facility are: a) the maintenance at all times of cash and cash equivalents in an amount equal to or greater than (i) \$25.0 million and (ii) 5 per cent of the total indebtedness; b) a ratio of EBITDA to interest expense of not less than 2:1 up to and including September 30, 2020, after which it will revert to 2.5:1; and c) maintain a ratio of total stockholders' equity to total assets of not less than 30%. The Company also pays a commitment fee of 0.91% per annum based on any undrawn portion of the facility. As of December 31, 2019, the Company was in compliance with all covenants contained in this credit facility.

March 2019 Secured Term Loan Facility. On March 25, 2019 the Company entered into a secured term loan with Credit Agricole Corporate and Investment Bank, ING Bank N.V. London Branch and Skandinaviska Enskilda Banken AB (Publ.) for a maximum principal amount of \$107.0 million (the "March 2019 Secured Term Loan"), to partially re-finance our January 2015 secured term loan facility that was due to mature in June 2020.

The full amount of \$107.0 million was drawn on March 28, 2019. The repayment of the loan, secured by four of our vessels was \$75.6 million, leaving net proceeds of \$31.4 million for fees and general corporate purposes. The facility has a term of six years from the date of the agreement and expires in March 2025, is fully drawn down and as of December 31, 2019, the amount still outstanding was \$100.1 million which is repayable in 20 equal quarterly instalments of \$2.3 million followed by a final payment of \$54.4 million on the final quarterly repayment date on March 25, 2025. Interest on amounts drawn is payable at a rate of U.S. LIBOR plus 240 basis points per annum.

ASC 470-50—Debt Modifications states that if re-financing of a loan results in the present value of future cash flows being modified by more than 10%, it is considered to have ‘substantially different terms’ from the original loan and is accounted for as a debt extinguishment and the new loan treated as the issuance of new debt. The 10% cash flow test was performed, and it was concluded that the present value of future cash flows on a lender-by-lender basis have not been modified by more than 10%. Issuance costs for the March 2019 Secured Term Loan of \$1.4 million have been deferred and will be amortized over the facility term on the effective rate basis.

This loan facility is secured by first priority mortgages on each of; *Navigator Atlas*, *Navigator Europa*, *Navigator Oberon*, and *Navigator Triton* as well as assignments of earnings and insurances on these secured vessels. The financial covenants each as defined within the credit facility are: a) the maintenance at all times of cash and cash equivalents in an amount equal to or greater than (i) \$35.0 million, or (ii) 5% of Net Debt or total debt, as applicable, whichever is greater; and the aggregate fair market value of the collateral vessels must be no less than 130% of the aggregate outstanding borrowing under the facility

Navigator Aurora Facility In October 2019, the SPV, OCY Aurora Ltd, which owns *Navigator Aurora*, entered into secured financing agreements for \$69.1 million consisting of a loan facility, the “Navigator Aurora Facility” which is denominated in USD. The Navigator Aurora Facility is a seven year unsecured loan provided by OCY Malta Limited, the parent of OCY Aurora Ltd., The Navigator Aurora Facility is subordinated to a further bank loan where OCY Aurora Ltd. is the guarantor and *Navigator Aurora* is pledged as security. The Navigator Aurora Facility bears interest at 3 month U.S. LIBOR plus a margin of 185 basis points and is repayable with a balloon payment on maturity. As of December 31, 2019, there was \$68.1 million in borrowings outstanding under the Navigator Aurora Facility.

The following table shows the breakdown of secured term loan facilities and total deferred financing costs split between current and non-current liabilities as of December 31, 2018 and 2019:

	December 31, 2018	December 31, 2019
	(in thousands)	
Current Liability		
Current portion of secured term loan facilities	\$ 70,600	\$ 66,534
Less: current portion of deferred financing costs . . .	<u>(1,743)</u>	<u>(1,831)</u>
Current portion of secured term loan facilities, net of deferred financing costs	<u>\$ 68,857</u>	<u>\$ 64,703</u>
Non-Current Liability		
Secured term loan facilities and revolving credit facilities net of current portion*	\$605,138	\$650,408
Less: non-current portion of deferred financing costs*	<u>(5,462)</u>	<u>(3,680)</u>
Non-current secured term loan facilities and revolving credit facilities, net of current portion and non-current deferred financing costs*	<u>\$599,676</u>	<u>\$646,728</u>

* Includes amounts relating to the Navigator Aurora Facility held within a lessor entity (for which legal ownership resides with a financial institution) that we are required to consolidate under U.S. GAAP into our financial statements as a variable interest entity (Please read Note 9 (Variable Interest Entities) to our consolidated financial statements.

11. Senior Secured Bond

On November 2, 2018, the Company issued senior secured bonds in an aggregate principal amount of NOK 600 million with Nordic Trustee AS as the bond trustee (the “2018 Bonds”). The net proceeds are being used to part finance the Export Terminal Joint Venture. The 2018 Bonds are governed by Norwegian law and are listed on the Nordic ABM which is operated and organized by Oslo Børs ASA. The 2018 Bonds bear interest at a rate of 3-month NIBOR plus 6.0% per annum, calculated on a 360-day year basis and mature on November 2, 2023. Interest is payable quarterly in arrears on February 2, May 2, August 2 and November 2. The 2018 Bonds are secured by four of the Company’s ethylene capable semi-refrigerated liquefied gas carriers.

On the same date, the Company entered into a cross-currency interest rate swap agreement with Nordea Bank Abp (“Nordea”), with a termination date of November 2, 2023, to run concurrently with the 2018 Bonds. The interest rate payable by the Company under this cross-currency interest rate swap agreement is 6.608% plus 3-month U.S. LIBOR and the transfer of the principal amount fixed at \$71.7 million upon maturity in exchange for NOK 600 million. Please read Note 18 (Note 18 (Derivative Instruments) to the consolidated financial statements. For a description of our accounting policy in relation to the cross-currency interest rate swap, please read Note 2 (Summary of Significant Accounting Policies) to the consolidated financial statements.

The Company may redeem the 2018 Bonds, in whole or in part, at any time beginning on or after November 2, 2021. Any 2018 Bonds redeemed from November 2, 2021 until November 1, 2022, are redeemable at 102.4% of par, from November 2, 2022 until May 1, 2023, are redeemable at 101.5% of par, and from May 2, 2023 to the maturity date are redeemable at 100% of par, in each case, in cash plus accrued interest.

Additionally, upon the occurrence of a “Change of Control Event” (as defined in the 2018 Bond Agreement), the holders of 2018 Bonds have an option to require us to repay such holders’ outstanding principal amount of 2018 Bonds at 101% of par, plus accrued interest.

The financial covenants each as defined within the bond agreement are: (a) The issuer shall ensure that the Group (meaning “the Company and its subsidiaries”) maintains a minimum liquidity of no less than \$25.0 million and (b) maintain a Group equity ratio of at least 30% (as defined in the 2018 Bond Agreement). As of December 31, 2019, the Company was in compliance with all covenants for the 2018 Bonds.

The 2018 Bond Agreement provides that we may declare dividends from January 1, 2020, payable at the earliest from January 1, 2021 so long as such dividends do not exceed 50% of our cumulative consolidated net profits after taxes from January 1, 2020. The 2018 Bond Agreement also limits us and our subsidiaries from, among other things, entering into mergers and divestitures, engaging in transactions with affiliates or incurring any additional liens which would have a material adverse effect. In addition, the 2018 Bond Agreement includes customary events of default, including those relating to a failure to pay principal or interest, a breach of covenant, false representation and warranty, a cross-default to other indebtedness, the occurrence of a material adverse effect, or our insolvency or dissolution.

The following table shows the breakdown of our senior secured bond and total deferred financing costs as of December 31, 2018 and 2019:

	<u>December 31,</u> <u>2018</u>	<u>December 31,</u> <u>2019</u>
	(in thousands)	
Senior Secured Bond		
Total Bond	\$69,337	\$68,368
Less deferred financing costs	(959)	(865)
Total Bond, net of deferred financing costs	<u>\$68,378</u>	<u>\$67,503</u>

12. Senior Unsecured Bond

On February 10, 2017, the Company issued senior unsecured bonds in an aggregate principal amount of \$100.0 million with Nordic Trustee AS as the bond trustee (the “2017 Bonds”). The net proceeds of the issuance of the 2017 Bonds, together with cash on hand, were used to redeem in full all of the Company’s outstanding 9.0% senior unsecured bonds. The 2017 Bonds are governed by Norwegian law and listed on the Nordic ABM which is operated and organized by Oslo Børs ASA. The 2017 Bonds bear interest at a rate of 7.75% per annum and mature on February 10, 2021. Interest is payable semi-annually in arrears on February 10 and August 10.

On September 30, 2019 the Company entered into the 2017 Bonds Amendment, with the bondholders’ approval, to amend one of the covenants in the 2017 Bonds. The covenant, requiring our interest coverage ratio, on a trailing four quarter basis, to be no less than 2.25 to 1.00 was amended to be a requirement of no less than 2.00 to 1.00, in line with a similar covenant in our secured term loan facilities and revolving credit facilities. In addition, the definition of interest under the 2017 Bonds now excludes interest due or payable relating to debt financing associated with our obligations on the construction of the Marine Export Terminal. In accordance with the terms of the 2017 Bonds Amendment, dividends may not be declared or paid by the Company until on or after December 31, 2020. An amendment fee and corporate fees associated with obtaining the 2017 Bonds Amendment of \$1.3 million have been deferred and are being amortized over the period the amendment is in force.

ASC 470-50—Debt Modifications states that if re-financing of an instrument results in the present value of future cash flows being modified by more than 10%, it is considered to have ‘substantially different terms’ from the original instrument and is accounted for as a debt extinguishment and the new instrument treated as the issuance of new debt. The 10% cash flow test was performed, and it was concluded that the present value of future cash flows have not been modified by more than 10%. An amendment fee and corporate fees associated with obtaining the 2017 Bonds Amendment of \$1.3 million have been deferred and will be amortized over the period the amendment is in force.

The Company may redeem the 2017 Bonds, in whole or in part, at any time beginning on or after February 11, 2019. Any 2017 Bonds redeemed from February 11, 2019 up until February 10, 2020, are redeemable at 103.875% of par, from February 11, 2020 to August 10, 2020, are redeemable at 101.9375% of par, and from August 11, 2020 to the maturity date are redeemable at 100% of par, in each case, plus accrued interest.

The 2017 Bond Agreement contains an option to issue additional bonds up to a maximum issue amount of a further \$100.0 million, at identical terms as the original bond issue, except that additional bonds may be issued at a different price.

The financial covenants each as defined within the bond agreement are: (a) The issuer shall ensure that the Group (meaning “the Company and its subsidiaries”) maintains a minimum liquidity of no less than \$25.0 million; (b) to maintain an interest coverage ratio (as defined in the 2017 Bond Agreement) of not less than 2.00 to 1.00; and (c) maintain a Group equity ratio of minimum 30% (as defined in the 2017 Bond Agreement). As of December 31, 2019, the Company was in compliance with all covenants for the 2017 Bonds.

The 2017 Bond Agreement provides that we may declare dividends so long as such dividends do not exceed 50% of our cumulative consolidated net profits after taxes since June 30, 2016. The 2017 Bond Agreement also limits us and our subsidiaries from, among other things, entering into mergers and divestitures, engaging in transactions with affiliates or incurring any additional liens which would have a material adverse effect. In addition, the 2017 Bond Agreement includes customary events of default, including those relating to a failure to pay principal or interest, a breach of covenant, false representation and warranty, a cross-default to other indebtedness, the occurrence of a material adverse effect, or our insolvency or dissolution.

The following table shows the breakdown of our senior unsecured bond and total deferred financing costs as of December 31, 2018 and 2019:

	<u>December 31, 2018</u>	<u>December 31, 2019</u>
	(in thousands)	
Senior Unsecured Bond		
Total Bond	\$100,000	\$100,000
Less deferred financing costs	(961)	(1,487)
Total Bond, net of deferred financing costs	<u>\$ 99,039</u>	<u>\$ 98,513</u>

13. Earnings per Share

Basic earnings per share is calculated by dividing the net income/(loss) available to common shareholders by the average number of common shares outstanding during the periods. Diluted earnings per share is calculated by adjusting the net income available to common shareholders and the weighted average number of common shares used for calculating basic earnings per share for the effects of all potentially dilutive shares.

The following table shows calculation of both basic and diluted number of weighted average outstanding shares for the years ended December 31, 2017, 2018 and 2019:

	<u>December 31, 2017</u>	<u>December 31, 2018</u>	<u>December 31, 2019</u>
Basic and diluted income/(loss) available to common stockholders (in thousands)	5,310	(5,739)	(16,706)
Basic weighted average number of shares	55,508,974	55,629,023	55,792,711
Effect of dilutive potential share options*:	372,480	—	—
Diluted weighted average number of shares	<u>55,881,454</u>	<u>55,629,023</u>	<u>55,792,711</u>

* Due to a loss for the years ended December 31, 2019 and 2018, no incremental shares are included because the effect would be antidilutive. The number of potential dilutive shares excluded from the calculation for the year ended December 31, 2019, is 349,870 (December 31, 2018: 349,237)

14. Share-Based Compensation

During 2013, the Company's Board adopted the 2013 Restricted Stock Plan (the "2013 Plan"), which entitled officers, employees, consultants and directors of the Company to receive grants of restricted stock of the Company's common stock or share options in the Company's common stock. This 2013 Plan is administered by the Board or a committee of the Board.

The 2013 Plan is administered by the Compensation Committee with certain decisions subject to approval of our Board. The maximum aggregate number of common shares that may be delivered pursuant to options or restricted stock awards granted under the 2013 Plan is 3,000,000 shares of common stock. A holder of restricted stock, awarded under the 2013 Plan, shall have the same voting and dividend rights as the Company's other common stockholders in relation to those shares.

Share awards

On March 20, 2019, the Company granted 32,550 restricted shares under 2013 Plan to non-employee directors with a weighted average value of \$11.06 per share. These restricted shares vest on the first anniversary of the grant date. On the same date the Company granted 141,888 restricted shares to the officers and employees of the Company, including the then Chief Executive Officer, with a weighted average value of \$11.06 per share. All these restricted shares vest on the third anniversary of the grant date.

During the year ended December 31, 2019, there were 29,898 shares that were previously granted to non-employee directors under the 2013 Plan with a weighted average grant value of \$12.04 per share, which vested at a fair value of \$336,054. In addition, 48,147 shares that were granted in 2016 to the then Chief Executive Officer and officers and employees of the Company, all of which had a weighted average grant value of \$15.80, vested at a fair value of \$548,218. In addition, 5,000 shares granted to a non-employee director in 2018 who then subsequently became the Chief Executive of the Company vested at a fair value of \$60,300.

On August 14, 2019, 5,425 shares granted to a non-employee director with a value of \$11.06 per share were cancelled.

On March 20, 2018, the Company granted 29,898 restricted shares under the 2013 Plan to non-employee directors with a weighted average value of \$12.04 per share. On November 28, 2018 the Company granted a further 5,000 shares to a newly appointed non-employee director with a weighted average value of \$12.30. These restricted shares vest on the first anniversary of the grant date. On March 20, 2018 the Company granted 96,644 restricted shares to the Chief Executive Officer and officers and employees of the Company with a weighted average value of \$12.04 per share. All these restricted shares vest on the third anniversary of the grant date.

During the year ended December 31, 2018, 28,194 shares that were previously granted under the 2013 Plan to non-employee directors with a weighted average grant value of \$12.77 per share vested at a fair value of \$325,641.

Restricted share grant activity for the year ended December 31, 2018 and 2019 was as follows:

	<u>Number of non-vested restricted shares</u>	<u>Weighted average grant date fair value</u>	<u>Weighted average remaining contractual term</u>
Balance as of January 1, 2018	143,513	\$13.82	1.49 years
Granted	131,542	12.04	
Vested	(28,194)	12.77	
Forfeited	(3,673)	14.16	
Balance as of December 31, 2018	<u>243,188</u>	<u>\$12.98</u>	1.30 years
Granted	174,438	11.06	
Cancelled	(5,425)	11.06	
Vested	(83,045)	14.24	
Balance as of December 31, 2019	<u><u>329,156</u></u>	<u><u>\$11.68</u></u>	<u><u>1.38 years</u></u>

Using the straight-line method of expensing the restricted stock grants, the weighted average estimated value of the shares calculated at the date of grant is recognized as compensation cost in the statement of operations over the period to the vesting date. During the year ended December 31, 2019, the Company recognized \$1,495,412 in share-based compensation costs relating to share grants (year ended December 31, 2018: \$1,173,580). As of December 31, 2019, there was a total of \$1,774,202 unrecognized compensation costs relating to the expected future vesting of share-based awards (December 31, 2018: \$1,387,104) which are expected to be recognized over a weighted average period of 1.38 years (December 31, 2018: 1.30 years).

Share options

Share options issued under the 2013 Plan are not exercisable until the third anniversary of the grant date and can be exercised up to the tenth anniversary of the date of grant. The fair value of each option is calculated on the date of grant based on the Black-Scholes valuation model. Expected volatilities are based on the historic volatility of the Company's stock price and other factors. The Company does not currently pay dividends and it is assumed this will not change. The expected term of the options granted is anticipated to occur in the range between 4 and 6.5 years. The risk-free rate is the rate adopted from the U.S. Government Zero Coupon Bond.

The movements in the existing share options during the years ended December 31, 2018 and 2019 were as follows:

Options	<u>Number of options outstanding</u>	<u>Weighted average exercise price per share</u>	<u>Aggregate intrinsic value</u>
Balance as of January 1, 2018	368,740	\$21.51	—
Forfeited during the year	<u>(24,804)</u>	<u>22.55</u>	<u>—</u>
Balance as of December 31, 2018	343,936	21.43	\$—
Granted during the period	<u>6,000</u>	<u>18.95</u>	<u>—</u>
Balance as of December 31, 2019	<u>349,936</u>	<u>21.39</u>	<u>\$—</u>

There were 343,936 options exercisable at December 31, 2019. The weighted average exercise price of the share options exercisable at December 31, 2019 was \$21.39.

The weighted-average remaining contractual term of options outstanding and exercisable at December 31, 2019 was 4.7 years and 4.7 years, respectively.

The weighted-average grant-date fair value of share options granted during 2019 was \$18.95.

On January 5, 2019, 6,000 share options were granted to an employee of the Company at a strike price of \$18.95 under the 2013 Plan. These options are not exercisable until the first anniversary of the grant date and can be exercised up to the sixth anniversary of the grant date.

During the year ended December 31, 2019, the Company recognized \$8,474 in share-based compensation costs relating to options granted under the 2013 Plan, which was recognized in general and administrative costs (year ended December 31, 2018: credit of \$99,902). As of December 31, 2019, there was no unrecognized compensation costs (year ended December 31, 2018 no unrecognized compensation costs) related to non-vested options under the 2013 Plan.

As of December 31, 2019, there were 349,936 share options which had vested but had not been exercised.

15. Commitments and Contingencies

The contractual obligations schedule set forth below summarizes our contractual obligations as of December 31, 2019:

	2020	2021	2022	2023	2024	2025	Thereafter	Total
	(in thousands)							
Marine Export Terminal capital contributions	17,100	7,400	—	—	—	—	—	24,500
Secured term loan facilities and revolving credit facilities	66,534	66,534	259,053	193,078	9,150	54,387	—	648,736
2017 Bonds	—	100,000	—	—	—	—	—	100,000
2018 Bonds	—	—	—	71,697	—	—	—	71,697
Office operating leases**	1,534	1,534	249	—	—	—	—	3,317
Navigator Aurora Facility*	—	—	—	—	—	—	68,206	68,206
Total contractual obligations	<u>\$85,168</u>	<u>\$175,468</u>	<u>\$259,302</u>	<u>\$264,775</u>	<u>\$9,150</u>	<u>\$54,387</u>	<u>\$68,206</u>	<u>\$916,456</u>

* The Navigator Aurora Facility is a loan facility held within a lessor entity (for which legal ownership resides with financial institutions) that we are required to consolidate under U.S. GAAP into our financial statements as a variable interest entity. Please read Note 9 (Variable Interest Entities) to our consolidated financial statements.

** The Company occupies office space in London with a lease that commenced in January 2017 for a period of 10 years with a mutual break option in January 2022, which is the fifth anniversary from the lease commencement date. This break option is recognized in the table above but has not been included as part of the right-of-use asset and lease liability associated with the lease. Please read Note 21 (Operating Lease Liabilities) to our consolidated financial statements. The gross rent per year is approximately \$1.1 million.

The Company entered into a lease for office space in New York that commenced June 1, 2017 and expires on May 31, 2022. The annual gross rent under this lease is approximately \$0.4 million, subject to certain adjustments.

The lease term for our representative office in Gdynia, Poland is for a period of five years commencing from April 2017. The gross rent per year is approximately \$60,000.

The weighted average remaining contractual lease term for the above three office leases on December 31, 2019 was 2.2 years.

16. Concentration of Credit Risks

The Company's vessels are chartered under either a time charter arrangement or voyage charter arrangement. Under a time charter arrangement, no security is provided for the payment of charter hire. However, payment is usually required monthly in advance. Under a voyage charter arrangement, a lien may sometimes be placed on the cargo to secure the payment of the accounts receivable, as permitted by the prevailing charter party agreement.

During 2019, four charterers contributed 51.4 % of the operating revenue, comprising 16.8%, 13.9%, 13.2%, and 10.2% (2018: four charterers contributed 55.1% of the operating revenue, comprising 16.5%, 15.4%, 13.5% and 9.7%).

As of December 31, 2018, and 2019, all of the Company's cash, cash equivalents, restricted cash, and short-term investments were held by large financial institutions, highly rated by a recognized rating agency.

17. Income Taxes

Navigator Holdings Ltd and its vessel owning subsidiaries are incorporated in the Marshall Islands and under the laws of the Marshall Islands are not subject to tax on income or capital gains and no Marshall Islands withholding tax will be imposed on dividends paid by the Company to its stockholders. However, the Company's UK, Polish and Singaporean subsidiaries and Maltese VIE (please read Note 9 (Variable Interest Entities) to our consolidated financial statements) are subject to local taxes.

	2017 (in thousands)	2018 (in thousands)	2019 (in thousands)
Net Income/(loss)	\$5,310	\$(5,739)	\$(16,607)
Tax expense at statutory rate	\$ —	\$ —	\$ —
Total statutory tax charge	\$ —	\$ —	\$ —
Tax charge in UK subsidiaries	\$ 221	\$ 254	\$ 199
Tax credit in Polish subsidiary	\$ (130)	\$ (147)	\$ (65)
Tax charge in Singapore subsidiary	\$ 306	\$ 226	\$ 213
Tax charge in Maltese VIE (<i>note 9</i>)	\$ —	\$ —	\$ 5
Total Tax charge	\$ 397	\$ 333	\$ 352

The total of all deferred tax assets included in our balance sheet as at 31 December, 2019 is \$458,000 and the total of all deferred tax liabilities is \$26,000. We have income tax carry forwards relating to our operations in Poland of approximately \$2.0 million. We have recorded a deferred tax asset on the balance sheet of \$0.3 million reflecting the benefit of \$1.6 million in loss carry forwards.

18. Derivative Instruments

The Company uses derivative instruments in accordance with its overall risk management policy to mitigate our risk to the effects of unfavorable fluctuations in foreign exchange movements.

The Company entered into a cross-currency interest rate swap agreement concurrently with the issuance of its NOK-denominated Senior secured bonds (see Note 11 (Senior Secured Bond) to the consolidated financial statements) and pursuant to this swap, the Company receives the principal amount of NOK 600 million in exchange for a payment of a fixed amount of \$71.7 million on the maturity date of the swap.

In addition, at each quarterly interest payment date, the cross-currency interest rate swap exchanges a receipt of floating interest of 6.0% plus 3-month NIBOR on NOK 600 million for a U.S. Dollar payment of floating interest of 6.608% plus 3-month U.S. LIBOR on the \$71.7 million principal amount. The purpose of the cross-currency interest rate swap is to economically hedge the foreign currency exposure on the payments of interest and principal of the Company's NOK-denominated 2018 Bonds due in 2023.

The cross-currency interest rate swap is remeasured to fair value at each reporting date. The fair value of this non-designated derivative instrument is presented in the Company's consolidated balance sheets and the change in fair value is presented in the consolidated statement of operations. As of December 31, 2019, the cross-currency interest rate swap had a fair value liability of \$5.8 million and an unrealized loss of \$0.6 million (December 31, 2018, a fair value liability of \$5.2 million and an unrealized loss of \$5.2 million). There is no impact on the cash flows.

Foreign Exchange risk

Under U.S. GAAP, all foreign currency-denominated monetary assets and liabilities are revalued and are reported in the Company's functional currency based on the prevailing exchange rate at the end of the period. These foreign currency transactions fluctuate based on the strength of the U.S. Dollar relative to the NOK and are

included in our results of operations. The primary source of our foreign exchange gains and losses are the movements on our NOK-denominated 2018 Bonds, which we have mitigated through the cross-currency interest rate swap. The translation of all foreign currency-denominated monetary assets and liabilities at each reporting date results in unrealized foreign currency exchange differences but do not impact our cash flows.

Credit risk

The Company is exposed to credit loss in the event of non-performance by the counterparty to the cross-currency interest rate swap agreement. In order to minimize counterparty risk, the Company only enters into derivative transactions with counterparties that are reputable financial institutions, highly rated by a recognized rating agency. As of December 31, 2019 there was no credit risk as the cross-currency interest rate swap was out of the money for the Company.

19. Cash, Cash Equivalents and Restricted Cash

The following table shows the breakdown of cash, cash equivalents and restricted cash as of December 31, 2018 and 2019:

	<u>December 31, 2018</u>	<u>December 31, 2019</u>
	(in thousands)	
Cash, Cash Equivalents and Restricted Cash		
Cash and cash equivalents	\$71,355	\$64,024
Cash and cash equivalents held by the lessor VIE (<i>note 9</i>)	—	796
Restricted cash	<u>160</u>	<u>1,310</u>
Total cash, cash equivalents and restricted cash	<u>\$71,515</u>	<u>\$66,130</u>

Amounts included in restricted cash represent those required to be set aside as collateral by a contractual agreement with a banking institution for the forecast future liability on the cross-currency interest rate swap agreement at the reporting date. Please read Note 18 (Note 18 (Derivative Instruments)) to the consolidated financial statements. If the NOK depreciates relative to the U.S. Dollar beyond a certain threshold, we are required to place cash collateral with our swap providers. As of December 31, 2019, the collateral amount held with the swap provider was \$1.3 million (December 31, 2018, \$0.2 million). The amounts held as collateral within restricted cash are assessed against daily currency movements and are presented as current assets on the Company's consolidated balance sheets.

Included within total cash, cash equivalents and restricted cash as of December 31, 2019 is an amount of \$0.8 million relating to the cash belonging to the lessor VIE that we are required to consolidate under U.S. GAAP. We had no lessor VIEs as of December 31, 2018. Please read Note 9 (Variable Interest Entities) to our consolidated financial statements.

20. Related Party Transactions

Navigator Aurora financing transaction: In October 2019, we sold *Navigator Aurora* to OCY Aurora Ltd. the ('lessor VIE'), and subsequently leased back the vessel under a bareboat charter. Please read Note 9 (Variable Interest Entities) to our consolidated financial statements. The lessor VIE is a wholly-owned, newly formed special purpose vehicle ("SPV") of Ocean Yield ASA, an entity listed on the Oslo stock exchange. While we do not hold any equity investments in this SPV, under U.S. GAAP we are deemed to be the primary beneficiary and we are required to consolidate this lessor VIE into our results. Accordingly, although consolidated into our results, we have no control over the funding arrangements negotiated by this lessor VIE entity.

In October 2019, OCY Aurora Ltd., which owns *Navigator Aurora*, entered into secured financing agreements for \$69.1 million consisting of a loan facility, the "*Navigator Aurora Facility*" which is denominated in USD.

The Navigator Aurora Facility is a seven year unsecured loan provided by OCY Malta Limited, the parent of OCY Aurora Ltd. and a wholly-owned subsidiary of Ocean Yield ASA. The Navigator Aurora Facility is subordinated to a further bank loan where OCY Aurora Ltd. is the guarantor and Navigator Aurora is pledged as security. The Navigator Aurora Facility bears interest at 3 month U.S. LIBOR plus a margin of 185 basis points and is repayable with a balloon payment on maturity. As of December 31, 2019, there was \$68.1 million in borrowings outstanding under this facility which is presented in non current liabilities on the Company's consolidated balance sheets.

OCY Aurora Ltd., the lessor VIE, is consolidated into our results and consequently, under U.S. GAAP, transactions with OCY Malta Limited are deemed to be related party transactions. A payment of \$0.85 million was made against the Navigator Aurora facility for the year ended ended December 31, 2019 as a single, non-contractual prepayment of the loan. This has been reflected as cash flows from financing in our consolidated statement of cash flows. The following table sets out the Company's related party transactions and balances for the year ended December 31, 2019:

	December 31, 2019
	(in thousands)
Income (expenses)	
General and administrative expenses	\$ (221)
Interest expense	(451)
Total	<u>\$ (672)</u>
Receivables (payables)	
Accrued Interest	\$ (451)
Navigator Aurora Facility, net of deferred financing costs	(68,055)
Total	<u>\$(68,506)</u>

21. Operating Lease Liabilities

The Company's consolidated balance sheets include a right-of-use asset and a corresponding liability for operating lease contracts where the Company is a lessee. The discount rate used to measure the lease liability presented on the Company's consolidated balance sheets is the incremental cost of borrowing since the rate implicit in the lease cannot be determined.

The liabilities described below are for the Company's offices in London, Gdynia and New York which are denominated in various currencies. At December 31, 2019, the weighted average discount rate across the three leases was 5.56%

At December 31, 2019, based on the remaining lease liabilities, the weighted average remaining operating lease term was 6.5 years. The difference from the weighted average remaining contractual lease term arises from the mutual break option on the London office lease. Please read Note 15 (Commitments and Contingencies) to our consolidated financial statements.

Under ASC 842, which the Company adopted on January 1, 2019, the ROU asset is a nonmonetary asset and is remeasured into the Company's reporting currency of the U.S. Dollar using the exchange rate for the applicable currency as at the adoption date of ASC 842. The operating lease liability is a monetary liability and is remeasured quarterly using the current exchange rates, with changes recognized in a manner consistent with other foreign-currency-denominated liabilities in general and administrative expenses in the consolidated statements of comprehensive income.

A maturity analysis of the undiscounted cash flows of the Company's operating lease liabilities as at December 31, 2019 is presented in the following table:

	(in thousands)
2020	\$ 1,534
2021	1,534
2022	1,267
2023	1,111
2024	1,111
2025 and thereafter	<u>2,297</u>
Total undiscounted operating lease commitments	\$ 8,854
Less: Discount adjustment	<u>(1,347)</u>
Total operating lease liabilities	\$ 7,507
Less: current portion	<u>(1,178)</u>
Operating lease liabilities, non-current portion	<u>\$ 6,329</u>

22. Subsequent Events

Since the balance sheet date, the Covid-19 virus has spread around the world and many governments have introduced strict measures to limit social contact in order to contain the spread of the virus. As these circumstances were not in place at the balance sheet date, management have concluded that the economic and operating impacts of the Covid-19 virus are a non-adjusting post balance sheet event.

The Company has considered the risk that its assets may be at higher risk of impairment, the significant assets being the fleet with a carrying value of \$1,610 million, our terminal joint venture with a carrying value of \$131 million and its receivables with a carrying value of \$24.5 million. In terms of impact on impairment considerations, the measures to contain the spread of the virus are likely to cause the global economy to enter recession, reducing trade flows and so reducing the Company's profitability in the short-term. This will, until the economy recovers, reduce the headroom of undiscounted future cash-flows over the carrying value of the group's vessels. However, the headroom in the impairment review for all vessels was such that the Company does not believe the impact of the virus will lead to an impairment of its vessels.

The terminal joint venture has contracted approximately 94% of its capacity for a period of between five and seven years and the Company has no reason to believe that those customers will default on their commitments. The final element of construction relating to the storage tank is now over 80% complete and remains on track. Although it is unclear how long the impact of COVID-19 will be, given the useful life of the terminal is a minimum of 24 years, the Company does not believe the impact of the virus will lead to an impairment of its terminal joint venture.

The Company also considered the risk that the carrying value of its Accounts Receivables is impaired, but the level of uncollected receivables at the balance sheet date that remain uncollected, does not give rise to a concern.

Cross-currency Interest Rate Swap

We provide cash collateral as security against unrealized losses on our cross-currency interest rate swap and in the event the Norwegian Kroner weakens against the U.S. dollar, additional cash security is placed into a collateral account. Since the year end, adverse movements in the exchange rate have resulted in the need to deposit significant funds into the collateral account, as of May 7, 2020, \$12.6 million has been deposited.

Luna Pool Collaboration Agreement

In March 2020, the Company collaborated with Pacific Gas Pte. Ltd and Greater Bay Gas Co. Ltd. to form and manage a pool of fourteen vessels ("the Luna Pool") focusing on the transportation of petrochemical gases with specific focus on ethylene and ethane to meet the growing demands of our customer. The Luna Pool will become operational in the second quarter of 2020.

Subsidiaries of Navigator Holdings Ltd

Corporation Name	Percentage Ownership as of December 31,		Country of Incorporation	Subsidiary of Limited Liability Company
	2018	2019		
- Navigator Gas US L.L.C.	100%	100%	Delaware (USA)	Service company
- Navigator Gas L.L.C.	100%	100%	Marshall Islands	Holding company
~ Navigator Aries L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Atlas L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Aurora L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Centauri L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Ceres L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Ceto L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Copernico L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Capricorn L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Eclipse L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Europa L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Galaxy L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Gemini L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Genesis L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Glory L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Grace L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Gusto L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Jorf L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Leo L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Libra L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Luga L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Magellan L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Mars L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Neptune L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Nova L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Oberon L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Pegasus L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Phoenix L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Prominence L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Saturn L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Scorpio L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Taurus L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Triton L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Umbrio L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Venus L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Virgo L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ Navigator Yauza L.L.C.	100%	100%	Marshall Islands	Vessel-owning company
~ NGT Services (UK) Ltd	100%	100%	England	Service company
~ NGT Services (Poland) Sp. z.o.o.	100%	100%	Poland	Service company
~ Navigator Gas Ship Management Ltd.	100%	100%	England	Service company
~ Falcon Funding PTE Ltd	100%	100%	Singapore	Service company
~ Navigator Gas Invest Ltd	100%	100%	England	Investment company
- PT Navigator Khatulistiwa	49%	49%	Indonesia	Vessel-owning company
~ Navigator Terminals L.L.C.	100%	100%	Marshall Islands	Investment company
~ Navigator Terminal Invest Ltd	100%	100%	England	Investment company
- Navigator Ethylene Terminals L.L.C.	100%	100%	Delaware (USA)	Investment company
- Enterprise Navigator Ethylene Terminal L.L.C.	50%	50%	Texas (USA)	Terminal operator

Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Dr Henry Deans, Principal Executive Officer, certify that:

I have reviewed this annual report on Form 20-F of Navigator Holdings Ltd. (the “company”);

1. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
2. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
3. The company’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the company’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the company’s internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company’s internal control over financial reporting; and
4. The company’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company’s auditors and the audit committee of the company’s board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company’s ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the company’s internal control over financial reporting.

Date: May 8, 2020

By: /s/ Harry Deans
Name: Dr. Harry Deans
Title: Chief Executive Officer (Principal Executive Officer)

Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Niall Nolan, Principal Financial Officer, certify that:

I have reviewed this annual report on Form 20-F of Navigator Holdings Ltd. (the “company”);

1. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
2. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
3. The company’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the company’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the company’s internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company’s internal control over financial reporting; and
4. The company’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company’s auditors and the audit committee of the company’s board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company’s ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the company’s internal control over financial reporting.

Date: May 8, 2020

By: /s/ Niall Nolan
Name: Niall Nolan
Title: Chief Financial Officer (Principal Financial Officer)

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code), the undersigned officer of Navigator Holdings Ltd., a Marshall Islands company (the "Company"), hereby certifies that:

The Annual Report on Form 20-F for the year ended December 31, 2019 (the "Report") of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: May 8, 2020

By: /s/ Harry Deans
Name: Dr. Harry Deans
Title: Chief Executive Officer (Principal Executive Officer)

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code), the undersigned officer of Navigator Holdings Ltd., a Marshall Islands company (the “Company”), hereby certifies that:

The Annual Report on Form 20-F for the year ended December 31, 2019 (the “Report”) of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: May 8, 2020

By: /s/ Niall Nolan
Name: Niall Nolan
Title: Chief Financial Officer (Principal Financial Officer)

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8 No. 333-197321) pertaining to the 2013 Long-Term Incentive Plan of Navigator Holdings Ltd. of our reports dated May 8, 2020, with respect to the consolidated financial statements of Navigator Holdings Ltd. and the effectiveness of internal control over financial reporting of Navigator Holdings Ltd., included in this Annual Report (Form 20-F) for the year ended December 31, 2019.

/s/ Ernst & Young LLP

London, United Kingdom

May 8, 2020

Consent of Independent Registered Public Accounting Firm

The Board of Directors
Navigator Holdings Ltd.:

We consent to the incorporation by reference in the registration statement (No. 333-197321) on Form S-8 of Navigator Holdings Ltd. of our report dated April 1, 2019, with respect to the consolidated balance sheet of Navigator Holdings Ltd. as of December 31, 2018, the related consolidated statements of income, comprehensive income, cash flows and stockholders' equity for each of the years in the two-year period then ended, and the related notes, which report appears in the December 31, 2019 annual report on Form 20-F of Navigator Holdings Ltd.

Our audit report refers to a change to the method of accounting for revenue from contracts with customers in 2018 due to the adoption of ASC Topic 606 — Revenue From Contracts With Customers

/s/ KPMG LLP

London, United Kingdom
May 8, 2020