

Global Freight Tickers

Market Capitalization Study by Exchange

The FreightWaves Research Institute performed a global study of all of the public companies in the transportation industry with a market capitalization greater than \$300 million. For the purposes of this study, market capitalization was defined as “the monetary value of a company that is traded on the stock market, where the value is calculated by multiplying the number of shares on the market by the current price per share.” These values were broken down by the 21 stock exchanges on which these companies are traded and 10 freight industry sub-sectors. The industry sectors used in this evaluation were rail, forwarding, maritime, trucking, ports, warehouse, air, pallets, parcel, and tanker.

We identified 144 publicly traded companies on 21 stock exchanges. As of September 21, 2018, the aggregate, or total, market capitalization of these 144 companies was an impressive \$1.4 trillion.

As of September 30, 2018, five of the 21 stock exchanges held 82 percent of the total market share. These markets were the New York Stock Exchange (NYSE) at an impressive \$741.01 billion, the Tokyo Market Exchange (TYO) at \$199.62 billion, the National Securities Dealers Automated Quotation (NASDAQ) at \$83.97 billion, the German Stock Exchange (FSX) at \$76.83 billion, and the Hong Kong Exchange (HKEX) at \$68.93 billion. These exchanges together account for approximately \$1.17 trillion in market capitalization, or approximately 82 percent of the total market capitalization in the publicly traded transportation industry globally.

We show the market share of each sub-sector of the transportation industry, and which stock exchanges held the largest share of market capitalization for the various sub-sectors. This study is useful in determining investor sentiment in the transportation industry globally. The FreightWaves Research Institute demonstrates how the economy, geography, politics, and population of a country could influence its transportation industry and the market capitalization of these companies by sector. This study identifies which countries and markets had higher aggregate market capitalization in transportation. The market capitalization in each sub-sector in each stock market can offer insight into the importance of transportation in the economy locally and globally. Finally, the market capitalization in transportation of each market individually is a derivative of the actual transportation industry in each market, and can therefore give some insight into the actual size of that industry.

We provide an analysis of the top 10 stock markets by market capitalization in transportation, and additional information for the remaining 11 stock markets is also provided. The study will also analyze market capitalization by each sub-sector of the transportation industry.

Methodology

The Freightwaves Research Institute consulted several sources to determine which companies were relevant and which companies to include in our study. The resources included Bloomberg, Google Finance, Yahoo Finance, Stockmarketclock, and individual company financials. Through this research, we decided to include companies that had at least \$300 million in market capitalization at the time of the study. This would ensure that we captured a broad spectrum of transportation companies, from small cap to large cap stocks.

We included companies that were transportation-focused subsidiaries of larger, broader- focused conglomerates, but only if the transportation-focused subsidiary made up at least 15 percent of the parent company's total revenue (for example, BNSF and parent company Berkshire Hathaway). The study did not apply the 15 percent criteria to parcel, warehouse, and tanker sectors. This information was assessed by examining company financial reports. For the large conglomerate Berkshire Hathaway, the value of BNSF's market capitalization was based on how much BNSF contributed to the parent company's overall revenue (19 percent). Therefore, it was estimated that its market capitalization would reflect 19 percent of the total market capitalization. After the list was compiled, the data was organized by stock market, transportation sector, and overall market capitalization.

Following this methodology resulted in the inclusion of 144 publicly traded companies, 21 stock exchanges and 10 transportation sectors, which will all be further highlighted in the body of the study.

Overview of Industries

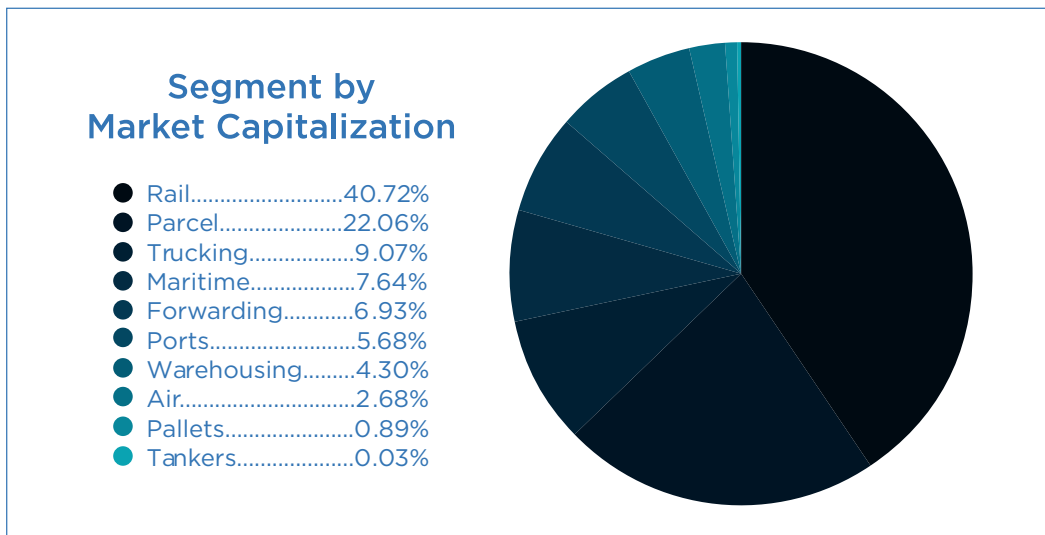
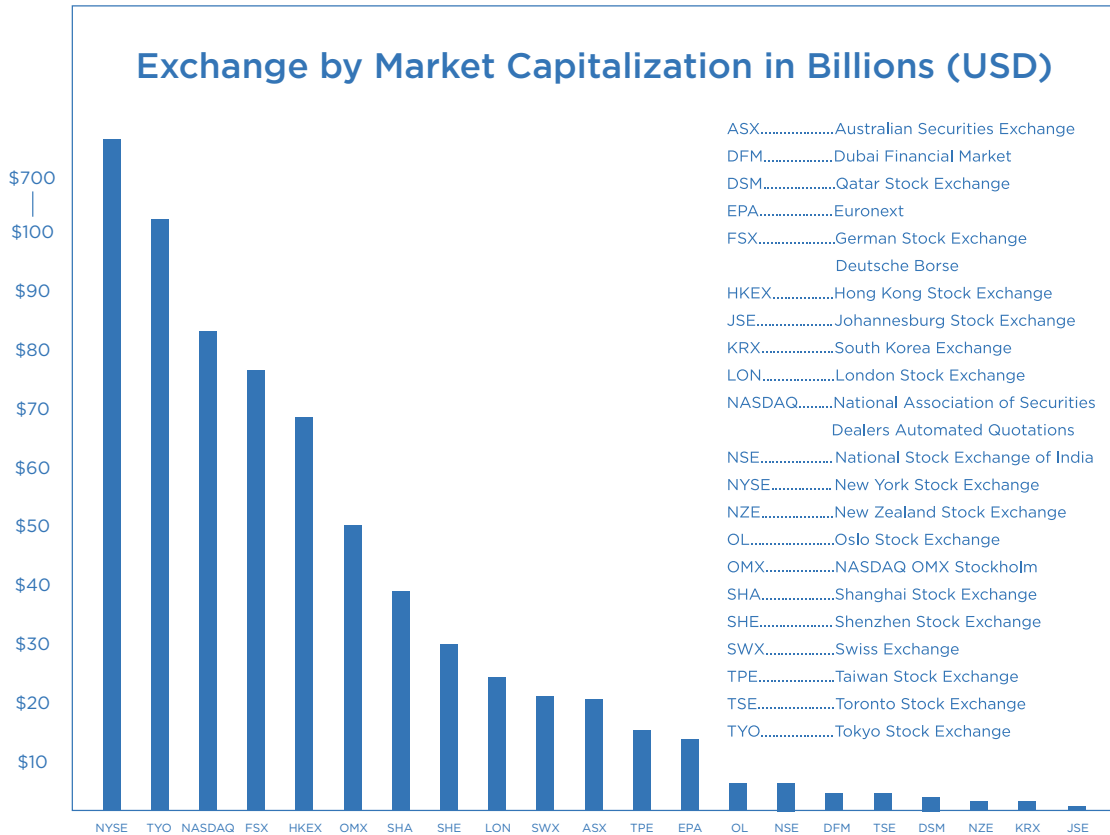
The study identified 10 sub-sectors of the transportation industry to be further evaluated in terms of billions of dollars of market capitalization. These 10 sub-sectors were as follows, in order of total market capitalization in billions of dollars: rail, parcel, trucking, maritime, forwarding, ports, warehousing, air, pallets, and tankers.

The study found that the subsects of the industry with the largest market capitalization were rail companies, at \$577.56 billion, followed by parcel companies, at \$312.87 billion. Trucking and maritime were next, at \$128.57 billion and \$108.30 billion, respectively. Freight forwarding companies held \$98.26 billion, followed by ports at \$80.58 billion and warehousing at \$61.04 billion. Finally, air companies had a market capitalization of \$38.08 billion, pallets at \$12.58 billion, and tankers at \$39.0 billion. These values are as of September 30, 2018. We will provide an in-depth view of each of these transportation market sub-sectors and their market capitalizations.

Introduction to Stock Exchanges

The study identified 10 stock exchanges that held the greatest market capitalization represented by transportation industry companies. Some of the stock exchanges had several companies representing several sectors, while others had only one sector present. This study will explore the 10 stock exchanges with the largest market capitalization in transportation companies in depth. Additional statistics on the remaining 11 stock exchanges can be found at the end of the study. We also explore each of the 10 industry sub-sectors by their representation in certain stock exchanges, and their overall market capitalization.

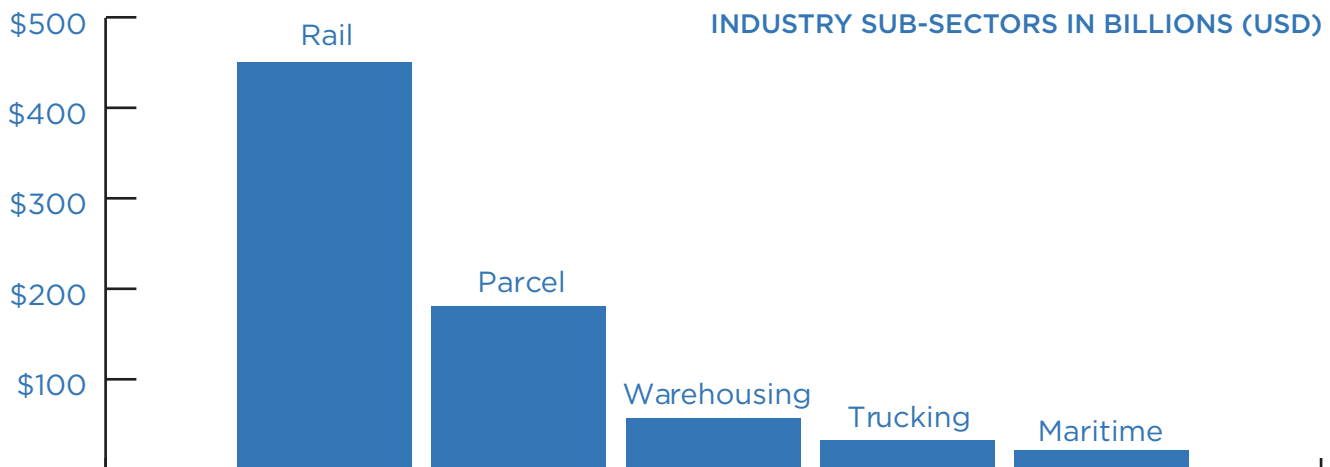
The FreightWaves Research Institute performed a global study by stock ticker symbol for all public companies in the freight industry, all modes of transportation included, with a market capitalization greater than \$300 million.



New York Stock Exchange (NYSE)

The New York Stock Exchange (NYSE), located in New York City, held the largest market capitalization in transportation industry companies at an astounding \$741.01 billion. That number represents approximately 52.25 percent of the total global transportation industry market capitalization. Overall, the NYSE is ranked first in the world by total market capitalization.

The NYSE was represented by 39 companies for the purposes of this study. Seventeen companies were in the maritime industry, nine were in rail, six in trucking, four in parcel, and three in warehousing. Of these companies, the rail companies comprised the highest market capitalization, at approximately \$451.19 billion, or approximately 61.88 percent of the overall market capitalization of transportation companies on the NYSE. Following rail, the four parcel companies accounted for \$180.59 billion, or approximately 24 percent of the market capitalization. After these two sub-sectors, the values are closer together. The three warehousing companies make up \$56.50 billion (approximately 8 percent of the total), the six trucking companies account for \$31.89 billion (approximately 5 percent of the total), and finally, the 17 maritime companies hold \$20.84 billion (approximately 3 percent of the total) in market capitalization.



Ticker	Name	Category	USD (B)
UNP	Union Pacific	Rail	\$120.41
BRK.A	Berkshire Hathaway (BNSF)	Rail	\$100.91
UPS	United Parcel Service	Parcel	\$100.45
CNI	Canadian National	Rail	\$65.35
CSX	CSX	Rail	\$63.60
FDX	FedEx	Parcel	\$63.45
NSC	Norfolk Southern	Rail	\$50.55
PLD	Prologis	Warehousing	\$42.67
CP	Canadian Pacific	Rail	\$30.03
XPO	XPO Logistics	Trucking	\$14.48
ZTO	ZTO Express	Parcel	\$13.04
KSU	Kansas City Southern	Rail	\$11.57
DRE	Duke Realty	Warehousing	\$10.14
KNX	Knight Swift	Trucking	\$6.22
GWR	Gennese and Wyoming	Rail	\$5.47
KEX	Kirby Corp	Maritime	\$4.92
SNDR	Schneider	Trucking	\$4.42
R	Ryder	Trucking	\$3.88
COLD	Americold	Warehousing	\$3.69
SF	SF Global	Parcel	\$3.65
GSH	Guangshen Railway	Rail	\$3.31

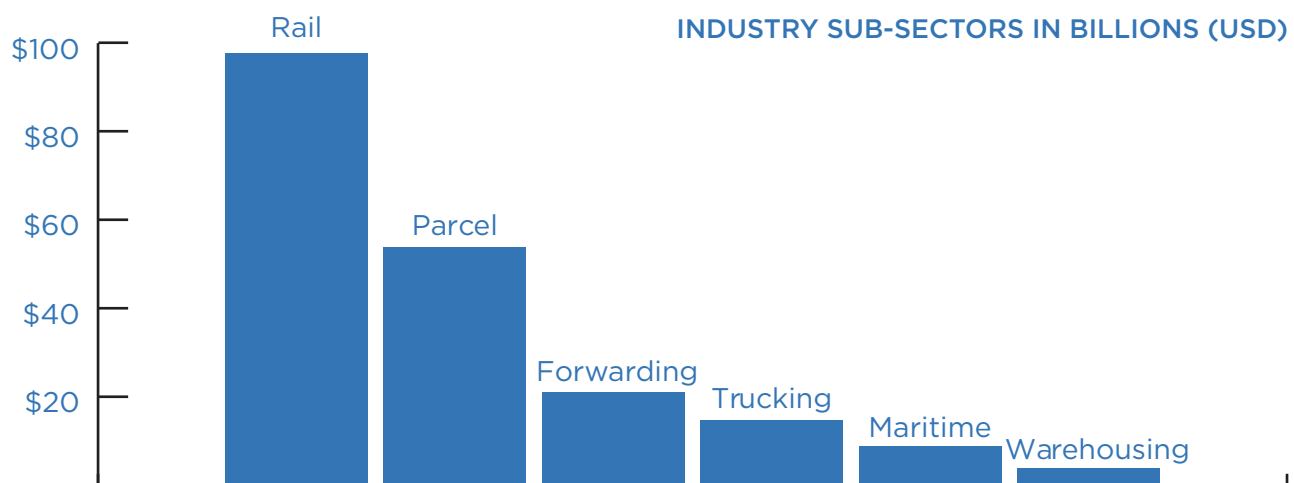
New York Stock Exchange (NYSE), continued

Ticker	Name	Category	USD (B)
BSTI	BEST Inc.	Trucking	\$2.22
EURN	Euronav	Maritime	\$1.89
MATX	Matson	Maritime	\$1.69
SFL	Ship Finance Intl	Maritime	\$1.66
GLOG	Gas Log	Maritime	\$1.60
SSW	Seaspan Corp	Maritime	\$1.45
TGP	Teekay LNG Partners	Maritime	\$1.33
CKH	Seacor Holdings	Maritime	\$0.90
CMRE	Costamare	Maritime	\$0.72
TK	Teekay Corp	Maritime	\$0.68
DHT	DHT Holdings	Maritime	\$0.67
NVGS	Navigator Holdings	Maritime	\$0.67
STNG	Scorpio Tankers	Maritime	\$0.67
USX	US Xpress	Trucking	\$0.67
GNK	Genco Ship & Trade	Maritime	\$0.56
SALT	Scorpio Bulkers	Maritime	\$0.55
LPG	Dorian LPG Ltd	Maritime	\$0.44
DSX	Diana Shipping Inc.	Maritime	\$0.44

Tokyo Stock Exchange (TYO)

The Tokyo Stock Exchange (TYO), located in Japan, holds the second-highest market capitalization in the transportation industry in the world. The TYO holds \$6.22 trillion in overall market capitalization as of March 2018, making it the third-largest exchange when ranked by market capitalization. Of this, \$199.62 billion are held in transportation companies. This \$199.62 billion is held among 19 companies and six industry sub-sectors.

The highest market cap represented in the market is held by five rail companies, totaling \$97.78 billion. This accounts for approximately 49 percent of the market cap in the transportation industry companies on this stock exchange. Following the rail companies, one parcel company accounts for \$53.77 billion, approximately 27 percent of the market cap total. The remaining market cap is comprised of four companies in forwarding at \$21 billion, five companies in trucking at \$14.62 billion, three maritime companies at \$8.67 billion, and finally, one warehousing company at \$3.78 billion.

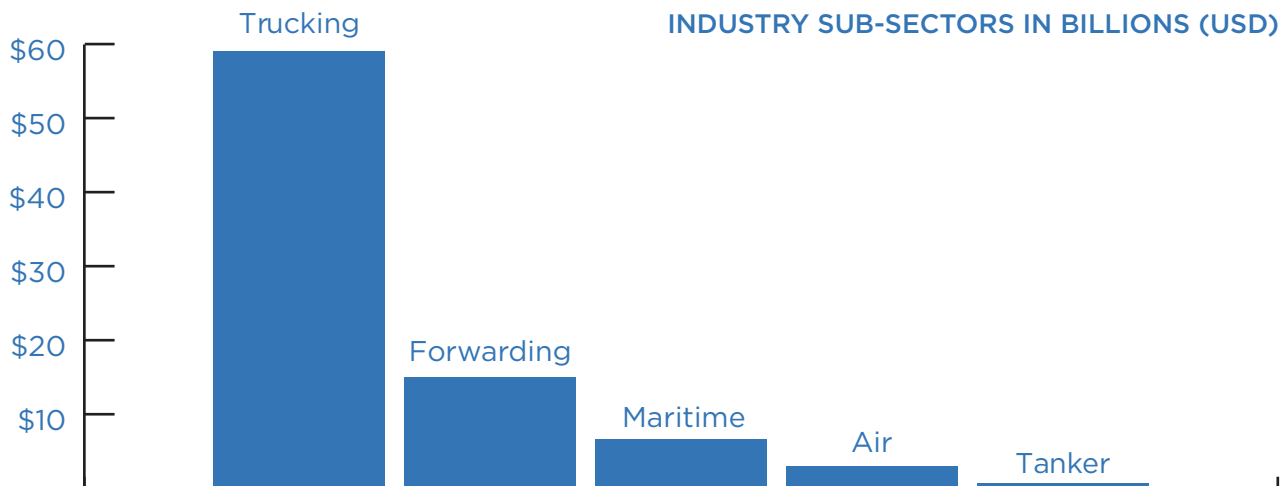


Ticker	Name	Category	USD (B)
6178	Japan Post	Parcel	\$53.77
9022	Central Japan Railway	Rail	\$42.50
9020	East Japan Railway	Rail	\$35.11
9021	West Japan Railway	Rail	\$13.29
9064	Yamato	Forwarding	\$12.41
9143	SG Holdings Co Ltd	Trucking	\$8.42
9062	Nippon Express	Forwarding	\$6.51
9048	Nagoya Railroad	Rail	\$4.75
2871	Nichirei Corp	Warehousing	\$3.78
9104	Mitsui OSK Lines	Maritime	\$3.56
9101	NIPPON YUSEN KAISHA	Maritime	\$3.21
9075	Fukuyama Transport	Trucking	\$2.40
9301	Mitsub Logistics	Trucking	\$2.29
9031	Nishi-Nippon Railway	Rail	\$2.12
9107	KAWASAKI KISEN KAISHA	Maritime	\$1.90
9375	Kintetsu	Forwarding	\$1.39
9039	Sakai Moving Service	Trucking	\$1.20
9037	HAMAKYOREX CO	Forwarding	\$0.70
9099	Chilled and Frozen	Trucking	\$0.32

National Association of Securities Dealers Automated Quotations (NASDAQ)

The National Association of Securities Dealers Automated Quotations exchange, or NASDAQ, holds the third-highest market cap of the transportation companies globally. NASDAQ is the second-largest stock exchange by market cap, following the NYSE, and is also located in New York City.

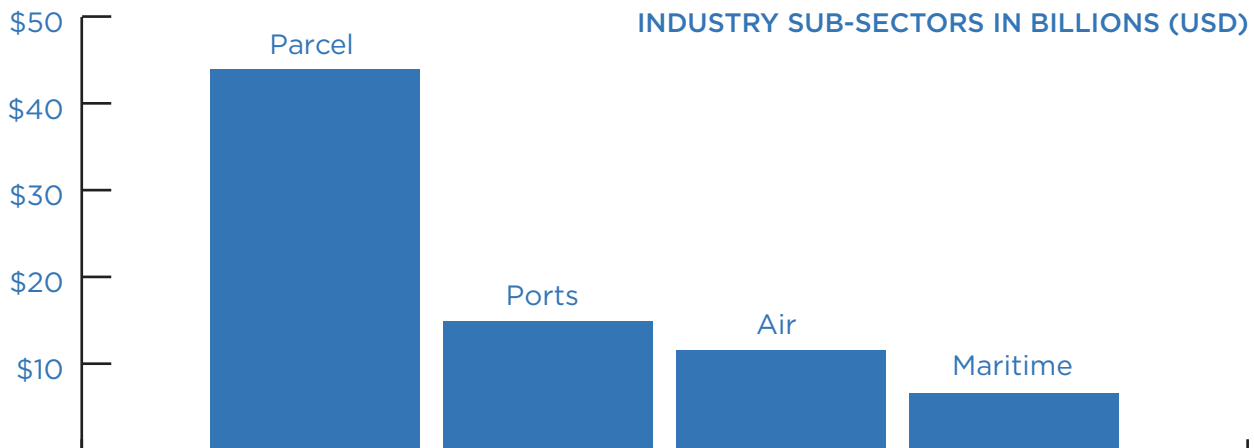
The total market cap of transportation companies traded on the NASDAQ with company market caps great than \$300 million totaled \$83.97 billion, represented by 27 companies in five sub-sectors of the industry. The largest of these was trucking. There were 16 companies in the trucking sub-sector with a cumulative market cap of \$59.09 billion. Trucking alone encompassed approximately 70 percent of the market cap for NASDAQ. The second-highest market cap was in freight forwarding, at \$15.02 billion with only three companies. These two were followed by maritime companies at \$6.57 billion, air companies at \$2.90 billion, and finally, one tanker company that reported \$0.39 billion.



Ticker	Name	Category	USD (B)
CHRW	CH Robinson	Trucking	\$13.57
ODFL	Old Dominion	Trucking	\$13.22
JBHT	JB Hunt	Trucking	\$13.01
EXPD	Expeditors	Forwarding	\$12.82
LSTR	Landstar	Trucking	\$5.01
GLNG	Golar LNG	Maritime	\$2.81
WERN	Werner	Trucking	\$2.53
FWRD	Forward Air	Trucking	\$2.10
SAIA	Saia	Trucking	\$1.96
AAWW	Atlas Worldwide	Air	\$1.63
HTLD	Heartland	Trucking	\$1.62
HUBG	Hub Group	Forwarding	\$1.57
GOGL	Golden Ocean Group	Maritime	\$1.42
SBLK	Star Bulk	Maritime	\$1.32
ATSG	Air Transport Services	Air	\$1.27
ARCB	Arc Best	Trucking	\$1.25
MRTN	Marten	Trucking	\$1.15
ULH	Universal Logistics Holdings	Trucking	\$1.04
ECHO	Echo Global Logistics	Trucking	\$0.88
CEVA	Ceva, Inc	Forwarding	\$0.63
DRYS	DryShips	Maritime	\$0.60
CVTI	Covenant Transport	Trucking	\$0.53
DSKE	Daeske	Trucking	\$0.52
EGLE	Eagle Bulk Shipping	Maritime	\$0.41
PTSI	Pam Transport	Trucking	\$0.39
CPLP	Capital Product Partners LP	Tankers	\$0.39
YRCW	YRCW	Trucking	\$0.31

German Stock Exchange (FSX)

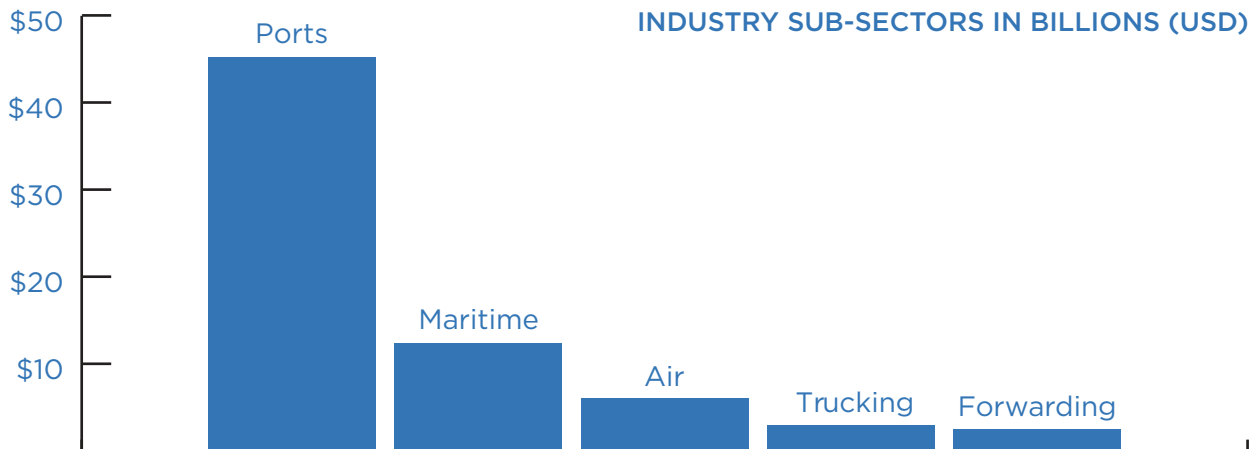
The German Stock Exchange, or FSX, ranked tenth in the world when compared to the market capitalization of other stock exchanges as of March 2018. The total market capitalization in this stock exchange at that time was \$2.22 trillion. As of September 21, 2018, transportation companies (with over \$300 million in market capitalization) accounted for \$76.83 billion on the FSX. The companies represented were in four sectors: air, maritime, ports, and parcel. Parcel held significantly more market capitalization than any of the other industry sub-sectors at \$43.89 billion. Ports were responsible for \$14.81 billion, air companies at \$11.55 billion, and maritime at \$6.57 billion. Each of the sub-sectors was represented by only one company with greater than \$300 million in market capitalization.



Ticker	Name	Category	USD (B)
DPWX	Deutsche Post AG	Parcel	\$43.89
3DW	Dubai Ports Worldwide	Ports	\$14.81
LHA	Lufthansa Group	Air	\$11.55
HLAG	HAPAG LLOYD	Maritime	\$6.57

Hong Kong Exchange (HKEX)

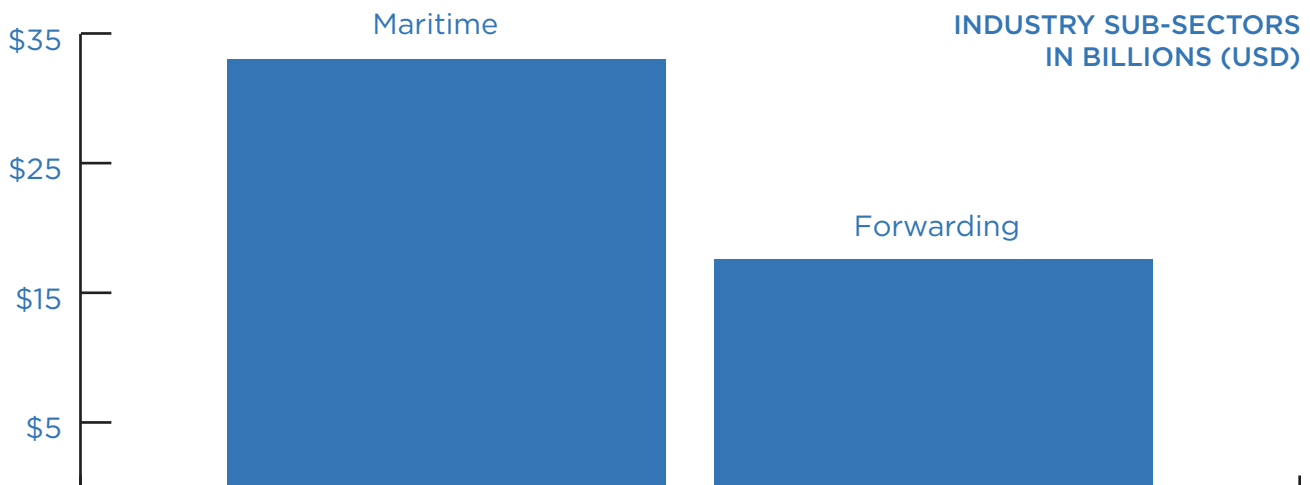
The HKEX, located in China, was ranked fifth globally by market capitalization, compared to other world stock markets in March 2018. The entire market capitalization of the HKEX as of March 2018 was \$4.46 trillion. When this study was conducted, \$68.98 billion in market capitalization was held by transportation companies. Ports held the largest market cap, with one company holding \$45.22 billion. Following ports, five maritime companies held \$12.33 billion, one air company held \$5.84 billion, and two freight forwarding companies held \$6.08 billion. Ports contributed 65 percent of the market capitalization for transportation companies on this stock exchange.



Ticker	Name	Category	USD (B)
0001	CK Hutchison Holdings	Ports	\$45.22
293	Cathay Pacific Airways Ltd	Air	\$6.03
316	ORIENT OVERSEAS INTL	Maritime	\$4.18
2866	COSCO CONTAINERSHIPS	Maritime	\$3.33
0636	Kerry Logistics	Trucking	\$2.89
0598	Sinotrans	Forwarding	\$2.51
1138	CHINA SHIPPING DEVELOPMENTS	Maritime	\$2.40
0368	SINOTRANS	Maritime	\$1.34
2343	PACIFIC BASIN SHIPPING	Maritime	\$1.09

NASDAQ OMX Stockholm (OMX)

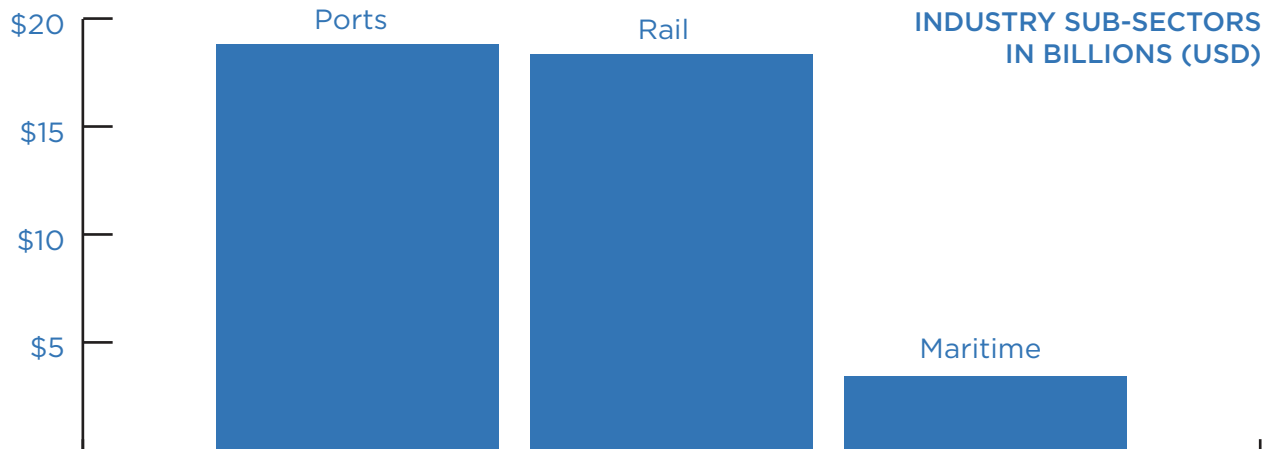
Formerly the Copenhagen Stock Market (CPH), the NASDAQ OMX (OMX) market was ranked 15th in the world as of March 2018 by market capitalization as compared to other global stock exchanges. Its total market capitalization was \$1.47 trillion as of March 2018. Of this, \$50.61 billion was held in transportation companies with over \$300 million in market capitalization at the time of this study. This market capitalization was held by only five companies representing two sub-sectors of the industry: freight forwarding and maritime. The majority of the market capitalization was held by four maritime companies, for a total of \$33.04 billion. The remainder, \$17.57 billion, was held by one freight forwarding company.



Ticker	Name	Category	USD (B)
MAERSK-B	A.P. Møller - Mærsk A A/S	Maritime	\$29.05
DSV	DSV	Forwarding	\$17.57
DFDS	DFDS A/S	Maritime	\$2.98
DNORD	D/S Norden	Maritime	\$0.66
EIM	EIMSKIPAFELAG HF	Maritime	\$0.36

Shanghai Market Exchange (SHA)

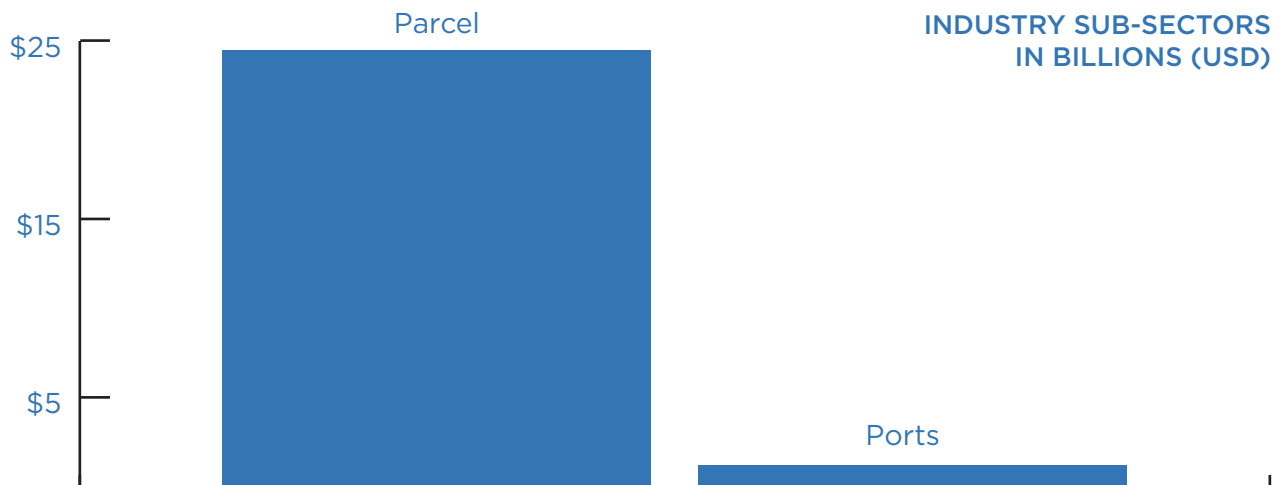
The Shanghai Exchange, or SHA, is ranked fourth by market capitalization globally. The total market capitalization for the SHA as of March 2018 was \$5.01 trillion. Transportation industry companies with more than \$300 million market capitalization accounted for \$40.54 billion on the SHA at the time of this study. This \$40.54 billion was comprised of three companies in three subsectors: maritime, ports, and rail. As of September 30, ports held the largest market capitalization at \$18.81 billion, with rail following closely at \$18.35 billion. The maritime company held the smallest market capitalization at \$3.39 billion.



Ticker	Name	Category	USD (B)
600018	Shanghai International Port Group	Ports	\$18.81
601006	Daqin Railway	Rail	\$18.35
601872	CHINA MERCHANTS ENERGY	Maritime	\$3.39

Shenzhen Market Exchange (SHE)

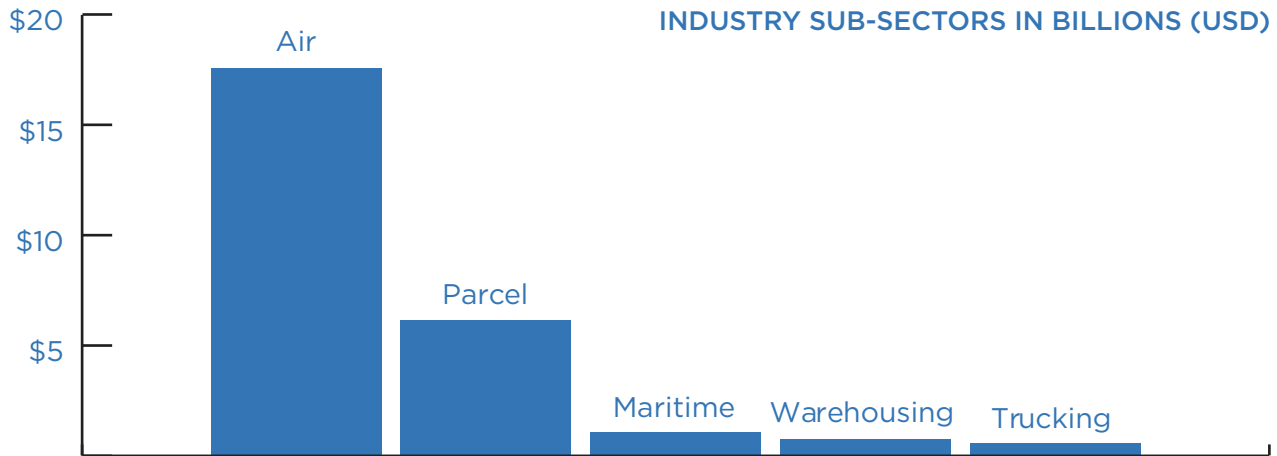
The Shenzhen Exchange (SHE), located in China, was ranked eighth in the world in terms of overall market capitalization as of March 2018. At that time, the SHE held \$3.49 trillion in market capitalization. As of September 30, 2018, the market capitalization in transportation industry companies (with more than \$300 million market capitalization) was \$30.20 billion. This \$30.20 billion market capitalization was accounted for by only two companies in two industry subsectors: parcel with the majority at \$28.46 billion, and ports, at \$1.74 billion.



Ticker	Name	Category	USD (B)
002352	SF Holding Co Ltd	Parcel	\$28.46
000088	SHENZ YAN TIAN-A	Ports	\$1.74

London Stock Exchange (LON)

As of March 2018, the London Stock Exchange (LON) was ranked sixth in the world by overall market capitalization. At that time, the total market capitalization of the LON was \$3.49 trillion. As of September 2018, \$26.12 billion in market capitalization was held by six companies in five sub-sectors of the transportation industry. Air companies comprised \$17.59 billion, with parcel companies at \$6.16 billion, maritime companies at \$1.06 billion, warehousing companies at \$0.76 billion, and trucking companies at \$0.55 billion.

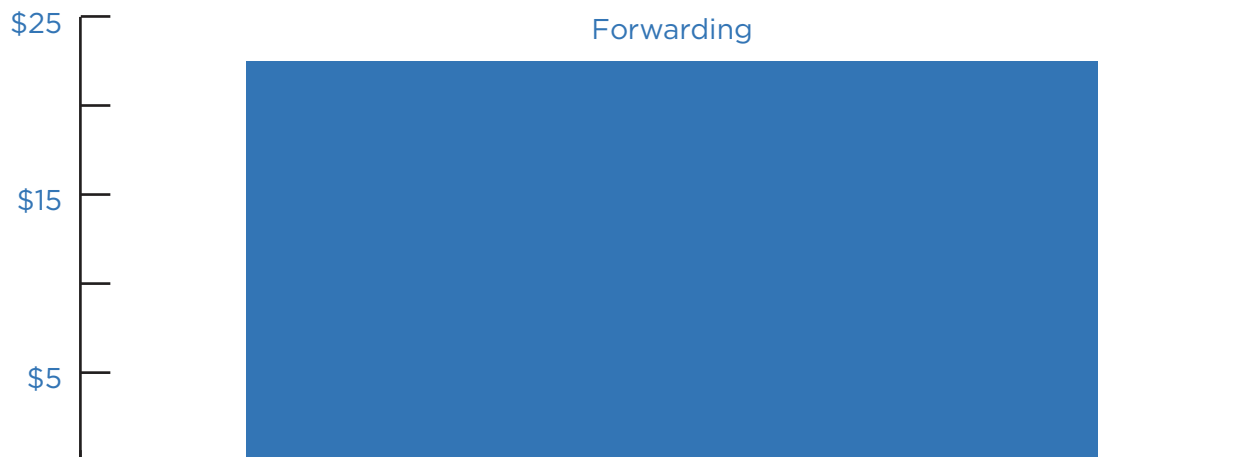


Ticker	Name	Category	USD (B)
IAG	International Consolidated Airlines Group	Air	\$16.99
RMG	Royal Mail Group	Parcel	\$6.16
CKN	Clarksons	Maritime	\$1.06
RST	Restore PLC	Warehousing	\$0.76
MNZS	Menzies (John)	Air	\$0.60
ESL	Eddie Stobart Logistics	Trucking	\$0.55

The Swiss Exchange (SWX)

The Swiss Exchange (SWX) ranked 14th by market capitalization as of March 2018 when compared to other global stock markets. The market's total market capitalization at that time was \$1.5 trillion. As of September 30, 2018, transportation industry companies comprised \$22.51 billion of market capitalization on the SWX. This market capitalization was represented by two companies, both in the freight forwarding sub-sector, with one company holding a majority (\$19.04 billion).

INDUSTRY SUB-SECTORS IN BILLIONS (USD)



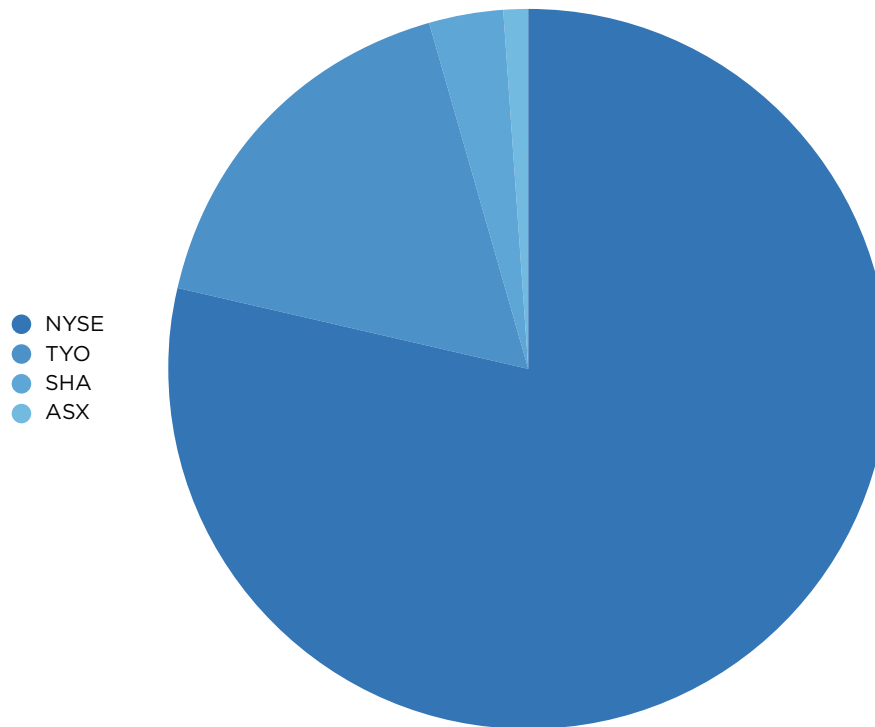
Ticker	Name	Category	USD (B)
KNIN	Kuehne Nagel	Forwarding	\$19.04
PWTN	Panalpina	Forwarding	\$3.47

Transportation Industry Subsectors

The study identified 10 sub-sectors of the transportation industry to be further evaluated in terms of billions of dollars of market capitalization. These 10 sub-sectors were as follows, in order of total market capitalization in billions of dollars: rail, parcel, trucking, maritime, forwarding, ports, warehousing, air, pallets, and tankers.

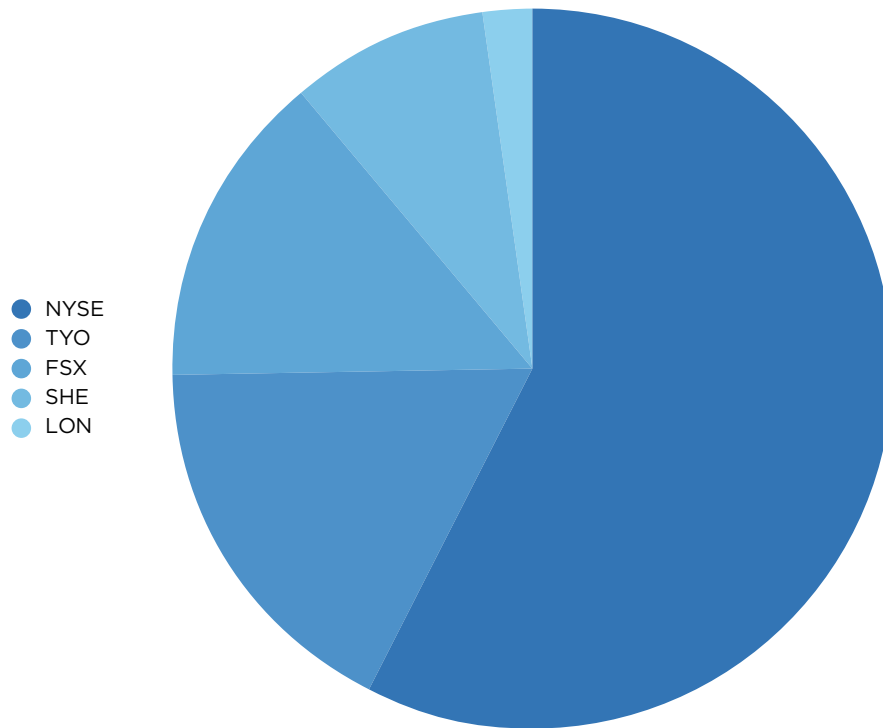
Market capitalization in the global market was highest for rail companies, a capital-intensive industry that issued public debt before it issued public equity, according to the data collected as of September 30, 2018. All rail companies combined globally had a market cap of \$577.56 billion. Parcel companies were close behind, with a combined market capitalization of \$312.87 billion. The third-largest sub-sector by market capitalization was trucking at \$128.57 billion, followed very closely by maritime companies at \$108.30 billion. Forwarding companies accounted for \$98.26 billion, ports companies accounted for \$80.58 billion, and warehousing companies accounted for \$61.04 billion. The final three were air, pallets, and tankers, holding \$38.08, \$12.58, and \$0.39 billion, respectively. It is helpful to examine each sub-sector and the stock markets that held the most market capitalization in these sub-sectors to gain a better understanding of the global market, and which transportation modes are valued most in an individual market.

Rail



This study identified 17 rail companies that had at least \$300 million in market capitalization, traded on four stock markets. Of these 17, nine were traded on the NYSE for a total of \$451.19 billion. Therefore, roughly 78 percent of the market capitalization for rail companies was traded on the NYSE. The Tokyo stock market had the next highest market capitalization, with \$97.78 billion, contributed by only five rail companies. The remainder was found on the SHA (one company and \$18.35 billion), and finally, the Australian Exchange (ASX) with one company contributing \$5.93 billion. The study shows that the NYSE has the most diversity in terms of rail companies. This makes sense considering the rich history of railroads in the United States and the industry's somewhat unique private-sector status. There is less diversity on the ASX and SHA markets, likely due, in part, to a lack of rail history and culture, and a lack of diversity in publicly traded rail companies.

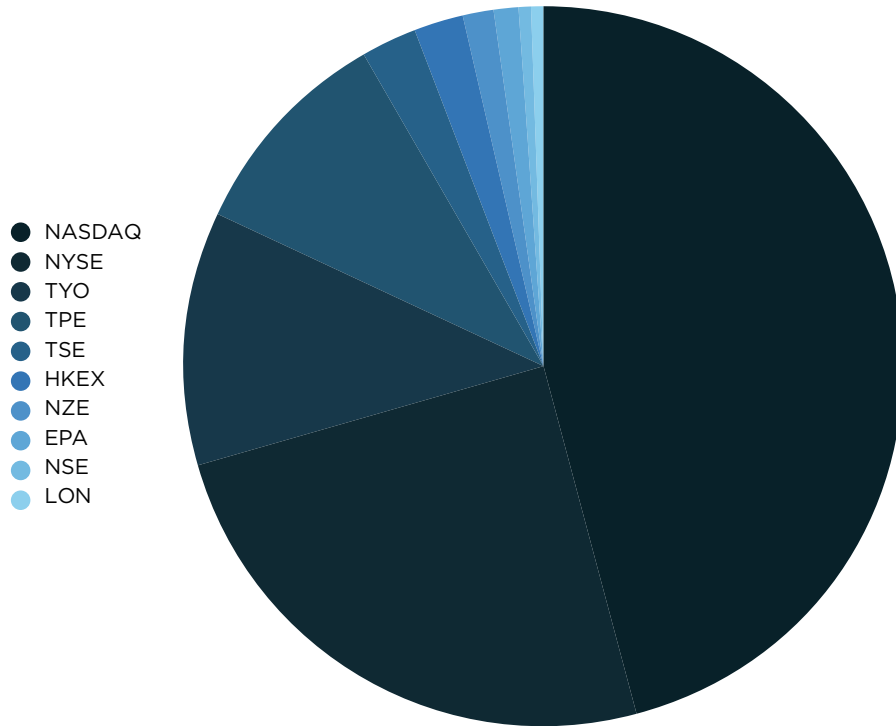
Parcel



The study found the parcel sub-sector had the second-highest market capitalization for transportation companies. The total market capitalization across all stock markets for parcel companies was \$312.87 billion. Of this amount, roughly 58 percent was held on the NYSE. This amounted to \$180.59 billion between four companies. The TYO was next, with \$53.77 billion. The FSX held \$43.89 billion representing just one company. The SHE accounted for \$28.46 billion, and one company on the LON contributed \$6.16 billion.

These numbers make sense in terms of the populations where each of these companies are traded. The United States, Japan, and China have large populations, and therefore, would have more money invested in publicly traded companies that deliver small packages and parcels. The smaller the relative population, the less market capitalization in companies representing this particular industry sub-sector.

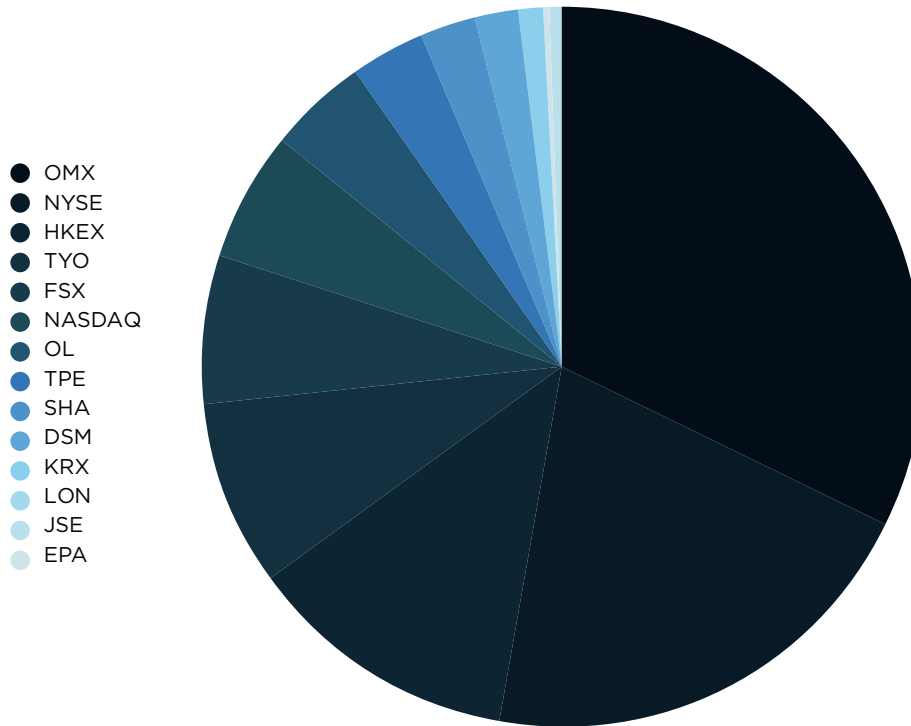
Trucking



Trucking companies accounted for the third-largest dollar amount in market capitalization in this study. The total amount of market capitalization represented by trucking companies was \$128.57 billion. This amount represents a total of activity on nine stock exchanges. The exchange with the highest market capitalization was NASDAQ, which accounted for \$59.09 billion, or roughly 46 percent of the total market capitalization. This was held by a total of 16 trucking companies. This was followed closely by the NYSE at \$31.89 billion. Roughly 71 percent of the total market capitalization in trucking companies was held on American stock exchanges. The Tokyo exchange accounted for \$14.62 billion and the Taiwan Stock Exchange accounted for \$12.30 billion. Following these, the market capitalization amounts are much smaller: TSE at \$3.21 billion, HKEX at \$2.89 billion, the New Zealand Exchange at \$1.99 billion, and the Euronext Paris exchange at \$1.37 billion. Trailing behind, the smallest market capitalization held by trucking companies was in the NSE market at \$0.65 billion, and LON at \$0.55 billion.

The United States has a large population and a large landmass, which can account for the majority of global market capitalization in trucking being held in American stock exchanges. Deregulation allowed companies in this low-margin sector to grow much larger than when the market was regulated, and many of the trucking companies resorted to public markets to raise capital. Trucking is a large part of most economies, but is only present in nine of the stock exchanges that the FreightWaves Research Institute studied. This could be because many trucking companies are not publicly traded. Trucking is an industry that is still fragmented and largely privately held.

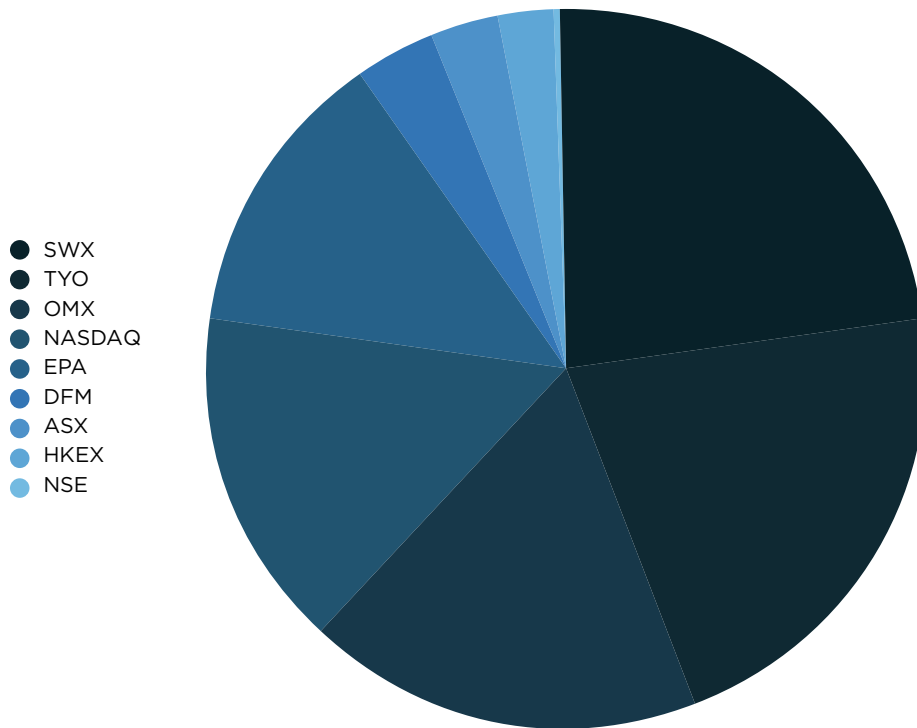
Maritime



The maritime sub-sector was easily the most diverse in terms of presence across multiple stock exchanges. Fourteen of the 21 stock exchanges studied were present in the maritime sub-sector. Of these, the greatest market capitalization was held by OMX with \$33.04 billion. This was held by only four companies, as compared to the NYSE's \$20.84 billion held by 17 companies. The HKEX held \$12.33 billion in market capitalization among five companies. The TYO market contributed \$8.67 billion dispersed among three companies. The FSX contributed one company and \$6.57 billion in market capitalization, while five companies traded on NASDAQ contributed \$6.57 billion. The Oslo Stock Exchange held \$5.91 billion over six companies. After these five exchanges, the TPE contributed \$4.66 billion, the Shanghai market contributed \$3.39 billion, and the Qatar Stock Exchange accounted for \$2.57 billion. The remaining exchanges were the South Korea Exchange (\$1.86 billion), the LON (\$1.06 billion), the Johannesburg Stock Exchange (\$0.46 billion) and the EPA (\$0.37 billion).

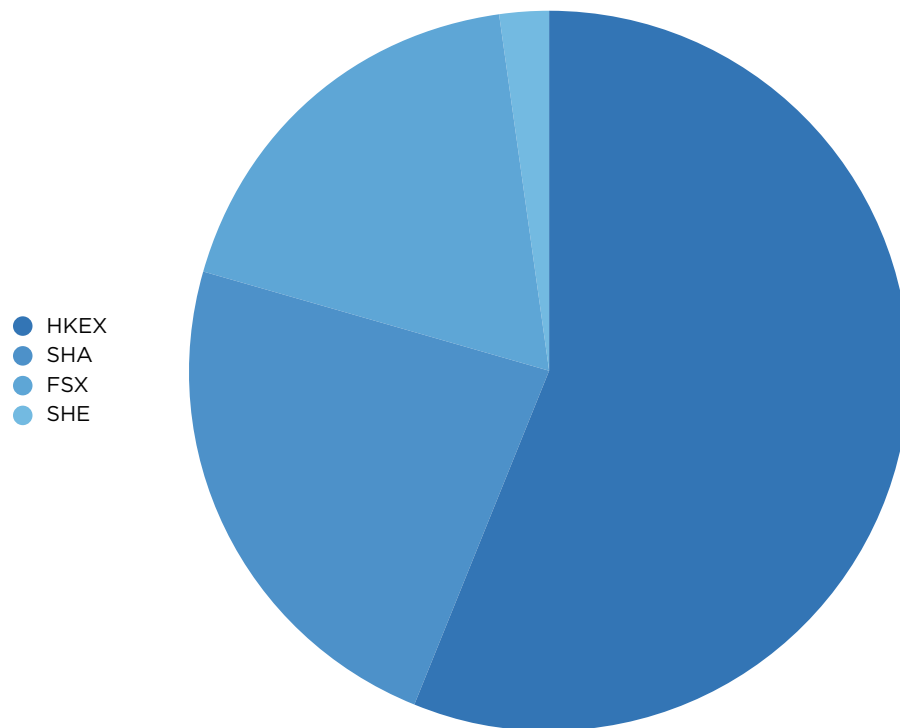
The amount of market capitalization in maritime interests is heavily influenced by the geography of the area in which the stock market is located, and the populations of coastal areas. The Hong Kong exchange, for example, has the majority of its market capitalization in ports and maritime companies. There are two reasons for this: the concentration of China's population in coastal cities and its economy's reliance on exports.

Forwarding



Freight forwarding companies accounted for \$98.26 billion of market capitalization in this study. The SWX held \$22.51 billion between just two companies, while the Tokyo market accounted for \$21 billion between four companies. The OMX accounted for \$17.57 billion with just one company. Following this, the NASDAQ market accounted for \$15.02 billion between three companies, and the EPA accounted for \$12.63 billion in just one. The HKEX, Dubai Financial Market, and ASX held \$2.51 billion, \$3.53 billion, and \$3.14 billion, respectively. Finally, the NSE held only \$0.35 billion.

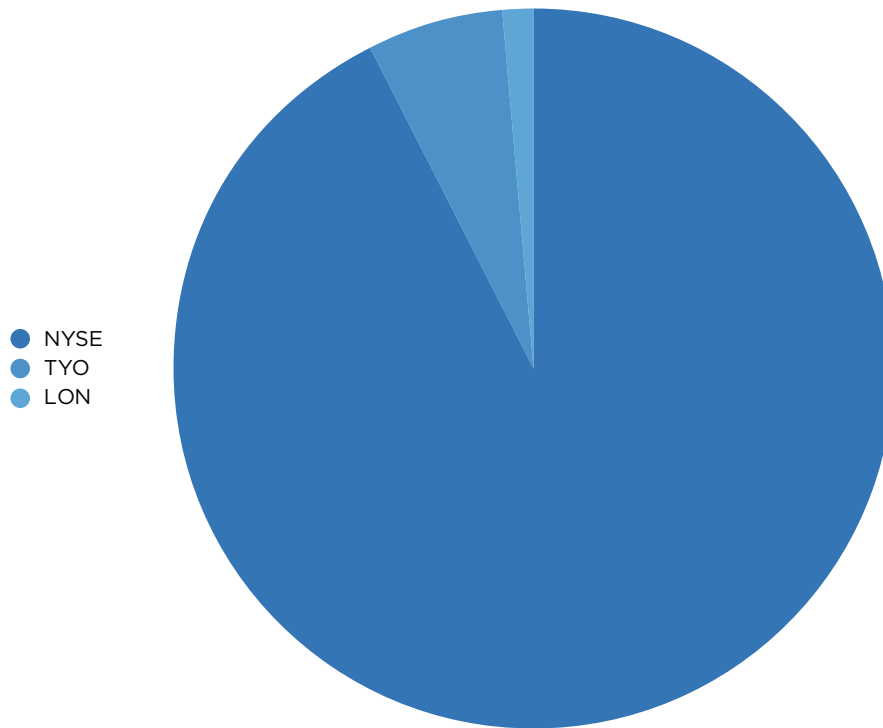
Ports



Ports accounted for \$480.58 billion in market capitalization. This was across only four stock exchanges and four companies. The highest amount of market capitalization was easily in the HKEX with only one company accounting for the entire \$45.22 billion market cap. Following HKEX, the SHA held \$18.81 billion, the FSX held \$14.81 billion, and the SHE held only \$1.74 billion.

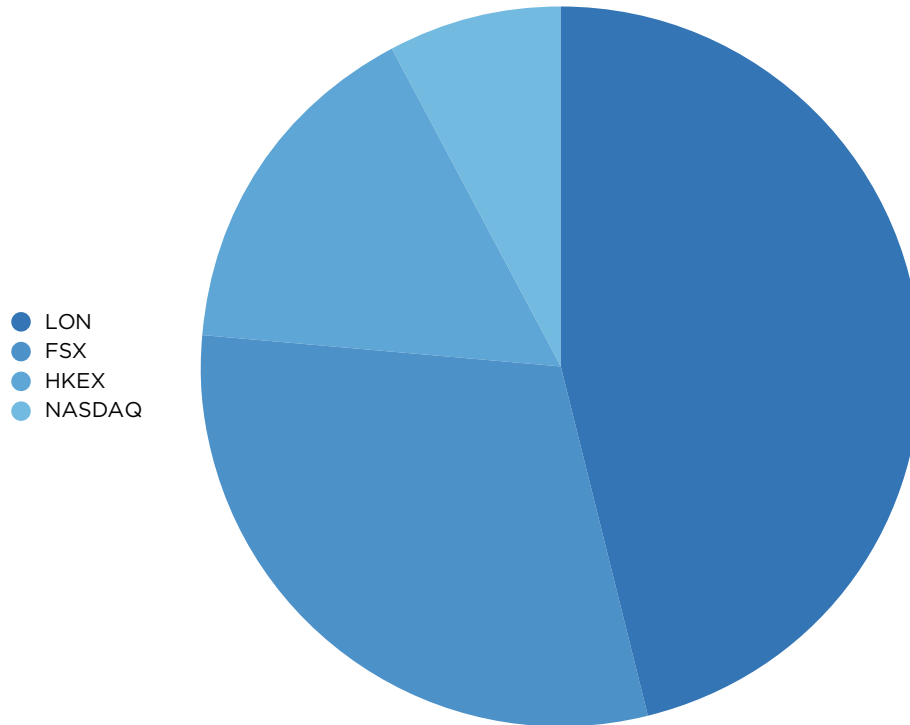
It is interesting to note that the majority of market capitalization for port companies is held in Asian markets. This is especially true of the one company in the Hong Kong Exchange that holds \$45.22 billion market capitalization. This could be because China exports more goods than any other country worldwide, and the country has the world's busiest container ports by volume. In other countries, ports are almost exclusively government-owned.

Warehousing



Warehousing companies held the seventh-largest market capitalization in transportation companies globally, with \$61.04 billion. Large publicly traded warehousing companies are distributed across three stock exchanges. The majority of this market capitalization is held in the NYSE, where three companies accounted for \$56.50 billion. This translates to roughly 92 percent of the market capitalization represented by companies with at least \$300 million market cap. The remainder is made up by \$3.78 billion on the TYO and \$0.76 billion on the LON.

Air



Air companies accounted for \$38.08 billion in market capitalization. The LON is responsible for the largest portion, with two companies representing \$17.59 billion. One company on the FSX accounted for \$11.55 billion, more than the HKEX and NASDAQ exchanges combined, at \$6.03 billion and \$2.90 billion, respectively.

Pallet

Only one company in one global exchange accounted for the total market capitalization for the pallets sub-sector. The pallet sub-sector was responsible for \$12.58 billion in market capitalization held in companies with over \$300 million. This market capitalization was held in the ASX.

Tankers

The final sub-sector, tanker companies, made up only \$0.39 billion of the \$1.4 trillion total. This was accounted for by only one company on one stock exchange. This \$0.39 billion in market capitalization was held in the NASDAQ.

Conclusion and Findings

There are several conclusions that can be drawn from these data sets. The FreightWaves Research Institute sought to answer several questions: which transportation industry subsectors are the most valued globally? How does that differ from one exchange to another? Which exchanges have the most market capitalization and in which industry subsectors? Ultimately, how does this data reflect on the global exchanges and economies in general?

The exchanges that held the most market capitalization were the New York Stock Exchange, the Tokyo Exchange, NASDAQ, and the Hong Kong Exchange. These exchanges are located in the countries that have the highest GDP worldwide. The transportation industries in these countries could be considered a good indicator of overall economic health. The NYSE had \$752.24 billion in market capitalization. Combined with the other American exchange, NASDAQ, nearly 61 percent of the publicly traded global transportation market was held by American stock exchanges at the time of this study. The United States is a populous, wealthy country that established open public markets long ago, and 20th century retirement vehicles like 401K and IRA accounts created tax incentives for the large American middle class to invest in equities.

Rail companies held far more market capitalization than any other sub-sector. In fact, rail companies held double the market capitalization of the next subsector (parcel). The exchanges with the highest market capitalization in the rail sub-sector were NYSE, TYO and SHA. These, again, are located in the three countries in the world with the highest GDP and large populations. According to World Atlas, the countries with the largest rail networks are the United States, Russia, China, and India. Interestingly, there were no Russian stock exchanges present in the FreightWaves study, and virtually no rail presence in the NSE, the Indian Stock Exchange represented in this study. Our study makes it clear that the majority of railroads are state-owned entities; only a few countries have allowed their railroads to grow into large, powerful, private sector corporations. Japan, with the second-highest market capitalization for rail companies, does not even make the top 10 countries by rail presence. It is clear that in the United States, Japan, and China, rail companies are a good investment. The railroads in the United States, especially, are institutions, and still an integral part of the way commodities move.

The maritime sub-sector of transportation, though fourth in terms of transportation company market capitalization, was the most diverse in terms of global presence. Fourteen of the 21 total stock markets contributed to the total \$102.52 billion in market capitalization. This could be due, in part, to maritime interests making a global economy possible. Ocean transport is a vital part of the global economy and trade, so it stands to reason that these large stock exchanges would have so much money invested in ocean transportation. Maritime interests are closely tied to the ports, as well. Ports alone had the sixth-highest market capitalization in transportation companies, but if taken with maritime companies, the two would eclipse the third-highest, held by trucking companies. The most market capitalization held by maritime companies was in the OMX, which is located in Stockholm, Sweden. The largest company on the OMX that contributed to the overall market capitalization for maritime is headquartered in Denmark. Both of these places are in geographical proximity to many bodies of water. Another company traded on OMX is located in Iceland, an island nation. The majority of the market capitalization for ports was held in Asian markets, however, with most of it in the Hong Kong Exchange.

The trucking industry companies held the third most market capitalization globally, with the majority of it held by American companies traded on NASDAQ and the NYSE. Trucking companies also represented a large percentage of the Tokyo stock market. The Taiwanese market, or TPE, held a surprisingly large amount of market capitalization in trucking. The total market capitalization for this exchange was \$17.52 billion, with trucking representing \$12.90 billion. Forwarding and trucking often go hand in hand, as freight forwarders service the freight that asset-based trucking companies cannot. The Swiss market surprisingly held the most market capitalization for freight forwarding, followed by the Tokyo market, and other European markets. This could be because there are more asset-based transportation companies in the United States, and therefore, less need for forwarding companies. Historically, the complexity of European borders and customs, and the diversity of national languages played a role in freight forwarders' predominance in Europe.

The composition of transportation companies in a particular stock exchange is the result of numerous factors, including national history, geography, and regulatory climate. For example, the British colonization of India played a role in the country's train network (which is state-owned, but an intermodal carrier is one of India's largest transport stocks). Deregulation in the United States allowed trucking companies to grow very large; communism in Russia prevented that country's massive rail network from tapping into public capital markets. Globalization turned Asian maritime companies into massive enterprises, but overcapacity compressed their margins, necessitating their public issuance of equity. On the other hand, the OMX serving the wealthy, but thinly populated Nordic countries is dominated by the maritime industry; other transport enterprises are either state-owned (rail) or insignificant (trucking).

This context can help investors understand the pros and cons for investment in each of these stock markets. It also can give insight into why certain industries are more present in the global market than others. And which companies to invest in? That's a decision for the individual.

Sources

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Appendix: Definitions

For the purposes of this study, the following definitions apply:

- **Exchange market capitalization:** the monetary value of a company that is traded on the stock market, where the value is calculated by multiplying the number of shares on the market by the current price per share
- **Rail:** companies involved in transportation interests on the railroad, including container, railroad companies, and companies that service the railroad
- **Trucking:** companies engaged in the over the road transportation of goods upon their own assets
- **Maritime:** companies engaged in shipment of goods via ocean
- **Ports:** publicly traded companies that control movement of goods via ports
- **Parcel:** companies engaged in small pack and parcel transportation globally, regionally, or locally
- **Warehousing:** companies engaged in the storing of commodities
- **Tanker:** companies engaged in the transportation of liquid goods, especially in bulk, over the road
- **Forwarding:** company that organizes shipments for individuals or corporations to get goods from the manufacturer or producer to a market, customer or final point of distribution, without the use of their own assets
- **Pallets:** Companies engaged in the supply of pallets for shipments
- **Air:** companies engaged in the movement of goods via air transport

Global Freight Tickers

CONSOLIDATED LIST

Ticker	Exchange	Name	Category	USD (B)
UNP	NYSE	Union Pacific	Rail	\$120.41
BRK.A	NYSE	Berkshire Hathaway (BNSF)	Rail	\$100.91
UPS	NYSE	United Parcel Service	Parcel	\$100.45
CNI	NYSE	Canadian National	Rail	\$65.35
CSX	NYSE	CSX	Rail	\$63.60
FDX	NYSE	FedEx	Parcel	\$63.45
6178	TYO	Japan Post	Parcel	\$53.77
NSC	NYSE	Norfolk Southern	Rail	\$50.55
0001	HKEX	CK Hutchison Holdings	Ports	\$45.22
DPWX	FSX	Deutsche Post AG	Parcel	\$43.89
PLD	NYSE	Prologis	Warehousing	\$42.67
9022	TYO	Central Japan Railway	Rail	\$42.50
9020	TYO	East Japan Railway	Rail	\$35.11
CP	NYSE	Canadian Pacific	Rail	\$30.03
MAERSK-B	OMX	A.P. Møller - Mærsk A A/S	Maritime	\$29.05
002352	SHE	SF Holding Co Ltd	Parcel	\$28.46
KNIN	SWX	Kuehne Nagel	Forwarding	\$19.04
600018	SHA	Shanghai International Port Group	Ports	\$18.81
601006	SHA	Daqin Railway	Rail	\$18.35
DSV	OMX	DSV	Forwarding	\$17.57
IAG	LON	International Consolidated Airlines Group	Air	\$16.99
3DW	FSX	Dubai Ports Worldwide	Ports	\$14.81
XPO	NYSE	XPO Logistics	Trucking	\$14.48
CHRW	NASDAQ	CH Robinson	Trucking	\$13.57
9021	TYO	West Japan Railway	Rail	\$13.29
ODFL	NASDAQ	Old Dominion	Trucking	\$13.22
ZTO	NYSE	ZTO Express	Parcel	\$13.04
JBHT	NASDAQ	JB Hunt	Trucking	\$13.01
EXPD	NASDAQ	Expeditors	Forwarding	\$12.82
BOL	EPA	Bolloré Logistics	Forwarding	\$12.63
BXB	ASX	Brambles Limited	Pallets	\$12.58
9064	TYO	Yamato	Forwarding	\$12.41
2912	TPE	President Chain	Trucking	\$12.30
KSU	NYSE	Kansas City Southern	Rail	\$11.57
LHA	FSX	Lufthansa Group	Air	\$11.55
DRE	NYSE	Duke Realty	Warehousing	\$10.14
9143	TYO	SG Holdings Co Ltd	Trucking	\$8.42
HLAG	FSX	HAPAG LLOYD	Maritime	\$6.57
9062	TYO	Nippon Express	Forwarding	\$6.51
KNX	NYSE	Knight Swift	Trucking	\$6.22
RMG	LON	Royal Mail Group	Parcel	\$6.16
293	HKEX	Cathay Pacific Airways Ltd	Air	\$6.03
AZJ	ASX	Aurizon	Rail	\$5.93
GWR	NYSE	Gennese and Wyoming	Rail	\$5.47
LSTR	NASDAQ	Landstar	Trucking	\$5.01
KEX	NYSE	Kirby Corp	Maritime	\$4.92
9048	TYO	Nagoya Railroad	Rail	\$4.75
SNDR	NYSE	Schneider	Trucking	\$4.42
CONCOR	NSE	Container Corporation of India	Rail	\$4.31
316	HKEX	ORIENT OVERSEAS INTL	Maritime	\$4.18
R	NYSE	Ryder	Trucking	\$3.88

Ticker	Exchange	Name	Category	USD (B)
2871	TYO	Nichirei Corp	Warehousing	\$3.78
COLD	NYSE	Americold	Warehousing	\$3.69
SF	NYSE	SF Global	Parcel	\$3.65
9104	TYO	Mitsui OSK Lines	Maritime	\$3.56
AGLTY	DFM	Agility Public Warehousing	Forwarding	\$3.53
PWTN	SWX	Panalpina	Forwarding	\$3.47
601872	SHA	CHINA MERCHANTS ENERGY	Maritime	\$3.39
2866	HKEX	COSCO CONTAINERSHIPS	Maritime	\$3.33
GSH	NYSE	Guangshen Railway	Rail	\$3.31
TFII	TSE	TFI International	Trucking	\$3.21
9101	TYO	NIPPON YUSEN KAISHA	Maritime	\$3.21
QUB	ASX	QUBE	Forwarding	\$3.14
DFDS	OMX	DFDS A/S	Maritime	\$2.98
0636	HKEX	Kerry Logistics	Trucking	\$2.89
GLNG	NASDAQ	Golar LNG	Maritime	\$2.81
QGTS	DSM	QATAR GAS TRANSPORT	Maritime	\$2.57
WERN	NASDAQ	Werner	Trucking	\$2.53
0598	HKEX	Sinotrans	Forwarding	\$2.51
1138	HKEX	CHINA SHIPPING DEVELOPMENTS	Maritime	\$2.40
9075	TYO	Fukuyama Transport	Trucking	\$2.40
9301	TYO	Mitsub Logistics	Trucking	\$2.29
BSTI	NYSE	BEST Inc.	Trucking	\$2.22
9031	TYO	Nishi-Nippon Railway	Rail	\$2.12
FWRD	NASDAQ	Forward Air	Trucking	\$2.10
MFT	NZE	Mainfreight	Trucking	\$1.99
SAIA	NASDAQ	Saia	Trucking	\$1.96
9107	TYO	KAWASAKI KISEN KAISHA	Maritime	\$1.90
EURN	NYSE	Euronav	Maritime	\$1.89
2603	TPE	EVERGREEN MARINE CORP	Maritime	\$1.81
000088	SHE	SHENZ YAN TIAN-A	Ports	\$1.74
MATX	NYSE	Matson	Maritime	\$1.69
SFL	NYSE	Ship Finance Intl	Maritime	\$1.66
AAWW	NASDAQ	Atlas Worldwide	Air	\$1.63
HTLD	NASDAQ	Heartland	Trucking	\$1.62
GLOG	NYSE	Gas Log	Maritime	\$1.60
HUBG	NASDAQ	Hub Group	Forwarding	\$1.57
SSW	NYSE	Seaspan Corp	Maritime	\$1.45
BWO.OL	OL	BW Offshore	Maritime	\$1.43
GOGL	NASDAQ	Golden Ocean Group	Maritime	\$1.42
9375	TYO	Kintetsu	Forwarding	\$1.39
STF	EPA	STEF	Trucking	\$1.37
011200	KRX	HYUNDAI MERCHANT MARINE	Maritime	\$1.35
0368	HKEX	SINOTRANS	Maritime	\$1.34
TGP	NYSE	Teekay LNG Partners	Maritime	\$1.33
SBLK	NASDAQ	Star Bulk	Maritime	\$1.32
OCY.OL	OL	OCEAN YIELD ASA	Maritime	\$1.27
ATSG	NASDAQ	Air Transport Services	Air	\$1.27
ARCB	NASDAQ	Arc Best	Trucking	\$1.25
2615	TPE	WAN HAI LINES	Maritime	\$1.23
9039	TYO	Sakai Moving Service	Trucking	\$1.20
MRTN	NASDAQ	Marten	Trucking	\$1.15
2343	HKEX	PACIFIC BASIN SHIPPING	Maritime	\$1.09
CKN	LON	Clarksons	Maritime	\$1.06
ULH	NASDAQ	Universal Logistics Holdings	Trucking	\$1.04
WWI.OL	OL	Wilh Wilhelmsen Holding	Maritime	\$0.99
FRO.OL	OL	Frontline	Maritime	\$0.99

Ticker	Exchange	Name	Category	USD (B)
2606	TPE	U-MING MARINE TRANSPORT	Maritime	\$0.95
CKH	NYSE	Seacor Holdings	Maritime	\$0.90
ECHO	NASDAQ	Echo Global Logistics	Trucking	\$0.88
SNI	OL	Stolt-Nielsen	Maritime	\$0.81
RST	LON	Restore PLC	Warehousing	\$0.76
CMRE	NYSE	Costamare	Maritime	\$0.72
9037	TYO	HAMAKYOREX CO	Forwarding	\$0.70
TK	NYSE	Teekay Corp	Maritime	\$0.68
DHT	NYSE	DHT Holdings	Maritime	\$0.67
NVGS	NYSE	Navigator Holdings	Maritime	\$0.67
2609	TPE	Yang Ming	Maritime	\$0.67
STNG	NYSE	Scorpio Tankers	Maritime	\$0.67
USX	NYSE	US Xpress	Trucking	\$0.67
DNORD	OMX	D/S Norden	Maritime	\$0.66
CEVA	NASDAQ	Ceva, Inc	Forwarding	\$0.63
DRYS	NASDAQ	DryShips	Maritime	\$0.60
MNZS	LON	Menzies (John)	Air	\$0.60
GNK	NYSE	Genco Ship & Trade	Maritime	\$0.56
SALT	NYSE	Scorpio Bulkers	Maritime	\$0.55
ESL	LON	Eddie Stobart Logistics	Trucking	\$0.55
CVTI	NASDAQ	Covenant Transport	Trucking	\$0.53
DSKE	NASDAQ	Daeske	Trucking	\$0.52
005880	KRX	KOREA LINE CORP	Maritime	\$0.51
GND	JSE	GRINDROD	Maritime	\$0.46
LPG	NYSE	Dorian LPG Ltd	Maritime	\$0.44
DSX	NYSE	Diana Shipping inc.	Maritime	\$0.44
HLNG	OL	Hoegh LNG	Maritime	\$0.41
EGLE	NASDAQ	Eagle Bulk Shipping	Maritime	\$0.41
PTSI	NASDAQ	Pam Transport	Trucking	\$0.39
CPLP	NASDAQ	Capital Product Partners LP	Tankers	\$0.39
EXM	EPA	Exmar NV	Maritime	\$0.37
EIM	OMX	EIMSKIPAFELAG HF	Maritime	\$0.36
ALLCARGO	NSE	Allcargo Logistics	Forwarding	\$0.35
VRLOG	NSE	VRL Logistics	Trucking	\$0.34
9099	TYO	Chilled and Frozen	Trucking	\$0.32
TCI	NSE	Transport Corp	Trucking	\$0.31
YRCW	NASDAQ	YRCW	Trucking	\$0.31

\$1,418.23