

Construct and describe share data

Suguru Otani*

Oct 22 2020

0.1 Trend of world's shipping tonnage

- Gross Tonnage of Japanese Merchant Vessels from http://www.mlit.go.jp/hakusyo/transport/index1_.htm
- Gross Tonnage of top6 countries from <http://www.mlit.go.jp/hakusyo/transport/shouwa41/ind060101/frame.html> and Loyd statistics (missing 1961-1963 now)

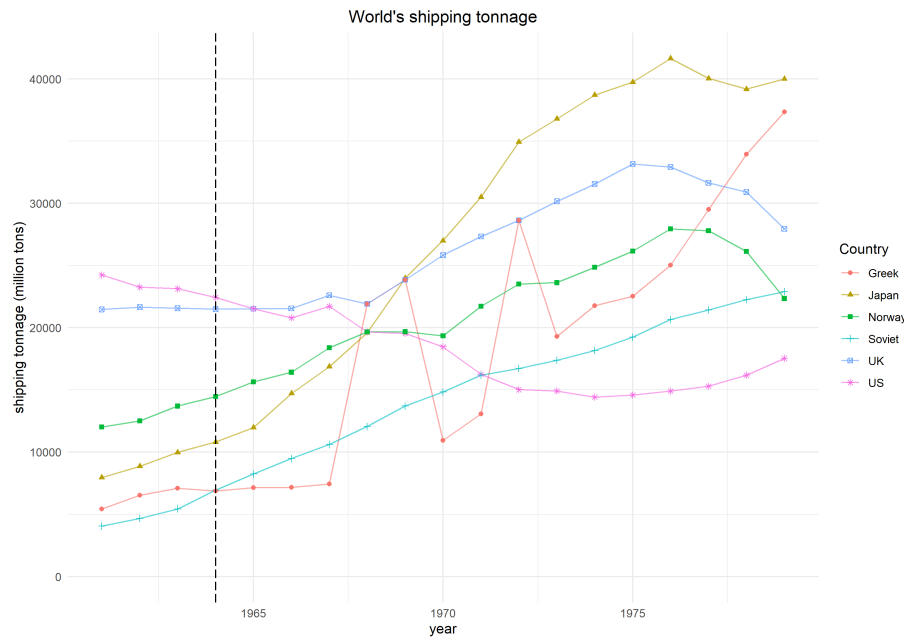


Figure 1: The trend of world's shipping gross tonnage(mill tons): *Source:* [?] which borrows the data of Statistical Tables in Lloyd's Statistics. The data contains only ships whose tonnage sizes are at least 100 ton.

0.2 Trend of world's freight movement tonnage

- shipping_quantity_japan is from book3
 - Ministry of Transport Shipping Bureau (missing 1961-1965 now)
 - http://www.mlit.go.jp/hakusyo/transport/index1_.htm

*so19@rice.edu, Rice University

0.3 Trends of the number of shipping firms in Japan

0.4 planned shipbuilding

The payment of planned shipbuilding is needed for calculation of the estimated amount of financial support.

* [https://www.mlit.go.jp/hakusyo/transport/shouwa39/ind060103/001.html#tabII-\(I\)-12](https://www.mlit.go.jp/hakusyo/transport/shouwa39/ind060103/001.html#tabII-(I)-12)

Note that 38 is the dimension

1 Descriptive data

1.1 descriptive summary

2 type-based histogram

2.1 Groupby histogram

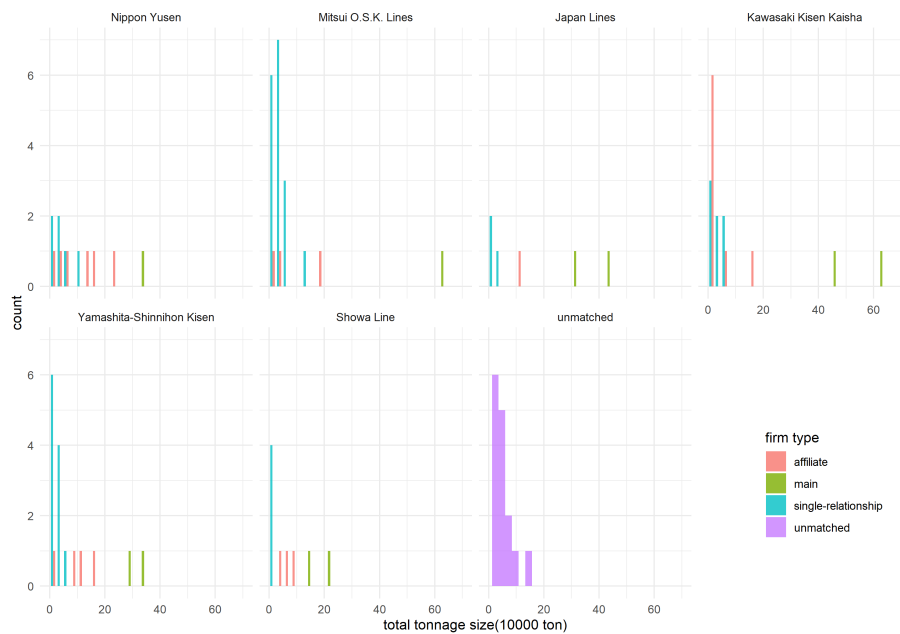


Figure 2: Distribution of tonnage size for each firm type. Observation unit: the total tonnage size for each firm type of each group.

2.2 pie charts

2.3 Regression

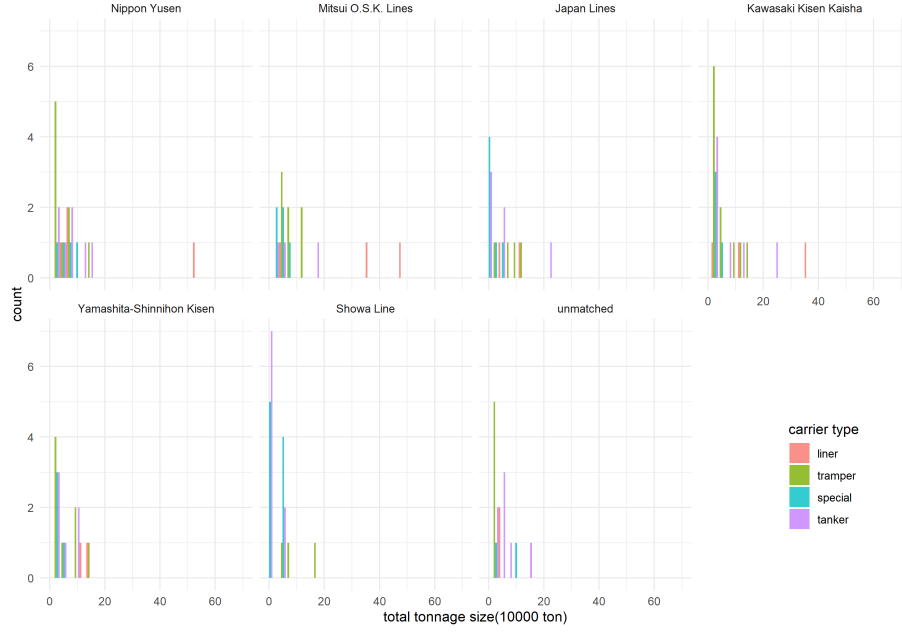


Figure 3: Distribution of tonnage size for each carrier type. Observation unit: the total tonnage size for each carrier type of each group.

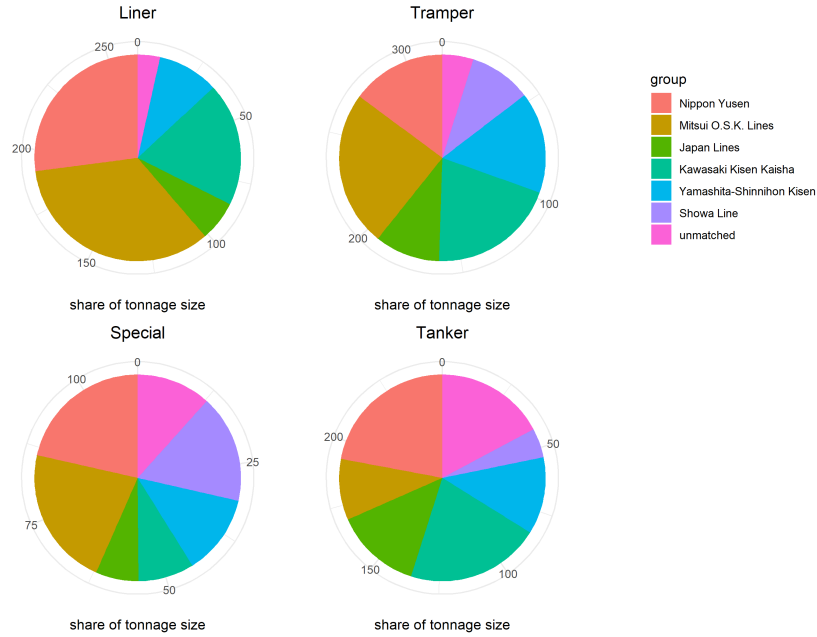


Figure 4: Shares of each carrier type and each group. Observation unit: the total tonnage size for each carrier type of each group.

Table 1: Preliminary regression results for predicting matchings. Observation unit: a one-to-one matching pair. The sample size is determined by all possible matching pairs from 121 firms in my data set.

	<i>Dependent variable:</i>				
	(1)	(2)	1(match) (3)	(4)	(5)
$\log(\text{liner}_b * \text{liner}_t + 1)$	−0.0002 (0.006)		−0.019* (0.011)	−0.033*** (0.011)	−0.004*** (0.001)
$\log(\text{tramper}_b * \text{tramper}_t + 1)$	0.003 (0.002)		0.010** (0.004)	0.017*** (0.004)	0.002*** (0.001)
$\log(\text{special}_b * \text{special}_t + 1)$	−0.010** (0.004)		−0.004 (0.006)	−0.018*** (0.006)	−0.002*** (0.001)
$\log(\text{tanker}_b * \text{tanker}_t + 1)$	−0.004 (0.004)		−0.014** (0.006)	−0.019*** (0.006)	−0.002*** (0.001)
$\log(\text{total}_b * \text{total}_t + 1)$	−0.005 (0.003)		−0.018*** (0.005)	0.017*** (0.005)	0.002*** (0.001)
bank coverage similarity ratio		1.057** (0.527)	2.003*** (0.562)	1.009* (0.599)	0.134* (0.076)
$\log(\text{HHI}_b * \text{HHI}_t + 1)$		0.087 (0.107)	0.550*** (0.184)	−0.119 (0.195)	−0.013 (0.024)
$\log(\text{share of liner}_b * \text{share of liner}_t + 1)$		0.284 (0.501)	1.866** (0.818)	2.574*** (0.888)	0.315*** (0.111)
$\log(\text{share of special}_b * \text{share of special}_t + 1)$		−1.060* (0.554)	−0.439 (0.672)	−0.090 (0.701)	0.0001 (0.079)
$\log(\text{share of tramper}_b * \text{share of tramper}_t + 1)$		0.107 (0.099)	−0.156 (0.152)	−0.719*** (0.161)	−0.092*** (0.020)
$\log(\text{share of tanker}_b * \text{share of tanker}_t + 1)$		0.162 (0.204)	0.899*** (0.300)	0.952*** (0.320)	0.119*** (0.039)
same type				1.490*** (0.050)	0.215*** (0.007)
Intercept	−1.584*** (0.057)	−1.731*** (0.049)	−1.665*** (0.064)	−2.522*** (0.076)	0.066*** (0.009)
Model	Logit	Logit	Logit	Logit	OLS
Observations	14,520	14,520	14,520	14,520	14,520
Akaike Inf. Crit.	12,761.360	12,766.890	12,737.220	11,808.540	11,003.130

Note:

*p<0.1; **p<0.05; ***p<0.01