

Mergers and Acquisitions in the Container Shipping Industry

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Abstract- This article analyzes the Industrial dimensions between acquiring and target firms taken into the significant of merger and acquisition's transactions. Mergers and Acquisitions activities were more intense among firms located closely each other. Mergers and acquisition transactions are a value creating activity within shipping industry firms before and after the merger and who benefits from this activity. While the existing article suggests that the smaller and unquoted public firms are more vulnerable to Mergers and Acquisitions.

Key words: shipping industry, mergers, and acquisitions, unquoted public firms.

1. Introduction

As the container shipping industry is characterized by the capital intensity of the acquired company benefited the most [1-3]. The reason being, it is seen in the majority of the cases that the acquiring company usually pays a little excess than it what should. [4-7] Unless a man lives in a house he has recently bought, he will not be able to know its drawbacks. So that the companies rationalize their business activities to create the economies of scale to minimize the financial risk, the company has to offer an amount more than the actual price [8-11], which is prevailing in the market. Buying a company at a higher price can prove to be beneficial for the local economy.

When two same sized firms [12], located in different areas, present nearly similar synergy effects or cost efficiency after a Merger and Acquisition which firm should the acquiring shipping company choose for a target to maximize the firm value? Mergers of firms in the same industry serving the same markets in parallel. Wear In Chrome Plated Cylinder Liner In Two Stroke Marine Diesel Engine Lubricated By

Hans Jensen Swirl Injection Principle [13].

The new business format for small retailers in India [14], Navigational & safety assessment of wind farm support vessels [15] this paper also review this papers.

2. Container Shipping Industry

2.1 Characteristics of container shipping industry.

Liberalization of trade, technology standardization, increased efficiency of ports and shipping services have made it easier to buy and sell goods. Today, about 90% of non-bulk cargo worldwide is transported by container, and modern container ships can carry up to 16,020 twenty-foot equivalent units (TEU) (CMA CGM Marco Polo). As a class, container ships now rival crude oil tankers and bulk carriers as the largest commercial vessels on the ocean.

The market share of Maersk Line stood at 13.4% in 2006 and had fallen to 11.2% in 2011, reflecting the difficulties that the company experienced After it acquired the P&O Nedlloyd.

Although overall industry remains fragmented with top five players holding the 45 percent market share (up from 35 percent market share in 2004), there are patterns of consolidations and growth strategies based on acquisition. Mergers and acquisitions (M&A) activity in container shipping has occurred in spikes, such as when Maersk line bought Safmarine and sea land in 1999 and acquired P&O Nedlloyd in 2006, and when CMA CGM bought Delmas in 2006, Historically, however, acquisitions in this industry have not been without challenges and have not been

as successful as expected. Whether it is acquisitions or a shakeout that drives consolidation, the trend is likely to continue for some reasons.

2.2 Importance of shipping industry

Trends in the shipping industry business are moving towards the concept of economies of scales in operations, the development of network-based management, and the adoption of technology to improve efficiency and effectiveness. The varied interpretations of shipping industry imply that the shipping business has become increasingly dynamic and complex. Physiological characteristics of crab *Portunus sanguinolent* egg mass extract from the southeast coast of India [16]. In studying the shipping business, we need to understand the world economy as well. Shipping and seaborne trade have made possible the progression from the world of isolated areas to an integrated global community.

3. Proposition Formulation

On investors, or shareholders of the firm, foreign investment is riskier because it has a larger variance around the expected return²⁹⁾. Therefore, risk-averse investors prefer domestic investments for any given level of the expected return. They argue that some investments abroad are empirically observed to be much less than the optimal diversification investment portfolio. When there are potential bidders for a target, it is likely that an uninformed bidder in a distant location will not buy the target.

Distance has an adverse effect on the takeover flows between pairs of regions because the search costs could be greater for potential acquisition firms that are located far away from the acquirer. Thus, the costs of controlling and managing a distant company are likely to be greater than for those for firms located nearby. Naturally, firms desire to minimize the conflict caused by the distance affecting the corporate control of the subsidiaries.

However, mergers involving cross-border transactions can be expensive regarding time and effort required to meet the legal and regulatory

4. Efforts toward cost efficiency

The liner shipping industry has experienced a considerable technological progress, which ultimately changed ocean transportation network. The shipbuilding technology has produced enormous container ship which may be too expensive for small shipping firms or an individual big firm to deploy in a viable service string. Without increasing freight demand, the widespread adoption of these containerships raises the level of excess capacity. The excess capacity poses a threat to these firms profitability. However, Shoreline evolution due to the construction of rubble mound jetties at Munambam inlet in Ernakulam [17] if Shipping companies do not adopt such few shipbuilding technologies, they will then become the takeover targets.

5. Impact of Mergers and Acquisitions

In the event when a new resulting company is efficient business-wise, it would require less number of people to perform the same task. Under such circumstances, the company would attempt to downsize the labor force. If the employees who have been laid off possess sufficient skills, they may, in fact, benefit from the layoff and move on for greener pastures. But it is usually seen that the employees those who are laid off would not have played a significant role under the new organizational setup. This accounts for their removal from the new organization set up. These workers, in turn, would look for re-employment and may have to be satisfied with a much lesser pay package than the previous one. Even though this may not lead to extreme unemployment levels, nevertheless, the workers will have to compromise for the same. If not drastically, the mild undulations created in the local economy cannot be ignored fully.

6. Balancing the Imbalances in container shipping

The financial crisis contributed to a significant imbalance between supply and demand in the

container shipping industry. Now, burdened by falling freight rates and profit margins.

Therefore, leading carriers such as Maersk line, MSC, and CMA CGM appear to follow the strategy of dominating the market through scale. They may well succeed, as large vessels, provide significant economic advantages in lower fuel, capital, and workforce costs per container carried. However, not all carriers need to follow such strategies to succeed. Large vessels have to operate between a limited number of ports to achieve high utilization and efficient turnaround. They need to be supported by a dense network of feeder services that require multiple handlings of containers. Nimble carriers operating smaller vessels may be able to achieve lower costs on a point to point basis than the 'market leaders' by calling directly at the ports not served by the mega-ships and thus eliminating further handling of containers.

The choice of strategy is not based solely on a scale; every service provider must have an innovative market differentiator. In the container shipping industry, a differentiator can be anything from size, product, lanes, and positioning in the logistics chain (services offerings) to transportation hardware, client interaction, and pricing, a launch of New Cement Brand in Existing Market [18]. And the strategy of choice should also reflect the volatility in trade markets.

	Min.	Max.	Mean	S.D.
TOP dummy	0	1	.08	.26
MKTK, million USD	0	165000	8891.07	37805.08
SHAQ, %	4	100	77.47	31.07
OWDSHR, %	.00	100.00	79.753	31.190
TRANSAC, million USD	.00	2757.14	223.593	521.579
SIZE, logarithm	-4.61	10.75	5.044	2.659
SALE, logarithm	2.08	10.37	4.696	1.757
EBIT, million USD	-16.45	9699.40	388.103	1861.595

However, mergers involving cross-border transactions can be expensive regarding time and effort required to meet the legal and regulatory pursuing Horizontal Mergers and Acquisitions.

Firm size also plays a major role in selecting a global target. When the actual geographical distance enlarges, the company's ability to monitor other companies located far away should be strengthened. The larger the size of the firm, the more expertise it has to make accurate controls regarding the target business as well as to make distant cross-border Mergers and Acquisitions possible.

7. Empirical Study

The shipping industry experienced technological progress and regulatory changes for both small and large firms. The paper analyzes shipping firms as well as the location of target companies. In the empirical study, the paper examines the behavior of shipping firms regarding the consolidation strategy.

7.1 Data Collection

The sample for this study consists of 120 observations of M&As. The study investigates mergers and acquisitions that have occurred during the 2006 and 2007 fiscal years in the shipping industry. The sample for this study is 120 takeover bids announced for the maritime transportation industry in the period from January 1, 2006, to December 31, 2007, from the Datastream database. It is identified that 62 firms for 2006 and 58 for 2007 have completed mergers and acquisitions. Some of the firms are multiple acquirers. Pooled data have been used in the empirical analysis. The financial and account data required for the empirical analysis are gathered from annual reports.

7.2 Variable Definitions

Firms which belong to the first 20 largest shipping companies. SIZE means the turnover of the target company. Those two variables are used to measure the size of the target company. SHAQ represents the proportion of equity obtained by an acquiring

company during the M&A. OWDSHR is the owned shares by the acquiring company after the transaction. TRANSAC refers to the value of M&As in USD. TASSET is some total assets of the target business. SIZE means the size of the acquirer and is measured by the total assets. EBIT is the EBIT of the target business. The measures of target performance are included in the analysis to evaluate whether the target company's profitability has an influence on M&As and to proxy for management inefficiency. MKTK measures the market capitalization of acquiring firms in USD. Data on geographic distance were obtained from a distance between the capital city of the acquiring company and the respective capital cities for the target firm, noted in km⁴⁰).

8. Descriptive Statistics

8.1 M&A intensity and geographical distance

In the first phase of the empirical study, Proposition 1 was examined, which tests the validity of the occurrence of M&As and the geographic distance of the target firms. Figure 1 shows domestic and cross-border M&As occurred during 2006 and 2007.

Each acquisition has been categorized into domestic and international transactions. In the case of cross-border M&As, it is analyzed to see whether these transactions are between firms in the same continent. <Table 3> presents a frequency table related to the types of acquisitions and changes of such M&As by year. It was found that the domestic assets were a dominant form of acquisition because 72 out of 120 shipping firms acquired local companies.

However, when the acquirer decides to invest in foreign countries, they prefer to choose companies located in continents other than their own. Firms acquire targets whose location is not situated on the same continent as the acquirer in more than 56.25% of international M&As. It is observed that while the acquisition of domestic liner shipping firms is decreasing, the global assets between different continents are increasing.

Table 1. Types of acquisitions

	2006, %	2007, %	Mean
Domestic	67.7	51.7	60.0
International			
- same continent	19.4	15.5	17.5
- different continent	12.9	32.8	22.5
Total			100

Table 2. Distribution of target and acquiring firms

	Targets		Acquirers	
	%	Cumulati	%	Cumulati
EU	46.6	46.6	52.1	52.1
ASIA	34.7	81.4	31.9	84.0
N.	13.6	94.9	12.6	96.6
S. AMERICA	1.7	96.6	0.8	97.5
MID. EAST	2.5	99.2	2.5	100.0
OTHER	0.8	100.0		
Total	100.0		100.0	

Table 3. Coefficients of OLS regression models

	Model 1	Model 2	Model 3	Model 4	Model 5
TOP20, dummy	4843.69 7*** (3.106P)	3331.290 ** (2.054)	5540.336 *** (3.531)	5018.024 *** (3.178)	4867.259 *** (3.125)
SHRAQ, %	17.455 ^Q Q (2.586)	20.367* (2.049)			16.929 ^Q Q (2.505)
TRANSA, million USD	1.005 (.890)		3.089 ^{QQ} (2.160)	2.268 (1.528)	2.045 (1.401)
ASIZE, million USD		.117*** (2.698)			
TSIZE, million USD				225.353* (1.834)	
TEBIT, million USD			-.779 (1.271)	-.913 (1.494)	-.675 (1.123)
YEAR, dummy	1559.26 9** (2.018)	1622.627 QQ (2.049)	2607.502 *** (3.811)	1816.392 QQ (2.262)	1631.092 QQ (2.106)
F stat.	14.852** *	13.731***	13.039***	11.316***	12.160***
R2	.316	.347	.286	.301	.317

The dependent variable is the geographic distance between an acquiring firm and a target. Values of R2 corrected are provided because the constant variables are missing. The value of R2 cannot be interpreted the same manner as its value generated by the OLS regression analyses. Betas are not standardized. T-values are in parentheses with absolute values.

9. Conclusion

The shipping industry experienced technological progress and regulatory changes for both small and large firms. The paper analyzes Shipping firms as well as the location of target companies. The paper shows that the geographical closeness is a characteristic of great importance for M&As in the container shipping industry. The motivation for the short distance is based on the information cost. Carefully located acquirers and targets decrease the misunderstandings in communication with tacit messages. The paper finds that the geographical distance has a negative impact on takeover flows. This implies that carriers seriously take into account the information cost when acquiring a target company. By contrast, combinations among small carriers are more likely, too small, to achieve such economies of scale and instead are motivated by the elimination of a competitor.

The paper provides evidence that the larger the firm size, the higher the Probability for inter-regional and cross-border M&As. The larger the Acquiring company, the more expertise it has to monitor the target business and also to make cross-border M&As possible.

References

- [1] ANDREOUS P C, LOUCA C, PANAYIDES P M, "Valuation effects of mergers and acquisitions in freight transportation," Transportation Research, Part E vol. 48, pp.1221-1234, 2012.
- [2] ASHCROFT B, COPPINS B, RAESIDE R, "The regional dimension of takeover activity in the United Kingdom," Scottish Journal of Political Economy, Vol.41, pp.163–175, 1994.
- [3] BECKERMAN P, LEHTO E, "Geographic of domestic mergers and acquisitions (M&As): Evidence from matched firm-level data," Regional Studies, Vol. 40, pp.847–860, 2006.
- [4] BROOKS M R, RITCHIE P, "Mergers and acquisitions in the maritime transport industry 1996–2000," Transportation Journal, Vol.45, No.2, pp.7– 22, 2006.
- [5] CAMERLYNCK J, OOGHE H, "Pre-acquisition profile of privately held companies involved in takeovers: An empirical study," EFMA Conference Athens, 2002.
- [6] CARBONE V, STONE M A, "Growth and relational strategies used by the European logistics service providers: Rational and outcomes," Transportation Research, Part E vol.41, pp. 495–510, 2005.
- [7] ELLISON G, GLAESER E L, "Geographic concentration in U.S. manufacturing industries: A dartboard approach," Journal of Political Economy, Vol.105, pp. 889–927, 1997.
- [8] EU COMMISSION Regulation No. 823/2000 of 19 April 2000. Exemption for certain agreements between liner shipping companies (consortia), 2008.
- [9] FUSILLO M, "Structural factors underlying mergers and acquisitions in liner shipping," Maritime Economics & Logistics, Vol.11, pp.209-226, 2009.
- [10] GORTON G, KAHL M, ROSEN R J, "Eat or be eaten: A theory of mergers and firm size," Journal of Finance, Vol.64, pp.1291–1329, 2009.
- [11] GREEN M B, *Mergers and acquisitions. Geographical and Spatial Perspectives.* Routledge, London, 1990.
- [12] GREUNZ L, "Geographically and technologically mediated knowledge spillovers between European regions," Annals of regional science, Vol.37, pp.657-680, 2003.
- [13] Jayakumar N, Mohanamurugan S, Rajavel R, *Study Of Wear In Chrome Plated Cylinder Liner In Two Stroke Marine Diesel Engine Lubricated By Hans Jensen Swirl Injection Principle. Materials Today:*

- Proceedings*, vol.4, no.2, pp.1535-1541, 2017.
- [14] Dorothy M.B.C, “*One Person Company (OPC)-The new business format for small retailers in India*,” *Management: Journal of Contemporary Management Issues*, vol.20, no.1, pp.173-181, 2015.
- [15] Gopinath S, “*Navigational & safety assessment of wind farm support vessels*,” RINA, Royal Institution of Naval Architects - Design and Operation of Wind Farm Support Vessels 2015, Papers, pp. 43-46, 2015.
- [16] Jun X U, “*Competitiveness Comparative Research on Jiaozuo Service Industry Based on Synchronic and Diachronic Data*,” *Indonesian Journal of Electrical Engineering and Computer Science*, vol.11, no.5, pp.2763-2770, 2013.
- [17] Chu Y P, Liu J J, “*An Empirical Analysis on the Relationship between Logistics industry and Economic development of Henan Province*,” *Indonesian Journal of Electrical Engineering and Computer Science*, vol.11, no.2, pp.1005-1011, 2013.
- [18] Yun C, Lan T, Qing-Song L, “*Research on automobile culture and entertainment industry in China*” *Indonesian Journal of Electrical Engineering and Computer Science*, vol.10, no.4, pp.649-653, 2012.