

Merger In The Philippines: Evidence In The Corporate Performance Of William, Gothong, And Aboitiz (WG&A) Shipping Companies

Emilyn Cabanda, (E-mail: eccabanda@mnl.ust.edu.ph), University of Santo Tomas, Philippines
Marianne Pajara-Pascual, (E-mail: mhugs78@yahoo.com), University of Santo Tomas, Philippines

ABSTRACT

This paper examines the corporate (financial and operating) performance of WG&A, following the merger event from the economic-finance perspective. There are three periods of analysis: (1) three years prior to merger, (2) three years immediately after merger for the short-run analysis, and (7) seven years after the merger for the long-run analysis. The period of empirical analysis covered from 1994 to 2003. This paper applies the conventional accounting and financial approaches in analyzing the effects of merger in the corporate performance of the shipping companies. We tested the major hypothesis whether there have been significant improvements in the corporate performance of WG&A following the merger event, using a parametric statistical t-test. Merger theories predict that M&As may increase or reduce profitability as well as efficiency.

Empirical results showed that pre-and post-merger values obtained mixed results. Some measures of corporate performance such as acid test ratio, total asset turnover, and net revenues suggest statistically significant gains in the long-run analysis, following M&A. Other performance variables such as net income, return on asset (ROA), return on sales (ROS), return on equity (ROE), net profit margin, capital expenditure, capital expenditure/sales (CESA), and capital expenditure/total asset (CETA) did not show significant gains after merger in the short run analysis. Mixed results verified in this study contribute significantly to the empirical literature on merger and acquisition in the shipping industry. Thus, merger in the Philippine shipping industry does not lead to all improved corporate performance both in short-run and long-run period as evident in this paper.

INTRODUCTION

The merger and acquisition trends have been a very visible activity in various industries nowadays. As Hopkins, (1999, p. 207) says, “More and more companies, large and small are instituting joint ventures, others are forming partnerships, marketing deals or one sort or another and still others are merging or making outright acquisitions.” Consequently, mergers and acquisitions (M&A) have emerged as a strategy in strengthening competitive advantages. Such strategies have been possible by liberalization and deregulation.

The 1990’s marked the merger mania decade, true enough it was during the 1990’s that William Lines Inc., Carlos A. Gothong Lines and Aboitiz Shipping Corporation consolidated their resources and expertise. WG&A’s history dates back to May 26, 1949 with the establishment of William Lines, Inc. (WLI), a passenger and cargo shipping company headquartered in Cebu, driven by the vision of providing the nation with the best shipping services. In a special meeting on December 21, 1995, the company’s stockholders approved the acquisition of the vessels and shipping-related assets of Aboitiz Shipping Corporation and Carlos A. Gothong Lines, Inc. in exchanged

for the company's shares of stocks and the change in corporate name, which marked the birth of William, Gothong and Aboitiz, Inc. (WG&A, Inc.), being approved by the Securities and Exchange Commission on February 28, 1996. Aboitiz family bought out its partners in WG&A for 3.65 billion pesos with the acquisition of 918 million shares, equivalent to approximately 61 percent of the shipping company. As of year 2002, WG&A operates 23 vessels nationwide, and now being the largest shipping company in the country, providing passenger and cargo transport services, plying major routes and principal ports across the Philippine archipelago. In the light of the growing role of M&As in so many industries such as the shipping industry, this paper analyzes both short-run and long-run effects of M&A as evidenced on financial and operating performance of WG&A Inc. before and after merger for ten (10) years in aggregate.

There are several studies on the effects of merger and acquisition in various industries where mostly include banks and other industries. However, this study provides significant results as to the short run and long-run effects of M&As on the financial performance of the business, specifically those engage in the shipping industry.

This paper contributes to the existing literature on the effects of merger and acquisitions on industries, particularly the shipping industry in terms of financial and operating performance. It also gives a profound reason for the engagement of shipping companies into merger and acquisitions as evident in this current study. The paper attempts to extend the Industrial Organization's theory and its predictions on M&As on the Philippine shipping industry. Also, the policy implications of M&As on the Philippine shipping industry is established in this paper.

Furthermore, reported findings may be a benchmark for policy formulation by policymakers of the shipping industry. It can open a wide range of consideration for the Philippine policymakers to re-examine the existing regulations in the country, which greatly affect the shipping industry. On the other hand, our empirical results can also be taken into account by firms in this specific sector in their future company decisions as regards to assessing the effects of M&As on the long-term performance of a firm.

The rest of the paper is sequenced as follows. Section 2 presents the conceptual framework and existing evidence. Section 3 deals with data and methodology, empirical findings in Section 4. Section 5 concludes.

CONCEPTUAL FRAMEWORK AND EXISTING EVIDENCE

The analytical framework examined William, Gothong, and Aboitiz shipping companies' financial performance, using firm-level data during the pre –and post-merger period. In the M&A process, the acquiring firm is the Aboitiz Group and the two acquired firms are William Lines (Chiongbian Group) and Gothong Lines. There was an ownership change in 1996 when the horizontal merger of the three companies took place. Horizontal merger refers to the firms in the same market combine. This means that the three companies belong to the same market - the shipping business. Prior to merger, they were competitors in the same market and eventually, they combined their management operations through a merger process to stay in the competitive market in the industry and driven by its vision of providing the nation with the best shipping services. Currently, these three companies are consolidated into one and renamed into William, Gothong, and Aboitiz, Inc. or WG&A.

The theory of M&As predicts the effects of mergers on financial and operating performance of the acquiring firm. These effects may either improved or declined financial performance of the new firm. Thus, long-term effects of merger in these aspects are investigated and verified in this paper.

Given the vital role played by the shipping industry in any country's trade as well as its contribution to the regional development, improvements in the industry will somehow give a greater impact on the country's trade and regional development. The rising number of different industries engaging in M&As sets the issue of discussing the regional patterns, motives and the actual benefits that firms achieve in such activity. A number of studies have been conducted regarding merger and acquisition in various industries (Coleman et al., 1996; Lin et al.,1994). Studies varies from different countries, methodologies used, and the industries involved. However, measuring the effect and efficiency performance of the firm/industry in the M&As activity is mostly the subject of the studies conducted. Analysis of the different studies focuses on investigating prices, market value, product value, the firm and

compensation and in overall the short and long-term effects of M&As in the operating performance of the firm. Moreover, different quantitative techniques and various economic models were presented in literature. Like in the case of Kleinsorge, Schary and Tanner (1991), they adopted DEA in measuring the competitive effect of M&A on the shipping industry. This study, however, cannot use DEA method since there is only one merged company (WG&A) under analysis and not a panel of firms. Other studies used economic model to compare efficiency gains of merger while still others use financial performance and non-parametric efficiency analysis to be able to derive a stronger finding that is contributory to the existing literature on M&As. Consequently, in general, M&As gains a positive effect on the performance and efficiency of the firm involved in M&As.

Studies on M&As both in other countries and the Philippines were mostly composed of banking, telecommunications, and airline industries. A significant similarity of the study from the previous studies is the use of financial ratios in analyzing the financial efficiency and performance of the shipping industry. However, a remarkable difference would be that this study used a longer period of aggregate data in measuring the financial performance against with the other studies that used only 2-3 years as period of comparison of the financial efficiency of every firm studied. Unlike in this study, it focuses on the aggregate period of 13 years of financial findings to give accurate and long-term results. Moreover, M&As both in local and foreign studies focus on investigating market value, product value, the firm and compensation. Such, in the study of Martin (1996), assessed the impact on economic welfare of mergers (or more generally, increased concentration) in container shipping. At the moment, there are economic models to compare the deadweight loss attributable to an increase in market power brought about by a merger with the concomitant efficiency gains. As such, these models are inadequate to deal with an intermediate input (transportation) involving many countries. Martin (1996) used the merger case of Canada Maritime Services Ltd. ("CanMar") and Cast Marine Holding Ltd. ("Cast"), two companies operating in European, Canadian and U.S. markets to show that his economic model is operational. However, in his findings, from an economic point of view, it seems that the quantified social gains and losses of the proposed merger point toward a small net loss in Canadian public interest, with the consideration that the barriers to entry are hold.

Meggison, Morgan and Nail (2003) analyzed the long-term performance effects associated with mergers, acquisitions, and other corporate control events. Using sample selection criteria and benchmarking, designed to remove biases in measuring the merger related changes is corporate focus and long-term merger performance. They found out that significantly positive relationship between corporate focus changes and long-term merger performance in strategic mergers. Mergers that decrease focus result in significant losses in relative shareholder wealth, operating performance, and firm value over the three years following merger completion. Mergers that either preserve or increase focus result in marginal improvements in long-term performance. Results of their study further suggested that corporate focus is the primary determinant of long-term merger performance, followed by the form of payment – reflected by the fact that the best post-merger performance is exhibited by cash financed FPI mergers and the worst by stock-financed FD mergers. Furthermore, the extent of corporate focus changes is a more important measure of corporate focus or diversification than the sign of change.

Gugler et al. (2003) analyzed the effect of mergers around the world over the past 15 years. Effects of which were examined by comparing the performance of the merging firms with control groups of non-merging firms. Comparisons are made on profitability and sales. They found that 56.7 percent of all mergers result in higher than projected profits, but almost the same fraction of mergers results in lower than projected sales after five (5) yrs. Thus, using profits as the measure of success would lead one to conclude that the average merger was a success; on the other hand, using sales would reach the opposite conclusion. Another most interesting finding is how similar the post-merger patterns of profit and sales changes look across the different countries and that there is no significant difference between domestic and cross-border mergers. Although individual mergers can have quite different consequences in terms of efficiency and market power, their effects do not appear to depend on the country origins of the merging companies.

DATA AND METHODOLOGY

The main sources of data for this study are the publicly available audited financial reports of WG&A over the test period 1994 to 2003. The financial year for WG&A begins in January for each year and ends in December for each year. All financial variables and other statistical data used were found in the annual financial reports of WGA. These financial statements are publicly available in the Securities and Exchange Commission, Manila.

The financial and operating performance of the WG&A was analyzed over the time period 1994-2003. The period of analysis were divided into three periods: (1) three years before the merger, (2) three years immediately after the merger for the short-run analysis and (3) another seven years after the merger for the long-run analysis. The pre-merger period covers from 1994 to 1996. The post-merger period covers from 1997 to 1999 for the short-run analysis, which was patterned in the study of Boubakri and Cosset (1998) and Megginson *et al.* (2003), which used the three year period in examining the short-run period of their study, and seven year period from 1997-2003 to comprise the long-run analysis. The year of merger (1996) was included in the pre-merger period, because no significant reforms took place during the transition period (Cabanda and Ariff, 2002). This study was designed to assess the long-term effects of M&As on the financial and operating performance of the consolidated shipping company.

WG&A's financial and operating performance before and after merger was assessed, using the established accounting-finance model and efficiency model. The accounting-finance model was measured by financial ratios of profitability, capital investment, leverage, and solvency. The efficiency model was measured by operating efficiency measures.

The commonly-used measures for evaluating a firm's performance are accounting-based performance measures, which are also referred to as financial variables. For measuring a firm's *profitability*, four financial variables are available: Return on Sales (ROS), Return on Assets (ROA), Return on Equity (ROE), and Net Income. ROS is measured as a ratio of net income and sales. ROA is computed as a ratio of net income and total assets. ROE is measured as a ratio of net income and total stockholder's equity. Net income refers to the firm's income after taxes.

Capital investment spending measures refer to capital expenditures to sales (CESA) and capital expenditures to Assets (CETA). CESA is calculated as a ratio of capital expenditures to sales. CETA is a ratio of capital expenditures to total assets.

A firm's *leverage* can be measured by two variables: total debt to assets (LEV1) and total debts to equity (LEV2). LEV1 is calculated as a ratio of total debt to asset. LEV2 is calculated as a ratio of total debt to equity. A firm's *solvency* can be measured by three financial variables: current ratio, acid test ratio, and working capital ratio. Current ratio is calculated as a ratio of current asset to current liabilities. Acid test ratio is computed as a ratio of quick asset to current liabilities and Working capital ratio is computed as a ratio of current asset and current liabilities to total asset.

A firm's *operating efficiency* can be measured using two variables: Net revenue and Depreciation.

This paper used the descriptive statistics of mean and standard deviation for each of the variables identified in this study before and after merger. After getting these descriptive statistics, the parametric t-test for each of these variables were also computed. All t-values were tested, based on 1, 5, and 10 percents level of significance, using an upper one-tail test. T-test (one-tail) was used to test whether there are significant improvements in the financial and operating performance after M&A, using the upper right rejection region. Thus, this statistical test is considered suitable for the present empirical investigation.

Table 1: Main Financial Performance Measures

Measures	Variables
Profitability	ROS = Net Income/ Sales ROA = Net Income/Total Asset ROE= Net income/Equity Net Income
Capital Investment Spending	Capital Expenditure CESA = Capital Expenditure/Sales CETA = Capital Expenditure/Total Asset
Leverage	LEV1 = Total Debt/Total Asset LEV2 = Total Debt/Equity
Solvency	Current Ratio = current asset/current liabilities Acid test ratio = quick asset/current liabilities Working capital to total asset = current asset - current liabilities/total asset
Operating Efficiency	Net revenue Depreciation

EMPIRICAL FINDINGS

Profitability

Acquisition by merger and consolidation results in combination of the assets and liabilities of acquired and acquiring firms (Ross et. al., 1996: 799). Effects of merger in the financial performance using profits as the measure of success would lead one to conclude that an average merger will be a success, as examined in the study of Gugler et al. (2003).

Net Income

The first measure of profitability is net income. The net income of the firm yielded an increase from Php 1,0714 thousand in 1994 before merger to Php 135,748 thousand in 1999, three years immediately after the merger and representing a growth rate of 52.69 percent. The mean income before merger was Php 86,901 thousand, compared to -Php 335,963 thousand, three years immediately after the merger or in the short run period. Thus, a test of significance yielded a t-value of -2.087, which shows a significant decline or net loss in the short run analysis after merger (see Table 2).

In the long run analysis, the net income increased amounting to Php 358,711 thousand in year 2003 and it resulted in a mean income of Php 14, 730 thousand. The test of significance yielded a 1.07 value, which suggests no significant improvement for this profitability measure covering the long run period of analysis (see Table 2).

The company absorbed a net loss in 1997, brought about by management's decision to charge against current operations. Due to difficulties of integrating activities of the merged company, WG&A, Inc., all possible losses from integration on receivables, claims, obsolete inventories tied-up vessels and contractual repair lost on off-hired leased containers contributed to the significant decline or net loss of WG&A in the short-run analysis.

Table 2
Results of Changes in the Financial Performance before and after merger (short-run), 1994-1997

Measures	Before Merger		After Merger- Panel A (Short-run)		Test of Significance	Annual Growth
	Mean	SD	Mean	SD		
<i>Profitability</i>						
Net Income (Net Loss) (In Thousands)	86,901	101,367	-335,963	467,034	-2.087 ***	52.69%
Return on Sales (ROS)	3.16%	4.59%	-7.11%	9.84%	-2.194 ** ****	20.64%
Return on Assets (ROA)	1.87%	2.47%	-3.90%	5.69%	-2.164 ** ****	27.51%
Return on Equity (ROE)	4.32%	3.06%	-6.60%	9.57%	-2.600 ** ****	-11.89%
Dupont ROE Decomposition:						
Net Profit Margin	3.16%	4.59%	-7.11%	9.84%	-2.194 ** ****	20.64%
Total Asset turnover	48.25%	4.12%	57.81%	5.05%	0.286	5.70%
Equity Multiplier	580.55%	744.51%	162.53%	6.82%	-0.950	-30.90%
<i>Capital Investment Spending</i>						
Capital Expenditures (In Thousands)	1,364,069	403,900	564,050	469,925	-1.997 ***	-14.71%
Capital Exp./Sales (CESA)	59.16%	20.44%	11.62%	9.66%	-3.503 ** ****	-32.61%
Capital Exp./ Total Asset (CETA)	28.54%	9.76%	6.49%	4.93%	-3.260 ** ****	-28.77%
<i>Leverage</i>						
Debt Ratio	17.44%	19.89%	11.11%	2.18%	-0.481	-21.59%
Debt to Equity	196.62%	322.41%	18.06%	3.64%	-0.958	-45.82%
<i>Solvency</i>						
Current ratio	73.51%	37.99%	91.32%	10.82%	0.312	19.65%
Acid test ratio	38.72%	18.20%	43.98%	7.04%	0.191	17.56%
Working capital ratio	4.71%	24.90%	-2.58%	3.16%	-0.505	-34.25%
<i>Operating Efficiency</i>						
Net Revenue (in Thousand)	2,711,767	1,770,813	4,839,486	122,427	0.715	26.57%
Depreciation (in Thousand)	357,824	212,662	793,317	116,147	0.918	32.85%

*significant at 1 percent level

**significant at 5 percent level

***significant at 10 percent level

Return on Sale

Return on sales is measured as a ratio of net income and sales. It measures the profitability of the firm from its net income over its sales. Thus, using profit as the measure of success would lead one to conclude that merger would be a success. On the other hand, using sales would reach the opposite conclusion (Gugler et al., 2003).

The ROS of WG&A before merger was 0.89 percent in 1994, which increased to 2.74 percent in 1999, three years immediately after the merger in the short-run analysis. ROS further increased to 4.66 percent in 2003, in the long-run analysis after the merger.

The mean ROS before merger was 3.16 percent and decreased to -7.11 percent despite the increase in the ROS value in 1999 after merger (short-run). However, mean ROS gained back in spite of its negative value in the long-run analysis after merger to -0.93 percent. The test of significance yielded a t-value of -2.194, which shows a significant decline in the short-run analysis after merger, following the decrease in the ROS of WG&A in years 1997 and 1998. Wherein, excess vessels sold resulting in a gain of PhP114 million were used to settle bank loans composed mostly of dollar denominated obligations on which foreign exchange loss was realized (WG&A Annual

Report, 1997). In contrary, a t-value of 0.93 in the long run analysis shows no significant improvement for the ROS measure after merger (see Tables 1 and 2). This result affirms the findings of Gugler et al. (2003).

Return on Asset

ROA is computed as a ratio of net income and total asset. Firms with higher return on assets should be better able to raise money in security markets, because they offer prospects for better returns on the firm's investments (Boubakri and Cosset, 1998). WG&A, Inc.'s ROA before merger was 0.40 percent in 1994. It increased after merger in both, short-run and long-run period of analysis from 1.73 percent in 1999 and 3.76 percent in 2003.

The mean ROA before merger was 1.87 percent compared to -3.90 percent after merger in the short run and 0.09 percent in the long-run. The test of significance yielded a t-value of -2.164, in the short-run analysis, which shows a significant decline in the ROA. Also a t-value of 1.01, in the long-run, suggests no significant improvement. The significant decline was due to the incurred net income losses of the company two years immediately after its merger (see Tables 1 and 2).

Return on Equity

Return on equity is a ratio of net income to total equity. This ratio is used widely in the private sector to measure a firm's performance (Cabanda and Ariff, 2002). This ratio measures returns relative to investments in the company. The ROE before merger declined to 5.80 percent in 1994 to 2.72 percent three years after merger, in 1999 in contrary to the increased in the company's ROE to 368.74 percent in 2003.

The mean ROE before merger was 4.32 percent. After merger in the short run, the mean was -6.60 percent and 51.85 percent in the long run. The test of significance yielded a t-value of -2.60, which shows a significant decline in the short run and a 1.10 t-value in the long run, showing no significant improvement in the long-run period. The mean ROE decreased after merger in the short-run due to the incurred net loss cited previously. Thus, there is no positive return on equity for the shareholders in such case that a firm incurred a net loss (see Tables 1 and 2)

ROE is further examined using the Dupont Approach in order to investigate the ROE extensively. This approach is valuable as it determines the sources of the ratio (Cabanda and Ariff, 2002) (see Tables 1 and 2). It is measured by its three components:

$$\text{ROE} = \text{Net profit margin} \times \text{Total asset turnover} \times \text{equity multiplier} \quad (1)$$

The mean net profit margins before and after merger were 3.16 percent and -7.11 percent in the short-run and -0.93 percent in the long run. The t-value was -2.194, which shows a significant decline in the short run, and a t-value of 0.93, shows no significant improvement in the long-run.

The mean total asset turnovers before and after merger were 48.25 percent against 57.81 percent and 68.80 percent for the short-run and long-run, respectively. The short-run period shows no significant improvement as it yielded a t-value of 0.286. However, there is a significant improvement in the total asset turnover in the long-run, with a t-value of 2.07. This may be due to the transformation in the freight division of WG&A. Different groups and facilities were consolidated to further improve efficiency and subsequently cut down costs and business processes were simplified in order to provide better services to the customers.

The mean of equity multiplier before merger was 580.55 percent. Mean after merger were 162.53 percent and 176.97 percent in the short-run and long-run, respectively. The test of significance yielded t-values of -0.95 and 1.15, respectively. There was no improvement for both period of analysis after merger. Therefore, based on Dupont decomposition, ROE showed no significant improvement after merger due to the poor performance in its net profit margin and equity multiplier, though, a positive asset turnover.

Findings in the short-run period on profitability are in contrast with the improved profitability following merger and acquisition in the previous studies of Gugler *et al.* (2003); Megginson *et al.* (2003); and Lommerud *et al.* (2003). The positive effects of M&A in the long-run performance were examined in the banking industry, downstream market firms, and the merging firm versus non-merging firms around the world. However, the present findings support the finding of Martin (1996) on the Canadian shipping industry that M&A points toward a declined profitability.

Capital Investment Spending

This measure may show the extent of the company's monetary investments in its fixed assets rather than in using it for its day-to-day operation. The measures used are Capital Expenditure, CESA, and CETA.

Capital Expenditure

The first measure of capital investment spending is capital expenditure. Before merger, the capital expenditure was Php 938,946 thousand in 1994. Consequently, the capital expenditure after merger decreased to Php 361,531 thousand in 1999 (short-run) and increased to Php 1,912,825 thousand in 2003 (long-run), representing a growth rate of -14.71 percent and 10.70 percent, respectively.

The mean capital expenditure before merger was Php 1,364,069 thousand. After merger, the mean capital expenditure was Php 564,050 thousand in the short run (see Table 1) and Php 1,012,179 thousand in the long-run (see Table 2). The test of significance yielded a -1.997 t-value, thus showing a significant decline in the short-run while a long-run analysis yielded a 1.28 t-value, which shows no improvement (see Tables 1 and 2).

The company succeeded in reducing its capital expenditure prior to merger in the short-run period. Routes were rationalized and inefficient vessels were tied up for eventual sale. The company's disposal of equipment and off-hiring of leased vans led to major cost savings of WG&A (Annual Report, 1997-1999).

Capital Expenditure to Sales

The second measure of capital investment is the ratio of capital investment to sales (CESA). After merger, there was a decrease in the CESA from 77.91 percent in 1994 before merger to 7.30 percent in 1999 after merger in the short-run and 24.87 percent in 2003 (long-run), with an annual growth rate of -32.61 percent and -15.05 percent, respectively.

The mean ratios before and after merger were 59.16 percent before merger, 11.62 percent (short-run), and 16.31 percent (long-run). There were significant declines observed in the short-run period after merger, yielding a t-value of -3.503, and a t-value of 0.74 in the long period shows no improvement (see Tables 1 and 2).

Capital Expenditure to Total Asset

The third measure of capital investment spending is the ratio of capital expenditure to total asset (CETA). Before merger, CETA ratio was 35.33 percent in 1994 and decreased to 4.61 percent in 1999 (short-run) and 20.05 percent in 2003 (long run) after merger. The annual growth rates were: -28.77 percent (short run) and -7.77 percent (long run).

The mean ratio before merger was 28.54 percent. After merger, the mean ratios were 6.49 percent (short-run) and 11.48 percent (long-run). The statistical test shows significant declines in both short-run and long-run analysis. The test of significance yielded a t-value of -3.260 in the short run analysis thus, it follows in the decline of WG&A's capital expenditure, and 1.35 in the long-run analysis (see Tables 2 and 3).

Table 3
Results of Changes in the Financial Performance after merger (long run), 1994-2003

Measures	After - Panel B (Long-run)		Test of Significance	Annual Growth
	Mean	SD		
Profitability				
Net Income (Net Loss) (In Thousands)	14,730	492,180	1.07	65.13%
Return on Sales (ROS)	-0.93%	8.98%	0.93	26.71%
Return on Assets (ROA)	0.09%	5.75%	1.01%	37.57%
Return on Equity (ROE)	51.85%	140.04%	1.10	80.95%
Dupont ROE Decomposition:				
Net Profit Margin	-0.93%	8.98%	0.93	26.71%
Total Asset turnover	68.80%	11.73%	2.07 * **	8.57%
Equity Multiplier	176.97%	31.40%	1.15	-22.31%
Capital Investment Spending				
Capital Expenditures (In Thousands)	1,012,179	584,158	1.28	10.70%
Capital Exp./Sales (CESA)	16.31%	8.05%	0.74	-15.05%
Capital Exp./ Total Asset (CETA)	11.48%	6.21%	1.35	-7.77%
Leverage				
Debt Ratio	15.13%	7.02%	1.37	-3.83%
Debt to Equity	28.61%	20.56%	1.31	-25.28%
Solvency				
Current ratio	99.52%	13.60%	1.01	16.19%
Acid test ratio	64.75%	20.99%	2.33 * **	21.06%
Working capital ratio	-0.33	3.78%	0.97	-27.47%
Operating Efficiency				
Net Revenue (in Thousand)	5,955,275	1,214,381	2.40 * **	30.32%
Depreciation (in Thousand)	916,287	180,155	1.29	31.09%

*significant at 1 percent level

**significant at 5 percent level

***significant at 10 percent level

Leverage

The leverage measure shows the extent that debt is used in company's capital structure. The debt to asset and debt to equity ratios are used in this paper.

Debt to Asset

The first measure of leverage is the ratio of debt to asset. There was a decrease in the debt to asset ratio after merger from 13.48 percent in 1994 to 9.18 in 1999 in the short-run analysis after merger, with a -21.59 percent annual growth rate. This was basically due to low interest rates plus the significant efforts of the company to pay out debt that resulted in notable deduction of bank loans (WG&A Annual Report, 1997). However, it increased in the long-run analysis after merger to 30.05% in 2003. The ratio showed no significant improvement in the long-run analysis, with a t- value of 1.37, with an annual growth rate of -3.83 percent.

The mean ratio before merger was 17.44 percent. After merger, the mean ratios were 11.11 percent (short run) and 15.13 percent (long-run), yielding a t-value of -0.481 and 1.37, respectively. The test of significance shows no improvement for both period of analysis (see Tables 2 and 3).

Debt to Equity

The second measure of leverage is the ratio of debt to equity. There was a decrease in the debt to equity ratio after merger, from 568.75 percent before merger in 1994 to 14.39 percent in 1999 in the short-run analysis after merger but increased, in the long-run analysis after merger, to 73.93 percent in 2003, with annual growth rates of -45.82 percent and -25.28 percent, respectively.

Most of WG&A's dollar obligations have been retired and debt level decreased from the proceeds of the sale of two vessels of WG&A leading to a lower debt to equity ratio of the company three years prior to its merger (WG&A Annual Report, 1997). The mean ratio before merger was 196.62 percent and after merger were 18.06 percent (short-run) and 28.61 percent (long-run). The tests of significance yielded t-values of -0.958 and 1.31, thus showing no significant improvements in both short run and long-run period (see Tables 2 and 3).

Solvency

This measure shows the ability of the company to meet its current obligations by measuring if it has enough assets to cover its liabilities. The measures used are current ratio, acid test ratio, and working capital ratio.

Current Ratio

The first measure of solvency is current ratio. The current ratio before merger was 30.28 percent in 1994, which increased to 88.83 percent in 1999 involving the short-run analysis after merger. However, it slightly declined to 86.55 percent in 2003, in the long-run analysis after merger. Decline in the current ratio reflects the increase in short-term borrowing to finance receivables, inventory materials, parts and supplies and the purchases and upgrading of vessels of WG&A after merger. The increase in the short-run analysis had an annual growth rate of 19.65 and the decline in the long-run analysis had an annual growth rate of 16.19 percent.

The mean ratio before merger was 73.51 percent. After merger, the mean ratios were 91.32 percent (short-run) versus 99.52 percent (long-run). The test of significance yielded a t-value of 0.312, which shows no significant improvement in the short-run analysis. Consequently, there is also no significant improvement in the long-run analysis, with a t-value of 1.01 (see Tables 2 and 3).

Acid-Test Ratio

The second measure of solvency is the acid-test ratio. The acid test ratio before merger was 18.07 in 1994. After merger, it increased to 47.70 percent in 1999 (short-run) and 68.85 percent in 2003 (long-run), with their annual growth rates of 17.56 percent and 21.06 percent, respectively. The mean ratio before merger was 38.72 percent. In the short-run analysis after merger, the mean ratio was 43.98 against the 64.75 percent in the long-run. The statistical test in the short-run yielded a t-value of 0.191, showing no significant improvement. However, a t-value of 2.33 in the long-run shows a statistically significant improvement after merger (see Tables 2 and 3). The company benefits from interest rates lower than prime-lending offered by most banks because of its strong credit rating, efforts to reduce bank loans and to negotiate for lower rates also contributes to the improvement of this ratio after merger

Operating Efficiency

There are two measures used for operating efficiency: the net revenue and depreciation to show how efficient the company is in its operation and in the use of its assets.

Net Revenue

The first measure of operating efficiency is net revenue. Before merger, the net revenue was Php 1,205,130 thousand in 1994, which increased to Php 4,954,155 thousand in 1999 in the short-run period; hence, it further

increased to Php 7,692,261 thousand in 2003 for the long-run period, and having annual growth rates of 26.57 percent (short-run) and 30.32 percent (long-run) after merger.

The mean net revenue before merger was Php 2,711,767 thousand while after merger, the mean net revenues were Php 4,839,486 thousand (short-run) and Php 14,730 thousand (long-run). The tests of significance yielded a t-value of 0.715 (short-run) and 1.07 (long-run), which both shows no significant improvements after merger (see Table 2 and 3).

Depreciation

The second measure of operating efficiency is depreciation; this is an indicator of capital usage. Before merger, depreciation was Php 168,566 thousand in 1994. It increased to Php 926,744 thousand in 1999 (short-run) and Php 1,121,491 thousand in 2003 (long-run). The increases in the two periods incurred annual growth rates of 32.85 percent and 31.09 percent, respectively. The positive growth rates may suggest that more capital was used after merger.

WG&A chartered the Kherson Vessels, namely: the Millennium Tiger Eagle and Dragon to replace freighter that were sold of (WG&A, Annual Report, 1997) and perhaps brought increases to its capital usage following its M&A. The mean depreciation before merger was Php 357,824 thousand and Php 916,287 thousand in the long-run period. However, t-values of 0.918 (short-run) and 1.29 (long-run) show no significant improvements after merger (see Tables 2 and 3).

CONCLUSIONS

This study analyzed the short-run and long-run effects of M&A evidenced on financial and operating performance changes of WG&A before and after merger for the period of 1994-2003. The measures on profitability such as net income, ROS, ROA and ROE declined both in the short-run analysis after merger, thus there were no significant improvements verified. These results of WG&A's profitability after M&A are in contrast with the strong results obtained in the previous studies. Thus, merger and acquisition did not deliver improved profitability in the case of WG&A.

Another finding is in relation to capital investment spending and leverage measures of WG&A. The measures on capital investment spending such as CESA and CETA showed significant declines in the short-run analysis after WG&A's merger and acquisition. Therefore, no significant increases were also verified in this measure. At the time, leverage measures showed similar result in which debt to asset and debt to equity ratios all showed no improvements after M&A both in the short-run and long-run analysis after merger.

The findings in relation to solvency of WG&A also showed no improvements in current ratio and working capital ratio in the short-run and long-run analysis after M&A of WG&A. However, a strong result was verified in the acid test ratio, resulting in a significant improvement after M&A in the long-run analysis.

The operating efficiency used net revenue and depreciation measures. There was no improvement noted in the two measures in the short-run analysis. However, in the long-run analysis, net revenue yielded a significant improvement. The strong result in the long-run analysis for this measure supports the study of Megginson *et al.* (2003) that mergers which preserve or increase efficiency results in marginal improvements in long-term performance.

In view of the M&A in the shipping industry, WG&A's merger and acquisition, delivered mixed results. Profitability, capital investment spending and leverage measures exhibited weak results, mostly during the short-run period of analysis after the merger. However, significant improvements were evidenced in the total asset turnover (profitability measure) acid-test ratio (solvency measure), and in the net revenue (operating efficiency measure) in the long-run period of analysis. These findings are in addition to the growing M&As literature with similar results

such as in the studies of Megginson *et al.* (2003); Lommerud *et al.* (2003); and Gugler *et al.* (2003), showing strong results in the long-term performance of M&A.

In summary, M&A could not deliver all positive gains in the financial performance in the short-run and long-run period of performance as evident in this paper. This may be taken into consideration by the company's decision making bodies in any industry, experiencing effects of M&As. Thus, our reported findings are in additions to the growing M&As literature worldwide.

This paper provides some starting point for the future researches to be made by policymakers. It provides evidences as a basis for the Philippine shipping industry's policymakers to formulate and implement laws that will help to improve the overall efficiency of the Philippine shipping industry. Moreover, other remaining issues for the shipping industry can be addressed in a separate study in the future. Some issues for M&As in the shipping industry are the effects of competition and productivity performance. Some important questions to be raised for future investigations are: What are the impacts of WG&A's merger and acquisition on other shipping competitors? What are the effects or are there any significant changes on the productivity performance of the shipping industry following M&As? How does WG&A respond to its growing competitors both foreign and local? These are some other important issues that need to be addressed by future researchers.

This study will serve as a gateway for further research concerning the impacts of M&A in the shipping industry worldwide. Likewise, it will be useful to increase the number of countries involved in M&As in their shipping industry and examine separately its impact on competition, productivity and efficiency performance. A separate study can also be done to examine the impact of WG&A's merger and acquisition on the performance of other competing firms in the industry using market data, which are left for future investigation and acknowledged as limitations of the present study.

Therefore, this paper may recommend to the decision making bodies of WG&A the following measures: Firstly, to consider making stronger and more aggressive efforts that can help the company improve their profitability, by allowing the company to identify their market standing, and their edge to improve and increase effort to fully improve the companies financial and operating performance. Secondly, considering the high cost of the companies operating expenses, attributed to the fuel cost increase, vessel repairs and maintenance and depreciation, the company should consider and take necessary measures and actions that will help compensate the high cost of their operation without sacrificing better service. The company can adopt full utilization of their vessel through continuous improvement and expansion of their service.

ACKNOWLEDGEMENTS

We would like to acknowledge the Graduate School of the University of Santo Tomas for the research support extended to this paper, especially to Dean Lilian Sison and Christina Binag. The usual disclaimer applies.

REFERENCES

1. Boubakri, N. and Cosset, J. 1998. The Financial and Operating Performance of Newly Privatized Firms: Evidence from Developing Countries. *Journal of Finance* 53 (3), 1081-1111.
2. Cabanda, E. and Ariff, M. 2002. Performance Gains through Privatization and Competition of Asian Telecommunications. *ASEAN Economic Bulletin* 19 (3), 254-279.
3. Coleman, M., Meyer, D. and Scheffman, D. 1996. Economic Analyses of Mergers at the FTC: The Cruise Ships Merger Investigation. *Review of Industrial Organization* 23, 121-155.
4. Hopkins, D. 1999. Cross-Border Mergers and Acquisitions: Global and Regional Perspectives. *Journal of International Management* 5, 207-235.
5. Gugler, K., Mueller, D, Yurtoglu, B, and Zulehner, C. 2003. The effects of mergers: an international comparison. *International Journal of Industrial Organization* 21, 625-653.
6. Kleinsorge, I., Phillip S., and Ray, T. 1991. The Shipper-Carrier Partnership: A New Tool for Performance Evaluation. *Journal of Business Logistics* 12, 35-57.

7. Lin, J., Madura, J. and Picou, A. 1994. The Wealth Effects of International Acquisitions and the Impact of the EEC Integration. *Global Finance Journal* 5 (1), 65-74.
8. Lommerud, K., Odd R. and Sorgard, L. 2003. Downstream Merger with Upstream Market Power. *European Economic Review*, 1-27.
9. Lorenzo, E. 1998. The Domestic Shipping Industry of the Philippines: A Situation Report.
10. Martin, F. 1996. Calculating the Public Interest in the Merger of Container Transportation Firms: Canada Maritime Services and Cast Marine Holdings. *Logistics and Transportation Review* 32 (2), 207-229.
11. Megginson, W., Morgan, A. and Nail, L. 2003. The Determinants of Positive Long-term Performance in Strategic Mergers: Corporate Focus and Cash. *Journal of Banking and Finance* XXX, 1-30.
12. Ross, S. *et al.* 1996. *Corporate Finance*, 4th Edition. New York: Mc-Graw-Hill.
13. WG&A, Inc., *Annual Reports* (1996-1999).

NOTES

NOTES