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Working Capital Management Policies of the Listed Manufacturing Firms in Ghana

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Abstract: This study sought to examine the relationship between the aggressive/conservative current asset investment and financing policies for six manufacturing firms listed at Ghana Stock Exchange for a period of 2000-2013. Data were sourced from the annual reports of the firms and the publication of Ghana Stock Exchange. Descriptive statistics, One-way ANOVA and rank order correlation were used for analyzing the data. The results revealed that the listed manufacturing firms were following moderate working capital management policies. The study found significant differences among the current asset investment policies across different firms. However, no significant differences were observed for firms' policies concerning relative aggressive/conservative current asset financing. Additionally, these significant differences or otherwise are not stable over time with the instability more prevalent in the current liability management.

Keywords: aggressive/conservative; current asset investment policies; current asset financing policies; stability

JEL Classification: H54

Introduction

Although, working capital management decisions concern short-term assets and liabilities, they have both short-term and long-terms implications on the profitability and liquidity as well as shareholder value which warrant careful attention (Eljeilly, 2004; Pouraghajan & Emamgholipourachi, 2012; Shin & Soenen, 1998). The working capital management policy concerns the firms' current assets investment and financing decisions and the policy adopted by a firm could dictate the magnitude of its effect on the firm performance as suggested by Nazir & Afza, 2009; Salawu, 2007 and Weinraub & Visscher, 1998. Current assets investing and financing decisions can be approached in three ways, such as conservative, moderate and aggressive. These strategies are mutually exclusive and firms choose one based on their relative benefits. A company is categorized as having a conservative working capital management policy if it has high proportion of its total asset as current asset and low proportion of its current liability relative to its total capital. On the other hand, an aggressive working capital management policy is where a company has low proportion of its current asset as a percentage of its total asset and high proportion of its current liability relative to its total capital. Thus, more aggressive working capital policies are associated with higher return and higher risk while conservative working capital policies are concerned with the lower risk and return (Carpenter & Johnson, 1983; Gardner, Mills, & Pope, 1986; Weinraub &Visscher, 1998).

Previous empirical studies focused on industrial level characteristics (Weinraub & Visscher, 1998; Filbeck & Kruenger, 2005; Salawu, 2007; Nasir & Afza, 2008). This is due to that fact that there are differences in industry setting. However, firms within the same industry may also have differences due to firm specific characteristics which might drive its working capital policy (Akinlo, 2012) as well as

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individual financial manager's risk preferences. A financial manager with a high appetite for risk and return would prefer aggressive policy. On the other hand, a risk averse manager would take conservative approach with low risk and profitability.

Thus, the present study focused on the manufacturing sector to see if there are firm level differences. The manufacturing firms were chosen since all the major components of working capital (inventories, account receivables and account payables) play a major role in the manufacturing sector. Majority of listed manufacturing firms in Ghana have exhibited dwindling returns as well as poor stock performance in the last few years. It is also evident that in the manufacturing sector, the issue of working capital management policies has been significantly under-researched if non-existent although this is not the case in other countries.

Prior studies done on listed manufacturing companies in Ghana mainly concentrated on the relationship between the components of working capital management and firm's financial performance without looking at the specific policies being pursued by the manufacturing companies in Ghana (Agyemang & Asiedu, 2013; Akoto, Awunyo & Angmor 2013; Korankye & Adarquah , 2013). We fill this gap by investigating the working capital management policies being pursued by the selected listed manufacturing firms and whether there are differences amongst the working capital financing policies and also to confirm that these policies are stable over the period. The study_contributes to the literature by forming the basis of industrial working capital policy benchmarking in Ghana.

The rest of the paper reviews the empirical literature and also discusses the research methodology and results of the study. The paper ends with the conclusion section.

Review of Previous Work

In corporate finance literature, most of the studies are conducted around the relationship between working capital management and corporate profitability (see for example, Shin & Soenen, 1998; Deloof, 2003; Eljelly 2004; Onwumere, Ibe & Ugbam, 2012; Agyemang & Asiedu, 2013; Akoto, Awunyo, & Angmor 2013; Korankye & Adarquah, 2013). Many researchers have studied financial ratios as a part of working capital management; however, very few of them have discussed the working capital policies specifically (Weinraub & Visscher, 1998; Nazir & Afza, 2009). For example, Pandey and Perera (1997) observed that, informal working capital policy and company size has an influence on the overall working capital policy and approach (conservative, moderate or aggressive). And the choice is influenced by industry type and location. Koury, Smith and Mackay (1998) documented Canadian companies preference for conservative policies while Weinraub and Visscher (1998) study showed that American companies generally follow aggressive policies. Notwithstanding, these preferences are not absolute and collaborated by the evidence from these two studies. For instance, while about 29% of the firms considered by Koury, Smith and Mackay (1998) inclined to conservative policy, 10.2 per cent pursue an aggressive policies.

Similary, Weinraub and Visscher (1998) examined 10 diverse industry groups to analyze the relative relationship between their aggressive/conservative working capital policies and concluded that the industries had distinctive and significantly different working capital management policies. These policies were found to be exhibited a remarkable stability over the 10-year study period studied.

Contrarily, Filbeck and Krueger (2005) showed that the working capital management results of 32 non-financial industries in the US are significantly different among industries in their working capital practices over time and change significantly within industries over time.

In a regional study, Salawu (2007) investigated fifteen diverse industrial groups over an extended period in order to establish a relationship between aggressive and conservative working capital practices among firms listed on the Nigeria Stock Exchange over the period 1994- 2003. The results of the study

strongly showed that firms in differing industries have significantly different current asset management policies. The study also found a significant negative correlation between industry asset and liability policies. The study indicated that relatively aggressive working asset management seems balanced by relatively conservative working capital financial management. Thus, moderate working capital management policies seems to be practiced in Nigeria.

Confirming the results of Salawu (2007), Afza and Nazir (2008) investigated the relationship between the aggressive and conservative working capital policies for 17 industrial groups of public entities listed at Karachi Stock Exchange between the periods 1998-2003. Their study found significant differences among working capital investment and financing policies across different industries in Pakistan. They also found that these significant differences were stable over the six year period. However, their study further indicated that firms that adopt aggressive investment working capital policies simultaneously pursue aggressive working capital financing policies. This suggests that firms in Pakistan were following aggressive working capital management.

Contrary to this assertion, Sathyamoorthi and Wally-Dima (2008) found that retail domestic companies that are listed on Botswana stock exchange adopted a conservative approach in the management of working capital. Their findings also suggest that the working capital is not static overtime but varies with the changes in the state of economy. Whereas companies tend to adopt a conservative approach in times of high volatility, they resort to an aggressive approach in times of low volatility. Similarly, Raheman, Afza, Qayyum and Bodla (2010) analyzed the impact of working capital management on firm's performance using a balanced panel of 204 manufacturing firms listed on the Karachi Stock Exchange for the period 1998 to 2007. Their study concluded that firms in Pakistan are following conservative working capital management policy.

On the other hand, Bhutto, Abbas, Rehman, and Shah (2011) conducted a cross sectional study to investigate the relationship between the length of Cash Conversion Cycle, firm size, firm profitability and aggressive/conservative working capital policies of 157 public limited companies made up of 12 industrial groups that are listed in the Karachi Stock Exchange (KSE) for the year 2009. Pearson correlation and Analysis of Variance (ANOVA) with post-hoc test (Least Significant Differences) were used for the empirical investigation. The authors found that significant differences lie among the mean values of CCC across the industries and more specifically, the Oil and Gas industry is significantly different from all the other industries in terms of its length of CCC. Findings of the study show that there is a significant and positive relationship between firms' aggressive investing policies and conservative financing policies.

From the foregoing empirical literature reviewed, it is clear that working capital management policies differ among firms due to industrial differences. However, firms within the same industry might have different policies as a result of managerial preferences and competitive advantages.

Research Methods

This study examined manufacturing companies that are listed on the Ghana Stock Exchange. These manufacturing companies are made up food and beverages, pharmaceuticals, wood and paper converters and traditional manufacturing firms. The choice of the manufacturing firms was due to the fact that these firms contribute greatly to the socio- economic development in Ghana through employment creation, economic stability and GDP as well as capital mobilization. The population for the study comprised all the manufacturing companies which fell within the definition of manufacturing enterprise by United Nations' ISIC (2008) as revised and were listed on the Ghana Stock Exchange on or before the year 2000 and were actively trading on the bourse as of 31st December, 2013 with no recording of

negative equity in their statement of financial positions during the study period. Based on this, the target population was made up of six manufacturing firms listed on the Ghana Stock Exchange. Appendix A provides the list of firms included in the study.

Description of Variables Used in the Study

In line with previous studies (Weinraub & Visscher, 1998; Salawu, 2007, Afza & Nasir, 2008; 2009) in order to measure the degree of aggressiveness/conservativeness of current asset investment policy, the following ratio was calculated:

$$TCA/TA = \frac{Total\ Current\ Assets\ (TCA)}{Total\ Assets\ (TA)}$$

Where a lower ratio (i.e. less than 0.5) means a relatively aggressive investment policy whereas a higher ratio (more than 0.5) means relatively conservative investment policy.

Similarly, the degree of aggressiveness/conservativeness of a financing policy adopted by a firm is measured by current assets financing policy, and the following ratio is used:

$$TCL/TA = \frac{Total\ Current\ Liabilities\ (TCL)}{Total\ Assets\ (TA)}$$

Where a lower ratio (i.e. less than 0.5) means a relatively conservative financing policy whereas a higher ratio (more than 0.5) means relatively aggressive financing policy.

The reason for choosing 50% cut off point would serve as a guide to determine the specific policies adopted by the firms. Given that these firms are manufacturing companies, it is expected that the ratio of TCA/TA would be higher due to the level inventories.

Data Analysis Procedures

The data obtained were analyzed using descriptive statistics, Student t-test, One-Way ANOVA with a post hoc analysis and Spearman's rank order correlation analysis. Descriptive statistics were employed in order to identify the sort of working capital management policies being pursued. Firms with TCA/TA ratio of more than 50% and TCL/TA ratio of less than 50% could be said to be following a conservative working capital management policy whiles firms with TCA/TA ratio of less than 50% and TCL/TA ratio of more than 50% could be said to be following an aggressive working capital management policy. T-test and One-way ANOVA were employed to aid in determining whether differences exist between and among the subsectors and firms respectively. Spearman's rank order correlation was applied to confirm the stability of the policies overtime.

Limitations

The study was restricted to only manufacturing firms listed on the Ghana Stock Exchange (GSE) from 2000 to 2013. Non listed manufacturing firms as well as listed non-financial firms were not considered. Thus, the study covers a very small number of firms thereby placing a limitation on the findings, results, interpretation and generalization of the findings.

Empirical Results and Discussion

Descriptive Statistics

Table 1 presents the descriptive statistics for the total current assets/total asset ratio and total current liabilities/total asset ratio. The mean value of TCA/TA for all the selected firm was 0.4882 with a standard deviation of 0.164 as shown in Table 1. Since the mean value is less than 0.5, this indicates that

the selected firms are relatively following aggressive current asset investment policy. As expected, inventories constitute averagely about 50% of the TCA over the study period (results not reported)

Table 1. Descriptive Statistics for Total Current Asset/Total Asset and Total Current Liabilities/Total Asset

	TCA/TA				TCL/TA			
Company	Obs.	Mean	Median	Std. Dev	Mean	Median	Std, Dev.	
ALUWKS	14	0.5061	0.6038	0.217	0.4111	0.3695	0.132	
CMLT	14	0.4169	0.4578	0.097	0.4677	0.4188	0.184	
FML	14	0.5009	0.5164	0.084	0.3939	0.3367	0.156	
GGBL	14	0.3316	0.3156	0.113	0.4688	0.4635	0.124	
PZC	14		0.6755	0.6830	0.099	0.3712	0.3529	0.053
UNIL	14	0.4983	0.4749	0.129	0.5015	0.4998	0.137	
F & B	28		0.4162	0.4257	0.1303	0.4313	0.4179	0.144
O. MFG	56	0.5242	0.5245	0.1690	0.4378	0.3929	0.140	
ALL	84	0.4882	0.4843	0.164	0.4357	0.4130	0.141	

Source: Computed from Annual Reports of Study Companies from 2000- 2013

F&B= Food & Beverages; O. MFG= Other Manufacturing Firms

Whereas food and beverages manufacturing firms were relatively following aggressive current asset investment policy, other manufacturing firms were seen to be following conservative investment policy with a mean values of 0.4162 (SD 0.13) and 0.5242 (SD 0.17) respectively.

Again, from Table 1, the average current asset financing policy measured by TCL/TA for all the selected firms was 0.4357 with a standard deviation of 0.141. This means the firms are being conservative in the management of current liabilities. Additionally, it can be observed that all the subsectors also follow conservative current asset financing policy with a mean values of 0.4313 (SD 0.14) and 0.4378 (SD 0.14) for food and beverage manufacturing firms and other manufacturing firms respectively. Thus, the overall policy for the management of working capital by these firms is moderate working capital management policy. This indicated that the selected firms use relatively low proportion of current asset as a percentage of total asset as well as low proportion of current liability to fund total capital. Furthermore, it can be noticed that whereas food and beverage firms follow moderate working capital management policy, other manufacturing firms are relatively following conservative working capital management policy.

Analysis of Variance (ANOVA)

The second research objective was to determine whether differences exist among the firms with regard to their current asset investment and financing policies. The differences in the relative degree of aggressive/conservative current assets investment and financing policies among firms have been tested through one-way ANOVA and post hoc tests. Firms' current asset investment policy, measured by Total Current Asset/ Total Asset, was first examined and the results are presented in Table 2.

Table 2. ANOVA Test for Total Current Asset/Total Asset (TCA/TA)

Sum of Squares	Df	Mean Squares	F	Sig.
Between groups	.914	5	.183	10.686 .000
Within groups	1.334	78	.017	
Total	2.248	83		

Source: Field work

The observed F-ratio of 10.686 is significant at 1% level of significance, and this indicates that a significant difference exists between the firms practices relating to aggressive/conservative current assets investment policies. To further examine the strength of differences between firms' values, Least

Significant Difference (LSD) and Tukey's Honestly Significance Difference (HSD) tests were performed to compare the firms' mean values of TCA/TA on a paired sample basis. Studies such as Weinraub and Visscher (1998); Salawu (2007); Afza and Nazir (2008) have applied Tukey's HSD and LSD tests to examine differences in working capital policies. The results are presented in Table 3 and Table 4 respectively.

Table 3. Test of Least Significance Differences (LSD) for Total Current Asset/Total Asset (TCA/TA)

COMPANY	ALUWORKS	CMLT	FML	GGBL	PZC	UNIL
ALUWORKS	--					
CMLT	.089*	--				
FML	.005	-.084*	--			
GGBL	.174***	.085*	.169***	--		
PZC	-.169***	-.256***	-.174***	-.343***	--	
UNIL	.007	-.081	.002	-.166***	.177***	--

***Significant at 1% level **Significant at 5% level *Significant at 10% level

As can be observed from Table 3 for Least Significant Difference (LSD), among 15 pairs, eight pairs are statistically significant at 5 percent level of significance. This left seven pairs of firms with ratios whose differences were not statistically significant at the conventional level of significance.

From Table 4, the Tukey's HSD test indicated that 8 out of 15 pairs are statistically significant at 5 percent level of significance while the remaining seven pairs of firms were found to be homogeneous. It could be observed from both ANOVA and all post hoc tests for variance that significant differences exist among the various firms regarding their current assets investment policies. Additionally, an independent sample t-test was also conducted to compare the conservative/aggressive current asset investment policies between food and beverage firms and other manufacturing firms. There was a significant difference in the current asset investment policies between the two groups of manufacturing firms, t (82) = 2.963, P<.01, two-tailed with other manufacturing firms pursuing conservative investment policies (M=52.4%, SD= 17%) whilst food and beverages firms were following aggressive investment policies (M=41.6%, SD=13.0%) with a medium effect size (d=0.712) (See appendices B for details).

Table 4. Tukey's HSD Test for Total Current Asset/Total Asset (TCA/TA

COMPANY	ALUWORKS	CMLT	FML	GGBL	PZC	UNIL
ALUWORKS	--					
CMLT	.089	--				
FML	.005	-.084	--			
GGBL	.174***	.085	.169**	--		
PZC	-.169**	-.256***	-.174***	-.343***	--	
UNIL	.007	-.081	.002	-.166**	.177***	--

***Significant at 1% level **Significant at 5% level *Significant at 10% level

Next, financing policy is examined by performing a one-way ANOVA on the Total Current Liability/ Total Asset ratio in order to test differences in the relative degree of aggressive/conservative liability management. The results are presented in table 5. The observed F- statistics of 1.938 is not significant at 5% significant level. This means that there is no existence of statistically significant differences among companies regarding current assets financing policies at the conventional 5% level.

Table 5. ANOVA Test for Total Current Liabilities/Total Asset (TCL/TA)

Sum of Squares	Df	Mean Squares	F	Sig.
Between groups	.182	5	.036	1.938 .097
Within groups	1.462	78	.019	
Total	1.644	83		

Source: Field work

Least Significant Difference (LSD) and Tukey's Honestly Significance Difference (HSD) tests were also performed to compare the firms' mean values of TCL/TA on a paired sample basis. The results are presented in Table 6 and Table 7 respectively.

Table 6. Test of Least Significance Differences (LSD) for Total Current Liability/Total Asset (TCL/TA)

COMPANY	ALUWORKS	CMLT	FML	GGBL	PZC	UNIL
ALUWORKS	--					
CMLT	-.056	--				
FML	.017	.073	--			
GGBL	-.057	-.001	-.074	--		
PZC	.039	.096*	.022	.097*	--	
UNIL	-.090*	-.033	.107**	-.032	-.130**	--

***Significant at 1% level **Significant at 5% level *Significant at 10% level

From the Least Significance Differences test, it was revealed that there are 2 pairs of the 15 pairs that are significant at 5 percent level of significant as reported in Table 6. It can be observed from Table 7 that no significant differences were reported by Tukey's HSD test even at 10% level of significance among the firms with regard to their current liability management. This implies that the selected firms are homogeneous in their current asset financing policies.

Table 7. Tukey's HSD Test for Total Current Liability/Total Asset (TCL/TA)

COMPANY	ALUWORKS	CMLT	FML	GGBL	PZC	UNIL
ALUWORKS	--					
CMLT	-.056	--				
FML	.017	.073	--			
GGBL	-.057	-.001	-.074	--		
PZC	.039	.096	.022	.097	--	
UNIL	-.090	-.033	.107	-.032	-.130	--

***Significant at 1% level **Significant at 5% level *Significant at 10% level

It is evident that strong significant company differences do exist in the relative degree of aggressive/conservative current asset investment policy whereas very weak statistically significance differences do exist in the relative degree of aggressive/conservative current asset financing policy. This result is consistent with the findings of Weinraub and Visscher (1998) and Afza and Nazir (2008) who reported significant differences in the industry relative degree of aggressive/ conservative working capital investment and financing policies and both their ANOVA and post hoc LSD and Tukey's HSD tests indicated that the differences were generally broader and more significant when examining current asset investment policies than the current asset financing policies. However, the current findings contradict that of Salawu (2007). Similarly, an independent sample t-test was also conducted to determine the difference in current asset financing policies between food and beverage firms and other manufacturing firms. There was a no statistical significant difference in the current asset financing policies between the two groups of manufacturing firms, t (82) = .199, P>.05, two-tailed with other manufacturing firms (M=43.8%, SD= 14%) whilst food and beverages firms (M=43.1%, SD=14.0%) with apparently no significant effect size (d=0.05). See appendices C for details.

Relative stability for the Current Assets Investment/Financing Policies

The third objective of the study was to examine the relative stability or otherwise of the working capital management policies over time. After, establishing that significant differences exist between current assets investment policy while current assets financing policies were homogeneous among the selected firms, the study further examined the relative stability of these differences or homogeneity over the study period. Ranked order correlations were used as a test of relative stability. The TCA/TA ratio was calculated for each firm for each of the 14 years and then ranked from the highest to lowest ratio. The base year (2000) rankings were compared sequentially to the TCA/TA rankings of each succeeding year. There would be stability in the policies if the correlation between the base year and each succeeding year was positive. The results obtained are presented in Table 8. There was stability in each firm's relative level of aggressiveness between the base year and 2006 with respect to current assets investment. However, this relative stability was not statistically strong. There was instability in current asset management policies from the year 2007 to 2013 and these instabilities were significant in year 2009, 2012 and 2013. This indicates that there were significant changes in the levels of aggressiveness in the firms and thus, there was inconsistency in the management of the current asset investment. The firms were also ranked for each year on the basis of TCL/TA and their rankings were also compared with the base year of 2000. The rank order correlation coefficients and their respective P-values are also presented in Table 8. It is evident from the results that the firms strongly maintained their relative level of conservativeness with respect to current assets financing for only 2001 and 2002 after which there was significant changes in the relative levels of conservativeness in the firms, and the instability was significant in the year 2007 and 2008. It can be observed that the significant differences that existed between firms' current assets investment policies were not stable over the time. Additionally, the homogeneity was not also stable. However, the instability was more prevalent in the current liability management than the current asset management.

Table 8. Rank order correlation for Investment/Financing Policies

Between Based Year And:	TCA/TA		TCL/TA	
YEAR	Correlation	P. Value	Correlation	P. Value
2001	.771	.072*	.943	.005***
2002	.257	.623	.771	.072*
2003	.600	.208	.029	.957
2004	.086	.872	.429	.397
2005	.086	.872	-.429	.397
2006	.314	.544	-.371	.468
2007	-.086	.872	-.771	.072*
2008	-.543	.266	-.829	.042**
2009	-.771	.072*	-.429	.397
2010	-.657	.156	-.257	.623
2011	-.657	.156	.029	.957
2012	-.771	.072*	-.086	.872
2013	-.886	.019**	-.086	.872

***Significant at 1% level **Significant at 5% level *Significant at 10% level

Conclusion

This study tries to identify the policies listed manufacturing firms in Ghana are pursuing with regard to the current assets investment and policies being adopted in practice to finance these current assets investment. It also examines whether significant differences do exist among the working capital policies of the firms across the sample companies and confirm whether these aggressive or conservative current asset investment and financing policies are relatively stable over the period of time. The sample firms were relatively following aggressive investment policy in managing current assets. On the other hand, current asset financing policy of the firms was found to be conservative. Thus, the study firms rely more

on long-term funds to finance their operations. This implies that the selected manufacturing firms in Ghana are relatively following moderate working capital management policies in their current asset investment and financing. However, subsector-wise analysis revealed that other traditional manufacturing firms and food and beverages manufacturing firms were following conservative and aggressive working capital management policies respectively.

The study also revealed that significant differences exist among the various firms regarding current assets investment policies. The nature and adoption of the current asset investment policies vary from firm to firm. Some firms are more conservative in managing their current assets while there are some firms being very much aggressive in their approach. However, no significant differences were observed with regard to current assets financing policies among the firms at the conventional level of significance. Thus, these firms were homogeneous in the current liability management.

With respect to current assets investment, it was found that there was stability in each firm's relative level of aggressiveness between the base year and 2006. However, from 2007 to 2013 there were instabilities in current asset management policies for which the years 2009, 2012 and 2013 were significant. Additionally, current assets financing policies were only stable for the years 2001 and 2002. However, the instability was only significant in the year 2007 and 2008. This suggested that the significant differences or otherwise that existed between firms current assets investment and financing policies were not stable over time, with the instability more prevalent in the current liability management than the current asset management.

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APPENDICES

FIRM	SYMBOL	ISIC CLASSIFICATION	GSE CLASSIFICATION
Aluworks Ltd	ALUWORKS	Manufacturing	Manufacturing
Camelot Gh. Ltd	CMLT	Manufacturing	Manufacturing
Fan Milk Gh. Ltd	FML	Manufacturing	Food & Beverages
Guinness Gh. Breweries Ltd	GGBL	Manufacturing	Food & Beverages
PZ Cussons Gh. Ltd	PZC	Manufacturing	Manufacturing
Unilever Gh. Ltd	UNILEVER	Manufacturing	Manufacturing

Appendix A: Firms Included in the Study

Source: Researcher construct

Appendix B: T-Test for the Differences in the Means of Total Current Asset/Total Asset (TCA/TA)

Group Statistics

SUB-SECTOR		N	Mean	Std. Deviation	Std. Error Mean
TCA/TA	Other Manufacturing Firms	56	.52418722	.169010507	.022584979
	Food & Beverages	28	.41626927	.130395226	.024642381

Independent Samples Test

			TCA/TA	
			Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F		3.221	
	Sig.		.076	
t-test for Equality of Means	t		2.963	3.229
	df		82	67.893
	Sig. (2-tailed)		.004	.002
	Mean Difference		.107917948	.107917948
	Std. Error Difference		.036418454	.033426460
	95% Confidence Interval of the Difference	Lower	.035470041	.041214590
		Upper	.180365855	.174621306

Appendix C: T-Test for the Differences in the Means of Total Current Liabilities/ Total Asset (TCL/TA)

Group Statistics

SUB-SECTOR		Mean	Std. Deviation	Std. Error Mean
TCL/TA	Other Manufacturing Firms	.43788323	.140441563	.018767293
	Food & Beverages	.43135694	.143790257	.027173804

Independent Samples Test

		TCL/TA	
		Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F	.023	
	Sig.	.879	
t-test for Equality of Means	t	.199	.198
	df	82	52.982
	Sig. (2-tailed)	.843	.844
	Mean Difference	.006526286	.006526286
	Std. Error Difference	.032763137	.033024641
	95% Confidence Interval of the Difference	-.058650030	-.059713270
		.071702603	.072765843