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## RESEARCH ARTICLE

### IMPACT OF FINANCIAL PERFORMANCE INDICATORS (FPIs) ON PROFITABILITY

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#### ABSTRACT

Most of the organizations use financial data to allocate resources to their various departments. Hence to assess the financial health of an organization, analyzing the financial data and financial performance indicators become crucial. This paper deals with the impact of financial performance indicators on profitability of a textile industry. Indian textile industry is the second largest employment generating sector, next to agricultural sector. Financial analysts often assess firm's production and productivity performance, profitability performance, liquidity performance, working capital performance, fixed assets performance, fund flow performance and social performance. The financial performance analysis identifies the financial strengths and weaknesses of the firm by properly establishing relationships between the items of the balance sheet and profit and loss account. Thus the present paper is of crucial importance to measure the firm's liquidity, profitability and other indicators that ensures the business is conducted in a rational and normal way and enough returns to the shareholders to maintain at least its market value. In this context researcher has undertaken an analysis of financial performance of garments companies to understand how management of finance plays a crucial role in the growth. The present study covers two garments sectors. The study has been undertaken for the period of 3 months from Jan2014 to March2014. In order to analyze financial performance in terms of liquidity, solvency, profitability and financial efficiency, various accounting ratios have been used. Statistical measures linear multiple regression analysis and test of hypothesis-t test have been used.

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## 1. INTRODUCTION

The garments industry in India is one of the best in the world. An extremely well organized sector, garment manufacturers, exporters, suppliers, stockiest and wholesalers are the gateway to an extremely enterprising clothing and apparel industry in India. There are numerous garments exporters, garments manufacturers; readymade garments exporters etc. both in the small scale as well as large scale. During April-December 1999-2000, textile exports were recorded as US \$ 9735.2 million (Rs.440179.4 million), of which readymade garments comprised nearly 40%. Interestingly, almost ¼ of India's total exports goes to the USA. Indian readymade garments and textiles are extremely popular the world over. In fact, exports of readymade garments registered a 6.4% increase in dollar terms and an 11.6% increase in rupee terms during the period April-December 1999-2000, despite a sluggish growth in income both at home and abroad. Indian Garment export growth during April-June 1998 for woolen readymade garments was a phenomenal 150%, for readymade garments made of silk it was 58%, and for other readymade garments it was 39%, in dollar terms.

Today, garments exports from India have made inroads into the international market for their durability, quality and beauty. One of the reasons for the economical pricing of India's readymade garments and apparels is the availability of highly skilled, cheap labor in the country. The superiority of India's Garment Industry has been acknowledged in the National Textile Policy (NTP) of India 2000. Having realized the tremendous growth potential of this sector there is a proposal in the NTP for taking the Indian Garment Industry out of the SSI reservation list.

## 2. Problem Definition

Financial performance analysis is the process of determining the operating and financial characteristics of a firm from accounting and financial statements. The ability of an organization to analyze its financial position is essential for improving its competitive position in the marketplace. Through a careful analysis of its financial performance, the organization can identify opportunities to improve performance of the department, unit or organizational level. In this context an attempt has been made in analysis of financial performance of garments companies to understand how management of finance plays a crucial role in the growth.

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**2.1 Research Goals**

The Goal of financial performance analysis is to determine the efficiency and performance of firm’s management, as reflected in the financial records and reports. The analyst attempts to measure the firm’s liquidity, profitability, and other indicators that the business is conducted in a rational and normal way ensuring enough returns to the shareholders to maintain at least its market value. In this context an attempt has been made an analysis of financial performance of garments companies to understand how management of finance plays a crucial role in the growth.

**2.1.1 General Goal**

The main objectives of the present work are to make a study on An Examination of Composite Impact of Financial Performance Indicators on Profitability of selected two garments companies in India.

**2.1.2 Specific Goals**

More specifically, it seeks to dwell upon mainly the following issues:

- To assess the short-term and long-term solvency,
- To assess the liquidity and profitability position and trend,
- To know the efficiency of financial operations and
- To analyze the factors determining the behavior of liquidity and profitability.

**2.1.3 Methodology**

The study has been undertaken for the period of Jan 2014 to March2014. In order to analyze financial performance in terms of liquidity, solvency, profitability and financial efficiency, various accounting ratios have been used. Various statistical measures have been used A.M., S.D., C.V., linear multiple regression analysis and test of hypothesis-t test. In this context an attempt has been made an analysis of financial performance of garments companies to understand how management of finance plays a crucial role in the growth.

**3. Research Hypotheses**

Keeping the above objectives in mind, the following null and alternative hypotheses have been formulated and tested during the study period.

**Hypothesis 1**

Ho: When return on investment increases, liquid ratio remains same.

H1: When return on investment increases, liquid ratio also increases.

**Hypothesis 2**

H0: When return on investment increases, net profit to total asset ratio remains same.

H1: When return on investment increases, net profit to total asset ratio also increases.

**Hypothesis 3**

Ho: When return on investment increases, debt to net worth ratio remains same.

H1: When return on investment increases, debt to net worth ratio also increases.

**Hypothesis 4**

Ho: When return on investment increases, debt equity ratio remains same.

H1: When return on investment increases, debt equity ratio also increases.

**Hypothesis 5**

Ho: When debt equity increases, interest coverage ratio remains same.

H1: When debt equity increases, interest coverage ratio also increases.

**Hypothesis 6**

Ho: When net profit to total asset ratio increases, debt equity ratio remains same.

H1: When net profit to total asset ratio increases, debt equity ratio also increases.

**Hypothesis 7**

Ho: When return on investment ratio increases, current asset ratio remains same.

H1: When return on investment ratio increases, current ratio also increases.

**3.1 Research Model**

Financial performance:

Profitability:

Overall

Net profit

Return on investment

Financial performance indicators:

Liquidity

Solvency

Efficiency

Financial stability

**3.2 Research Variables:**

**Data for the Hypothesis**

Hypothesis	Independent Variable	Dependent Variable
First	Return on investment ratio	Liquid Ratio
Second	Return on investment ratio	Net profit to total asset ratio
Third	Return on investment ratio	Debt to net worth ratio
Fourth	Return on investment ratio	Debt equity ratio
Fifth	Dept equity ratio	Interest coverage ratio
Sixth	Net profit to total asset ratio	Debt equity ratio
Seventh	Return on investment ratio	Current Ratio

**3.3 Research Variables operating definitions and Data Analysis by ratios and statistics usage**

Generally current ratio, liquid ratio, debt-equity ratio, interest coverage ratio, inventory turnover ratio, debtors turnover ratio, returns on investment ratio, net profit to total asset ratio, debt to

total asset ratio, debt to net worth ratio, net worth to total asset ratio and total liabilities to net worth are highly useful in determining financial position, financial performance and the financial stability or otherwise of such management. Comparison of company-wise and year-wise various financial performance indicators with that of the grand industry average/industry average, which is considered as a benchmark, would undoubtedly help in examining the pros and cons of the management of financial performance.

### 3.3.1 Current Ratio (CR)

CR is an indicator of a company's ability to meet short-term debt obligations. The higher the ratio, the more liquid the company is current ratio is equal to current asset divided by current liabilities. If the current asset of a company is more than industry average, then that company is generally considered to have good short-term financial strength. If current liabilities exceed current asset, then the company may have problems meeting its short-term obligations.

Table 1 shows the current ratio is more satisfactory in case of QK because the ratio is more than industry average. They have been able to meet their matured current obligations. Then current ratio is less satisfactory in cash of KT because the ratio is less than industry average. They have been unable to meet their matured current obligations. Coefficient of variation of current ratio of QK and KT is 0.34% and 0.57% respectively.

**Table 1. Selected Liquidity Ratios**

Year	Current Ratio		Liquidity Ratios	
	QKWPL KTML	AVG	QKWPL AVG	KTML
2011	4.23 2.45	0.67	1.94 1.18	0.42
2010	3.56 2.18	0.80	2.37 1.43	0.50
2009	4.24 2.5	0.76	3.39 2.06	0.74
2008	2.28 1.6	1.05	1.29 1.16	1.03
2007	2.62 1.8	1.07	1.79 1.22	0.65
2006	1.53 1.2	1.02	1.39 1.99	0.60
Mean	3.07 1.95	0.9	2.02 1.5	0.70
C.V (%)	0.34 0.36	0.57	0.43 0.42	0.86

### 3.3.2 Liquid Ratio (LR)

It is the ratio of liquid assets to current liabilities. Liquid ratio is more rigorous test of liquidity than the current ratio because it eliminates inventories and prepaid expenses as a part of current assets. Usually a high liquid ratio an indication that the firm is liquid and has the ability to meet its current or liquid liabilities in time and on the other hand a low liquidity ratio represents that the firm's liquidity position is not good. Table 1 shows the liquid ratio is more satisfactory in case of QK because the ratio is more than industry average. They have been able to meet their matured current obligations. Then liquid ratio is less satisfactory in cash of KT because the ratio is more than industry average. They have been able to meet

their matured current obligations. Coefficient of variation of current ratio of QK and KT is 0.43% and 0.86% respectively.

### 3.3.3 Debt/Equity Ratio (DER)

The debt-to-equity ratio (D/E) is a financial ratio indicating the relative proportion of shareholder's equity and debt used to finance a company's assets. The two components are often taken from the firm's balance sheet or statement of financial position, but the ratio may also be calculated using market value for both, if the company's debt and equity are publicly traded, or using a combination of book value for debt and market value for equity financially. A high debt/equity ratio generally means that a company has been aggressive in financing its growth with debt. This can result in volatile earnings as a result of the additional interest expense. This can result in volatile earnings as a result of the additional interest expense. A low debt/equity ratio usually means that a company has been friendly in financing its growth with debt and more aggressive in financing its growth with equity.

Table 2 shows that debt equity ratio in case of QK is just identical as its average is 0.58. This is an indication of proper debt-equity management. A high debt-equity ratio is observed in case of KT with an average of 0.33, which means the company has been aggressive in financing its growth with debt. Coefficient of variation of debt-equity ratio of QK and KT is 0.92% and 0.88% respectively.

**Table 2. Debt Equity Ratio**

Year	Debt Equity Ratio		Interest Coverage Ratio	
	QKWPL KTML	AVG	QKWPL AVG	KTML
2011	0.30 0.23	0.16	0.30 2.59	4.88
2010	0.39 0.39	0.39	0.37 1.51	2.66
2009	0.99 0.66	0.34	1.94 1.21	0.48
2008	0.33 0.33	0.34	2.17 1.65	0.14
2007	0.58 0.43	0.28	3.60 1.83	0.07
2006	0.90 0.61	0.33	4.94 2.77	0.61
Mean	0.58 0.44	0.30	2.22 1.84	1.47
C.V (%)	0.92 0.90	0.88	0.49 0.43	0.93

### 3.3.4 Interest Coverage Ratio (ICR)

A ratio used to determine how easily a company can pay interest on outstanding debt. The interest coverage ratio is calculated by dividing a company's earnings before interest and taxes (EBIT) of one period by the company's interest expenses of the same period. The lower the ratio, the more the company is burdened by debt expense. When a company's interest coverage ratio is lower, its ability to meet interest expenses may be questionable and it indicates that the company is not generating sufficient revenues to satisfy interest expenses. The interest coverage ratio is a measure of the number of times a company could make the interest payments on its debt with its earnings before interest and taxes, also

known as EBIT. The lower the interest coverage ratio, the higher is the company's debt burden and the greater the possibility of bankruptcy or default. For bond holders, the interest coverage ratio is supposed to act as a safety gauge. It gives you a sense of how far a company's earnings can fall important because it gives a clear picture of the short-term financial health of a business.

Table 2 shows that interest average ratio in cash of QK and KT is less than industry average as its averages 2.22 and 1.47 respectively. Coefficient of variation of interest coverage ratio of QK and KT is 0.49% and 0.93% respectively.

### 3.3.5 Inventory Turnover Ratio (ITR)

The inventory turnover ratio gives a general view on the inventories of a company. In order to calculate it you should divide the annual sales/cost of sales of the company by its inventory. The result represents the turnover or inventory or how many times inventory was used and then again replaced. This number is representative for a one year time period. If the value of the inventory-turnover ratio is low, then it indicates that the management team doesn't do its job properly in managing inventories. This ratio should be compared against industry averages. A low turnover implies either strong sales or ineffective buying. High inventory levels are unhealthy because they represent an investment with a rate of return of zero. It also opens the company up to trouble should prices begin to fall.

Table 3 shows that inventory turnover ratio of the QK and KT during the period of the Jan2012 and march2012. Here QK is 32.18 in case of less than the industry average and KT is 88.44 in case of more than industry average. The coefficient of variation inventory turnover ratio is 0.16% and KT is 0.03 and respectively. Greater variability in the inventory turnover ratio indicates improper or inefficient management of inventory.

**Table 3. Inventory Turnover Ratio**

Year	Inventory Turnover Ratio		Debtors Turnover Ratio	
	QKWPL AVG	KTML	QKWPL AVG	KTML
2011	8.38	72.42	44.26	34.03
	40.4		39.14	
2010	24.76	87.53	29.61	16.09
	56.14		22.85	
2009	38.86	87.50	17.80	16.11
	63.19		16.95	
2008	12.60	98.09	35.78	11.27
	55.34		23.52	
2007	25.10	100.70	37.44	13.44
	62.9		25.44	
2006	83.42	84.41	31.64	15.55
	83.91		23.59	
Mean	32.18	88.44	32.75	17.75
	60.31		25.24	
C.V (%)	0.16	0.03	0.09	0.16
	0.05		0.14	

### 3.3.6 Debtors Turnover Ratio (DTR)

Trade debtors are expected to be converted into cash within a short period time and are included in CA. Hence, the liquidity position of concern to pay its short term obligations in time

depends upon the quality of its trade debtors. It indicates the rate at which debtors are converted to cash, helps in formulating the credit policy by indicating whether investment in debtors is within limits, and indicates if capital is blocked in slow paying debtors. A high DTR indicates a lenient credit policy, over investment in debtors or slow paying debtors. However it may also result in higher sales. The higher the value of debtor's turnover the more efficient is the management of debtors or more liquid the debtors are. Similarly, low debtors turnover ratio implies inefficient management of debtors or less liquid debtors. It is the reliable measure of the time of cash flow from credit sales. There is no rule of thumb which may be used as a norm to interpret the ratio as it may be different from firm to firm.

Table 3 shows that debtor's turnover ratio of QK during the period of the jan2012 and march2012 very satisfactory as its average are 35.75 higher than 25.24 which is the industry average. Then the ratio of KT during the period of the jan2012 to march2012 very unsatisfactory as its average is 17.75 lowers the 25.24 which is the industry average. It implies more efficient management of debtors or more liquid debtors. The coefficients of variations are 0.09 and 0.16 respectively.

### 3.3.7 Net Profit to total Asset Ratio (NPTAR)

Net profit to total asset measures a company's earnings in relation to all of the resources it had at its disposal (the shareholders 'capital plus short and long term borrowed funds), thus, it is the most Stringent and excessive test of return to shareholders.

**Table 4. ROI Ratio**

Year	Net profit to total asset ratios		Return on Investment Ratios	
	QKWPL AVG	KTML	QKWPL AVG	KTML
2011	1.10	2.99	3.24	11.12
	2.04		7.18	
2010	1.10	1.62	2.70	8.266
	1.36		5.48	
2009	2.31	3.31	6.56	14.37
	2.81		10.46	
2008	4.42	0.02	10.03	0.08
	2.22		5.05	
2007	4.91	0.32	13.78	1.06
	2.61		7.42	
2006	4.25	3.20	15.98	11.17
	3.72		13.57	
Mean	3.01	1.91	8.71	7.67
	2.46		8.19	
C.V (%)	0.43	0.63	0.26	0.31
	0.36		0.22	

If a company has no debt, the return on assets and return on equity figures will be the same. In order to calculate it you should divide the total assets of the company by its net profits after tax. The lower the net profit per rupee of assets, the more asset-intensive a business is.

The higher the net profit per rupee of assets, the fewer assets – incentive a business is. All things being equal the more asset-intensive a business the money must be reinvested into it to continue generating earnings.

Table 4 exemplifies that net profit to total asset ratio of QK and KT during the study period of the Jan2014 and March2014. It implies that the companies under the study are more asset incentive. Coefficient of variation of the net profit to total asset ratio of QK and KT is 0.43% and 0.63% respectively. Lesser variability in the net profit to total asset ratio indicates proper or efficient management of asset.

### 3.3.8 Return on Investment Ratio (ROIR)

Return on Investment ratio is used by financial analysts to ascertain the best investment plans. It is also an important tool used by investors and shareholders, while making investment decisions. A performance measure used to evaluate the efficiency of an investment or to compare the efficiency of a number of different investments. To calculate ROI, the benefit (Return) of an investment is divided by the cost of the investment; the result is expressed as a percentage or a ratio. Return on investment ratio for a company shows how much profit a company is making against the investments made by the shareholders and the investors. Return on investment ratio is used to compare different investment options by an investment advisor. An investment with a higher ROI ratio is more lucrative option as compared to an investment with a lower ROI ratio. An investment with a negative or lower ROI Ratio is most likely to be discontinued by the investors.

### 3.3.9 Debt to Total asset Ratio (DTAR)

The debt to total asset ratio is an indicator of financial leverage. It provides the -percentage of total assets that were financed by creditors, liabilities, debt. Debt-total asset ratio is the proportion of total liabilities to total asset. It indicates what proportion of the company's assets is being financed through debt. A lower ratio means a majority of assets are financed through equity. Its assets are financed more through equity rather than debt and higher ratio means they are financed more by debt. Furthermore it can be interpreted a high ratio as a highly debt leveraged firm. A higher percentage indicates more leverages and more risk. Companies with high ratios are placing themselves at risk, especially in an increasing interest rate market. Creditors are bound to get worried if the company is exposed to a large amount of debt and may demand that the company pay some of it back.

Table 5 shows exemplifies that debt to total asset ratio of QK is more than industry average so it is more satisfactory and the ratio of KT is less than industry average so it is unsatisfactory of the one. The values of coefficient of variations are 1.14% and 1.16% which is lower than industry average.

### 3.3.10 Debt to Net worth Ratio (DNWR)

Debt to net worth ratio measures is used in the analysis of financial statements to show the amount of protection available to creditors. The ratio equals total liabilities divided by total stockholders' equity also called debt to net worth ratio. A high ratio usually indicates that the business has a lot of risk because it must meet principal and interest on its obligations. Potential creditors are reluctant to give financing to a company with a high debt position. However, the magnitude of debt depends on

the type of business. Usually book value is used to measure a firm's debt and equity securities in calculating the ratio. Market value may be a more realistic measure however because it takes into account current market conditions.

**Table 5. Debt to Total asset ratio**

Year	Debt to Total asset ratio	
	QKWPL AVG	KTML
2011	0.10 0.07	0.04
2010	0.16 0.11	0.07
2009	0.34 0.20	0.07
2008	0.14 0.12	0.09
2007	0.20 0.14	0.08
2006	0.24 0.16	0.09
Mean	0.19 0.13	0.07
C.V (%)	1.48 1.61	1.42

Table 6 shows that debt to net worth ratio of Qk and KT during the study period of the Jan2012 and march2012 the Qk is 1.07 in case of the more than industry average so it is more satisfactory and also KT is 0.42 in case of the less than industry average so it is less satisfactory. The coefficients of variations are 1.07% and 0.42% respectively.

**Table 6. Debt to net worth ratio**

Year	Debt to Net worth ratio	
	QKWPL AVG	KTML
2011	0.38 0.96	1.55
2010	0.24 1.33	2.43
2009	0.37 1.29	2.21
2008	0.49 0.94	1.39
2007	0.56 0.84	1.13
2006	0.22 1.33	1.44
Mean	0.54 1.12	1.69
C.V (%)	1.07 0.45	0.42

## 3.4 Financial Performance through Multiple Regressions

To measure the financial performance of selected two garments companies in India. It is important to study financial performance indicators namely, current ratio, liquid ratio, debt-equity ratio, interest coverage ratio, inventory turnover ratio, debtors turnover ratio, return on investment ratio, net profit to total asset ratio, debt to total asset ratio, debt to net worth ratio. It has been analyzed in the previous chapter. Now to study the joint variations of these associations, linear regression (multiple regressions) analysis has been adopted. An attempt has been made to examine composite impact of financial

performance indicators on profitability through the sophisticated statistical techniques. Accordingly multiple regression techniques have been applied to study the joint influence of the selected ratios indicating company's financial position and performance on the profitability and the regression coefficients have been tested with the help of the most popular 't' test. In this study, CR, LR, DER, ICR, ITR, DTR, NPTAR, DTAR, DNWR and NWTAR have been taken as the explanatory variables and ROIR has been used as the dependent variable. The regression model used in this analysis parameters of the ROIR line.

**3.4.1 Joint Impact of Performance Indicators on Profitability of QKWPL**

Multiple regression analysis of QKWPL has been tabulated in Table. It proves the potency of relationship between the dependent variable, ROIR and all the independent variables taken together and the impact of the independent variables on the profitability.

influenced by its independent variables. It is also evident from the value of R square that 100 percent of variation in ROIR was announced by the joint variation in all the independent variables. Coefficient of determination is also 100 percent indicates that the regression line perfectly fits the data. Standard error of estimate is perfectly associated with regression analysis. Such a significant variation could be justified as the impact of many other financial performance indicators, which have not taken into the study, in addition to the effect of the used in the study.

**3.4.2 Joint Impact of Performance Indicators on Profitability of KTML**

The multiple correlation coefficients between the dependent variable ROIR and the independent variables CR, LR, DER, ICR, DTR, NPTAR and NWTAR taken together was 1.00. It indicates that the profitability was just about perfectly influenced by its independent variables.

**Multiple regression analysis of QKWPL coefficients (a)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	-12.619	.000						
	CR	1.035	.000	.209			-.864	1.000	.084
	ITR	.146	.000	.726			.628	1.000	.117
	DTR	.184	.000	.298			.032	1.000	.099
	NPTAR	3.043	.000	.957			.926	1.000	.375
	DNWR	-3.215	.000	-.204			.836	-1.000	-.032

a. Dependent Variable: ROI

Model		Beta In	t	Sig.	Partial Correlation	Co linearity Statistics
						Tolerance
1	LR					.000
	DER					.000
	ICR					.000
	DTAR					.000

a. Predictors in the Model: (Constant), DNWR, DTR, NPTAR, CR, ITR

b. Dependent Variable: ROI

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	1.000 <sup>a</sup>	1.000			1.000		5	0	

a. Predictors: (Constant), DNWR, DTR, NPTAR, CR, ITR

b. Dependent Variable: ROI

**3.4.2 Joint Impact of Performance Indicators on Profitability of KTML**

The multiple correlation coefficients between the dependent variable ROIR and the independent variables CR, LR, DER, ICR, DTR, NPTAR and NWTAR taken together was 1.00. It indicates that the profitability was just about perfectly

It is also evident from the value of R square that 100 percent of variation in ROIR was announced by the joint variation in all the independent variables. Coefficient of determination is also 100 percent indicates that the regression line perfectly fits the

data. Standard error of estimate is perfectly associated with regression analysis. Such a significant variation could be justified as the impact of many other financial performance indicators, which have not taken into the study, in addition to the effect of the used in the study.

The calculated value of t is more than the significance value; hence null hypothesis is not accepted.

Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	35.328	.000						
	LR	-3.203	.000	-.103			-.503	-1.000	-.070
	ITR	-.269	.000	-.409			-.734	-1.000	-.097
	DTR	-.419	.000	-.514			.378	-1.000	-.166
	NPTAR	3.986	.000	.883			.979	1.000	.392
	DNWR	-.685	.000	-.052			.429	-1.000	-.042

a. Dependent Variable: ROI

Excluded Variables<sup>b</sup>

Model		Beta In	t	Sig.	Partial Correlation	Co linearity Statistics
						Tolerance
1	CR					.000
	DER					.000
	ICR					.000
	DTAR					.000

a. Predictors in the Model: (Constant), DNWR, DTR, NPTAR, LR, ITR

b. Dependent Variable: ROI

Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	1.000 <sup>a</sup>	1.000			1.000		5	0	

a. Predictors: (Constant), DNWR, DTR, NPTAR, LR, ITR

b. Dependent Variable: ROI

**4. Test of Hypotheses**

A hypothesis is an assumption to be tested. The statistical testing of hypothesis is the important technique in statistical inference. Hypothesis tests are widely used in business and industry for making decisions. The following are the hypotheses framed and tested using test of significance at 5% level of significance.

**Hypothesis 1**

Ho: When return on investment increases, liquid ratio remains same.

H1: When return on investment increases, liquid ratio also increases.

**Result:**

	N	Mean	Std. Deviation	Std. Error Mean
ROI	6	8.1933	3.25312	1.32808
LR	6	1.5067	.41346	.16879

  

Test Value = 0						
	T	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
ROI	6.169	5	.002	8.19333	4.7794	11.6073
LR	8.926	5	.000	1.50667	1.0728	1.9406

**Hypothesis 2**

HO: When return on investment increases, net profit to total asset ratio remains same.

H1: When return on investment increases, net profit to total asset ratio also increases.

**Result**

	N	Mean	Std. Deviation	Std. Error Mean
NPTAR	6	2.4600	.79707	.32540
ROI	6	8.1933	3.25312	1.32808

Test Value = 0						
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
NPTAR	7.560	5	.001	2.46000	1.6235	3.2965
ROI	6.169	5	.002	8.19333	4.7794	11.6073

The calculated value of t is more than the significance value; hence null hypothesis is not accepted.

**Hypothesis 3**

Ho: When return on investment increases, debt to net worth ratio remains same.

H1: When return on investment increases, debt to net worth ratio also increases.

**Result**

	N	Mean	Std. Deviation	Std. Error Mean
DNWR	6	1.1150	.22510	.09190
ROI	6	8.1933	3.25312	1.32808

Test Value = 0						
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
DNWR	12.133	5	.000	1.11500	.8788	1.3512
ROI	6.169	5	.002	8.19333	4.7794	11.6073

The calculated value of t is more than the significance value; hence null hypothesis is not accepted.

**Hypothesis 4**

Ho: When return on investment increases, debt equity ratio remains same.

H1: When return on investment increases, debt equity ratio also increases.

**Result**

	N	Mean	Std. Deviation	Std. Error Mean
DER	6	.4417	.16497	.06735
ROI	6	8.1933	3.25312	1.32808

Test Value = 0						
	T	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
DER	6.558	5	.001	.44167	.2685	.6148
ROI	6.169	5	.002	8.19333	4.7794	11.6073

The calculated value of t is more than the significance value; hence null hypothesis is not accepted

**Hypothesis 5**

Ho: When debt equity increases, interest coverage ratio remains same.

H1: When debt equity increases, interest coverage ratio also increases.

**Result**

	N	Mean	Std. Deviation	Std. Error Mean
DER	6	.4417	.16497	.06735
ICR	6	3.7267	4.84439	1.97771

Test Value = 0						
	T	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
DER	6.558	5	.001	.44167	.2685	.6148
ICR	1.884	5	.118	3.72667	-1.3572	8.8105

The calculated value of t is more than the significance value; hence null hypothesis is not accepted

**Hypothesis 6**

Ho: When net profit to total asset ratio increases, debt equity ratio remains same.

H1: When net profit to total asset ratio increases, debt equity ratio also increases.

**Result**

	N	Mean	Std. Deviation	Std. Error Mean
NPTAR	6	2.4600	.79707	.32540
DER	6	.8017	.97481	.39796

Test Value = 0						
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
NPTAR	7.560	5	.001	2.46000	1.6235	3.2965
DER	2.014	5	.100	.80167	-.2213	1.8247

The calculated value of t is more than the significance value; hence null hypothesis is not accepted

**Hypothesis 7**

Ho: When return on investment ratio increases, current asset ratio remains same.

H1: When return on investment ratio increases, current ratio also increases.

**Result**

	N	Mean	Std. Deviation	Std. Error Mean
CR	6	1.9550	.51240	.20918
ROI	6	8.1933	3.25312	1.32808

Test Value = 0						
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
CR	9.346	5	.000	1.95500	1.4173	2.4927
ROI	6.169	5	.002	8.19333	4.7794	11.6073

The calculated value of t is more than the significance value; hence null hypothesis is not accepted

**5. Conclusion and Suggestions**

**5.1 Based on Descriptive Statistics**

QKWPL and KTML have been able to meet their matured current obligations under the study period. Overall management of liquidity of QKWPL and KTML is an indication of proper management fund. QKWPL are just identical for proper debt equity management and KTML has been aggressive in financing its growth with debt QKWPL and



KTML are overstrained by debt expense and the greater the possibility of bankruptcy or default. Strong sales sign overall satisfactory inventory level are seen in case of QKWPL and KTML under the study. But debtor's turnover ratio of KTML, of all the individual years except 2007 is very unsatisfactory. It is evident from net profit to total asset ratio of all the companies under the study are more asset-intensive. It is an indication of more money must be reinvested into it to continue generating earnings. Net profit to total asset ratio of all the years except 2003 and 2004 is poorer.

Debt to net worth ratio of both the companies is higher that is an indications less risk about debt obligations. This ratio of all the individual years is poorer that indicates proper or efficient management of financial risk. Net worth to total asset ratio of KTML during the period of study is lower. It is an indication more risk about debt obligations. But this ratio is higher in case of KTML that indicates lower risk about debt obligations. Net worth to total asset ratio of all the years is poorer that means a less risk about debt obligations.

## 5.2 Based on Multiple Regressions

In QKWPL, ROI and two liquidity indicators CR and LR are positively associated. ROI and DER are negatively associated ROI and ICR are positively associated. ITR and DTR indicators are positively associated then NPTAR is seen a positively association between DTAR and DNWR with ROI is observed.

In KTML, ROI and two liquidity indicators CR and LR are positively associated. ROI and DER are negatively associated ROI and ICR are positively associated. ITR and DTR indicators are positively associated then NPTAR is seen a positively association between DTAR and DNWR with ROI is observed.

## 5.4 Suggestions

For solving the problems of debtors management in case of KTML an effective professional coordination between sales, production and finance departments is called for prompt billing timely reminders to defaulting customers and immediate action should be ensured. The investment in loans and advances should be minimized to the extent possible. To improve the financial position of QKWPL and KTML, equity oriented dependability have to be reduced properly. To improve the financial stability of both the companies under the study, proper mixture of stake in the business between the owners and the creditors have to be made in which significant pressure on future cash flows can be avoid. Higher degree of multiple correlations implies the presence of explained variables that have lead to lower profitability over and above poor financial position and performance are in action. To remove such problems, accurate liquidity management, correct solvency or leverage management and appropriate wealth management is highly needed.

As far as selected enterprises are concerned, the management of the companies should contemplate its efforts in maximizing assets and minimizing liabilities so that the company's financial position could be improved.

## 5.5 Conclusion

From the study of the financial performance of the select garments companies it can be concluded that the liquidity position was strong in case of QKWPL and KTML thereby reflecting the ability of the companies to pay short-term obligations on due dates. Long-term solvency in case of QKWPL and KTML in all years which shows that companies relied more on external funds in terms of long-term borrowings thereby providing a lower degree of protection to the creditors. Debtor's turnover ratio of QKWPL needs to be improved as the solvency of the firm depends upon the sales income generated from the use of various assets.

Financial stability ratios in the vein of debt to total asset ratio, debt to net worth ratio , net worth to total asset ratio In cash of both the selected companies have showed a downward trend and consequently the financial stability of selected garments companies have been decreasing at an intense rate. The Indian garments industry will witness an increase in the market share. The sector is poised not only to take new challenges but to sustain the growth momentum of the past decade.

## 5.6 Limitations

Study exclusively depends on the published financial data, so it is subject to all limitation that is inherent in the condensed published financial statements. The study was conducted for limited time period of three months only.

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