

## Solvency vis-à-vis Liquidity: A Study of Non Performing Assets in Textile Sector Companies in Punjab, India

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### Abstract

The present study aims at finding out the real causes of massive Non-Performing Assets (NPA) in the textile industry of Punjab, India. This is done by analyzing the financials of textile companies of Punjab which were not able to service their debt from 2008-09 to 2017-18. The study attempts to figure out whether these textile companies were facing solvency issues or these were ailing from liquidity crisis. The study also attempts to reveal whether there was any correlation between poor liquidity and lower cash accruals of these NPA textile companies in Punjab. The analysis of financial ratios have revealed that there exists significant difference between liquidity ratios of failed textile companies and non-failed textile companies in Punjab. The study has also pointed out that solvency ratios of failed textile companies do not differ significantly from non-failed textile companies in Punjab. Lastly, the study attempts to suggest guiding principles for financial institutions for laying down minimum standards for liquidity ratios to avoid further slippage of loans into NPA Category.

**Keywords.** Bankruptcy, Failure, Liquidity, Ludhiana, Non-Performing Assets, NPA, Punjab, Solvency, Textile Industry

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### 1. Introduction

India has witnessed a number of down falls of family firms on account of various reasons such as business failures, financial failures, failure in succession planning, technological, political and other economic reasons. But Indian banking industry has never seen such levels of family business failures across India resulting to higher Non Performing Assets (NPA) levels. The present level of NPAs are putting pressure on capital adequacy of public and private sector banks due to which most of banks are under Preventive Corrective Action (PCA). At present Central Government and Reserve Bank of India are finding ways and

means to restore capital adequacy levels of the banks so that credit creation may be improved in the economy. Bad loans are increasing continuously since last four years in Indian banking sector. Indian banking sector is passing through the toughest time as the ratio of Gross Non-Performing Assets (GNPA) to total advances of all Scheduled Commercial Banks (SCB) of India have reached at an all-time high level of 11.21 % during the financial year 2017-18 as per annual report of Reserve Bank of India (RBI). In view of mounting NPAs in textile sector in Punjab, it is the need of the hour to unearth the real causes of failure of textile companies in Punjab whether they have failed due to solvency

issues or liquidity crisis.

## 2. Review of Literature

Numerous studies on the subject of bankruptcy and business failure have been carried out by researchers from all the corners of the world. A study done by Goswami and Gulati (2021) has revealed that banking system in India has failed to benefit from the technological up-gradations in banking industry and is not able to generate early warning signals of default by borrowers and mitigation of risk. The study has also suggested that the need of the hour is to initiate utilization of installed technology in banking industry for establishment of effective credit appraisal system which shall help in improvement of assets quality of banks and avoidance of further risk of loss in banking sector due to loan defaults in India.

Lending behaviour of banks too has put an impact on the quantum of non-performing assets. Cucineli (2016) has explained that the banks whose credit extension has grown before financial crisis have larger share of bad loans in Italy. The study has also suggested that the banks which have granted excessive credit before crisis pulled back their hands during crisis which means they didn't offer further credit to their borrowers to whom they have already lent excessively before crisis. The policy of credit contraction by these banks has affected adversely the borrowers as the credit was not available for sailing through during the crisis which has resulted in larger NPAs. The banks started reducing lending activity to firms and families after massive credit expansion during 2007. The study has showed positive relationship between non-performing loans and credit contraction by banks (Panetta, 2013). The studies related to

Turkey have found significant relationship between non-performing loans and lending pattern of state owned banks (Tomak, 2013).

Javaid and Javid (2018) have done a study related with Pakistan and have suggested that prediction models of failure designed in a debtor oriented regime held good for prediction of defaults and evaluation of going concern assumption of a firm in creditor oriented regime too. In financial literature both the terms 'bankruptcy' and 'going concern' are overlapping. Auditors have to provide opinion about going concern or non-going concern for firms, once firms file for bankruptcies (Bellovary, Giacomino and Akers, 2007). Accounting data based prediction models provide better prediction than market data based prediction models (Altman *et al.*, 2017).

Generally, organizations fail due to decline process coupled with financial failure; means organizational failure is described as systematic decline in financial ratios and depletion of resources of the organization. Four stages of failure are described as declining profitability, declining strength, declining liquidity and financial crisis (Lukason and Laitinen, 2019). A study of the firms of Finland has suggested that linear time-series correlations are higher in failing firms rather than non-failing firms due to loss generations in failing firms (Laitinen, 2021). Studies which have focus on the process of firm failure have thrown light on different ways of collapses of firms (Lukason and Laitinen, 2016). Review of literature on the study of failure of firms has suggested that various financial ratios i.e. profitability, liquidity and leverage ratios are significant to differentiate between failed and non-failed firms (Lukason and Laitinen, 2019).

It is also observed that despite the presence of several laws and schemes there exists a dire need of a single law which can protect the interest of the creditors. There are five different platforms for recovery of debt from the debtors i.e. Debt Recovery Tribunal, Winding up petition in High Court, SARFAESI Act, Arbitration Act and Civil Court (Ravi, 2015). RBI has also suggested that there is an urgent need of model for early warning signal of financial distress in the wake of rising non-performing assets and economic slowdown (RBI, 2013).

### 3. Needs & Objectives of the Study

RBI's annual reports for the financial year 2018-19 has revealed that public sector banks had Gross Non Performing Assets (GNPA) of INR 7,39,541 crores out of total advances of INR 59,26,286.37 crores which amounts to 12.47 %. Interestingly, GNPA to advances ratio for textile sector has stood at 17.42 % for the year June, 2016 as per Motilal Oswal Securities Ltd (MOSL), Report published in Zee Business which has shown that Gross NPA in textile sector was INR 37,383 crores out of total advances of INR 2,14,574 crores. Bi-annual report of RBI for the year 2016 has declared textile sector as sector with second highest NPA at 6.4 % level, the first being steel sector with 7.8 % NPA. Annual report of SBI for the year 2019-20 has shown total NPA of 10.56 % in textile sector.

Total NPA of SBI in Indian textile sector as on 30.09.2018 was Rs. 15,051 crores. Out of total NPA of Rs. 15,051 crores an amount of Rs. 2,576 crores belongs to North India. Out of total NPA of Rs. 2,576 crores of North India an amount of Rs. 1,940 crores belongs to Ludhiana itself which counts for 75 % of total NPA of North India. Top 10 NPA accounts in textile sector in

SBI amounts to Rs. 11,986 crores. Out of these top 10 NPA accounts of textile sector in SBI, three accounts belong to Ludhiana namely SEL Manufacturing Co. Ltd (1,563 crore), Venus Garments (India) Ltd (129 crore) and Satia Synthetics Ltd (75 crore).

Reasons for increased level of NPA in textile sector should be investigated and should be analysed in order to know the actual cause of bankruptcy of textile firms. Is it due to higher capital gearing or due to liquidity crisis of textile firms which has caused huge loss of public money? Punjab is no different than what has happened across India. The present study is an attempt to analyse the financial performance of textile sector in Punjab to differentiate between NPA companies and investment grade companies with specific reference to textile companies operating from Ludhiana as Ludhiana is the textile hub of Punjab.

The present study is important for urgent diagnosis of rising bankruptcies in textile sector in Punjab.

The present study has following objectives:

- To find out real causes of increasing NPA in textile companies in Punjab, India.
- To analyse whether the NPA textile companies are suffering from solvency issues or liquidity crisis.
- To find out if there is any role of capital structure in the bankruptcy of textile companies in Punjab.
- To evolve guiding principles to avoid further downgrading of accounts in bad loan category.

### 4. Research Methodology

The present study is descriptive in nature since it analyses historical financial data of

textile companies having NPA loan accounts in comparison with financial data of non-failed textile companies in Punjab. Thirty financial ratios are computed, compared and analysed for a set of 17 failed textile companies and another set of 17 non-failed textile companies of Punjab to find out whether there is any significant difference in their liquidity and solvency ratios. Student t-test is used to find out the differentiating capabilities of various financial ratios between failed and non-failed textile companies in Punjab.

#### 4.1. Hypothesis Testing

In the present study following hypothesis are tested for evaluating the significance of difference between solvency ratios and liquidity ratios of two sets of failed and non-failed textile companies by using student t-test as the number of variables in each group are less than 30.

Hypothesis for the study:

H0 – 1. There is no significant difference between solvency ratios of failed and non-failed companies operating in textile sector in Punjab.

H0 – 2. There is no significant difference between liquidity ratios of failed and non-failed companies operating in textile sector in Punjab.

Group A\* includes 17 textile companies with standard loan accounts and Group B\*\* includes 17 textile companies with NPA loan accounts.

#### 5.1 Solvency Ratios:

As depicted in Table 1 that difference in the mean values of solvency ratios is not significant among textile companies with NPA accounts and textile companies with investment grade rating as per table 1

**Table 1: Comparative Solvency Ratios**

Ratio	Mean Value		Mean Difference	p-value	Result
	NPA Accounts	Standard Accounts			
Total Tangible Assets/Current Debt	3.98	18.05	14.07	0.2439	Insignificant
Total Tangible Assets/Long term Debt	7.50	8.39	0.89	0.8154	Insignificant
Total Tangible Assets/Total Debt	1.68	14.80	13.12	0.2826	Insignificant
Total Debt/Tangible Net Worth	4.38	1.46	2.92	0.058	Insignificant
Long Term Debt/ Tangible Net Worth	2.37	0.74	1.63	0.113	Insignificant

Therefore, null hypothesis (H0-1) is accepted as no significant difference is observed in any of the solvency ratios of textile companies with NPA loan accounts and textile companies with investment grade rating in Punjab during the period of the study as per table 1 which means that all the companies have different capital structure but there is no significant difference between the leverage level of both the groups of textile companies in Punjab. Thus, it can be inferred that capital structure has not played any

role in the bankruptcy of textile companies in Punjab.

#### 5.2 Liquidity Ratios:

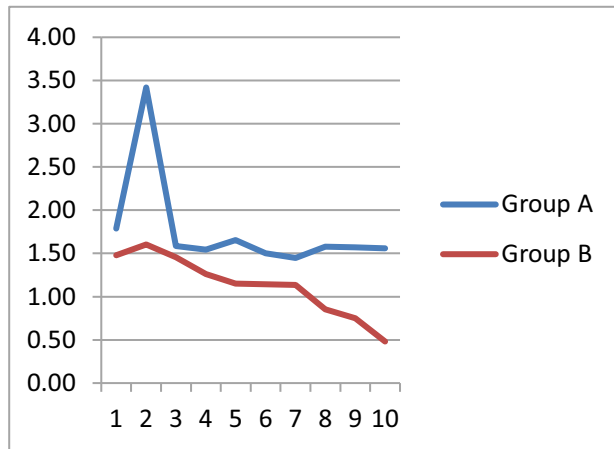
##### Current Ratio

In order to judge the liquidity of a company current ratio is used. In the present study current ratio of 17 failed textile companies is compared with 17 non-failed textile companies in Punjab from 2008-09 till 2017-18 as shown in table 2.

**Table 2: Year Wise Data of Current Ratio**

Current Ratio Times	Mar,09	Mar,10	Mar,11	Mar,12	Mar,13	Mar,14	Mar,15	Mar,16	Mar,17	Mar,18
Non-failed Companies (A)	1.79	3.42	1.59	1.54	1.65	1.50	1.45	1.58	1.57	1.56
Failed Companies (B)	1.48	1.60	1.45	1.26	1.15	1.14	1.13	0.85	0.75	0.48

The data of current ratio is shown graphically in following figure 1.



**Figure 1: Current Ratio Net Working Capital to Total Tangible Assets Ratio (NWC/TTA)**

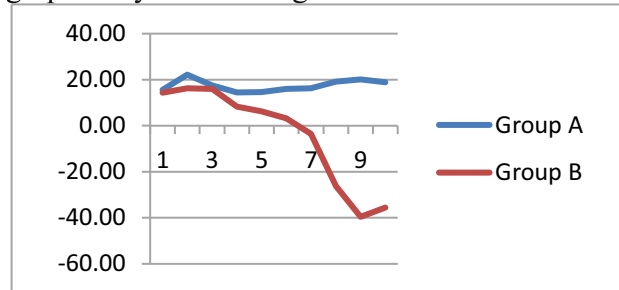
In the present study, net working capital to total tangible assets ratio of 17 failed textile companies is compared with 17 non-failed textile companies in Punjab from 2008-09 till 2017-18. The comparative analysis depicts significant difference between the NWC/TTA ratio of failed and non-failed textile companies in Punjab. The

**Table 3: Comparative EBR (%)**

EBR	Mar,09	Mar,10	Mar,11	Mar,12	Mar,13	Mar,14	Mar,15	Mar,16	Mar,17	Mar,18
Non-failed Companies (A)	17.68	4.66	37.05	-3.82	55.72	30.15	26.80	13.39	16.52	20.67
Failed Companies (B)	119.67	25.30	15.10	713.77	90.81	89.35	185.31	675.92	381.17	280.37

Figure 3 depicts the comparative EBR of failed and non-failed companies for 10 years from 01.04.2008 till 31.03.2018.

figures of NWC/TTA for these 10 years are graphically shown in figure 2.



**Figure 2: NWC/TTA**

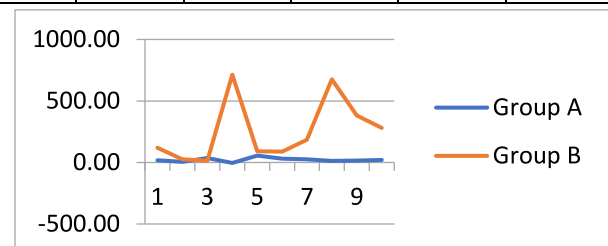
**Excess Borrowing Ratio (EBR)**

In order to evaluate whether the failed companies were availing excess bank borrowings from their bankers or not, excess borrowing ratio for failed and non-failed companies has been computed and compared. Excess borrowing ratio (EBR) is calculated as under:

$$EBR (\%) = EBB / MPBF \times 100$$

(MPBF- Maximum Permissible Bank Finance)

Table 3 shows the EBR (%) for failed and non-failed textile companies in Punjab as under:



**Figure 3: EBR (%)**

**Table 4: t-Test Results of Liquidity Ratios**

Ratio	Mean Value		Mean Difference	p-value	Result
	Failed Companies	Non-failed Companies			
Current Ratio	1.18	1.79	0.61	0.0154	Significant*
Net Working Capital / Total Tangible Assets	-4.16	18.17	22.33	0.0016	Significant**
EBR	0.45	0.47	0.02	0.0226	Significant*

\*Significant at 1% level of significance

\*\*Significant at 5% level of significance

### Results of Liquidity Ratios:

Table 4 depicts that liquidity ratios of failed and non-failed textile companies in Punjab differ significantly therefore null hypothesis is rejected and alternate hypothesis is accepted.

#### Current Ratio

As shown in Table 4, p-value for differential current ratios of failed and non-failed textile companies is 0.0154 which indicates that there exists significant difference between current ratio of failed and non-failed textile companies in Punjab at 5% level of significance.

#### Net Working Capital/Total Tangible Assets

As shown in Table 4, p-value for differential NWC/TTA ratio of failed and non-failed textile companies is 0.0016 which indicates that there exists significant difference between NWC/TTA of failed and non-failed textile companies in Punjab even at 1% level of significance.

#### Excess Borrowing Ratio (EBR)

As shown in Table 4, p-value for differential EBR of failed and non-failed textile companies is 0.0226 which indicates that there exists significant difference between EBR of

failed and non-failed textile companies in Punjab at 5% level of significance.

## 6. Conclusion

Bankruptcy results in closure of firms which is a major area of concern because it leads to unemployment, lower production and lower tax collections. Keeping in view the importance of leverage and liquidity as key driver to business failure or success, the present study has analyzed the financial performances of failed and non-failed textile companies in Punjab with the help of 30 financial ratios grouped in 5 categories. Result of the study revealed that liquidity position of failed and non-failed companies differs significantly. The profitability of non-failed companies is comparatively much higher than the failed companies due to sound liquidity. Comparison of solvency ratios of both the classes of companies revealed that there is no significant difference in the solvency ratios of failed and non-failed companies in textile industry of Punjab which clearly means that capital structure doesn't have any role in failure of failed textile companies in Punjab.

The study has concluded that there exists no significant difference between solvency ratios of 17 failed textile companies as compared to 17 non-failed companies in the state of Punjab

during 01.04.2008 till. 31.03.2017. The failed textile companies are suffering from poor liquidity position which has resulted into lower capacity utilization and hence, lower profitability and lower cash generations.

## 7. Recommendations

The result of the study revealed that the loan accounts of textile companies of Punjab turned NPA due to poor liquidity positions of these companies. Therefore, it is recommended that bankers should put more emphasis on the projections of liquidity and cash flows as the study has revealed that there exists significant difference in liquidity position and cash flow ratios of two sets of textile companies in Punjab. The study has revealed that there is no significant difference between solvency ratios of failed and non-failed textile companies in Punjab. However, there may be difference between solvency levels in different sectors. The study has revealed that current ratio of failed and non-failed companies differs significantly. Therefore, in order to ensure sufficient liquidity in the companies the bankers should stipulate minimum level of 1.33 for current ratio to avoid losses due to shortage of working capital. The bankers must increase monitoring of use of working capital limits to avoid diversion of short term funds into long term utilization by the companies. The bankers should consider allowing larger repayment period with adequate moratorium period so that liquidity of the firms may not be affected in case of delay in project implementation or delay in achieving projected capacity utilization. The lenders should stipulate pre-conditions of upfront promoter's margin money to avoid possibility of diversion of working capital for capital expenditure which is

main reason of liquidity crisis in companies engaged in expansions. Lenders and restructuring professionals should consider different measures for transformation of failed companies and should avoid "one size fits all" solutions while financing or restructuring of failed companies (Demary, Hornik and Watfe, 2016).

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