Structure and Utilization of Receivable of Listed Non-Government Manufacturing Companies in Nepal

Kedar Raj Gautam
Lecturer, Faculty of Management
Tribhuvan University
Janapriya Multiple Campus, Pokhara

Abstract
When the firm sells goods on credit rather than requiring immediate cash payment such kind of credit sales generate accounts receivable. Especially in small firms, accounts receivable may be a factor that decides success or failure. In large firms, efficient accounts receivable management affects the firm’s risk, return, and share price. The volume of receivable, their composition, and management affect the liquidity and profitability. They have, therefore, to be managed in such a way that strikes a balance between risk and return. This paper attempts to analyze the structure and utilization of receivable of listed manufacturing companies in Nepal. The emphasis in this study is on manufacturing enterprises because they provide the best laboratory for analyzing the structure and utilization of receivable. To analyze the structure and utilization of receivable, ratio analysis is used along with statistical tools such as mean and standard deviation. The analysis shows that there was wide variation in investment in receivable. The average ratio of receivable to current assets ranged between 0.35% to 58%. Similarly, utilization of receivable in terms of average collection period ranged between 1 to 195.8 days representing on average 58.62 days.

Key Words: Receivable, Liquidity, Risk, Profitability and Bad debt.

Introduction
The study of accounts receivable management occupies an important place in financial management. Firms typically sell merchandise on credit rather than requiring immediate cash payment. Such credit sales generate accounts receivable (Mian and Smith, 1992:169). Trade credit appears on both sides of the balance sheet. For the buyer, it is a source of financing through accounts payable, while for the seller, trade credit is an
investment in accounts receivable. Although trade credit has long been an important source of financing for corporations, it is one of the least understood methods of doing business (Long et al. 1993: 117).

Business today is just difficult to run without credit sales. Earning a steady amount of profit requires successful sales activity (Pandey, 1999: 809). As credit transactions have grown, credit decision has become a major responsibility of financial management (Kuchhal, 1980: 205). As in the case of receivable, there involves a trade-off between risk and return. Increased in receivable would lead to increase in sales and thus higher returns are expected. But this would also lead to increase in risk and there is a possibility of increase in bad debts. Management of accounts receivable plays an important role in maximizing the value of an enterprises (Schiff and Schiff, 1998: 116). The volume of receivable, their composition and management affects the liquidity and profitability. They have, therefore to be managed in such a way that it promotes sales and profit until a point is reached where the return on investment in further funding the receivable is less than the cost of funds raised to finance additional credit and the risk remains within the acceptable limit (Ettinger and Golieb, 1989: 117). Proper management of the cash cycle through the effective use of inventory and accounts receivable management models should enhance the value of the corporation and shareholder wealth (Solomon and Pringle, 1987: 224).

Accounts receivables need to be managed effectively as it has much to do in achieving growth in sales, minimizing risks cost of collection and generating quick turnover. Moreover, credit standard maintained, credit terms offered, expected return on investment and monitoring payment patterns affect the level and size of credit policy. It is neither desirable for corporations to follow loosening credit policy nor tightening credit policy. But what is needed is optimum credit policy (Bradley, 1974: 208).

Some of the authors are of the opinions that optimal credit strategies and optimal pricing policy are independent functionally from a wealth maximization perspective. In view of this concept, the focus of receivable is neither toward profit maximization nor toward minimization but on value-cum wealth maximization through best trade-off between benefits and cost. What is needed for corporations is to match the credit policy in accordance with objectives of value cum wealth maximization through balancing risks and benefits. Moreover, the collection of accounts receivable should be properly watched to keep ‘eye to eye’ on minimization bad debt losses and default risk through the policy of appropriate and attractive discount rates.

Bad debt is the natural outcome of credit sales and credit policy. It arises when a firm is unable to collect its trade receivable. It can be expected to increase with liberal credit policy and decrease with stiff or restrictive credit policy. Changes in credit policy can also bring change in the volume of sales. The extenuation of trade credit has a major impact on sales, costs and profitability. Other thing being equal, a relatively liberal policy and, therefore, higher investment in receivable will produce larger sales. However, cost will be higher with liberal policies than with more stringent measures. Therefore, accounts receivable management should aim a trade-off between profit
benefit and risk cost (Hossain, 1996: 6).

This study, therefore, attempts to examine the structure of investment in accounts receivable and its utilization of listed non-government manufacturing enterprises in Nepal. The emphasis in this study is on manufacturing enterprises because they provide the best laboratory for analyzing the receivable management.

**Data and Method**

Descriptive research design is used to examine the structure and utilization of receivable investment. There were 28 non-government manufacturing enterprises listed in the NEPSE by the end of FY 2001/02. These were regarded as the size of population for the study. Out of 28 enterprises, 9 enterprises were selected via judge mental non-random sampling method by considering the study period from 2053 to 2059. These enterprises selected for the study were representative of listed non-government manufacturing companies (NME) in Nepal. The study was basically based on secondary data. The necessary data and information were collected from different sources such as; annual report of related enterprises via security board, and Website of NEPSE limited, http://www.nepalstock.com. Ratio analysis, which relates balance sheet and income statement items to one another, permits the charting of a firm’s history and the evaluation of its present position. In this study, three types of ratios are used in assessing structure and utilization of receivable. They are: Receivable to Current Assets Ratio (RCA), Receivable Turnover Ratio (RTR) and Average Collection Period (ACP). Similarly, statistical tool such as standard deviation is used to measure the absolute variability of a distribution. A small value of standard deviation indicates a high degree of uniformity of the observation as well as homogeneity of a series. The opposite is true in case of large value of standard deviation.

**Results and Discussion**

**Ratio of Receivable to Current Assets**

The analysis of ratio of receivable to current assets provides a meaningful picture of the current funds invested in the component of current assets. An enterprise is said to be successful if it can operate with the lowest value of receivable to current assets without affecting its sales volume. Thus, the percentage of receivable to current assets can act as a measure of the efficiency of receivable management. The computed values of the ratio of receivable to current assets are presented in Table 1.

| Es  | Year | 2055 | 2056 | 2057 | 2058 | 2059 | \( \bar{X} \) | \( \sigma \) |
|-----|------|------|------|------|------|------|------|------|
| BNTL|      | 1.95 | 1.83 | 1.54 | 1.14 | NA   | 1.62 | 0.36 |
| BNL |      | 0.44 | 0.26 | 0.19 | 0.51 | NA   | 0.35 | 0.15 |
| JSML|      | 4.04 | 4.32 | 3.31 | 3.38 | 3.41 | 3.69 | 0.46 |
Form the Table 1; this reveals that the proportion of receivable to current assets varies widely across the enterprises. Taking industry wise, NLOL has the highest proportion (58 percent), followed by NBBUL (54 percent), SRSML (19.6 percent), AVUL (17 percent), HTIL (11.6 percent) and NLL (8.6 percent), JSML3.69 (percent) BNTL (1.62 percent) and BNL (0.35 percent). On an average the accounts receivable represents approximately 20.05 percent of current assets. The year wise average ratio reveals that the average investment in receivable is 19.38 percent in 2055, decreased up to 17.45 percent in 2058 and then increased up to 24.49 percent in 2059.

Table 1 show that the size of receivable varies widely not only across the enterprises but also within individual enterprises. It varies from 1.14 to 1.95 percent for BNTL, 0.19 to 0.51 percent for BNL, 3.31 to 4.32 percent for JSML, 6 to 11 percent for NLL, 46 to 73 percent for NLOL, 4 to 24 percent for HTIL, 8 to 27 percent for AVUL, 15 to 27 percent for SRSML and 46 to 59 percent for NBBUL. When the ratio of receivable to current assets is compared over a period of time for individual enterprises it is noticed that the size of receivable is largest for NLOL (73 percent) and lowest for BNL (0.19 percent).

When the variability (standard deviation) of the receivable to current assets ratio of is observed, it is found that the variability as measured by standard deviation ranging between 20.17 in 2055 to 28.87 in 2059. NLOL has the highest variability and BNL has the lowest variability.

### Receivable Turnover Ratio

The accounts receivable turnover is a ratio of sales to average accounts receivable. The receivable turnover gives a general measure of the productivity of the receivable investment. Higher the turnover rate, the more effective and rewarding the use of receivable.

The turnover ratios are presented in Table 2. These values across the enterprises in the table indicate that receivable turnover varies widely from one enterprise to another. Taking industry wise, the average receivable turnover is highest for BNL (338.91 times), followed by BNTL (76.78 times), JSML (61.94 times), NLL (46.39 times), HTIL (20.97 times), SRSML (15.86 times), AVUL (14.91 times), NLOL (1.93 times)

Source: Annual Report of Listed NME
and NBBUL (1.93 times). The average ratios across the year indicate that the average receivable turnover has increased first two years up to 78.64 times and then decreased up to 28.87 times in 2059.

Table 2
Receivable Turnover Ratios of Selected Listed Enterprises (Times)

| Es/Year | 2055  | 2056  | 2057  | 2058  | 2059  | $\bar{X}$ | $\sigma$ |
|---------|-------|-------|-------|-------|-------|----------|----------|
| BNTL    | 74.04 | 66.76 | 70.52 | 95.78 | NA    | 76.78    | 13.01    |
| BNL     | 233   | 406.4 | 510.6 | 205.64| NA    | 338.91   | 144.9    |
| JSML    | 53.69 | 45.22 | 68.89 | 65.22 | 76.67 | 61.94    | 12.41    |
| NLL     | 66.16 | 44.43 | 35.06 | 47.89 | 38.43 | 46.39    | 12.13    |
| NLOL    | 2.39  | 2.22  | 1.61  | 1.44  | 2     | 1.93     | 0.40     |
| HTIL    | 6.27  | 32.71 | 4.11  | 29.09 | 32.67 | 20.97    | 14.50    |
| AVUL    | 13.15 | 11.21 | 5.26  | 11.36 | 33    | 14.91    | 10.47    |
| SRSML   | 11.78 | 17.11 | 10.02 | 22.81 | 17.58 | 15.86    | 5.09     |
| NBBUL   | 2.04  | 2.36  | 1.65  | 1.83  | 1.76  | 1.93     | 0.28     |
| $\bar{X}$ | 51.39 | 69.82 | 78.64 | 53.45 | 28.87 | 56.43    |          |
| $\sigma$ | 73.84 | 128.09| 164.38| 65.00 | 25.79 |          |          |

Source: Annual Report of Listed NME

The receivable turnover varies widely not only from one enterprise to another but it also varies widely within the selected individual enterprises. It varies from 66.76 to 95.78 times for BNTL, 205.64 to 510.6 times for BNL, 45.22 to 76.67 times for JSML, 35.06 to 66.16 times for NLL, 1.44 to 2.39 times for NLOL, 4.11 to 32.67 times for HTIL, 5.86 to 33 times for SRSML and 1.65 to 2.04 times for NBBUL.

The variability as measured by the standard deviation of the receivable turnover ratios indicates that BNL has the highest variability and the NBBUL has the lowest variability.

**Average Collection Period (ACP)**

Average collection period (ACP) expresses in terms of number of days the credit sales remains tied up in accounts receivable. It is a measure of efficiency of collection activity of receivable. A higher collection period indicates slower collection and lower quality of trade credit. While shorter collection periods represents better quality of customers and lower cost of collections. The average collection period thus reflects the credit and collection policies of the firm.

The average collection period of the selected enterprises under study are shown in table 3. The average value for BNL (1.5 days) is the lowest average collection period followed by BNTL (4.75 days), JSML (6.2 days), NLL (8.2 days), SRSML (25 days),
AVUL (33.2 days), HTIL (36.4 days), NBBUL (192.2 days) and NLOL (195.8 days). The year wise average collection period indicates that the average collection period varies from lowest 45.11 in 2056 to highest 72.78 days in 2057. The increasing trend of the average collection period indicates recurrence of liquidity problem.

Table 3
Average Collection Period of Selected Enterprises (Days)

| Es/ Year | 2055 | 2056 | 2057 | 2058 | 2059 | \( \bar{x} \) | \( \sigma \) |
|----------|------|------|------|------|------|--------|--------|
| BNTL     | 5    | 5    | 5    | 4    | NA   | 4.75   | 0.5    |
| BNL      | 2    | 1    | 1    | 2    | NA   | 1.5    | 0.58   |
| JSML     | 7    | 8    | 5    | 6    | 5    | 6.2    | 1.30   |
| NLL      | 6    | 8    | 10   | 8    | 9    | 8.2    | 1.48   |
| NLOL     | 153  | 164  | 226  | 253  | 183  | 195.8  | 42.40  |
| HTIL     | 58   | 11   | 89   | 13   | 11   | 36.4   | 35.61  |
| AVUL     | 28   | 33   | 62   | 32   | 11   | 33.2   | 18.38  |
| SRSML    | 31   | 21   | 36   | 16   | 21   | 25     | 8.22   |
| NBBUL    | 179  | 155  | 221  | 199  | 207  | 192.5  | 25.75  |
| \( \bar{x} \) | 52.11 | 45.11 | 72.78 | 59.22 | 63.86 | 58.62 |
| \( \sigma \) | 67.30 | 65.58 | 90.46 | 95.93 | 89.98 |

Source: Annual Report of Listed NME

Average collection period varies not only across the enterprises but also within the individual enterprises. It varies from 4 days to 5 days for BNTL, 1 days to 2 days for BNL, 5 days to 8 days for JSML, 6 to 10 days for NLL, 153 days to 253 days for NLOL, 11 days to 89 days for HTIL, 11 days to 62 days for AVUL, 16 days to 36 days for SRSML and 155 days to 221 days for NBBUL. When the variability of the average collection period observed it is found that it varies from lowest 0.58 for BNL to the highest 42.40 for NLOL.

Conclusion

The proportion of receivable in relation to current assets shows that there was wide variation in investment in receivable among the different enterprises. The average ratio of receivable to current asset ranged between 0.35% to 58%. On an average manufacturing enterprise hold 20.05% of current assets in the form of receivable. It was highest for NLOL (58 percent) and lowest for BNL (0.35 percent) among non-government manufacturing enterprises. The year wise average ratio of receivable to current assets shows the increasing trend. The utilization of receivable as measured by receivable turnover ratio ranged between 1.93 times to 338.91 times. On average manufacturing enterprises have 56.43 times receivable turnover ratio. It was largest for BNL (338.91 times) and lowest for NLOL and NBBUL (1.93 times) among non-government enterprises. The year wise receivable turnover indicates that it started to
increase for first three years and then to decline. Similarly, utilization of receivable in terms of average collection period ranged between 1 to 195.8 days representing on average 58.62 days. The largest and lowest average collection period among non government enterprises are 195.8 days for NLOL and 1.5 days for BNL respectively.

In the modern competitive world, the decision about receivable and its impact is now a matter of life or death in uncertain economic times. Therefore, Nepalese listed manufacturing sector should pay special attention to the management of accounts receivable as the accounts receivable holds around one fourth of the current assets. It is better to provide cash discount to encourage early payment to control receivables for those enterprises that have got larger share of receivable and longer average collection period.

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**Appendix:**

Name of the enterprises (Es) Selected for the Study

| S.N | Name of the Enterprises                      |
|-----|---------------------------------------------|
| 1.  | Bottlers Nepal Terai Ltd. (BNTL)            |
| 2.  | Bottlers Nepal Ltd. (BNL)                   |
| 3.  | Jyoti Spinning Mills Ltd. (JSML)            |
| 4.  | Nepal Lever Ltd. (NLL)                      |
| 5.  | Nepal Lube Oil Ltd. (NLOL)                  |
| 6.  | Himgiri Textile Industries Ltd. (HTIL)      |
| 7.  | Arun Vanaspati Udyog Ltd. (AVUL)            |
| 8.  | Sri Ram Sugar Mills Ltd. (SRSML)            |
| 9.  | Nepal Bitumin and Barrel Udyog (NBBUL)      |