

# CHAPTER 18

## Receivables

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## DEMONSTRATION PROBLEM

Transactions affecting Bradford Ltd's accounts receivable for the year ended 30 June are presented below. On 1 July of the previous year, the commencing balance of the Allowance for Doubtful Debts account was a credit of \$1960.

Aug.	3	Wrote off the \$700 account of Gum Ltd as uncollectable.
Sept.	6	Received 50% of the \$650 balance owed by J. Wiley and wrote off the remainder as a bad debt.
Oct.	16	Recorded the collection of \$475 from G. Rhodes in full payment of her account, which had been written off earlier as a bad debt.
Jan.	15	Wrote off the accounts of Pauley Ltd, \$1100, and R. Donley, \$360, as bad debts.
March	5	D. Martin issued a 90-day 10% promissory note for \$5000 in settlement of his account receivable.
	9	Received \$500 from E. Darkins in full payment of his account, which had been written off earlier as a bad debt.
April	8	Received 25% of the \$2800 owed by North Ltd and wrote off the remainder as a bad debt.
June	4	Recorded an account receivable for dishonour of D. Martin's promissory note issued on 5 March.
June	30	Estimated bad debts expense for the year to be 1% of net credit sales of \$503 500.

**Required:**

- A. Prepare journal entries for each of the transactions in general journal format.
- B. Determine the balance in the Allowance for Doubtful Debts account after the 30 June adjustment.
- C. Assume that, instead of basing the allowance on net credit sales, the allowance is based on an ageing of accounts receivable and that \$8110 of the accounts receivable at 30 June were estimated to be uncollectable. Determine the adjustment necessary to bring the allowance account to the desired balance.

*(continued)*

*Solution to demonstration problem*

A.

BRADFORD LTD General Journal				
Aug.	3	Allowance for Doubtful Debts Accounts Receivable—Gum Ltd To write off uncollectable account.	700	700
Sept.	6	Cash at Bank Allowance for Doubtful Debts Accounts Receivable—J. Wiley To record cash received and write off the remainder.	325 325	650
Oct.	16	Accounts Receivable—G. Rhodes Bad Debts Recovered To record recovery of bad debt.	475	475
	16	Cash at Bank Accounts Receivable—G. Rhodes Cash received from customer.	475	475
Jan.	15	Allowance for Doubtful Debts Accounts Receivable—Pauley Ltd Accounts Receivable—R. Donley To write off bad debts.	1460	1100 360
Mar.	5	Bills Receivable Accounts Receivable—D. Martin Unearned Interest To record receipt of 10%, 90-day promissory note.	5 123.29	5 000.00 123.29
	9	Accounts Receivable—E. Darkins Bad Debts Recovered To record recovery of bad debt.	500	500
	9	Cash at Bank Accounts Receivable—E. Darkins Cash received from debtor.	500	500
April	8	Cash at Bank Allowance for Doubtful Debts Accounts Receivable—North Ltd To record cash received and write off the balance of account.	700 2100	2800
June	4	Accounts Receivable—D. Martin Bills Receivable To record dishonour of bills receivable.	5123.29	5123.29
	4	Unearned Interest Interest Revenue To record interest revenue.	123.29	123.29
	30	Bad Debts Expense Allowance for Doubtful Debts Balance-day adjustment for bad debts.	5035	5035

(continued)



B.

## Allowance for Doubtful Debts

3/8	700	1/7	Balance	1 960
6/9	325	30/6	Adjusting entry	5 035
15/1	1 460			
8/4	2 100			
30/6	Balance c/d			
	<u>2 410</u>			
	<u><u>6 995</u></u>	1/7	Balance b/d	<u><u>6 995</u></u>
				<u>2 410</u>

C.

## Allowance for Doubtful Debts

3/8	700	1/7	Balance	1 960
6/9	325	30/6	Adjusting entry	10 735
15/1	1 460			
8/4	2 100			
30/6	Balance c/d			
	<u>8 110</u>			
	<u><u>12 695</u></u>	1/7	Balance b/d	<u><u>12 695</u></u>
				<u>8 110</u>

### Problem 18.1 Doubtful debts – net credit sales and ageing methods

Theo Pty Ltd sells furniture on credit. The following information was extracted from the accounting records at 30 June 2003:

Credit sales (for year)	\$890 000
Credit sales returns and allowances (for year)	75 000
Accounts receivable (balance 30 June 2003)	270 000
Allowance for doubtful debts (balance 30 June 2003)	1 250 (credit)

In the past, bad debts expense for the year has been estimated at 2% of net credit sales. However, Theo Pty Ltd would like to compare this method with an ageing of the accounts receivable. The following additional information was obtained with respect to the accounts receivable:

	Balance	% estimated uncollectable
Accounts not yet due	\$145 000	$\frac{1}{2}$
Accounts overdue:		
10–30 days	50 000	2
31–60 days	35 000	10
61–120 days	22 000	25
121 days and over	18 000	40
	<u>\$270 000</u>	

#### Required:

- Prepare the journal entries to adjust the Allowance for Doubtful Debts at 30 June 2003 under:
  - the net credit sales method
  - the ageing of accounts receivable method.
- Determine the balance in the Allowance for Doubtful Debts account under both methods.
- Assume that the allowance account had a debit balance of \$680 at 30 June 2003. Show the journal entries to record the allowance for doubtful debts at 30 June 2003 under:
  - the net credit sales method
  - the ageing of accounts receivable method.
- Using the journal entries from requirement C, determine the balance in the allowance account under both methods.
- Explain, with reference to requirements B and D, why the two different methods result in different balances.

### Solution

A.

#### THEO PTY LTD General Journal

2003

30 June

1. Bad Debts Expense	16 300	
Allowance for Doubtful Debts		16 300
Allowance made on 2% of net credit sales		
2. Bad Debts Expense	16 675	
Allowance for Doubtful Debts		16 675
Allowance made on ageing of accounts receivable		

(continued)



B.

1.

## Allowance for Doubtful Debts

			30/6	Balance	1 250
30/6	Balance c/d	17 550	30/6	Adjusting	16 300
		<u>17 550</u>			<u>17 550</u>
				Balance b/d	17 550

2.

## Allowance for Doubtful Debts

			30/6	Balance	1 250
30/6	Balance c/d	17 925	30/6	Adjusting	16 675
		<u>17 925</u>			<u>17 925</u>
				Balance b/d	17 925

C.

2003

30 June

1. Bad Debts Expense 16 300  
     Allowance for Doubtful Debts 16 300  
     Allowance made on 2% of net credit sales
2. Bad Debts Expense 18 605  
     Allowance for Doubtful Debts 18 605  
     Allowance made on ageing of accounts receivable

D.

1.

## Allowance for Doubtful Debts

30/6	Balance	680			
30/6	Balance c/d	15 620	30/6	Adjusting	16 300
		<u>16 300</u>			<u>16 300</u>
				Balance b/d	15 620

2.

## Allowance for Doubtful Debts

30/6	Balance	680			
30/6	Balance c/d	17 925	30/6	Adjusting	18 605
		<u>18 605</u>			<u>18 605</u>
				Balance b/d	17 925

B.

The net credit sales method and the ageing of accounts receivable method both calculate a different balance for the Allowance for Doubtful Debts. The net credit sales method calculates the adjusting entry for Bad Debts Expense as a percentage of net credit sales and ignores any balance that may exist in the allowance account. The calculation forms the basis of the adjusting entry. The ageing of an accounts receivable calculates a desired ending balance for the Allowance for Doubtful Debts. The adjusting entry for Bad Debts Expense is calculated by working to adjust back to achieve the desired ending balance.



WILEY

**Problem 18.2** Discounting and default of a bill receivable

Nehru Imports entered into the following transactions during the year ending 31 December 2002:

Jan	6	Received a 10%, 90-day, \$2000 bill in exchange for the overdue account receivable of J. Davies.
March	7	The bill received from J. Davies was discounted at the bank at a discount rate of 12%.
April	6	J. Davies defaulted on her bill and the bank assessed a protest fee of \$28. Nehru Imports paid the maturity value of the bill, plus the protest fee.
May	6	J. Davies paid the maturity value of her dishonoured bill, plus the protest fee and interest at 10% on both for 30 days beyond the bill's maturity date.
Nov.	16	Received an \$8400, 90-day, 12% bill from T. Williams in settlement of his account receivable.
Dec.	31	Interest was accrued on the bill receivable from T. Williams.

**Required:**

- A. Prepare journal entries to record the transactions on Nehru Imports' accounts.
- B. Prepare journal entries to record the collection of the T. Williams bill.

## Solution

A.

### NEHRU IMPORTS General Journal

2002

Jan	6	Bills Receivable	2 049.32	
		Accounts Receivable - J. Davies		2 000.00
		Unearned Interest		49.32
		(\$2 000 x 0.10 x 90/365)		
		To record receipt of bill from Davies.		
Mar.	7	Cash at Bank	2 029.11*	
		Unearned Interest	20.21	
		Bills Receivable		2 049.32
		(\$2 049.32 x 0.12 x 30/365)		
		Discounted Davies' bill.		
	7	Unearned Interest	29.11	
		Interest Revenue		29.11
		To record interest revenue.		
		*Maturity value	\$2 049.32	
		Discount (\$2 049.32 x 0.12 x 30/365)	<u>20.21</u>	
		Proceeds	<u>\$2 029.11</u>	
April	6	Accounts Receivable - J. Davies	2 077.32	
		Cash at Bank (\$2 049.32 + \$28)		2 077.32
		To record dishonoured bill.		
May	6	Cash at Bank	2 094.39	
		Accounts Receivable - T. Williams		2 077.32
		Interest Revenue		17.07
		(\$2 077.32 x 0.10 x 30/365)		
		To record cash received from Davies.		
Nov	16	Bills Receivable	8 648.55	
		Accounts Receivable - T. Williams		8 400.00
		Unearned Interest		248.55
		(\$8 400 x 0.12 x 90/365)		
		To record bill from Williams.		
Dec.	31	Unearned Interest	124.27	
		Interest Revenue		124.27
		(\$8 400 x 0.12 x 45/365)		
		To record interest revenue.		
<b>B.</b>				
Feb.	14	Cash at Bank	8 648.55	
		Bills Receivable		8 648.55
		To record collection of bill.		
Feb.	14	Unearned Interest	124.27	
		Interest Revenue		124.27
		(\$8 400 x 0.12 x 45/365)		
		To record interest revenue.		



**Problem 18.3****Ageing of accounts receivable and adjustment of allowance**

Blue Jeans Ltd analysed its accounts receivable balances at 30 June 2002 and arrived at the aged analysis below. The percentages of each age group that have proven uncollectable in the past are shown next to the aged balances.

Age	Estimated uncollectable (%)	Balance
Current		\$ 210 000
30–60 days past due	0.5	60 000
61–120 days past due	2.5	15 000
121 days to 6 months past due date	10	18 000
Over 6 months past due	13	12 000
	40	
		<u>\$ 315 000</u>

The company uses the allowance method to account for bad debts. On 30 June 2002 the credit balance of the Allowance for Doubtful Debts account is \$1800 before any adjustments.

**Required:**

- A. Prepare the adjusting entry for estimated bad debts on 30 June 2002.  
 B. Give the entry to write off the account of G. Bie in October 2000, \$1002.

**Solution**

A.

**BLUE JEANS LTD**

2002

June 30	Bad Debts Expense	18 840	
	Allowance for Doubtful Debts		18 840
	To record allowance for doubtful debts.		
	$\$210\,000 \times .5\%$	\$ 10 500	
	$60\,000 \times 2.5\%$	1 500	
	$15\,000 \times 10\%$	1 500	
	$18\,000 \times 13\%$	2 340	
	$12\,000 \times 40\%$	<u>4 800</u>	
		\$20 640	
	Less: Balance	<u>1 800</u>	
		<u>\$18 840</u>	

B.

2002

Oct	Allowance for Doubtful Debts	1 000	
	Accounts Receivable – G.Bie		1 000
	To write off G.Bie account.		



### Problem 18.4 Disposal of accounts receivable

The following transactions were entered into by Maryborough Hardware Ltd:

- Oct. 1 Borrowed \$75 000 from Custom Finance Ltd. As security for this debt, Maryborough Hardware Ltd assigned \$80 000 of its accounts receivable to Regal Finance Ltd, the finance company charging a service fee of 3% of the receivables assigned.
- 22 Cash collected from the receivables assigned on 1 October amounted to \$38 000.
- 31 Cash collected from the assigned receivables by Maryborough Hardware Ltd was forwarded to Custom Finance Ltd, together with interest on the loan of \$550.
- Nov. 18 Additional cash collected by Maryborough Hardware Ltd from the assigned accounts receivable amounted to \$30 500. This was forwarded to Custom Finance Ltd.
- 28 The loan was paid out in full by Maryborough Hardware Ltd. This included a further interest cost of \$400.
- 30 Outstanding amounts on the assigned accounts receivable were returned to the ledgers of Maryborough Hardware Ltd.

#### Required:

Record the above transactions in the general journal of Maryborough Hardware Ltd.

### Solution

#### MARYBOROUGH HARDWARE LTD

Oct.	1	Cash at Bank	80 000	
		Loan Payable		80 000
		To record loan from Regal Finance Ltd.		
		Receivables Assigned as Loan Security	80 000	
		Accounts Receivable		80 000
		To assign receivables to Regal Finance Ltd.		
		Service Fee Expense	2 400	
		Cash at Bank		2 400
		To pay service fee.		
	22	Cash at Bank	38 000	
		Receivables Assigned as Security		38 000
		To record cash from assigned receivables.		
	31	Loan Payable	38 000	
		Interest Expense	550	
		Cash at Bank		38 550
		To pay cash from receivables and interest.		
Nov.	15	Cash at Bank	30 500	
		Receivables Assigned as Security		30 500
		To record cash from assigned receivables.		
		Loan Payable	30 500	
		Cash at Bank		30 500
		To pay cash from receivables.		
	28	Loan Payable	11 500	
		Interest Expense	400	
		Cash at Bank		11 900
		To pay remainder of loan plus interest.		
	30	Accounts Receivable	11 500	
		Receivables Assigned as Security		11 500
		To reassign receivables to normal conditions.		

(continued)

**Alternative solution**

The above solution assumes that the receivables asset is still recorded in the books of Maryborough Hardware Ltd, and is held in the form of a “sinking fund” against the loan payable. The alternative solution below assumes that the receivables assets are disposed of to Regal Finance Ltd.

Oct.	1	Cash at Bank	80 000	
		Accounts Receivable		80 000
		To record receivables disposed of to Regal Finance Ltd.		
		Service Fee Expense	2 400	
		Cash at Bank		2 400
		To record service fee paid.		
	22	Cash at Bank	38 000	
		Regal Finance Ltd		38 000
		To record cash from receivables, payable to Regal Finance Ltd.		
	31	Regal Finance Ltd	38 000	
		Interest Expense	550	
		Cash at Bank		38 550
		To record amount paid to Regal Finance Ltd.		
Nov.	18	Cash at Bank	30 500	
		Regal Finance Ltd		30 500
		To record cash from receivables, payable to Regal Finance Ltd		
		Regal Finance Ltd	30 500	
		Cash at Bank		30 500
		To record amount paid to Regal Finance Ltd.		
	30	Accounts Receivable	11 500	
		Interest Expense	400	
		Custom Finance Ltd		11 900
		To repurchase remaining receivables from Regal Finance Ltd.		
	30	Regal Finance Ltd	11 900	
		Cash at Bank		11 900
		To pay for receivables and interest.		

**Problem 18.5** Monitoring cash collection

Presented below is information extracted from the annual reports of Home Hill Ltd and Reid River Traders:

	Home Hill Ltd	Reid River Traders
Sales (net credit) for year	\$2 380 400	\$1 740 725
Allowance for Doubtful Debts, 1/7/00	14 140	22 425
Allowance for Doubtful Debts, 30/6/01	16 350	23 200
Accounts receivable (gross) 1/7/00	542 950	276 500
Accounts receivable (gross) 30/6/01	365 000	288 650

**Required:**

- A. Calculate the receivables turnover ratio and average collection period for both companies. Comment on the difference in their collection experiences.
- B. Compare the success or otherwise of their cash collection policies, given that the average receivables turnover for the industry in which the companies operate is 8. Credit terms for both companies are 2/10, n/30.

**Solution**

A.

## HOME HILL LTD &amp; REID RIVER TRADERS

	Home Hill Ltd	Reid River Traders
Receivables turnover ratio: <u>Net credit sales revenue</u> Average receivables	$\frac{\$2\,380\,400}{(\$542\,950 + \$365\,000)/2}$ $= 5.2 \text{ times}$	$\frac{\$1\,740\,725}{(\$276\,500 + \$288\,650)/2}$ $= 6.2 \text{ times}$
Average collection period: <u>365 days</u> Receivables turnover ratio	$\frac{365 \text{ days}}{5.2}$ $= 70 \text{ days}$	$\frac{365 \text{ days}}{6.2}$ $= 59 \text{ days}$

