

6

The double entry system for assets, liabilities and capital



Specific objectives

After you have studied this chapter you should be able to:

- understand what is meant by the double entry system
- explain how the double entry system follows the rules of the accounting equation
- understand the rules for double entry book-keeping
- draw up 'T accounts' and understand the terms debit and credit
- record transactions affecting assets, liabilities and capital in the T accounts.

6.1 Nature of a transaction

In Chapter 5, we saw how various events changed two items in the statements of financial position. Events that result in such changes are known as transactions. This means that if the proprietor of a business asks the price of some goods but does not buy them, then there is no transaction. If he later asks the price of some goods and buys them, then there is a transaction and the two statement of financial position (balance sheet) items, that is, inventory and cash at bank, will have changed.

6.2 The double entry system

The system of double entry book-keeping is a method of recording transactions in the books of account of a business. In the previous chapter we saw how every transaction affected two items. We now need to show these effects when the transaction is first recorded in the books of account. The information for every item that is entered into the books of account is obtained from a source document, that is, invoice, credit note, cheque book stub, paying-in book, etc. The next important stage is to understand the double entry system of book-keeping.

Business transactions deal with money or money's worth and each transaction always affects two things. For example, if a firm buys goods valued at \$1,000 and pays for them by cheque, two things have occurred:

- 1 the money in the firm's bank account will have decreased by \$1,000
- 2 the stock of goods is increased.

Here is another example: if a firm buys a motor van costing \$7,000 and pays for it by cheque then again two things have been affected:

- 1 the money in the firm's bank account will have decreased by \$7,000
- 2 the motor van will have been acquired for the business and the asset account will have increased.

This is the book-keeping stage of accounting and the process used is called double entry. Sometimes this may also be referred to as double entry book-keeping; either term is correct.

In the previous chapter, a new statement of financial position was drawn up after each transaction. This can be done quite easily if there are only a few transactions per day.

However, if there are hundreds of transactions per day then it will become impossible to draw up numerous statements of financial position. There simply would not be enough time to carry out such a task.

Therefore, instead of constantly drawing up amended statements of financial position after each transaction, the double entry system is used. The basis of this system is that transactions that have occurred are entered in the books of account. An account shows us the *history* of a particular business transaction. It is the place in the records where all the information referring to a particular asset, liability or capital is entered, for example, the bank account or motor van account. If manual records are kept, then each account is usually shown on a separate page; if a computerised system is used, then each account is given a separate code number and the information is stored on the accounting package and back-up disks.

6.3 The accounts for double entry

Each account should be shown on a separate page. The double entry system divides each page into two halves. The left-hand side of each page is called the **debit** side, while the right-hand side is called the **credit** side. The title of each account is written across the top of the account at the centre – see Exhibit 6.1. Note that the word 'Debit' is often shown in a short form as 'Dr' while 'Credit' is often shown as 'Cr'.

Dr		Title of account written here				Cr
Date	Details	\$	Date	Details	\$	
	↑ Left-hand side of the page. This is the 'debit' side.			↑ Right-hand side of the page. This is the 'credit' side.		

▲ Exhibit 6.1

From the start it is important to recognise that the words debit and credit in book-keeping and accounting have quite specific meanings.

6.4 Rules for double entry

Double entry is relatively easy to learn and understand if the following four rules are learnt and understood:

- 1 Double entry means that every transaction affects two things and should, therefore, be entered twice in the accounts: once on the **Debit** side and once on the **Credit** side. Later on in your studies you may have more than two accounts to record a transaction, for example, when an item is purchased and part of it is paid for in cash and part by cheque.
- 2 The order in which the items are entered does not matter – although students may find it easier to deal with any cash or bank transaction first using the 'IN' and 'OUT' principle which is explained in Section 6.5.

- 3 A Debit entry is always an asset or expense. A Credit entry is a liability, capital or income.
- 4 Exhibit 6.2 shows the double entry rules for increasing or decreasing assets, liabilities or capital as discussed in Chapter 3.

Accounts	To record	Entry in the account
Assets	An increase	Debit
	A decrease	Credit
Liabilities	An increase	Credit
	A decrease	Debit
Capital	An increase	Credit
	A decrease	Debit

▲ Exhibit 6.2

Let us look once again at the accounting equation:

	Capital	=	Assets	less	Liabilities
To increase each item	Credit		Debit		Credit
To decrease each item	Debit		Credit		Debit

The double entry rules for liabilities and capital are the same, but they are the opposite of those for assets. Looking at the accounts the rules will appear as:

<i>Capital account</i>		<i>Any asset account</i>		<i>Any liability account</i>	
Decreases	Increases	Increases	Decreases	Decreases	Increases
-	+	+	-	-	+ ✓

In a real business, at least one full page would be taken for each account in the accounting books. However, as we do not have enough space in this textbook to put each account on a separate page, we will list the accounts under each other.

6.5 The 'IN' and 'OUT' approach

To help students having difficulty deciding on which side of each account the items should be entered, a useful hint is to think of the debit side being 'IN' to the account, and the credit side being 'OUT' of the account.

The following two examples show this approach.

Example 1: Paid cash \$2,000 to buy machinery.

The double entry for this transaction would be as follows:

Effect	Action
(a) Cash goes 'OUT'	A credit entry in the Cash account
(b) Machinery comes 'IN'	A debit entry in the Machinery account

Example 2: Took \$500 out of the cash till of the business and paid it into the bank account of the business.

The double entry for this transaction would be as follows:

Effect	Action
(a) Cash goes 'OUT' of the cash till	A credit entry in the Cash account
(b) Money comes 'IN' to the bank	A debit entry in the Bank account

6.6 T accounts

The type of accounts that are going to be demonstrated are known as T accounts. This is because the accounts are in the shape of a T, as illustrated in Exhibit 6.3.

Account title here – the top stroke of the T	
Debit side	Credit side

▲ Exhibit 6.3

The line divides the two sides and is the downstroke of the T.

6.7 Worked examples

The entry of a few transactions can now be attempted.

- 1 The proprietor starts the firm with \$10,000 in cash on 1 August 2017.

Effect	Action
1 Increases the <i>asset</i> of cash	Debit the Cash account – cash goes 'IN'
2 Increases the <i>capital</i>	Credit the Capital account – cash comes 'OUT' of the owner's money

These are entered as follows:

Dr		Cash	Cr
2017	'In'	\$	
1 Aug		10,000	
Dr		Capital	Cr
		2017	'Out'
		1 Aug	\$ 10,000

The date of the transaction has already been entered. Now there remains the description which is to be entered alongside the amount. The double entry to the item in the cash account is completed by an entry in the capital account, and therefore the word 'Capital' will appear in the cash account. Similarly, the double entry to the item in the capital account is completed by an entry in the cash account, therefore the word 'Cash' will appear in the capital account.

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The completed accounts are therefore:

Dr		Cash		Cr
2017	'In'	\$		
1 Aug	Capital	10,000		
Dr		Capital		Cr
		2017	'Out'	\$
		1 Aug	Cash	10,000

This method of entering transactions therefore fulfils the requirements of the double entry rules as shown in Section 4.4. Now let us look at the entry of some more transactions.

2. A motor van is bought for \$6,500 cash on 2 August 2017.

Effect	Action
1 Decreases the <i>asset</i> of cash	Credit the Cash account – cash goes 'OUT'
2 Increases the <i>asset</i> of motor van	Debit the Motor van account – motor van comes 'IN'

Dr		Cash		Cr
		2017	'Out'	\$
		2 Aug	Motor van	6,500

Dr		Motor van		Cr
2017	'In'	\$		
2 Aug	Cash	6,500		

3. Fixtures are bought on credit from Shop Fitters for \$1,500 on 3 August 2017.

Effect	Action
1 Increases the <i>asset</i> of fixtures	Debit the Fixtures account – fixtures come 'IN'
2 Increases the <i>liability</i> to Shop Fitters	Credit Shop Fitters' account – fixtures comes 'OUT' of the supplier's account

Dr		Fixtures		Cr
2017	'In'	\$		
3 Aug	Shop Fitters	1,500		
Dr		Shop Fitters		Cr
		2017	'Out'	
		3 Aug	Fixtures	1,500

4 We paid the amount owing in cash to Shop Fitters on 17 August 2017.

Effect	Action
1 Decreases the <i>asset</i> of cash	Credit the Cash account – cash goes 'OUT'
2 Decreases the <i>liability</i> to Shop Fitters	Debit Shop Fitters' account – cash goes 'IN' to the supplier's account

Dr	Shop Fitters		Cr		
2017	'In'	\$	2017	'Out'	\$
17 Aug	Cash	1,500	3 Aug	Fixtures	1,500

Dr	Cash		Cr
	2017	'Out'	\$
	17 Aug	Shop Fitters	1,500

5 Transactions to date: taking the transactions numbered 1–4 above, the records will now appear as follows:

Dr	Cash		Cr		
2017	'In'	\$	2017	'Out'	\$
1 Aug	Capital	10,000	2 Aug	Motor van	6,500
			17 Aug	Shop Fitters	1,500

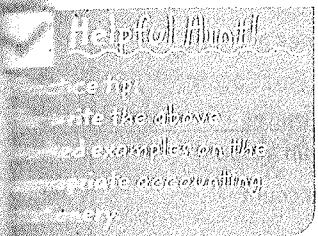
Dr	Capital		Cr
	2017	'Out'	\$
	1 Aug	Cash	10,000

Dr	Motor van		Cr
2017	'In'	\$	
2 Aug	Cash	6,500	

Dr	Shop Fitters		Cr		
2017	'In'	\$	2017	'Out'	\$
17 Aug	Cash	1,500	3 Aug	Fixtures	1,500

Dr	Fixtures		Cr
2017	'In'	\$	
3 Aug	Shop Fitters	1,500	

Before you read further, you are required to work through Exercises 6.4, 6.5 and 6.8 at the end of this chapter.



A further worked example

Now you have actually made some entries in accounts, you are to go carefully through the following example. Make certain you can understand every entry.

Transactions		Effect	Action	In/Out
2017				
1 May (A)	J. Charles started an engineering business, putting \$10,000 into a business bank account	Increases asset of bank Increases capital of owner	Debit bank account Credit capital account	In Out
3 May (B)	Bought works machinery on credit from Unique Machines \$2,750	Increases asset of machinery Increases liability to Unique Machines	Debit machinery account Credit Unique Machines' account	In Out
4 May (C)	Withdrew \$2,000 cash from the bank and placed it in the cash box	Increases asset of cash Decreases asset of bank	Debit cash account Credit bank account	In Out
7 May (D)	Bought a motor van paying in cash \$1,800	Increases asset of motor van Decreases asset of cash	Debit motor van account Credit cash account	In Out
10 May (E)	Sold some of the machinery for \$150 on credit to B. Barnes	Increases asset of money owing from B. Barnes Decreases asset of machinery	Debit B. Barnes account Credit machinery account	In Out
21 May (F)	Returned some of the machinery, value \$270 to Unique Machines	Decreases liability to Unique Machines Decreases asset of machinery	Debit Unique Machines Credit machinery account	In Out
28 May (G)	B. Barnes pays the firm the amount owing, \$150, by cheque	Increases asset of bank Decreases asset of money owing by B. Barnes	Debit bank account Credit B. Barnes account	In Out
30 May (H)	Bought another motor van paying by cheque \$4,200	Increases asset of motor vans Decreases asset of bank	Debit motor van account Credit bank account	In Out
31 May (I)	Paid the amount of \$2,480 to Unique Machines by cheque	Decreases liability to Unique Machines Decreases asset of bank	Debit Unique Machines Credit bank account	In Out

The accounts for the transactions are now shown. The letters (A) to (I) correspond to the transactions (A) to (I) in the preceding table.

Dr		Bank		Cr	
2017	'In'	\$	2017	'Out'	\$
1 May	Capital (A)	10,000	4 May	Cash (C)	2,000
28 May	B. Barnes (G)	150	30 May	Motor van (H)	4,200
			31 May	Unique Machines (I)	2,480
Dr		Cash		Cr	
2017	'In'	\$	2017	'Out'	\$
4 May	Bank (C)	2,000	7 May	Motor van (D)	1,800
Dr		Capital		Cr	
			2017	'Out'	\$
			1 May	Bank (A)	10,000
Dr		Machinery		Cr	
2017	'In'	\$	2017	'Out'	\$
3 May	Unique Machines (B)	2,750	10 May	B. Barnes (E)	150
			21 May	Unique Machines (F)	270
Dr		Motor Van		Cr	
2017	'In'	\$			
7 May	Cash (D)	1,800			
30 May	Bank (H)	4,200			
Dr		Unique Machines		Cr	
2017	'In'	\$	2017	'Out'	\$
21 May	Machinery (F)	270	3 May	Machinery (B)	2,750
31 May	Bank (I)	2,480			
Dr		B. Barnes		Cr	
2017	'In'	\$	2017	'Out'	\$
10 May	Machinery (E)	150	28 May	Bank (G)	150

6.8 Abbreviation of 'Limited'

In this book when we come across transactions with limited companies, the letters 'Ltd' are used as the abbreviation for 'Limited Company'. Thus, you will know that, if we see the name of a firm as T. Lee Ltd, then that business will be a limited company. In our books the transactions with T. Lee Ltd will be entered in the same way as for any other customer or supplier.



Summary

- This chapter covers the concept of double entry book-keeping whereby every transaction affects two things. Each item has to be entered twice in the book-keeping records, once on the debit side and once on the credit side of an account.
- The double entry system of accounting follows the rules of the accounting equation.
- Transactions are entered into the accounts rather than directly into numerous statements of financial position.
- The use of 'T accounts' to record information is discussed.
- This chapter contains a fully worked example illustrating how transactions cause increases and decreases in assets, liability and capital accounts.

Chapter 6 Exercises

6.1 Complete the table showing which accounts are to be debited and which are to be credited.

- (a) Bought motor van for cash.
- (b) Bought office machinery on credit from J. Grant & Son.
- (c) Introduced capital in cash.
- (d) A customer, J. Beach, pays us by cheque.
- (e) Paid a supplier, A. Barrett, in cash.

Account to be debited	Account to be credited

6.2 The following table is also to be completed, showing the accounts to be debited and credited.

- (a) Bought machinery on credit from A. Jackson & Son.
- (b) Returned machinery to A. Jackson & Son.
- (c) A customer, J. Brown, pays us in cash.
- (d) J. Smith lends us money, giving it to us by cheque.
- (e) Sold office machinery for cash.

Account to be debited	Account to be credited

6.3X Complete the following table.

- (a) Bought office machinery on credit from D. Isaacs Ltd.
- (b) Paid a supplier, C. Jones, from owner's private monies outside the firm.
- (c) A customer, N. Fox, paid us in cash.
- (d) Repaid part of loan from P. Exeter by cheque.
- (e) Returned some of the office machinery to D. Isaacs Ltd.
- (f) A customer, N. Lyn, pays us by cheque.
- (g) Bought motor van by cash.

Account to be debited	Account to be credited

6.4 Complete the following table showing which accounts are to be debited and which to be credited.

- (a) Bought motor lorry for cash.
- (b) Paid supplier, T. Lee, by cheque.
- (c) Repaid P. Lopez's loan by cash.
- (d) Sold motor lorry for cash.
- (e) Bought office machinery on credit from Ultra Ltd.
- (f) A customer, A. Hill, pays us by cash.
- (g) A customer, J. Cross, pays us by cheque.
- (h) Put a further amount into the business by cheque.
- (i) A loan of \$200 in cash is received from L. Lowe.
- (j) Paid a supplier, D. Lord, by cash.

Account to be debited	Account to be credited

6.5 Write up the asset and liability accounts in the records of D. Coy to record these transactions.

2017

- 1 May Started business with \$10,000 cash.
- 3 May Bought a motor van on credit from Speed & Sons for \$6,980.
- 14 May Bought office machinery by cash from Duplicators Ltd for \$60.
- 31 May Paid Speed & Sons the amount owing to them, \$6,980, in cash.

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6.6 Write up the asset and liability and capital accounts to record the following transactions in the records of G. Powell.

2017

- 1 July Started business with \$25,000 in the bank.
- 2 July Bought office furniture for \$1,500 by cheque.
- 3 July Bought machinery \$7,500 on credit from Planers Ltd.
- 5 July Bought a motor van paying \$6,000 by cheque.
- 8 July Sold some of the office furniture – not suitable for the firm – for \$600 on credit to J. Walker & Sons.
- 15 July Paid the amount of \$7,500 owing to Planers Ltd by cheque.
- 23 July Received the amount of \$600 due from J. Walker in cash.
- 31 July Bought more machinery \$2,800 by cheque.

6.7 You are required to open the asset and liability and capital accounts and record the following transactions for June 2017 in the records of Digital Computer Systems.

2017

- 1 June Started business with \$15,000 in the bank.
- 3 June Bought motor car and paid by cheque, \$6,500.
- 9 June Bought office furniture from Cheetham & Co. \$1,150 paid by cheque.
- 12 June Bought computer equipment on credit from Computext Ltd, \$2,400.
- 17 June Took \$200 out of the bank and put it in the cash till.
- 19 June Bought office chair and paid by cash, \$42.
- 25 June Paid Computext Ltd \$1,000 by cheque on account.
- 27 June Bought second-hand motor van, \$2,450 paid by cheque.
- 29 June Bought desk for reception area and paid cash, \$100.
- 30 June Paid the outstanding account to Computext Ltd by cheque.

6.8X Write up the asset, capital and liability accounts in the records of C. Williams to record the following transactions.

2018

- 1 June Started business with \$15,000 cash in bank.
- 2 June Bought motor van, paying \$4,200 by cheque.
- 5 June Bought office fixtures \$800 on credit from Young Ltd.
- 8 June Bought motor van on credit from Super Motors \$3,800.
- 12 June Took \$500 out of the bank and put it into the cash till.
- 15 June Bought office fixtures paying \$200 by cash.
- 19 June Paid Super Motors a cheque for \$800 on account.
- 21 June A loan of \$1,000 cash is received from J. Jarvis.
- 25 June Paid \$800 of the cash in hand into the bank account.
- 30 June Bought more office fixtures, paying \$300 by cheque.

6.9X Write up the accounts to record the following transactions.

2018

- 1 Mar Started business with \$1,000 cash.
- 2 Mar Received a loan of \$5,000 from M. Chow by cheque, a bank account being opened and the cheque paid into it.
- 3 Mar Bought machinery for cash \$600.
- 5 Mar Bought display equipment for \$1,550 on credit from View Displays.
- 8 Mar Took \$300 out of the bank and put it into the cash till.
- 15 Mar Repaid part of Chow's loan \$800 by cheque.
- 17 Mar Paid amount owing to View Displays \$1,550 by cheque.
- 24 Mar Repaid part of Chow's loan \$100 in cash.
- 31 Mar Bought additional machinery, this time on credit from D. Smith for \$800.

6.10X Write up the asset, capital and liability accounts in the books of N. Morris to record the following transactions.

2018

- 1 May Started business with \$14,000 cash.
- 2 May Paid \$13,600 of the opening cash into a bank account for the business.
- 3 May Bought shop fittings on credit from Lawrence Ltd for \$600.
- 4 May Bought a motor van, paying \$4,000 by cheque.
- 6 May A. Lee lent us \$500 by cheque.
- 7 May Bought another motor van on credit from Pear Tree Garage \$2,800.
- 10 May Bought shop fittings for \$350 cash.
- 14 May Returned some of shop fittings costing \$150 to Lawrence Ltd as they were unsuitable.
- 16 May Took \$300 out of the bank and put it into the cash till.
- 18 May Bought machinery for \$280 cash.
- 21 May Paid Lawrence Ltd the amount owing to them by cheque.
- 23 May Repaid part of Lee's loan of \$200 by cheque.
- 28 May Bought machinery for \$1,300 on credit from Better Built Ltd.
- 31 May Paid Pear Tree Garage \$2,800 by cheque.