

A well-balanced equation

Andrew Harrington

The rules of double-entry bookkeeping are easy when you understand the logic behind them

The notion of double-entry bookkeeping is sometimes viewed as something made up by accountants to confuse others and justify their salaries – why else would anybody choose to record transactions twice? There is, of course, a valid answer. It lies in the nature of business transactions and a fundamental truth called “the accounting equation”. This is most easily derived and illustrated by considering a newly established business.

In the simplest of business start-ups, resources are provided from the owner’s personal funds. As the business begins, the resources it owns (assets) must equal those introduced by the owner (capital), so there is already a simple equation: assets = capital. In some cases, private funds will not be enough and resources must be borrowed from other sources (liabilities). The worth and funding of the new business can then be summarised as: assets = liabilities + capital.

This is the accounting equation, which exists from the very start of any business. The resources in the business can only be those introduced by the owner plus those borrowed from elsewhere. To understand the need for double entry, it is necessary to see what happens to the accounting equation as the business continues to operate.

Suppose the business makes the following transactions:

- (a) open a business bank account with £12,000 of the owner’s money;
- (b) buy a secondhand van for deliveries with £9,000 paid by cheque;
- (c) buy fixtures for £7,000 on credit from Potters Ltd;
- (d) obtain a bank loan of £15,000, paid into the business bank account.

Each of these transactions has a different effect on the assets, liabilities and capital of the new business. Their effects can be seen in

table 1, opposite. After every transaction the accounting equation still holds true. It will always hold true, regardless of the complexity of the business and its transactions, because of the dual aspect of all business transactions – every transaction has two effects.

Transaction (a) increases the value of the asset called bank and also increases the capital. Transaction (b) increases one asset (van) and reduces another (bank). Transaction (c) increases an asset (stock) and also a liability (Potters Ltd, a creditor), as does transaction (d) (bank and loan). Things get more complicated when the business starts to make a profit, but this is attributable to the owner of the business, so it will increase the capital.

If the dual aspect of all business transactions is to be adequately reflected in the accounts of the business, then two accounting entries must be made for each transaction. The equal debits and credits of double-entry bookkeeping are therefore needed to track the performance of the business (profits and losses) and its financial position (assets and liabilities).

Double-entry records comprise a set of accounts in a book called the ledger. Each asset, liability, source of income or expenditure must have its own account. If in doubt about a transaction, open a new account (it is far easier to combine accounts later than it is to separate previously combined accounts). The accounts are often referred to as “T accounts,” because they appear as follows:

Name of account	
Date detail £	Date detail £
Debit side (Dr)	Credit side (Cr)

For every business transaction the bookkeeper will make equal debit and credit entries in accordance with a set of rules. These rules can be summarised as follows:

	Any asset/ expense	Any liability/ income/capital
Increase	debit	credit
Decrease	credit	debit

For example, suppose a business buys stationery for £120 and pays with cash. This transaction reduces the asset known as “cash” so the cash account must be credited with £120. The total spent on stationery has just increased, so the stationery account must be debited with £120.

Stock is an item that requires special consideration. The items bought by a business for resale are an asset, and the rules above suggest that stock purchases should be debited to a stock account and sales of stock credited to it. But most stock is sold for more than it cost to buy, so this treatment could produce unexpected results.

For example, suppose a business buys 10 units of stock for £100 each and then sells seven of them for £150 each. The rules would suggest a debit to the stock account of £1,000, followed by a credit of £1,050. The result is a credit balance on the account of £50. But, since the account reflects an asset (there are three units left), surely a debit balance would be appropriate?

For this reason, the stock account is not used for day-to-day transactions. Instead, the different types of transactions (some at cost, some at selling price) are kept separate. When stock is purchased, the debit-to-stock account (to reflect the asset going up) is replaced by a debit-to-purchases account. When stock is sold, the credit-to-stock account (to reflect the asset going down) is replaced by a credit-to-sales account. In this way the rules of double entry are maintained



and the effect of profit does not distort the picture presented by the accounts.

At the end of the accounting period, sales and purchases are matched against each other in the trading account. The resulting profit, once expenses have been deducted in the profit and loss account, accrues to the owner of the business. The final step in the year's double entry will be a debit to the profit and loss account (to clear out the profit for the year) and a credit to the capital account (to reflect that the business "owes" this profit to the owner).

At this point there may be confusion over the bank account. The rules and the example indicate that the bank account is debited when money is paid in and credited when money comes out. A look at a bank statement shows the opposite happening. Both are correct. Remember that the statement is drawn up from the bank's point of view, not the customer's. Money in the bank is an asset for the customer but a liability for the bank, which owes the money to the customer. Money deposited increases that liability, so the bank credits the customer's account.

A further point about the bank account is that it can be an asset or a liability, depending on whether the balance is in hand (asset) or overdrawn (liability). This will not affect any double entry. Paying a cheque from an in-hand balance decreases that asset, so a credit entry is made. Paying a cheque from an overdraft increases that liability, so a credit is still correct.

Periodically, the accounts will be balanced (all entries in the account summarised in one line) and a trial balance will be extracted. This is a straightforward list of every account balance, analysed into debit and credit columns. It provides a starting point for the preparation of the final accounts (the profit and loss account and the balance sheet), but also checks the equality of debits and credits.

The trial balance does not prove total accuracy, since entries may have been made to the wrong accounts or omitted altogether, but it does check the mathematical accuracy of the system – the totals of the debit and credit columns should be equal.

A good knowledge of double entry is essential, since it underpins much of the financial accounting you will study at this level and beyond. Students are advised to practise as many questions as possible – it is the best way to learn the rules. ■

Andrew Harrington is a lecturer in accounts at Chelmsford College, Essex

Table 1 The effects of a business's first transactions

Transaction	Assets		Liabilities	Capital
(a)	Bank	£12,000		£12,000
(b)	Bank	£ 3,000		
	Van	£ 9,000		
	Total	£12,000		£12,000
(c)	Bank	£ 3,000		
	Van	£ 9,000		
	Fixtures	£ 7,000		
	Total	£19,000	Potters Ltd	£ 7,000
				£12,000
(d)	Bank	£18,000	Potters Ltd	£ 7,000
	Van	£ 9,000	Loan	£15,000
	Fixtures	£ 7,000		
	Total	£34,000	Total	£22,000
				£12,000