

Double Entry Bookkeeping

A business transaction involves an exchange between two accounts. For example, for every asset there exists a claim on that asset, either by those who own the business or those who loan money to the business. Similarly, the sale of a product affects both the amount of cash (or cash receivable) held by the business and the inventory held.

Recognizing this fundamental dual nature of transactions, merchants in medieval Venice began using a double-entry bookkeeping system that records each transaction in the two accounts affected by the exchange. In the late 1400's, Franciscan monk and mathematician Luca Pacioli documented the procedure for **double-entry bookkeeping** as part of his famous Summa work, which described a significant portion of the accounting cycle. **Double-entry** bookkeeping spread throughout Europe and became the foundation of modern accounting.

Two notable characteristics of double-entry systems are that:

- 1) Each transaction is recorded in two accounts, and
- 2) Each account has two columns.

In a **double-entry system**, two entries are made for each transaction - one entry as a debit in one account and the other entry as a credit in another account. The two entries keep the accounting equation in balance so that:

$$\text{Assets} = \text{Liabilities} + \text{Owners' Equity}$$

To illustrate, consider a repair shop with a transaction involving repair service performed on Jan 1 for a cash payment of \$275.00. In a **single-entry bookkeeping system**, the transaction would be recorded as follows:

Single Entry Example

Date	Description	Revenues	Expenses
Jan 1	Performed repair service	275.00	

In a **double-entry system**, the transaction would be recorded as follows:

Double Entry Example

Date	Account Description	Dr.	Cr.
Jan 1	Cash	275.00	
	Revenue		275.00

A notation may be added to this journal entry to indicate that the revenue was from repair services.

Note that two accounts (revenue and cash) are affected by the transaction. If the customer did not pay cash but instead was extended credit, then "accounts receivable" would have been used instead of "cash."

In this system, the double entries take the form of debits and credits, with debits in the left column and credits in the right. For each debit there is an equal and opposite credit and the sum of ***all debits therefore must equal the sum of all credits***. This principle is useful for identifying errors in the transaction recording process.

Double-entry accounting has the following advantages over single-entry:

- Accurate calculation of profit and loss in complex organizations
- Inclusion of assets and liabilities in the bookkeeping accounts.
- Preparation of financial statements directly from the accounts
- Easier detection of errors and fraud

To appreciate the importance of double-entry bookkeeping, it is interesting to note that the industrial revolution might not have been possible without it. At that time, businesses increased in size and complexity. Accurate bookkeeping was required for managers to understand the financial status of their businesses in order to keep them solvent and offer a degree of transparency to investors. While a single-entry system can be adapted by a skilled bookkeeper to meet some of these needs, only a double-entry system provides the required detail systematically and by design.

