

Accounting  
Balance Sheet

Entity is any organization for which financial statements are prepared.  
Balance Sheet Reports of the amounts of assets, liabilities and equity as of one point in time.

Left side of balance sheet

Current Assets are **cash** and assets that are expected to be converted into cash or used up in the near future (usually one year).  
Noncurrent Ass. are expected to be useful for **longer** than one year.  
Assets are the things of measurable **value** that it **owns** (controls).  
Rented objects are usually **not** assets (except 'capital leases').  
Tangible Assets can be **touched**, also called **fixed assets** or **property, plant and equipment**  
Intangible Assets **cannot** be touched, except as pieces of paper (for example insurance protection).  
Goodwill arises when one company buys another company and pays **more** than the identifiable assets. It is **not** an asset, unless it was purchased.

Right side of balance sheet (shows the **claims** against the **assets** or **sources** that provided the entity's **assets**)

Current Liab. are obligations due in the near future (one year).  
Noncurrent Liab. think again...  
Liabilities are **sources** from **creditors**. They are a **stronger** claim against the assets than equity.  
Creditors have a **claim** against the assets in the amount shown as the **liability**.  
Equity Common stock, additional paid-in capital and **retained earnings** (**not** cash, it is part of the owners' claim on the asset!). It does **not** report the market value of the stock!  
Equity is a **weaker** claim against the assets than liabilities.  
Whatever assets remain after liabilities are taken into account will be claimed by the equity investors. It is **not** a liability, because the entity does **not** promise to pay **equity investors** anything.  
Working capital is the part of **current assets not** financed by **current liabilities**.  
Perm. capital is the sum of **noncurrent liabilities** plus **equity** which is equal to **working capital** plus **noncurrent assets**.  
Debt capital is equal to **noncurrent liabilities**.

Although a single liability may have both a current and a noncurrent portion, a single asset is mostly not so divided and both parts are reported as current asset.

## Concepts

Dual-aspect concept:	<b>Assets = Liabilities + Equity</b>
Money measurement concept:	Accounting reports show only facts that can be expressed in <b>monetary amounts</b> .
Entity concept:	Business accounts are kept for <b>entities</b> , rather than for the persons who own, operate or otherwise are associated with those entities. Individual shareholders may sell their stock to someone else, market price of shares can change every day, but this has no effect on the balance sheet of the entity.
Going-concern concept:	Accounting assumes that an entity will continue to operate indefinitely.
Cost concept:	Accounting focuses on the <b>cost of assets</b> , rather than on their <b>market value</b> .
Conservatism concept:	recognizes <b>increases</b> in equity <b>only</b> when they are reasonably <b>certain</b> . recognizes <b>decreases</b> in equity <b>as soon</b> as they are reasonably <b>possible</b> .
Materiality concept:	disregard trivial matters (for example pencils are written off completely on the day of purchase), but disclose all important matters.
Realization concept:	Revenue is usually only recognized when goods or services are delivered.
Matching concept:	Costs associated with revenues or activities of a period are expenses of that period: costs of goods, other costs associated with the period, and losses.

## Ratios

Current Ratio	is a measure of the entity's ability to meet its <b>current obligations</b> . The <b>current assets</b> are compared to the <b>current liabilities</b> . A ratio between <b>2 to 1</b> is desirable.
Days' Sales Uncollected	indicates whether customers are paying their bills on time. The <b>average Accounts Receivables</b> are compared to the <b>total of credit sales</b> divided by the <b>number of days</b> of that period.
Inventory Turnover	indicates <b>how many times</b> the inventory is turned over a year. It is found by dividing <b>COGS</b> for a period by <b>inventory</b> at the end of the period (or <b>average</b> inventory during the period). The higher the ratio the better. However, if inventory is too small, orders from customers may not be filled promptly, which can result in lost sales.
Debt Ratio	indicates how highly <b>leveraged</b> (risky) the company is. It compares the <b>debt capital</b> (or <b>noncurrent liability</b> ) to <b>permanent capital</b> ( <b>debt capital</b> plus <b>equity</b> (paid-in capital plus retained earnings)). A ratio should be less than 50%.

## Income Statement (Profit & Loss statement)

The amount of income and how it was earned is usually the most important information about a business entity. An accounting report called the income statement explains the income of a period. The income statement is for a period of time (flow report), in contrast to the balance sheet, which is for a point in time (status report).

Revenue            **increase in Retained Earnings** resulting from operations, it's therefore an **increase in equity** (for example sale of merchandise). **It is not income!**

Expense            **decrease in Retained Earnings** resulting by the **reduction of inventory**, it's therefore a **decrease in equity**.

The **difference** between revenues and expenses is the **net income** of the period! Revenues and expenses (equity) are not necessarily at the same time accompanied by changes of cash (asset)!

### Key points to remember:

- Withdrawals by the owners (dividends) **are not** expenses! Therefore, they **do not** appear on the income statement. They **do not** reduce income, but they **do** decrease retained earnings!
- Every accounting transaction affects at least two items and preserves the basic equation  $Assets = Liabilities + Equity$  (double entry system)
- Some events are **not** transactions; they **do not** affect the accounting amounts: change in the value of land, 'goodwill' that was not purchased, changing the entity from proprietorship to corporation.
- Other events affect assets and/or liabilities but have no effect on equity: borrowing money, purchasing inventory, purchasing insurance protection, acquiring an asset, giving mortgage, buying land, selling land at its cost, repaying bank loans.
- Still other events affect equity as well as assets and/or liabilities. Revenues are increases in equity resulting from operations during a period. Expenses are decreases. Their net effect is shown in the equity called Retained Earnings. Equity also increases when owners pay in capital, and equity decreases when owners withdraw capital, but these transactions **do not** affect income!
- A sale has two aspects: a revenue aspect and an expense aspect. Revenue results when the sale is made, whether or not cash is received at that time. The related expense is the cost of the merchandise that was sold. The income of a period is the difference between the revenues and expenses of that period.

## Journal/Ledger

Debit is shown on the **left** side of an account.  
Credit is shown on the **rights** side of an account.

Increases in assets or expenses are debits (increases in expenses are decreases in equity).  
Increases in liabilities, equity or revenue are credits (increases in revenues are increases in equity).  
Decreases are the opposite.

**Revenue and Expense accounts (income statement)** are **temporary** accounts, because they are closed to Retained Earnings and started over at the beginning of each period. **Asset accounts** have **debit** balances, **liability and equity accounts** have **credit** balances. These **balance sheet accounts** are **permanent** accounts and are carried forward to the next period.

**Increases in equity** (associated with the entity's operations during a period) are **revenues**, **decreases** are **expenses**. The **difference** between them is **income**.

## Examples

1.) A sale of merchandise costing \$600.- for \$900.- **in cash** would affect the journal like this:

	Dr.	Cr.
Cash	900	
Sales Revenues		900
Expenses (COGS)	600	
Inventory		600

2.) A sale of merchandise costing \$600.- for \$900.- **on invoice** would affect the journal like this:

	Dr.	Cr.
Accounts Receivable	900	
Sales Revenues		900
Expenses (COGS)	600	
Inventory		600

... and when the invoice is paid:

	Dr.	Cr.
Cash	900	
Accounts Receivable		900

3.) A sale of merchandise costing \$600.- for \$900.- **paid in advance** would affect the journal like this:

	Dr.	Cr.
Cash	900	
Advances from Customers		900

...and when the merchandise is delivered:

	Dr.	Cr.
Advances from Customers	900	
Sales Revenues		900
Expenses (COGS)	600	
Inventory		600

4.) An entity budgets, that 2% of their total sales of \$500'000.- will be **bad debts**. It therefore creates an **allowance of doubtful accounts**, which is a **contra-asset**:

	Dr.	Cr.
Bad Dept Expense	10'000	
Allowance for doubtful acc.		10'000

...one year later, it decides it is never going to collect \$3'000 owed by a customer:

	Dr.	Cr.
Allowance for doubtful acc.	3'000	
Accounts Receivable		3'000

5.) An entity discovers that the market value of its inventory is 1'000 lower than its cost.

	Dr.	Cr.
Cost of Sales	1'000	
Inventory		1'000

6.) A machine is purchase for 10'000 and has an expected life of 10 years with no residual value. It is sold after 11 years for 3'000:

	Dr.	Cr.
Cash	3'000	
Gain on disposition of plant		3'000

7.) An entity pays its January rent of \$5'000.- in February:

	Dr.	Cr.
Rent Expense	5'000	
Accrued Rent		5'000

...in February:

	Dr.	Cr.
Accrued Rent	5'000	
Cash		5'000

Other 'temporary' **liability** accounts for payments **later** than when the expenses actually occurred (**accrued expenses**), are:

- Accounts Payable
- Salaries Expense /Accrued Salaries
- Pension Expense /Accrued Pensions
- Other Post Employment Benefits (OPEB)
- Rent Expense /Accrued Rent
- Depreciation Expense/Accumulated Depreciation (contra-asset account!)
- Deferred Income Tax (difference between actual income taxes **paid** and income tax **expense**)
- Interest Expense/Interest Payable

Other 'temporary' **asset** accounts for payments **earlier** than when the expenses actually occurred (**prepaid expenses**), are:

- Prepaid Expenses
- Prepaid Insurance/Cash
- Prepaid Rent/Cash

## Expense/Expenditure

Similar as **revenues** are not necessarily associated with **cash receipts**, **expenses** are not necessarily associated with **cash payments** in that period. If it **is** associated with cash, it **decreases** the asset 'cash', **if not**, it **increases** the **liability** (usually 'Accounts Payable'). **Expenditures** can also be both expenses **and** assets: \$3'000.- worth of inventory was purchased in August. \$500.- of it was sold in August (**expense**), the remaining \$2'500.- are still in inventory (**asset**). If the remaining \$2'500.- were sold in September, the entity had an **expense** but not an **expenditure** for these goods in September. When an **asset** is used up or **consumed**, an **expense** is incurred. Thus, an **asset** gives **rise** to an **expenditure** when it is **acquired**, and to an **expense** only when it is consumed. Over the life of a business, most **expenditures** become **expenses**, but in a single accounting period, **expenses** are not necessarily the same as **expenditures**. **Expenditures** are made when goods or services are acquired. If these goods or services are **used up (expired)** during the current period, they are **expenses** of the period. If **not used up (unexpired)**, they are **assets** at the end of that period and will become expenses in future periods as they are used up. Dividends are a distribution of earnings to owners and therefore are **not** an expense!

Examples:

	Expenditure	Expense
Inventory is ordered in Feb, rcvd in Mar, paid for in Apr, delivered to customer in May and paid by customer in June	Mar	May
Wages are earned in Feb and paid in Mar	Feb	Feb
Fuel was rcvd in Feb, paid for in Mar and consumed in Apr	Feb	Apr
Mar Rent was paid in Feb	Feb	Mar

## The three categories of expenses

1. Costs of the goods or services delivered during the period
2. Other expenditures that benefit operations of the period
3. Losses

## Product costs and Period costs

**Product costs** are costs associated with the **production** of products. **Period costs** are costs associated with the **sales and general activities** of the **accounting period**. **Period costs** reduce income in the period in **which the costs are incurred**, **Product costs** reduce income in the period in **which the products are sold** (which is often a later period).

## Depreciation, depletion and amortization

Depreciation **Plant assets** are **depreciated** over their **estimated service life**. In order to show the **original cost** of plant assets, depreciation expenses are accumulated in a **separate** account called **Accumulated Depreciation**.

Depletion is the depreciation of **wasting assets** (oil, mines, gas etc.), but the asset account is usually reduced **directly**.

Amortization is the writing off the cost of **intangible assets** (goodwill, trademarks, patent etc. which have been **acquired at a measurable cost**)

**Land** usually has an **unlimited** life and is therefore **rarely** depreciated!

## Liabilities and Equity

The equity section of a corporation's balance sheet has these main items:

1. Paid-in capital from **preferred** stock (a **mix** between common stock and bonds; **not** tax-deductible and hence **not** very common)
2. Paid-in capital from **common** stock, which consists of the **par** or **stated** value of the outstanding shares plus the **additional paid-in capital**
3. **Retained Earnings**, which is the **difference** between **net income** and **dividends** since the corporation began

However, **bonds** are **not** equity, but **noncurrent liability**, because the company has an **obligation** to pay the bondholder **interest** as well as **repay the principal**. Evidently, **bonds** are a **more risky** method to raise capital than **stock**. On the other side, **bonds** (or debt capital) are a **less expensive** way to source capital than **stocks** (or equity) and the interest paid is **tax-deductible**. Therefore, a company has to decide on the proper **balance** of its **permanent capital structure**. It risks of **going bankrupt** if it has a too high proportion of **debt capital** (so-called **highly leveraged**) and it pays an **unnecessarily high cost** if it has too high a proportion of **equity capital**.