EPS & EBIT
CALCULATIONS & EXPLANATIONS
EBIT

- In accounting and finance, earnings before interest and taxes (EBIT), is a measure of a firm's profit that includes all expenses except interest and income tax expenses.
- It is the difference between operating revenues and operating expenses.

What is 'Earnings Before Interest & Tax - EBIT'?

An indicator of a company's profitability, calculated as revenue minus expenses, excluding tax and interest.

EBIT is also referred to as "operating earnings", "operating profit" and "profit before interest and taxes (PBIT"

- Company never pay interest on its own money e,g shares
**EPS**

- **Earnings per share (EPS)** is the portion of a company's profit allocated to each outstanding share of common stock.

- **Earnings per share** serves as an indicator of a company's profitability.

Definition: A company's profit divided by its number of common outstanding shares.

If a company earning $2 million in one year had 2 million common shares of stock outstanding, its EPS would be $1 per share.

In calculating EPS, the company often uses a weighted average of shares outstanding over the reporting term.

Outstanding shares:
HOW DO YOU CALCULATE EARNINGS

- Net income, or net profit, is found on the income statement.
- Preferred dividends paid are listed on the balance sheet.
- **Number of common shares outstanding** must be calculated using the amount paid for the common shares, divided by the amount paid per share.
One of the primary **valuation** metrics used by investors to assess a business' worth and financial stability is **earnings per share (EPS)**.

EPS reflects a company's net income divided by the number of common shares outstanding. (shares outstanding)

( e.g. net income is $150000 outstanding share are 50 )

Earning per share (EPS) is 150000*50 = 3000

EPS, of course, largely depends on a company's earnings.

For the purposes of EPS calculation, **earnings before interest and taxes (EBIT)** is used because it reflects the amount of profit that remains after accounting those expenses necessary to keep the business going.

EBIT is also often referred to as **operating income**.
EARNINGS PER SHARE DEFINED

- **Earnings per share**, also known as **EPS**, is a very important number in business.

- It tells shareholders how much money each share of their stock earned for the company.

- It's important because, usually, when a company has a high earnings per share, it also has a high stock price, which makes investors happy.

- The equation for calculating earnings per share is as follows:

\[
\text{Earnings per Share} = \frac{\text{Net Income} - \text{Preferred Dividends}}{\text{Number of Common Shares Outstanding}}
\]

- \[150000 - 10000 = 140000\]

- Shares outstanding (10000)

- \[140000 \times 10000 = 14\] (Earnings per share is 14)
EARNINGS PER SHARE (EPS)

- **Net income** of a firm divided by the number of its **outstanding shares** the shares held by the **stockholders** (shareholders).

- **Primary earnings per share** (also called fully diluted EPS) takes into account all shares currently outstanding, plus the number of shares that would be outstanding if all convertible bonds and convertible preferred stock (preference shares) were exchanged for common stock (ordinary shares).

- Also called **net income per share**. Formula:

\[
\text{EPS} = \frac{(\text{Total revenue} - \text{Total expenses})}{\text{Number of outstanding shares}}
\]

Assuming:

\[
\text{EPS} = \frac{150000 - \text{expenses}}{10000}
\]

Then:

\[
\text{EPS} = 15
\]
EARNINGS PER SHARE (EPS)

Definition

Earnings per share (EPS) the amount of income that "belongs" to each share of common stock. An important tool for investors, EPS is often used in determining the value of a stock.

The average number of shares outstanding (the denominator of the EPS formula) is usually calculated by averaging the number of shares at the beginning of the earning period and the number of shares at the end of the period.

For example, if a company earned $1 million in 2009 and had 900,000 shares at the beginning of 2009 and 1.1 million shares at the end of 2009, the 2009 EPS would be $1 million/[(.9 million shares + 1.1 million shares)/2] = $1/share.

EPS is generally reported in annualized form from the most recent fiscal year. From time to time, you will see the abbreviation (ttm) associated with earnings per share. That means that the earnings number is a sum of the previous four quarters, which is not necessarily the same as the previous fiscal year.

Formula

- Earnings per Share = Net Income / Average Number of Shares Outstanding during Income Period
- Earnings per Share (TTM) = Net Income (Last Four Quarters) / Avg Number Shares Outstanding
The earnings per share ratio (EPS ratio) measures the amount of a company's net income that is theoretically available for payment to the holders of its common stock.

A company with a high earnings per share ratio is capable of generating a significant dividend for investors, or it may plough the funds back into its business for more growth; in either case, a high ratio indicates a potentially worthwhile investment, depending on the market price of the stock.

- If an investor is primarily interested in a steady source of income, the EPS ratio is useful for estimating the amount of room that a company has for increasing its existing dividend amount.

- However, in many cases simply reviewing a company's history of making changes to its dividend is a better indicator of the actual size of future dividends. In some cases, a company may have a high ratio, but pays no dividend at all, since it prefers to plough the cash back into the business to fund additional growth.

- It is very worthwhile to track a company's earnings per share ratio on a trend line. If the trend is positive, then the company is either generating an increasing amount of earnings or buying back its stock.

- Conversely, a declining trend can signal to investors that a company is in trouble, which can lead to a decline in the stock price.

To calculate the ratio, subtract any dividend payments due to the holders of preferred stock from net income after tax, and divide by the average number of common shares outstanding during the measurement period.

**The calculation is:**

\[
\text{Net income after tax} - \text{Preferred stock dividends} \\
\text{Average number of common shares outstanding}
\]

For example, ABC Company has net income after tax of $1,000,000 and also must pay out $200,000 in preferred dividends.

- It has both bought back and sold its own stock during the measurement period; the weighted average number of common shares outstanding during the period was 400,000 shares. ABC’s earnings per share ratio is:

\[
\frac{\$1,000,000 - \$200,000}{400,000} = \$2.00 \text{ per share}
\]
EARNINGS PER SHARE

Formula

- Earnings per share or basic earnings per share is calculated by subtracting preferred dividends from net income and dividing by the weighted average common shares outstanding. The earnings per share formula looks like this.

You'll notice that the preferred dividends are removed from net income in the earnings per share calculation.

- This is because EPS only measures the income available to common stockholders.

- Preferred dividends are set-aside for the preferred shareholders and can't belong to the common shareholders.

- Most of the time earning per share is calculated for year-end financial statements.

- Since companies often issue new stock and buy back treasury stock throughout the year, the weighted average common shares are used in the calculation.

- The weighted average common shares outstanding is can be simplified by adding the beginning and ending outstanding shares and dividing by two.
EARNINGS PER SHARE (EPS).

- Earnings per share (EPS) is calculated by dividing a company's total earnings by the number of outstanding shares.
- For example, if a company earns $100 million in a year and has 50 million outstanding shares, the earnings per share are $2.
- Earnings per share can also be calculated on a fully diluted basis, by adding outstanding stock options, rights, and warrants to the outstanding shares.
- The results report what EPS would be if all of those options, rights, and warrants were exercised and the company had to issue more shares to meet its obligations.
- Earnings and other financial measures are provided on a per share basis to make it easier for you to analyse the information and compare the results to those of other investments.
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EARNINGS PER SHARE

- Earnings per Share
- In a given fiscal year, a publicly-traded company's profit divided by the number of shares outstanding. This is considered the single most important aspect in determining a share's price and value, because the calculation of earnings per share shows the amount of money to which a shareholder would be entitled in the event of the company's liquidation. In general, earnings per share applies only to common shares. It is calculated thusly:

\[
\text{Earnings per share} = \frac{(\text{Net income} - \text{Preferred dividends})}{\text{Average shares outstanding}}
\]
EARNINGS PER SHARE (EPS).

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- Earnings and other financial measures are provided on a per share basis to make it easier for you to analyze the information and compare the results to those of other investments.
Earnings per share (EPS) is the portion of a company’s profit that is allocated to each outstanding share of common stock, serving as an indicator of the company’s profitability. It is often considered to be one of the most important variables in determining a stock’s value, and it comprises the “E” part of the P/E (price-earnings) valuation ratio. EPS is calculated as:

\[ \text{EPS} = \frac{\text{net income}}{\text{average outstanding common shares}} \]

For example, McGraw Hill Financial Inc (MHFI) reported first quarter 2014 net income of $248 million and had 277.2 million average shares outstanding.

To calculate EPS, investors can insert these figures into the EPS calculation:

\[ \text{EPS} = \frac{248 \text{ million}}{277.2 \text{ million}} = 0.89 \]

Companies may choose to buy back their own shares in the open market. In doing so, a company can improve its EPS (because there are fewer shares outstanding) without actually improving net income.

For example, if MHFI in the first quarter had used a share buy-back program to buy 100 million shares, its EPS would have been:

\[ \text{EPS} = \frac{248 \text{ million}}{177.2 \text{ million}} = 1.40 \]

Note: some companies have a special class of stock called preferred stock. Any dividends paid on preferred stock would be subtracted from net income when calculating EPS.

The formula for calculating EPS would then be:

\[ \text{EPS} = \frac{\text{net income} - \text{dividends on preferred stock}}{\text{average outstanding common shares}} \]

In our example, MHFI had and EPS of 89 cents for the first quarter of 2014. Knowing the EPS of an individual stock is not enough information to make an informed investment decision.
Divide the net income by the number of shares outstanding.

- Taking Microsoft's vitals as our example, we'd divide $17 billion by 8.33 billion and come away with a basic EPS of  
  Take another basic example.

- Let's say a bocce ball company has a net income of $4 million and 575,000 shares outstanding.

- We divide $4 million by 575,000 and come up with an EPS of 6.95.
EPS = \frac{\text{net income}}{\text{outstanding shares}}

Example:
\frac{17,000,000,000}{8,330,000,000} = 2.04 = 2
One of the factors used to figure earnings per share is the company's net income.

Net income is the profit left over after deducting the company's expenses and is sometimes referred to as net profit or the bottom line.

Net income can be found on the company's income statement.

In this example, the net income for Bob's Miniatures is $122,200.
Preferred dividends are the second item used to calculate earnings per share.

**Dividends** are a share of the profit that is sometimes paid to shareholders.

**Preferred dividends** are dividends paid to the owners of a class of stock called 'preferred' stock.

The preferred dividends can be found on the statement of retained earnings (also called the statement of stockholder's equity) or from the income statement.

In the following example, Bob's Miniatures is showing $17,000 and $32,200 paid for dividends on the retained earnings statement.
The final piece of information we need to calculate the earnings per share is the number of common shares outstanding.

Common shares are another class of stock. A company usually issues many more shares of common stock than it does of the more expensive preferred stock.

Outstanding shares are simply shares that have been bought by stockholders.

So, **common shares outstanding** refers to the number of shares of common stock that have been purchased by stockholders.

Be careful not to confuse shares issued and shares outstanding.

Shares issued means the total number of shares the company has offered for sale, while outstanding shares means the number of shares that are owned by stockholders.

To figure out the number of common shares outstanding, we'll usually have to do a little extra math, using the information in the stockholder's equity section of the balance sheet.

On the **balance sheet**, it will tell us (how much money the company received for selling common shares,) along with how much the shares were sold for.

By dividing the total paid for (the common stock )by the cost per share, we can calculate how many shares are outstanding.

- Total paid for stock = $150000
- Cost per share $14
- Cost per share s (150000*14) = (outstanding shares is = 107714)
How to Calculate Earnings Per Share

Three Methods: Basic Earnings Per Share Calculation

Weighted Earnings Per Share Calculation

Using Earnings Per Share

Community Q&A

Earnings per share (EPS) is a commonly used phrase in the financial world. Earnings per share represents a portion of a company's profit that is allocated to one share of stock. Therefore, if you were to multiply the EPS by the total number of shares a company has, you'd calculate the company's net income. EPS is a calculation that many people who watch the stock market pay attention to.

Steps

Method 1

Basic Earnings Per Share Calculation
Example:

2012 net income

= $17,000,000,000,000
How to Calculate Earnings Per Share

- Locate the company's net earning or net income from the previous year. This information can be found on most financial webpages, or on the company's website.

- Using the company's net earnings or income as the primary number in the calculation is the most basic way of determining EPS.
  
  For example, say you want to calculate the EPS of Microsoft based on its net income.
  
  A quick browse of Microsoft's website tells you that in 2012, the company's net income was almost $17 billion.[1]

- Be careful not to mistake a company's quarterly net income with their annual net income.

- Quarterly profit is calculated every three months, whereas annual profit is calculated every 12 months.

- Mistaking a company's quarterly net income for their annual net income will cause your calculation to be roughly four times smaller.
Example:

outstanding shares = 8,330,000,000
EPS

- **Figure out how many shares are outstanding.** How many total shares does a company have on the stock exchange?
- This information can be collected by visiting a financial website and locating the company's information.
  - Again, let's continue with the example of Microsoft. As of the time of writing, Microsoft has 8.33 billion shares outstanding.
**EPS** = \( \frac{\text{net income}}{\text{outstanding shares}} \)

*Example:*

\[
\frac{17,000,000,000}{8,330,000,000,000} = 2.04 \approx 2
\]
**EPS**

- **Divide the net income by the number of shares outstanding.** Taking Microsoft's vitals as our example, we'd divide $17 billion by 8.33 billion and come away with a basic EPS of 2.

- Take another basic example. Let's say a bocce ball company has a net income of $4 million and 575,000 shares outstanding. We divide $4 million by 575,000 and come up with an EPS of 6.95.
WEIGHTED EARNINGS PER SHARE CALCULATION

\[
\text{Weighted EPS} = \frac{\text{net income - dividends}}{\text{outstanding shares}}
\]
Modify the basic EPS calculation slightly to arrive at the weighted earning per share calculation.

Weighted EPS is a more accurate calculation because it takes into account any dividends that the company issues to shareholders.

However, this formula is more complex than the basic earnings per share calculation or the reporting term, so it is not used quite as often even though it is more accurate.
Example:

dividends

= $5,000,000,000,000
A dividend is an amount of money paid out to stockholders — often quarterly — from the company's profit.

- For the sake of example, let's take Apple as the company we're trying to arrive at a calculation for.
- In 2012, Apple announced that it would pay a $2.5 billion dividend quarterly, starting in Q3.
- That amounts to roughly $5 billion in dividends over the course of the year.
Example:

\[ \text{net income} = \$41,730,000,000,000 - \$41,730,000,000,000 - 5,000,000,000,000 = \$36,730,000,000,000 \]
Take the company's net income and subtract the dividends on preferred stock number. Using Apple as an example, a quick search reveals that in 2012, Apple recorded $41.73 billion in net income.

Subtract $5 billion from 41.73 to arrive at $36.73 billion.
Example:

outstanding shares

= 934,820,000

\[
\frac{36,730,000,000,000}{934,820,000}
\]

= 39.29
DIVIDE THE DIFFERENCE BY THE AVERAGE NUMBER OF OUTSTANDING SHARES

- Divide the difference by the average number of outstanding shares.
- Apple's net income minus their dividend in 2012 was $36.73 billion.
- Divide this amount by the amount of shares outstanding, 934.82 million, to arrive at a weighted EPS of roughly 39.29.
higher EPS = more profit
Use EPS as a barometer for a company's profitability.

- EPS clues investors and potential investors into a company's profitability.
- A higher EPS generally signals a more robust company, profit-wise.
- Like most numbers, however, EPS should not be looked at in isolation.
- There's no fixed EPS number above which a company's stock should be bought and below which its stock should be sold.
- It's important to look at a company's EPS in relation to other companies.
huge company’s net income = $1,000,000
small company’s net income = $1,000,000
Know that more than other calculations, EPS is probably the single most important factor in driving a company's stock price.

- Looking at a company's EPS is more valuable than looking at their profit because EPS puts a company's profit into perspective.
- (A huge company generating $1M net income isn't very impressive; a tiny company generating $1M net income is.)
- EPS is also integral in evaluating a company's Price to Earnings ratio, or P/E.
INVESTMENTS

INVEST = ?

- earnings per share
- market capitalization
- share price
- dividends
- long-term financial outlook
- sufficient liquidity
KNOW THAT CALCULATING EPS IS NOT ENOUGH TO MAKE AN INFORMED DECISION ABOUT WHETHER TO INVEST

- Know that calculating EPS is not enough to make an informed decision about whether to invest.

- EPS will tell you how one company is doing compared to another, or how one company is doing in relation to the industry as a whole, but it won't tell you at a glance whether it's a steal to invest in a company or whether that company is overvalued. In order to make an informed decision about whether to invest in a company's stock, you'll also need to consider the following, at the very least:
  - Market capitalization
  - Share price
  - Dividends/buybacks
  - Long-term financial outlook
  - Sufficient liquidity
EBIT (Earnings Before Interest and Taxes) is a measure of a entity's profitability that excludes interest and income tax expenses. Interest and taxes are excluded because they include the effect of factors other than the profitability of operations.

EBIT (also called operating profit) shows an entity's earning power from ongoing operations.

**Calculation (formula)**

\[
EBIT = \text{Profit (loss)*} + \text{Finance costs} + \text{Income tax expense*}
\]

* from continuing operations
In this example, EBIT is $200,000 while net income is $100,000.
WHY IT MATTERS:

- EBIT provides investment analysts with useful information for evaluating a company’s operating performance without regard to interest expenses or tax rates.
- EBIT helps minimize these two variables that may be unique from company to company, and enables one to analyse operating profitability as a singular measure of performance.
- Such analysis is particularly important when comparing similar companies across a single industry where those companies may have varying capital structures or tax environments.
Method 1 Basic Earnings Per Share Calculation

- Locate the company's net earning or net income from the previous year.
- This information can be found on most financial webpages, or on the company's website.
- Figure out how many shares are outstanding.
- Divide the net income by the number of shares outstanding.

\[
\text{EPS} = \frac{\text{net income}}{\text{outstanding shares}}
\]

Example:

\[
\frac{17,000,000,000}{8,330,000,000} = 2.04 \approx 2
\]
# EBIT-EPS Calculation with New Equity Financing

## Common Stock Equity Alternative

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<tr>
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<th>$500,000</th>
<th>$150,000</th>
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<tr>
<td><strong>EBIT</strong></td>
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<tr>
<td><strong>Interest</strong></td>
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<td>0</td>
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<tr>
<td><strong>EBT</strong></td>
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<tr>
<td><strong>Taxes (30% x EBT)</strong></td>
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<td><strong>EAT</strong></td>
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* A second analysis using $150,000 EBIT rather than the expected EBIT.
# EBIT-EPS Calculation with New Debt Financing

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<th>EBIT</th>
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* A second analysis using $150,000 EBIT rather than the expected EBIT.