Accounting & Financial Statement Analysis

365 Careers

WHAT IS ACCOUNTING?

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What is accounting?

Accounting is an information science that is used to collect and organize financial data for organizations and individuals.

What type of information?

Accounting organizes financial information. It is about money. It is quantitative in nature and measures money. Accounting isn't an abstract science – it is much more practical than theoretical. It's one of those things that you'll learn best by doing.

TYPES OF ACCOUNTING

What types of accounting are there?

- ***Bookkeeping:*** *ensures that financial information has been gathered systematically*
- ***Financial Accounting:*** *prepared for the company's ownership, its lenders, financial analysts, and for other external stakeholders*
- ***Managerial Accounting:*** *looks into topics like pricing, competition, marginality, budgeting*
- ***Tax Accounting:*** *determines the amount of taxes that a company has to pay*

THE THREE CORE STATEMENTS

INCOME STATEMENT

Purpose

- *How did the company perform throughout the period under consideration?*
- *Did it produce a profit or a loss?*

BALANCE SHEET

Purpose

- *What does a company owe and own at a certain date?*
- *What is the company's financial position?*

CASH FLOW

Purpose

- *How much cash did the company make during the period under consideration?*
- *Where did the cash come from?*

THE MAIN INCOME STATEMENT ITEMS

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Revenue

Represents an inflow of economic resources. Usually, the main type of revenue for a given firm are its day-to-day sales – customers buying goods that the firm sells.

Other Revenue

Earnings money by performing activities that are outside the core area of operations

Cost of Goods Sold

Expenses that are sustained in order to produce the goods that the firm sells and are directly attributable to the production process

THE MAIN INCOME STATEMENT ITEMS

Selling, General and Administrative

A large category of costs that includes many items that are not directly related to the production process (for ex. Salaries of non-production personnel, management compensation, rent, general expenses, etc.)

D&A (Depreciation & Amortization)

Two accounts that reflect the "using up" of tangible and intangible assets. Depreciation refers to assets of a physical nature, while amortization is the term that is used for intangible assets (goodwill, licenses, copyrights, etc.).

Interest Expenses

The costs that a company bears for receiving financing

THE MAIN BALANCE SHEET ITEMS

Assets

Cash

One of the most important drivers for a business. It shows how much of a firm's assets are cash or can easily be converted into cash. It gives us an idea of the liquidity of the company

Accounts Receivable

When customers buy a firm's products they have to pay for them. And until they do, the firm will register this amount in accounts receivable, which indicates the money owed by customers. The firm registers that it has earned a payment from these customers, but has not yet received the payment.

Inventory

Inventory is the account that shows the value of raw materials, goods that are in the process of elaboration and finished goods that are ready to be sold to customers.

THE MAIN BALANCE SHEET ITEMS

Assets

PP&E (Property, Plant & Equipment)

A group of assets that are vital to business operations. Imagine a production company – it certainly needs plants and equipment in order to transform raw materials into finished products. Usually, this is a hefty investment that cannot be easily liquidated.

THE MAIN BALANCE SHEET ITEMS

Liabilities

Accounts Payable

When a company buys goods from suppliers and does not pay at the time of the purchase, it registers the amount in accounts payable until the actual payment has been made.

Financial Liabilities

A financial liability appears on the Balance Sheet of a company when it receives external financing – which is usually a bank loan.

THE MAIN BALANCE SHEET ITEMS

Owners' Equity

Equity

The firm's capital that it technically "owes" to its owners. This capital would not be repaid to the shareholders, but the company will try to pay them a decent amount of dividends if its business is successful.

THE MAIN ACCOUNTING EQUATION

THE MAIN ACCOUNTING EQUATION

The Accounting Equation

The reason it is called a "Balance Sheet" is because assets must equal liabilities and equity. The two sides have to be equal or else a mistake has been made. This principle is known as the Accounting equation and is one of the core principles around which Accounting has been built. Assets are equal to liabilities and equity.

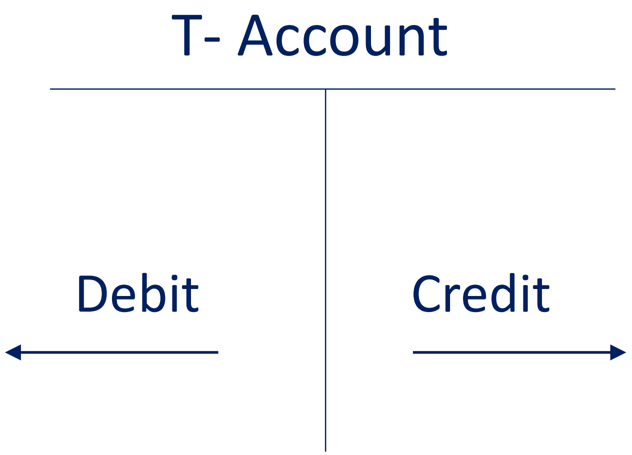
T-ACCOUNTS, CREDITS & DEBITS

T-ACCOUNTS – A USEFUL TOOL

Balance Sheet

Assets	**Liabilities & Equity**
Cash	Trade Payables
Accounts Receivable	Financial Liabilities

DEBIT MEANS "LEFT", CREDIT MEANS "RIGHT"



DEBIT MEANS LEFT

…Assets increase to the left

Asset T- Account

↑ Increase	Decrease ↓
Debit ←	Credit →

CREDIT MEANS RIGHT

…Liabilities and Equity increase to the right

Liability T- Account	
Decrease	Increase
Debit ←	Credit →

&

Equity T- Account	
Decrease	Increase
Debit ←	Credit →

CREDIT MEANS RIGHT

…Liabilities and Equity increase to the right

Balance Sheet

Assets	Liabilities & Equity
Asset T- Account	Liability T- Account

Asset T- Account

Increase	Decrease
Debit	Credit

Liability T- Account

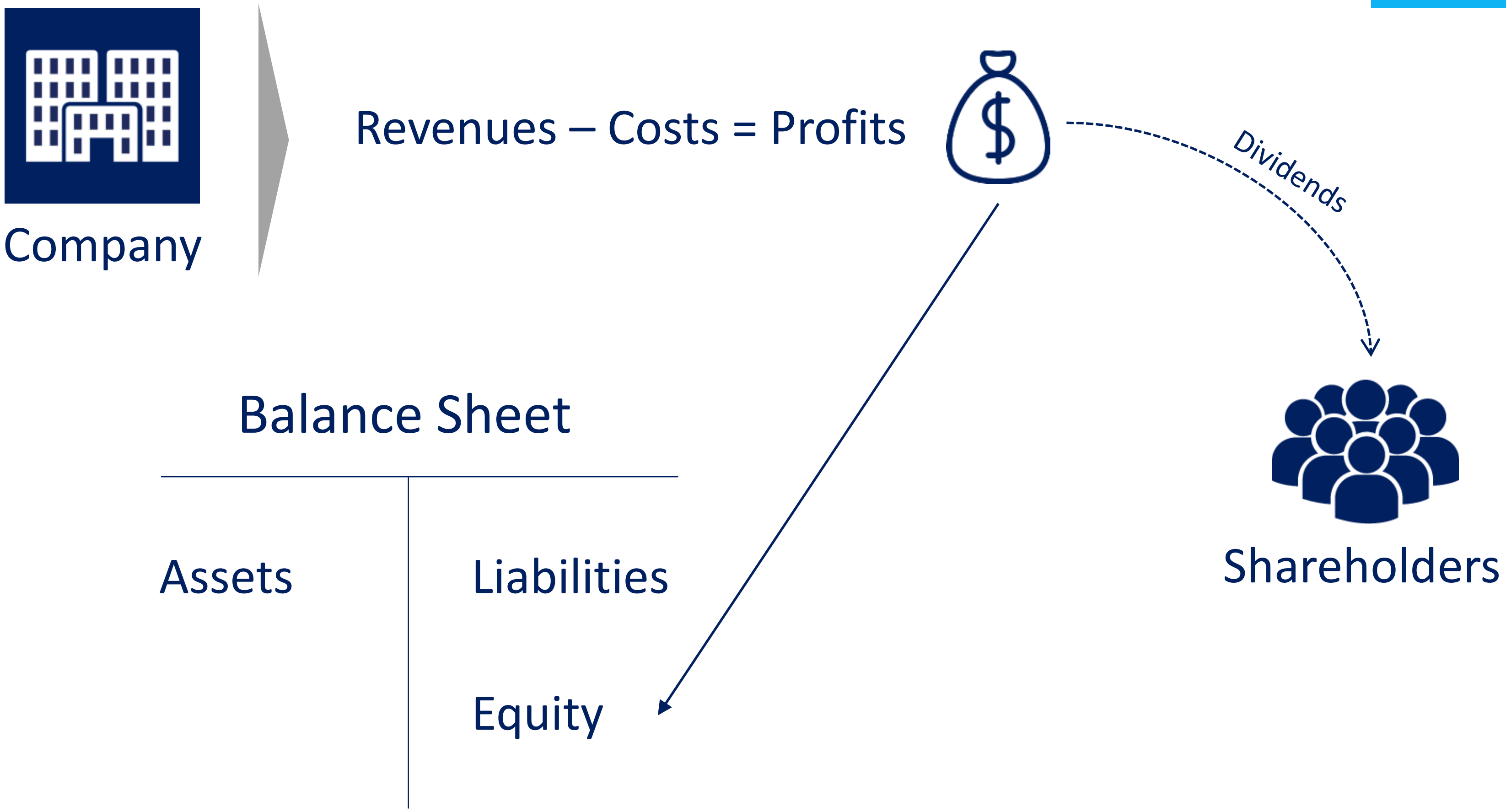
Decrease	Increase
Debit	Credit

Debit = Left

Credit = Right

INCOME STATEMENT T-ACCOUNTS

WHEN A FIRM MAKES PROFITS…



INCOME STATEMENT T-ACCOUNTS

Debits are on the left, while Credits are on the right side

P&L T- Account

Debit	Credit

REVENUES

…Revenues behave like Liabilities & Equity

The higher a company's revenues, the higher its profits and equity

↑ Revenues → ↑ Profits → ↑ Equity

REVENUES

…Revenues behave like Liabilities & Equity

Revenues behave like Liabilities & Equity

Revenues T- Account

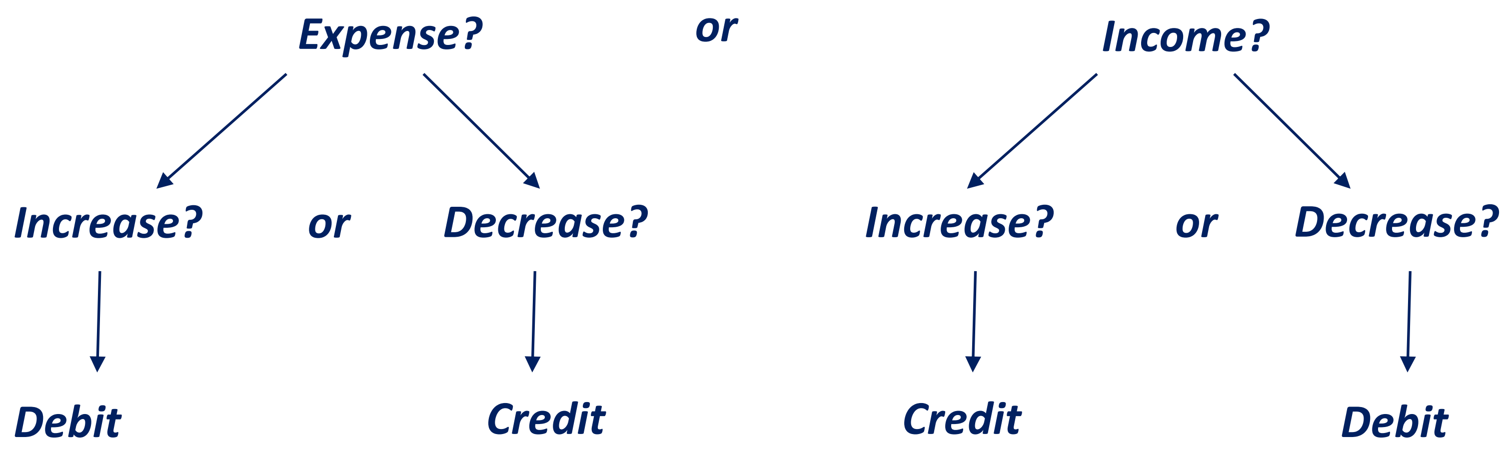
Decrease	Increase
Debit	Credit

Costs behave like Assets

Cost T- Account

Increase	Decrease
Debit	Credit

A USEFUL SCHEME…



DOUBLE ENTRY BOOKKEEPING

A FIRM OWNS ONE ASSET…

$ 1,000,000

Cash (Asset)

100% EQUITY FINANCING…

$ 1,000,000

Equity

BALANCE SHEET…

Balance Sheet

Assets	Liabilities & Equity
Cash	**Equity**
$ 1,000,000	$ 1,000,000

ACQUISITION OF REAL ESTATE…

$ 1,000,000 ⇄ **$ 1,000,000**

Cash (Asset) ***Real Estate (Asset)***

BALANCE SHEET…

Balance Sheet

Assets	Liabilities & Equity

Cash

$ 1,000,000	$ 1,000,000

Real Estate

$ 1,000,000	

Equity

	$ 1,000,000

THE FIRM RECEIVES A BANK LOAN

$ 500,000

Bank Loan

BALANCE SHEET…

Balance Sheet

Assets

Cash

$ 1,000,000	$ 1,000,000
$ 500,000	

Real Estate

$ 1,000,000	

Liabilities & Equity

Equity

	$ 1,000,000

Bank Loans

	$ 500,000

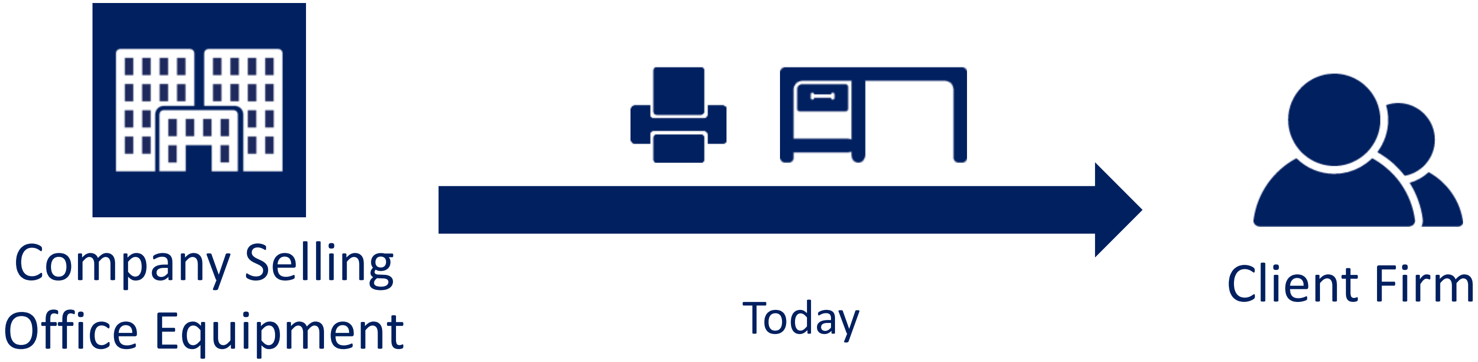
TIMING OF REVENUES

A COMPANY SELLS OFFICE EQUIPMENT

Company Selling Office Equipment

Client Firm

THE COMPANY DELIVERS THE PRODUCTS



THE COMPANY DELIVERS THE PRODUCTS

1. A payment is made **at** delivery
2. A payment is made **before** delivery
3. A payment is made **after** delivery

Company Selling Office Equipment

Payment of $10,000

Client Firm

PAYMENT AT DELIVERY

The client pays for the office supplies at delivery

Cash (BS)		Revenue (IS)		Trade Receivables (BS)	
10,000			10,000		

PAYMENT AFTER DELIVERY

The client pays for the office supplies 60 days after delivery

Cash (BS)		Revenue (IS)		Trade Receivables (BS)	
			10,000	10,000	

PAYMENT AFTER DELIVERY

The client pays for the office supplies 60 days after delivery

Cash (BS)

10,000	

Revenue (IS)

	10,000

Trade Receivables (BS)

10,000	10,000

PAYMENT BEFORE DELIVERY

The client pays in advance

Cash (BS)		Revenue (IS)		Trade Receivables (BS)		Prepaid Revenue (BS)	
10,000							10,000

PAYMENT BEFORE DELIVERY

The client pays in advance

Cash (BS)		Revenue (IS)		Trade Receivables (BS)		Prepaid Revenue (BS)	
10,000			10,000			10,000	10,000

TIMING OF COSTS

A COMPANY HAS TO PAY RENT

1. A payment is made **before** the invoice
2. A payment is made **at the time of the invoice**
3. A payment is made **after** the invoice

A Company Pays Rent

Invoice $1,000

Landlord

PAYMENT AT THE DATE OF INVOICE

Paying rent when the invoice shows up

Cash (BS)

	1,000

Rent (IS)

1,000	

Trade Payables (BS)

PAYING AFTER INVOICE

The company pays its rent 60 days after the invoice has arrived

Cash (BS)

	1,000

Rent (IS)

1,000	

Trade Payables(BS)

1,000	1,000

PAYMENT BEFORE INVOICE

The company pays its rent in advance

Cash (BS)	
	1,000

Rent (IS)	
1,000	

Trade Payables (BS)	

Prepaid Expenses (BS)	
1,000	1,000

FINANCIAL RATIOS

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Liquidity

A firm's capability to pay its short term obligations

Profitability

A firm's ability to generate profits

Solvency

A company's ability to meet its long term obligations

Growth

The speed at which a company's financials are growing

FINANCIAL RATIOS

Liquidity

Current Ratio
Net Trade Cycle

Profitability

ROA	*Ebit%*
ROE	*Net Income%*

Solvency

Debt Ratio
Interest Coverage Ratio

Growth

Revenue y-o-y growth
EBITDA y-o-y growth

FINANCIAL RATIOS

Liquidity Ratios

Liquidity

Current Ratio: $\dfrac{\text{Short term assets}}{\text{Short term liabilities}}$

Net Trade Cycle: DSO + DIO - DPO

DSO: $\dfrac{\text{Accounts Receivable}}{\text{Revenues}} \times 360$

DIO: $\dfrac{\text{Inventory}}{\text{Cost of goods sold}} \times 360$

DPO: $\dfrac{\text{Accounts Payable}}{\text{Cost of goods sold}} \times 360$

FINANCIAL RATIOS

Solvency Ratios

- **Solvency**

Debt ratio: $$\frac{\text{Total Liabilities}}{\text{Total Assets}}$$

Interest Coverage: $$\frac{\text{EBIT}}{\text{Interest Expenses}}$$

FINANCIAL RATIOS

Profitability Ratios

Profitability

ROA:

$$\frac{\text{EBIT}}{\text{Total Assets}}$$

ROE:

$$\frac{\text{Net Income}}{\text{Shareholders' Equity}}$$

ROE decomposition: ROA x (Total Assets / Equity) x (Net Income / EBIT)

FINANCIAL RATIOS

Growth Ratios

Growth

Revenue y-o-y %: $\dfrac{\text{Revenue (this year)}}{\text{Revenue (last year)}} - 1$

EBITDA y-o-y %: $\dfrac{\text{EBITDA (this year)}}{\text{EBITDA (last year)}} - 1$