

## ACC250: Intro to Financial Accounting

### Ch2. The Balance Sheet

Jaeyoon Yu, Ph.D.  
Central Michigan University

## 1 Business Activities and Transactions

- Three Types of Business Activities
- Transactions, Duality of Effects, and a Chart of Accounts

## 2 Debit/Credit Framework

- Debit and Credit
- Debit and Credit Accounts
- Where to record?

## 3 Accounting Cycle

- Step 1. Analyze Transactions
- Step 2. Record Journal Entries
- Step 3. Summarize T-Accounts
- Step 4. Prepare Trial Balance
- Step 5. Financial Statements (B/S only in this chapter)

## 4 Current Ratio - Assets

## 5 Cost Principle

Three different types of business activities:

① Financing - The raising and repayment of capital.

- ▶ Selling stocks to shareholders
- ▶ Borrowing money from banks
- ▶ Paying dividends to shareholders

② Investing - The purchase of assets that are not part of the core business.

- ▶ Buying equipment
- ▶ Buying land
- ▶ Buying a new building

③ Operating - The core activities of a business that generate revenue (incl. R & E).

- ▶ Selling products
- ▶ Buying supplies
- ▶ Paying employees' salaries
- ▶ Paying rent for office space

## Business Activities - Classification exercise

- **F I O:** Choose F (Financing), I (Investing), or O (Operating).
- **NI:** O if the activity affects Net Income (through Revenue or Expense), otherwise X.

Business Activities	F	I	O	NI
Two owners of the NoodleCake decided to contribute \$5,000 each.	—	—	—	—
NoodleCake received \$20,000 cash in exchange for its promise to repay the loan in two years.	—	—	—	—
NoodleCake purchased a logo by paying \$300 cash to a designer.	—	—	—	—
NoodleCake bought \$9,600 of Equipment on credit.	—	—	—	—
NoodleCake paid \$1,000 cash to employees for salaries.	—	—	—	—
NoodleCake received \$2,000 cash from customers for products sold.	—	—	—	—

## Transactions

Financial activities that involve the exchange of goods, services, or money.

- All transactions affect the basic accounting equation: **A = L + SHE**.
- Two types:
  - ▶ **Operating** activities: Affect NI (mainly covered in Ch3).
  - ▶ **Financing** and **Investing** activities: Do not affect NI (covered in Ch2).
- **Activities but not transactions**:
  - ▶ Promising to hire employees
  - ▶ Exchange of stocks between shareholders

## A chart of accounts

A company manages its own **chart of accounts** to record transactions.

Examples of common accounts:

Account	Class	Definition
Cash	—	Money available for immediate use, including currency, coins, and balances in checking and savings accounts.
Supplies	—	Items used in the course of business operations that are expected to be consumed within a short period.
Equipment	—	Long-term assets such as machinery, computers, or vehicles used in business operations.
Logo and Trademarks	—	Intangible assets representing the company's brand identity and legally protected symbols or names.
Software	—	Computer programs and applications owned or licensed by the company for business use.
Accounts Payable	—	Amounts the company owes to suppliers for goods or services purchased on credit.
Notes Payable	—	Written promises to pay a specific amount of money at a future date, often with interest.
Common Stock	—	The basic ownership shares issued to investors, representing ownership in the company.
Retained Earnings	—	Cumulative net income that has been kept in the company rather than distributed to shareholders as dividends.

Each transaction has at least two effects on the basic accounting equation:

- $A = L + SHE$

Analyze the effects of the following transactions:

Business Activities	A	L	SHE
1. Two owners of the NoodleCake decided to contribute \$5,000 each.	+		+
2. NoodleCake received \$20,000 cash in exchange for its promise to repay the loan in two years.	-	-	
3. NoodleCake purchased a logo by paying \$300 cash to a designer.			
4. NoodleCake bought \$9,600 of Equipment on credit.	-	-	
5. NoodleCake paid \$1,000 cash to employees for salaries.	-		-
6. NoodleCake received \$2,000 cash from customers for products sold.	-		-

**Debit(DR): Left**

**Credit (CR): Right**

$$A = L + \mathbf{SHE}$$

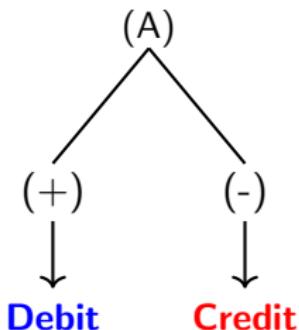


Those on  
the **left-hand** side:  
Debit Accounts

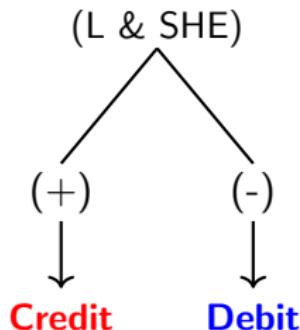


Those on  
the **right-hand** side:  
Credit Accounts

### Debit accounts



### Credit accounts



- When **Debit** accounts increase: **Debit**.
- When **Debit** accounts decrease: **Credit**.
- When **Credit** accounts increase: **Credit**.
- When **Credit** accounts decrease: **Debit**.

	A	L	SHE
<b>Debit / Credit account</b>	<u>Debit acc.</u>	<u>Credit acc.</u>	<u>Credit acc.</u>
<b>Increase</b>	<u>D (L)</u>	<u>C (R)</u>	<u>C (R)</u>
<b>Decrease</b>	<u>C (R)</u>	<u>D (L)</u>	<u>D (L)</u>

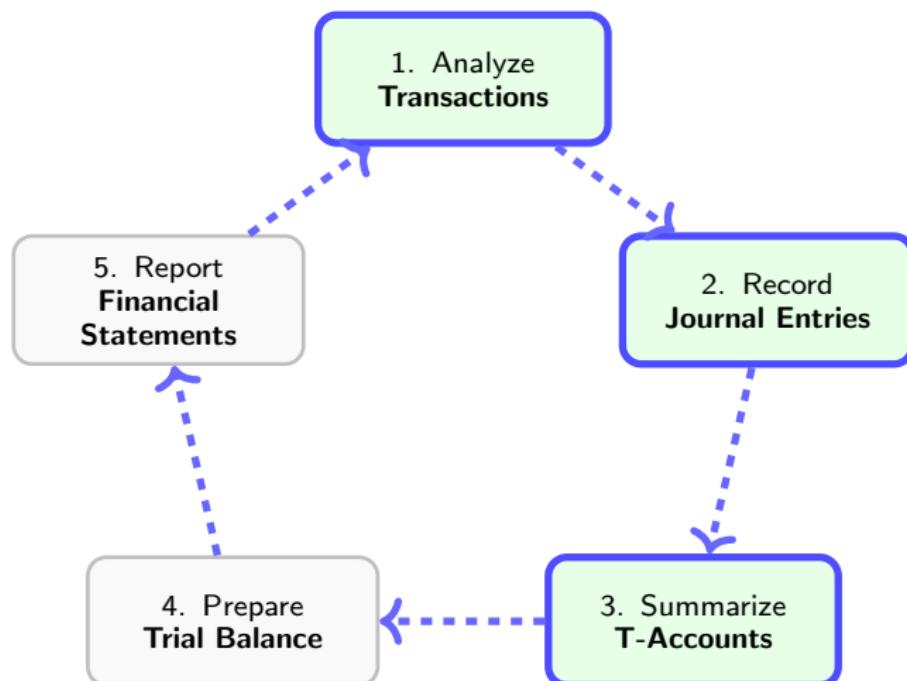
**EX.** Prepare journal entries for the following transactions under the debit/credit framework:

- ① Two owners of NoodleCake each contributed \$5,000.

- ② Noodlecake pays \$300 cash to create the company's logo.

# Accounting Cycle

A systematic accounting process is used to capture and report the financial effects of a company's transactions.



*Note: Steps 1–3 are covered in this chapter.*

## Step 1. Analyze Transactions

### Questions for Every Transaction

- ① Is it a transaction?
- ② Which accounts are affected?
- ③ How are they affected? (increase or decrease)

**Example:** You bought \$500 worth of supplies and paid cash.

- Transaction? It affects the basic accounting equation, so it's a transaction.
- What accounts? Supplies (Asset) and Cash (Asset) are affected.
- How affected? Supplies increases, Cash decreases.

A	= L	+ SHE
<hr/>		
<hr/>		

## Step 1. Analyze Transactions - Examples

① Two owners of the NoodleCake decided to contribute \$5,000 each.

A	= L	+ SHE

② NoodleCake received \$20,000 cash in exchange for its promise to repay the loan in two years.

A	= L	+ SHE

③ NoodleCake bought \$9,600 of Equipment on credit.

A	= L	+ SHE

## Step 2. Record Journal Entries

**EX.** Consider the following transactions. Prepare journal entries for each:

- 1 Two owners of NoodleCake each contributed \$5,000.

- 2 Noodlecake pays \$300 cash to create the company's logo.

- 3 NoodleCake received \$20,000 cash in exchange for a promise to repay the loan in 2 years.

- 4 Noodlecake purchases and receives \$9,600 in equipment (e.g., computers), in exchange for its promise to pay \$9,600 at the end of the month.

5 Noodlecake pays \$5,000 to the equipment supplier in (d).

6 Noodlecake signs a contract with a programmer for program code for the Enchanted World game app for \$9,000. No code has been received yet.

7 Noodlecake receives the \$9,000 of app game code ordered in (f), pays \$4,000 cash, and promises to pay the remaining \$5,000 next month.

8 Noodlecake receives supplies costing \$600 on account.

## Step 3. Summarize T-Accounts

### Ledger Accounts, T-Accounts, and General Ledger

- Transactions are posted to (i.e., summarized by) ([Ledger Accounts](#)).
- A complete list of Ledger Accounts is called [General Ledger](#).
- [T-account](#) is a visual representation of the (Ledger Accounts).
- We use T-accounts in this course.

Cash	
Beg. 0	
(a) _____	_____ (b)
(c) _____	_____ (e)
End. _____	_____ (g)

## Step 3. Summarize T-Accounts

### Balances of T-accounts

- **Debit** accounts have normally **debit** balances.
- **Credit** accounts have normally **credit** balances.

### How to get transactions (in journal entries) posted to T-accounts?

- Get the **beginning balance** of the T-account from the previous period.
- For each account, go through transactions that affect the account.
  - ▶ For those with **debit** values, add the **debit** value to the T-account.
  - ▶ For those with **credit** values, add the **credit** value to the T-account.
- Get the **ending balance** of the T-account.

<u>Asset Accounts</u>		<u>Liab. Accounts</u>	<u>SHE. Accounts</u>	
Beg. Bal.			Beg. Bal.	
End. Bal.			+	End. Bal.

### Step 3. Summarize T-accounts

<b>ASSETS</b>	
<b>Cash</b>	
<hr/>	
Beg. 0	
(a) 10,000	300 (b)
(c) 20,000	5,000 (e)
	4,000 (g)
End. 20,700	
<b>Supplies</b>	
<hr/>	
Beg. 0	
(h) 600	
End. 600	
<b>Equipment</b>	
<hr/>	
Beg. 0	
(d) 9,600	
End. 9,600	
<b>Logo &amp; Trademarks</b>	
<hr/>	
Beg. 0	
(b) 300	
End. 300	
<b>Software</b>	
<hr/>	
Beg. 0	
(g) 9,000	
End. 9,000	

<b>LIABILITIES</b>	
<b>Accounts Payable</b>	
<hr/>	
Beg. 0	
(e) 5,000	
9,600 (d)	
5,000 (g)	
600 (h)	
End. 10,200	
<b>Notes Payable</b>	
<hr/>	
Beg. 0	
20,000 (c)	
End. 20,000	
<b>SHAREHOLDERS' EQUITY</b>	
<b>Common Stock</b>	
<hr/>	
Beg. 0	
10,000 (a)	
End. 10,000	

## Step 4. Prepare Trial Balance

- Take all the debits and credits from the T-Accounts
- Put them in the Trial Balance.
- Calculate the total debits and credits.
- Check if the **total debits** equal the **total credits**.
- **If it does not, there is an error in the journal entries.**

Account Title	Debit (\$)	Credit (\$)
Cash	_____	
Supplies	_____	
Equipment	_____	
Logo & Trademarks	_____	
Software	_____	
Accounts Payable		_____
Notes Payable		_____
Common Stock		_____
<b>Total</b>	_____	_____

## Step 4. Prepare Trial Balance

---

- If the total debits do not equal the total credits, there's an error in the journal entries.
- If the total debits equal the total credits, the journal entries are likely correct.
- Having the same balances does not guarantee the journal entries are correct.

- **Assets** are grouped into **current assets** and **non-current assets**.
  - ▶ **Current assets**: those expected to be converted to cash or used up within 1 year (e.g., Cash, Supplies).
  - ▶ **Non-current assets**: those expected to provide benefits for more than 1 year (e.g., Equipment, Logo & Trademarks, Software).
- **Liabilities** are grouped into **current liabilities** and **non-current liabilities**.
  - ▶ **Current liabilities**: those expected to be paid within 1 year (e.g., Accounts Payable, Notes Payable).
  - ▶ **Non-current liabilities**: those expected to be paid more than 1 year from now (e.g., Notes Payable).

NoodleCake Studio, Inc.  
Balance Sheet  
As of August 31, 20XX

<b>Assets</b>	
Current Assets	
Cash	\$20,700
Supplies	600
<b>Total Current Assets</b>	<b>\$21,300</b>
Equipment	9,600
Logo & Trademarks	300
Software	9,000
<b>Total Assets</b>	<b>\$40,200</b>
<b>Liabilities and Shareholders' Equity</b>	
Current Liabilities	
Accounts Payable	\$10,200
<b>Total Current Liabilities</b>	<b>\$10,200</b>
Notes Payable	20,000
<b>Total Liabilities</b>	<b>\$30,200</b>
Stockholders' Equity	
Common Stock	\$10,000
Retained Earnings	\$0
<b>Total Stockholders' Equity</b>	<b>\$10,000</b>
<b>Total Liabilities and Shareholders' Equity</b>	<b>\$40,200</b>

## Current Ratio

A measure of a company's ability to pay its short-term obligations.

Calculated as: 
$$\frac{\text{Current Assets}}{\text{Current Liabilities}}$$

- Current Ratio > 1: the company is able to pay its current liabilities.
- Current Ratio < 1: the company is **not** able to pay its current liabilities.

**EX.** From the previous example:

- Current assets: \_\_\_\_\_
- Current liabilities: \_\_\_\_\_
- Current Ratio: \_\_\_\_\_
- Implications: The company \_\_\_\_\_ its current liabilities (to suppliers, employees, etc.) using its current assets (e.g., Cash, Accounts Receivable).

### Cost Principle

Assets are initially recorded at their **acquisition cost**, which includes all costs necessary to acquire the asset and prepare it for its intended use.

- Asset values are initially determined by the **cost principle**.  
(i.e., how much the company paid to acquire the assets.)
- **Not** the current market value of the assets.
- Subsequently, the value is adjusted for depreciation and other factors.  
(will be covered later.)

**EX.** Think about this:

- The firm paid \$9,600 to acquire the equipment.
  - ▶ Historical acquisition cost: \$9,600 (following the **cost principle**).
- To buy the same one today, the firm would need to pay \$10,000.
  - ▶ Current market value: \$10,000.
- Historical acquisition cost is **not** the current market value of the asset.
- In B/S, the asset value is the **historical acquisition cost**.