ACC250: Intro to Financial Accounting

Ch0. Introduction to R, E, and NI

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- This Ch0 slide packet is primarily based on material from Chapters 1 to 4.
- The goal of this packet is to introduce accounting concepts to those with no prior accounting background.
- To make the material accessible, I have **simplified the concepts** using plain language rather than providing strict definitions.
- We **will study** them in **greater detail** and with **more formal definitions** as the course progresses.
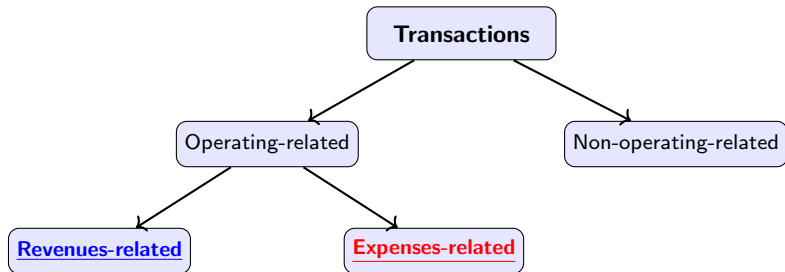
Transactions

> **Transactions**
>
> Financial activities that involve the exchange of goods, services, or money.
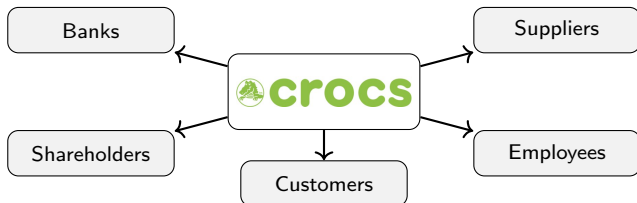
- Transactions affect the financial position of the business.
- **REVENUES** and **EXPENSES** are the two main types of transactions.

Transactions - Types

```
                    ┌─────────────────┐
                    │  Transactions   │
                    └─────────────────┘
                      ↙             ↘
          ┌──────────────────┐   ┌─────────────────────┐
          │ Operating-related │   │ Non-operating-related │
          └──────────────────┘   └─────────────────────┘
            ↙             ↘
┌────────────────────┐  ┌────────────────────┐
│  Revenues-related  │  │  Expenses-related  │
└────────────────────┘  └────────────────────┘
```

Revenues (R) - Simple

The amount of resources (cash) **earned** from selling goods or services for a period.
("**earned**" means products & services are **delivered** to customers.)

EX. How much revenues for this quarter?

- Sold and collected $10,000 from customers.
- Received $1,000 in advance to deliever 10 shoes in the next quarter.
- Received $5,000 from a bank loan.

Expenses

Expenses (E) - Simple

Costs of operating a business, incurred to generate revenues in the period.

- Salaries and wages paid to employees
- Rent for business premises
- Utility bills (electricity, water, etc.)

EX. How much expenses for this quarter?

- Paid $1,000 for salaries and wages.
- Paid $2,000 for rent.
- Paid $4,000 in advance for a 1-year insurance policy effective next quarter.

Net Income

Net Income (NI)

Revenues - Expenses.

- Measures the profitability of a business.
- If $R > E \Rightarrow$ **net income (or profit)**.
- If $R < E \Rightarrow$ **net loss**.

Example: Year 1

EX. You started a lemonade stand business. Here are your first 3 transactions:

- Bought lemons and sugar: $20
- Paid for cups and napkins: $10
- Sold lemonade for cash: $50
- (All supplies were used up.)
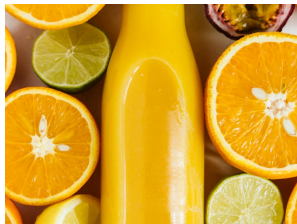
Question: Calculate your Revenues, Expenses, and
Net Income for Year 1.

- **R:** ___ (from selling lemonade)
- **E:** ___ (___ for lemons&sugar + ___ for cups&napkins)
- **NI:** _____

Income Statement	
Item	**Year 1**
Revenues	___
Expenses	___
Net Income	

Retained Earnings

Retained Earnings (Earned Capital, Equity)

The cumulative amount of net income retained in the business after dividends are paid.

- Net income is cumulated in **Retained Earnings**.
- **Retained Earnings** belong to the owners of the business.
- When opening a business, **Retained Earnings** is 0 (as no profit is made yet).

EX. How much Retained Earnings at the end of Year 1 from the previous example?

Dividends (D)

A distribution of a portion of a company's earnings to its shareholders.
By this amount, Retained Earnings decreases.

When paying dividends?

- when the business is doing well.
- when its profits are high and sustainable.

Continuing from the previous example,

- No dividends are distributed to shareholders.
- If $5 dividends are distributed, How much Retained Earnings at the end of Year 1?

Dividends

The effect of paying dividends:

- Shareholders' portions are not changed: $20.
- Retained Earnings (in your business) is decreased by Dividends.
  $\Rightarrow$ New RE balance: $15.
- $5 is now in your pocket.

Retained Earnings and Dividends

- Retained earnings (RE) equation:

$$\text{Ending RE} = \text{Beginning RE} + \underline{\mathbf{NI}} - \underline{\mathbf{Div}}$$

- **Net income (NI): Increases retained earnings.**
- **Dividends (Div): Decrease retained earnings.**
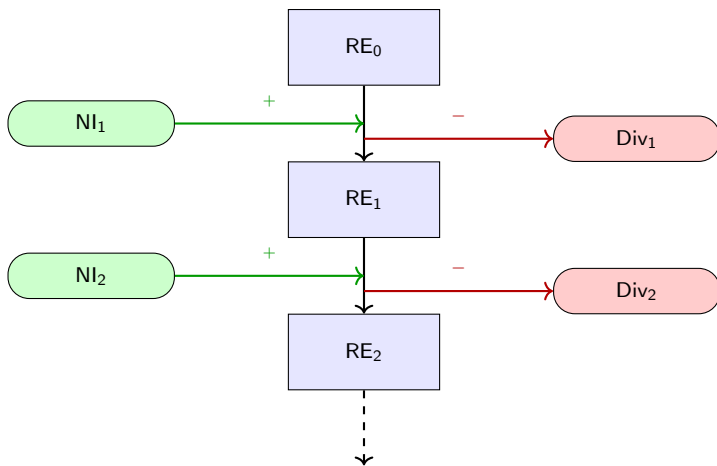
0: business opened   1: Year 1   2: Year 2

EX. A corporation ABC has beginning retained earnings of $50,000 (thanks to prior years' profits), net income of $20,000, and dividends of $5,000.
Ending retained earnings:

$$\text{Ending RE} = 50,000 + 20,000 - 5,000 = 65,000$$

Item	Amount ($)
Beginning Retained Earnings	___
Add: Net Income	___
Less: Dividends	
Ending Retained Earnings	___

Table: Statement of Retained Earnings

Do dividends involve a cash outflow? _

Are dividends considered expenses? _

Explanations:

- See the definition of dividends.
- It's not an expense because it's not a cost of doing business.
- Rather, It's a distribution of profits to the owners (consequences of the business's operations).

EX. Your lemonade stand is doing well! Here are 4 transactions for Year 2:

- Sold lemonade for cash: $120
- Bought lemons and sugar: $45
- Paid for cups and napkins: $15
- Paid yourself a dividend: $5
- (All supplies were used up.)
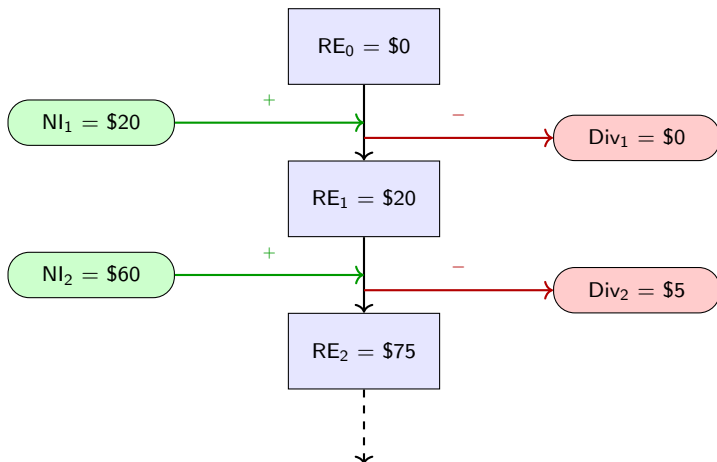
Question: Calculate R, E, and NI for Year 2.

- **Revenues:** ____ (from selling lemonade)
- **Expenses:** ___ (___ for lemons&sugar + ___ for cups&napkins)
- **Net Income:** _____

Income Statement

Income Statement

A financial statement that reports a company's revenues, expenses, and net income over a period of time.

Income Statement		
Item	**Year 1**	**Year 2**
Revenues	$100	$120
Expenses	$80	$60
Net Income	$20	$60

$RE_0 = \$0$

$NI_1 = \$20$ $\quad + \quad$ $\quad - \quad$ $Div_1 = \$0$

$RE_1 = \$20$

$NI_2 = \$60$ $\quad + \quad$ $\quad - \quad$ $Div_2 = \$5$

$RE_2 = \$75$

0: business opened   1: Year 1   2: Year 2

Statement of Retained Earnings

Statement of Retained Earnings

A financial statement that shows changes in retained earnings over a period, including net income and dividends.

Statement of Retained Earnings

Item	Year 1	Year 2
Beginning Retained Earnings	$0	$20
Add: Net Income	$20	$60
Less: Dividends	$0	$5
Ending Retained Earnings	$20	$75

Practice Exercises

Q1: You started a cookie business with $200. You sold cookies for $80, bought ingredients for $30, and paid for packaging for $10. What is your Net Income?

- **Revenues:** ___ (from selling cookies)
- **Expenses:** ___ (___ for ingredients + ___ for packaging)
- **Net Income:** _____

Q2: In Year 2, your cookie business had revenues of $150, expenses of $90. The business paid $20 in dividends. How much is Net Income? Prepare two-year income statement and statement of retained earnings.

- **Net Income:** _____
- **Income Statement:** & **Statement of Retained Earnings:**

Income Statement		
Item	**Year 1**	**Year 2**
Revenues	___	___
Expenses	___	___
Net Income	▭	▭

Statement of Retained Earnings		
Item	**Year 1**	**Year 2**
Beg. RE		
Add: Net Income	▭	▭
Less: Dividends	___	___
End. RE	___	___