

# ACC250: Intro to Financial Accounting

## Ch0. Introduction to R, E, and NI

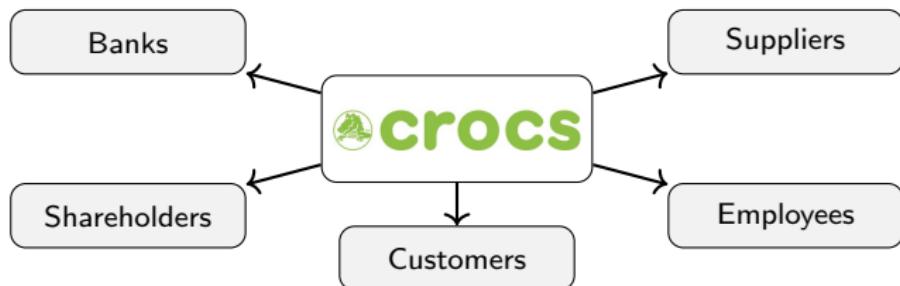
Jaeyoon Yu, Ph.D.  
Central Michigan University

- 1 Transactions, Revenues, Expenses, and Net Income
- 2 Retained Earnings and Dividends
- 3 Income Statement
- 4 Statement of Retained Earnings

- 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

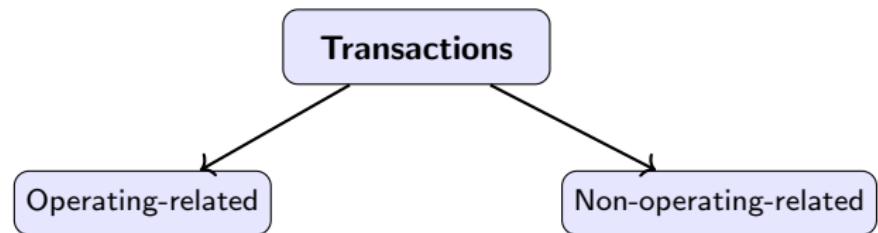
Financial activities that involve the exchange of goods, services, or money.



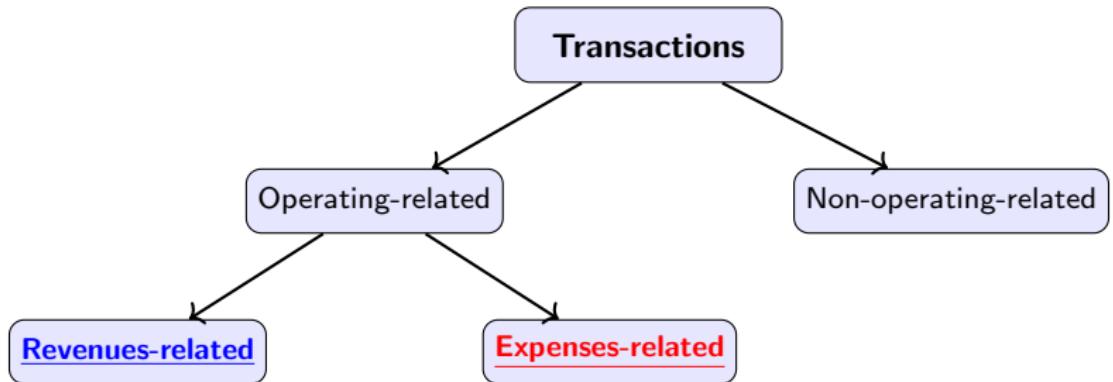
- Transactions affect the financial position of the business.
- **REVENUES** and **EXPENSES** are the two main types of transactions.

## Transactions - Types

Transactions



## Transactions - Types



## 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 deliver 10 shoes in the next quarter.
- Received \$5,000 from a bank loan.



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\$10,000 (we will talk more about this later.)



## 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.

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$\$1,000 + \$2,000 = \$3,000$  (we will talk more about this later.)

## Net Income (NI)

Revenues - Expenses.

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Revenues - Expenses.

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

## 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: \_\_\_\_\_

## Example: Year 1

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- Bought lemons and sugar: \$20
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- Sold lemonade for cash: \$50
- (All supplies were used up.)



**Question:** Calculate your Revenues, Expenses, and Net Income for Year 1.

- R: \$50 (from selling lemonade)
- E: \$30 (\$20 for lemons&sugar + \$10 for cups&napkins)
- NI:  $\$50 - \$30 = \$20$

<b>Income Statement</b>	
<b>Item</b>	<b>Year 1</b>
Revenues	—
Expenses	—
Net Income	

Income Statement	
Item	Year 1
Revenues	\$50
Expenses	\$30
Net Income	

Income Statement	
Item	Year 1
Revenues	\$50
Expenses	\$30
Net Income	\$20

## 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?

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

\$20 (RE at the inception of the business is 0. NI is added to RE.).

## 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?

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

$$\$20 - \$5 = \$15$$



The effect of paying dividends:

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

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- Net income (NI): Increases retained earnings.

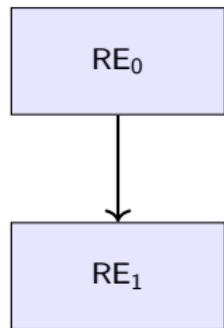
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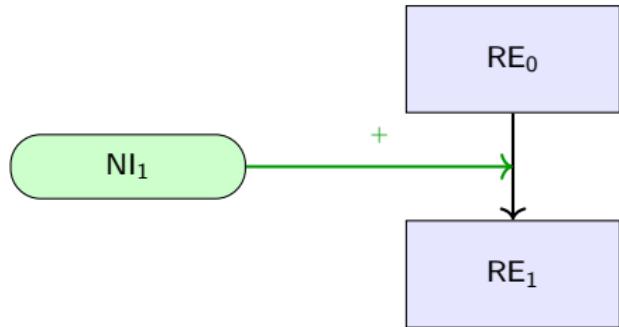
- Net income (NI): Increases retained earnings.
- Dividends (Div): Decrease retained earnings.

RE<sub>0</sub>

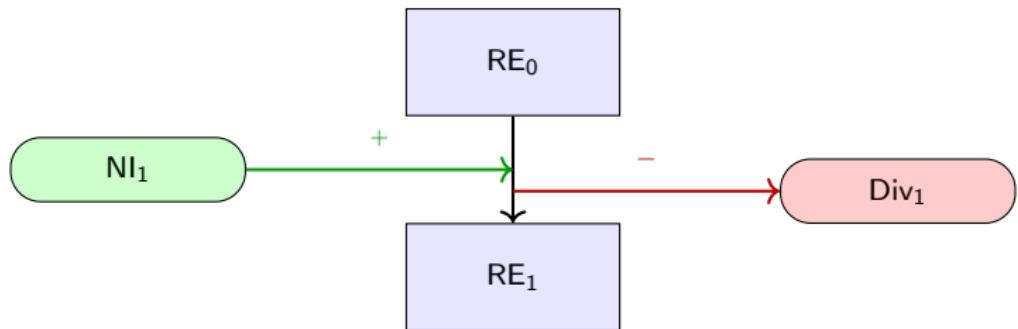
**0: business opened    1: Year 1    2: Year 2**



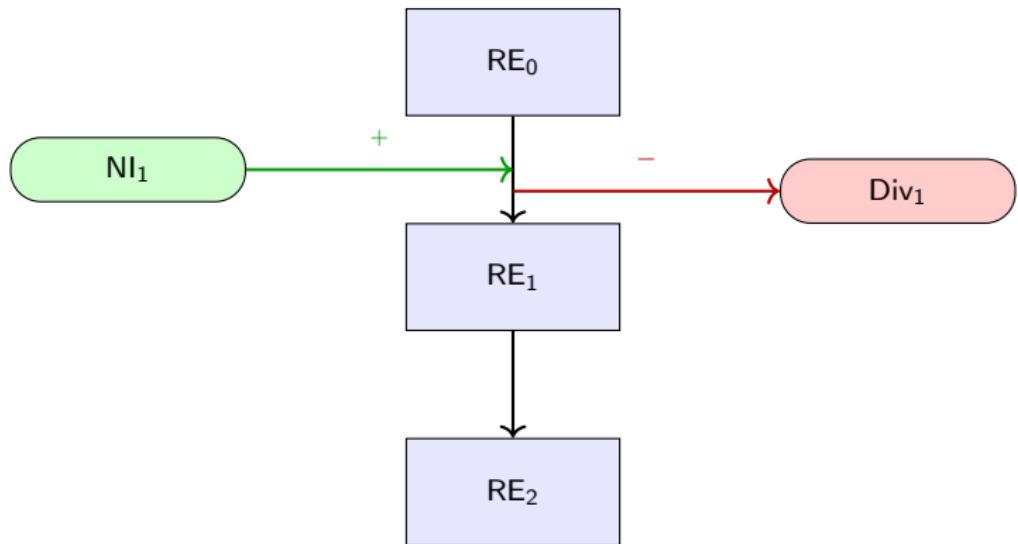
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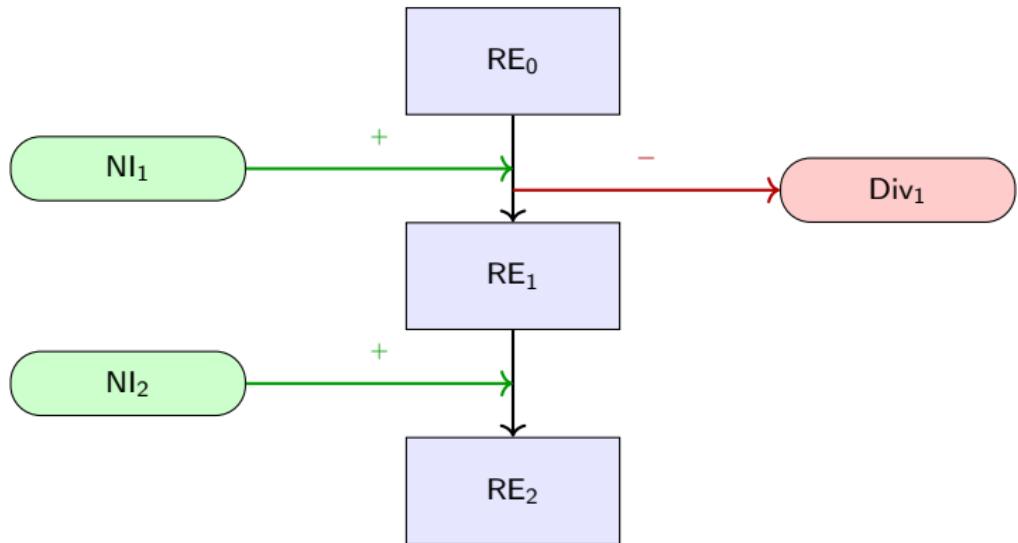
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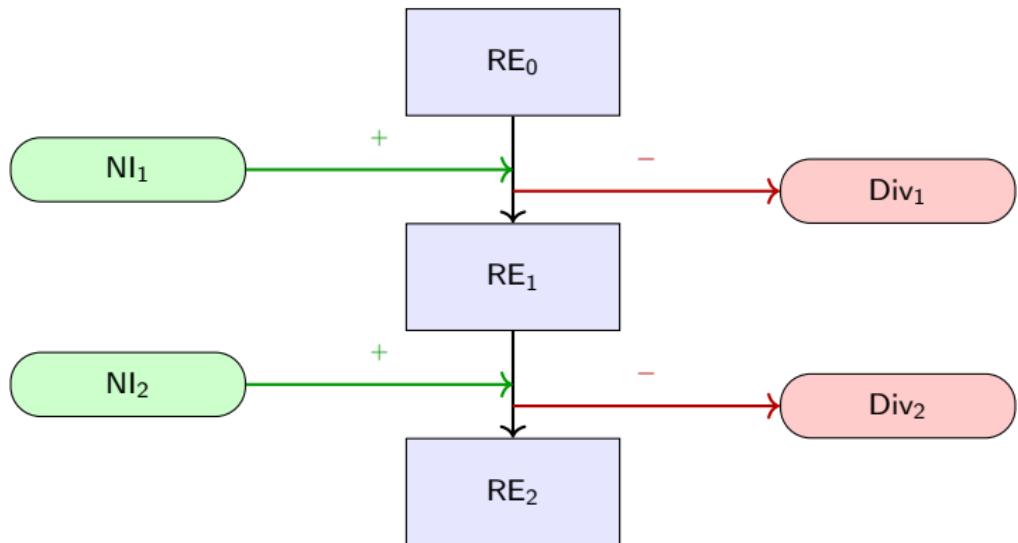


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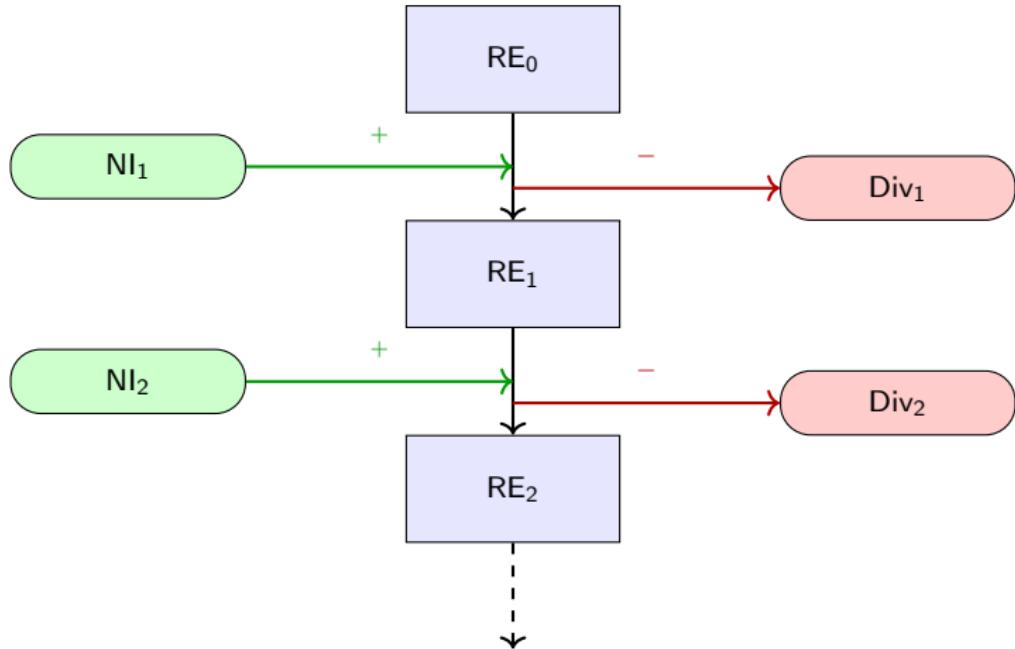


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## NI, Div, and RE



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

<u>Item</u>	<u>Amount (\$)</u>
Beginning Retained Earnings	<u>50,000</u>
Add: Net Income	<u>20,000</u>
Less: Dividends	<u>(5,000)</u>
<b>Ending Retained Earnings</b>	<b><u>65,000</u></b>

Table: Statement of Retained Earnings

Do dividends involve a cash outflow?

—

Are dividends considered expenses?

—

Do dividends involve a cash outflow? **O**

Are dividends considered expenses? **—**

Do dividends involve a cash outflow? O

Are dividends considered expenses? X

### 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:** \_\_\_\_\_

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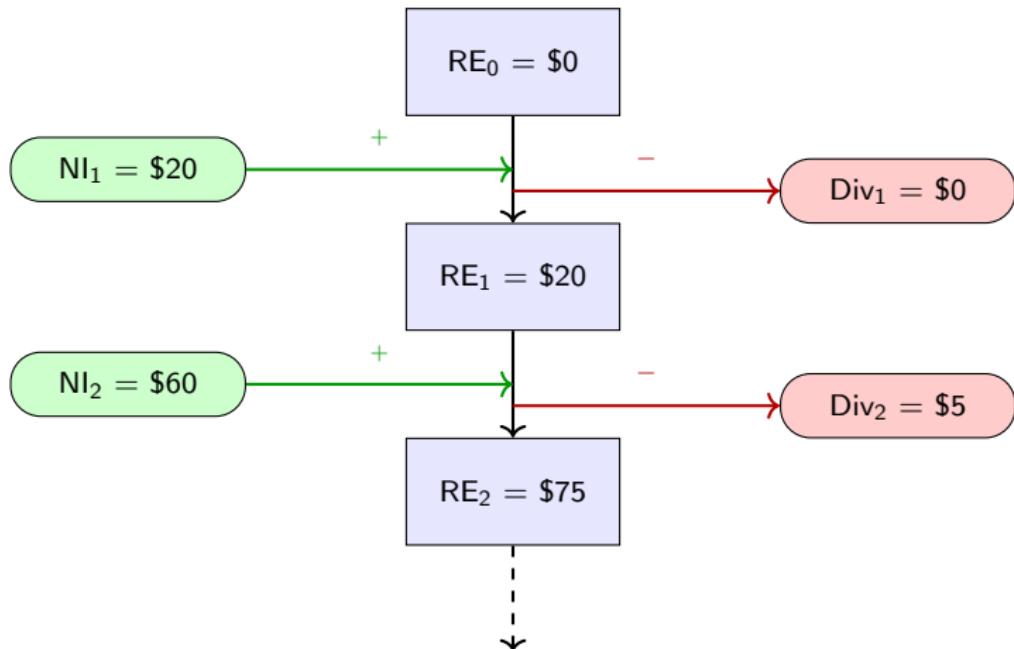
**Question:** Calculate R, E, and NI for Year 2.

- **Revenues:** \$120 (from selling lemonade)
- **Expenses:** \$60 (\$45 for lemons&sugar + \$15 for cups&napkins)
- **Net Income:**  $\$120 - \$60 = \$60$

## 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



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

**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:** \_\_\_\_\_

**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:** \$80 (from selling cookies)
- **Expenses:** \$40 (\$30 for ingredients + \$10 for packaging)
- **Net Income:**  $\$80 - \$40 = \$40$

**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	■	■

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Add: Net Income	\$40	\$60
Less: Dividends	\$0	\$20
End. RE	\$40	\$80