

ACC250: Intro to Financial Accounting
Ch0. Introduction to R, E, and NI

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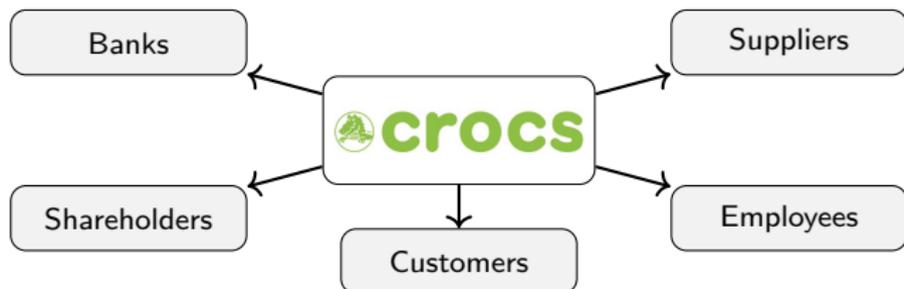
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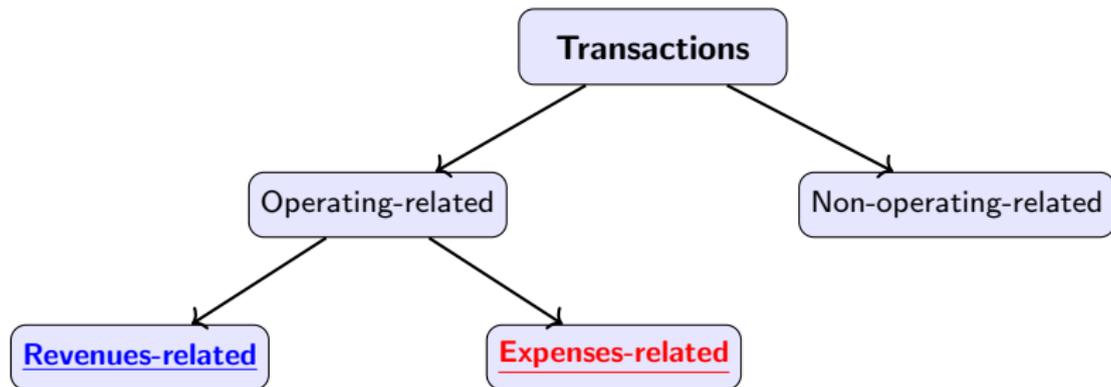
- This Ch0 slide packet is primarily based on material from Chapters 1 to 4.
- The goal of this packet is to introduce accounting concepts to those with no prior accounting background.
- To make the material accessible, I have simplified the concepts using plain language rather than providing strict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

Transactions

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.



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.

\$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.

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

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.

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

Income Statement	
Item	Year 1
Revenues	<u>\$50</u>
Expenses	<u>\$30</u>
Net Income	<u>\$20</u>

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?

\$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?

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



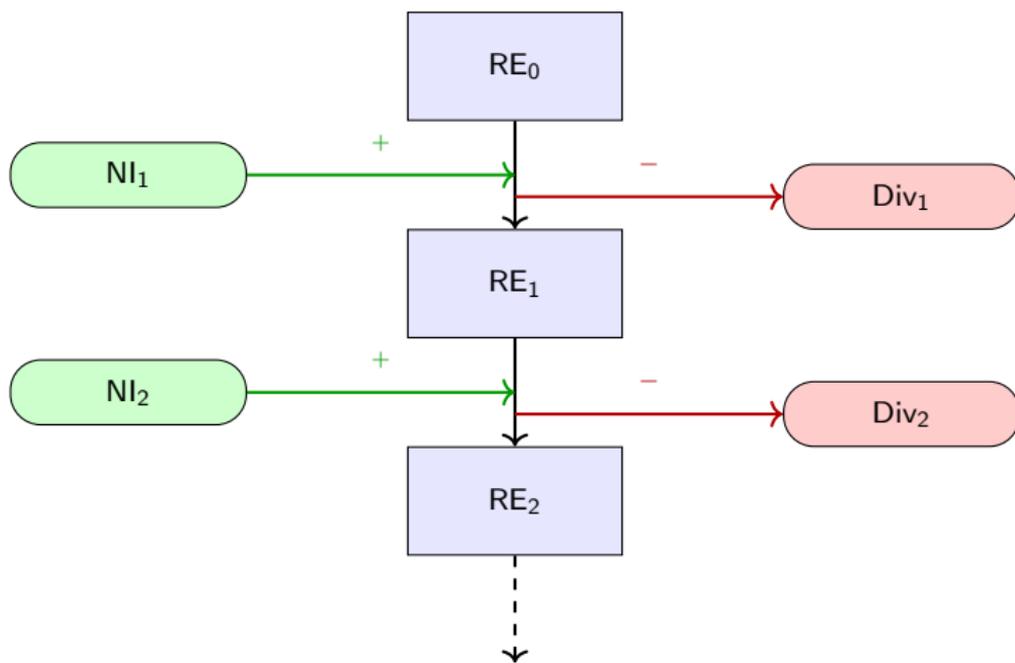
The effect of paying dividends:

- 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.

- Retained earnings (RE) equation:

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

- 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:

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

<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>
<u>Ending Retained Earnings</u>	<u>65,000</u>

Table: Statement of Retained Earnings

Dividends - Quick Questions

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.)

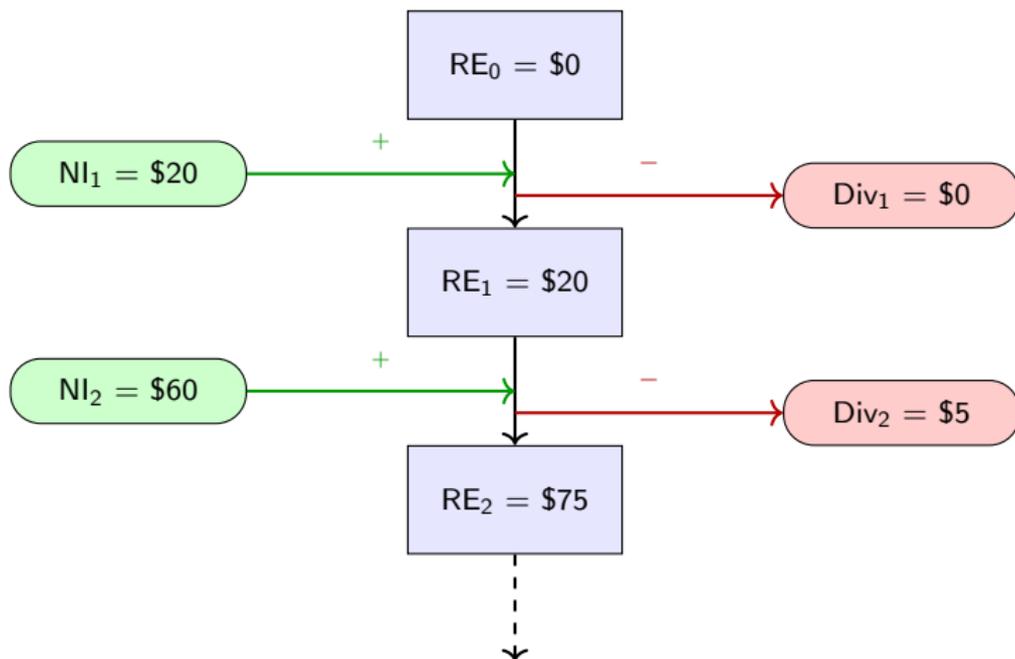
Question: Calculate R, E, and NI for Year 2.

- **Revenues:** \$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:** \$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:** $\$150 - \$90 = \$60$
- **Income Statement: & Statement of Retained Earnings:**

Income Statement		
Item	Year 1	Year 2
Revenues	<u>\$80</u>	<u>\$150</u>
Expenses	<u>\$40</u>	<u>\$90</u>
Net Income	<u>\$40</u>	<u>\$60</u>

Statement of Retained Earnings		
Item	Year 1	Year 2
Beg. RE	<u>\$0</u>	<u>\$40</u>
Add: Net Income	<u>\$40</u>	<u>\$60</u>
Less: Dividends	<u>\$0</u>	<u>\$20</u>
End. RE	<u>\$40</u>	<u>\$80</u>