

# Chapter 3

## Transaction analysis



## 8 steps of the accounting cycle include the following:

1. Transaction Analysis
2. Recoding Transactions in General Journal
3. Posting
4. Preparing Trial Balance
5. Adjusting Accounts
6. Preparing Working Papers
7. Closing Accounts
8. Preparing Financial Statements

# Business transaction

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A business transaction is an economic event with a third party that is recorded in an organization's accounting system.

## Examples

- Borrowing from Bank
- Purchase Goods from Vendor on Credit Basis
- Rent and Electricity of Premises Paid



# 1. Accounting Equation

ASSETS = LIABILITIES + OWNER EQUITY

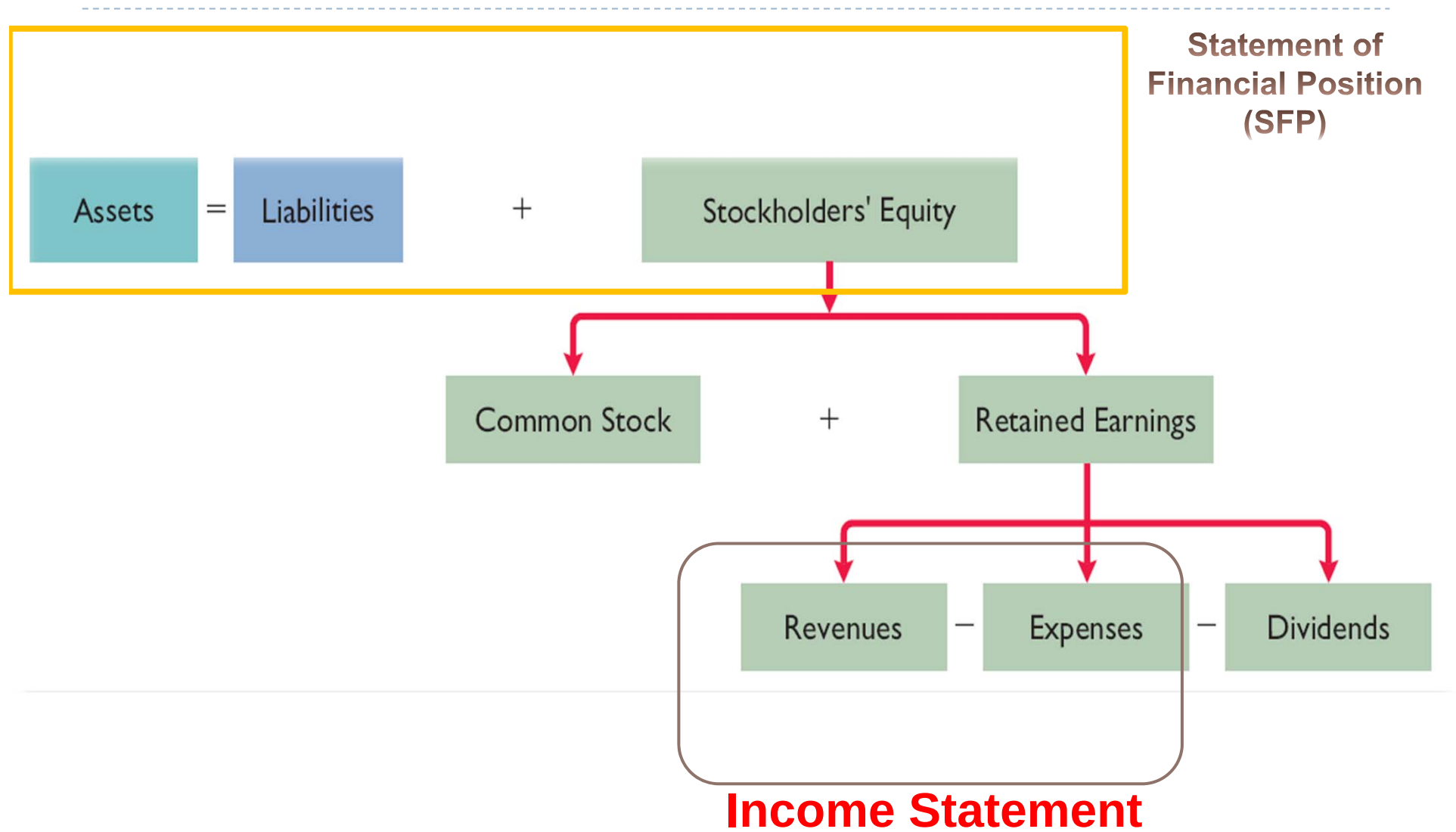
Resources

Promise

Common  
Stock



# Accounting Equation



# Exercises

| # | Assets | Liabilities | Equity | Revenue | Expenses | Profit (Loss) |
|---|--------|-------------|--------|---------|----------|---------------|
| 1 | 100    | 20          | _____  | 90      | _____    | 20            |
| 2 | _____  | 80          | 90     | 130     | 110      | _____         |
| 3 | 90     | 20          | _____  | _____   | 30       | 40            |
| 4 | 200    | 120         | _____  | _____   | 100      | (30)          |
| 5 | 300    | 200         | _____  | 110     | _____    | (20)          |
| 6 | _____  | 200         | 200    | 120     | 180      | _____         |



# Exercises

| # | Assets     | Liabilities | Equity     | Revenue   | Expenses   | Profit (Loss) |
|---|------------|-------------|------------|-----------|------------|---------------|
| 1 | 100        | 20          | <u>80</u>  | 90        | <u>70</u>  | 20            |
| 2 | <u>170</u> | 80          | 90         | 130       | 110        | <u>20</u>     |
| 3 | 90         | 20          | <u>70</u>  | <u>70</u> | 30         | 40            |
| 4 | 200        | 120         | <u>80</u>  | <u>70</u> | 100        | (30)          |
| 5 | 300        | 200         | <u>100</u> | 110       | <u>130</u> | (20)          |
| 6 | <u>400</u> | 200         | 200        | 120       | 180        | <u>(60)</u>   |

# Transaction Analysis Equation

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The accounting equation **must remain in balance** after each transaction.

Assets

=

Liabilities

+

Equity





# Transaction Analysis

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In each succeeding example, identify whether the account balance increases or decreases.

J. Scott, the owner, contributed \$20,000 cash to start the business.

The accounts involved are:

- (1) Cash (asset)
- (2) J. Scott, Capital (equity)



# Transaction Analysis

J. Scott, the owner, contributed \$20,000 cash to start the business.

| Assets        |          |           | = | Liabilities      |               | + | Equity            |
|---------------|----------|-----------|---|------------------|---------------|---|-------------------|
| Cash          | Supplies | Equipment |   | Accounts Payable | Notes Payable |   | J. Scott, Capital |
| (1) \$ 20,000 |          |           |   |                  |               |   | \$ 20,000         |
|               |          |           |   |                  |               |   |                   |
| \$ 20,000     | \$ -     | \$ -      |   | \$ -             | \$ -          |   | \$ 20,000         |
|               |          |           |   |                  |               |   |                   |
| \$ 20,000     |          |           | = | \$ 20,000        |               |   |                   |

## Transaction Analysis

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Purchased supplies paying \$1,000 cash.

The accounts involved are:

(1) Cash (**asset**)

(2) Supplies (**asset**)



# Transaction Analysis

Purchased supplies paying \$1,000 cash.

| Assets        |          |           | = | Liabilities      |               | + | Equity            |
|---------------|----------|-----------|---|------------------|---------------|---|-------------------|
| Cash          | Supplies | Equipment |   | Accounts Payable | Notes Payable |   | J. Scott, Capital |
| (1) \$ 20,000 |          |           |   |                  |               |   | \$ 20,000         |
| (2) (1,000)   | \$ 1,000 |           |   |                  |               |   |                   |
| <hr/>         |          |           |   | <hr/>            |               |   | <hr/>             |
| \$ 19,000     | \$ 1,000 | \$ -      |   | \$ -             | \$ -          |   | \$ 20,000         |
| <hr/>         |          |           |   | <hr/>            |               |   | <hr/>             |
| \$ 20,000     |          |           | = | \$ 20,000        |               |   |                   |

## Transaction Analysis

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Purchased equipment for \$15,000 cash.

The accounts involved are:

(1) Cash (**asset**)

(2) Equipment (**asset**)



# Transaction Analysis

Purchased equipment for \$15,000 cash.

| Assets |                  |                 | =                | Liabilities |                  | +             | Equity            |
|--------|------------------|-----------------|------------------|-------------|------------------|---------------|-------------------|
|        | Cash             | Supplies        | Equipment        |             | Accounts Payable | Notes Payable | J. Scott, Capital |
| (1)    | \$ 20,000        |                 |                  |             |                  |               | \$ 20,000         |
| (2)    | (1,000)          | \$ 1,000        |                  |             |                  |               |                   |
| (3)    | (15,000)         |                 | \$ 15,000        |             |                  |               |                   |
|        | <u>\$ 4,000</u>  | <u>\$ 1,000</u> | <u>\$ 15,000</u> |             | <u>\$ -</u>      | <u>\$ -</u>   | <u>\$ 20,000</u>  |
|        | <b>\$ 20,000</b> |                 |                  | =           | <b>\$ 20,000</b> |               |                   |

## Transaction Analysis

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Purchased Supplies of \$200 and Equipment of \$1,000 on account.

The accounts involved are:

- (1) Supplies (**asset**)
- (2) Equipment (**asset**)
- (3) Accounts Payable (**liability**)



# Transaction Analysis

Purchased Supplies of \$200 and Equipment of \$1,000 on account.

| Assets |                  |                 | =                | Liabilities |                  | +             | Equity            |
|--------|------------------|-----------------|------------------|-------------|------------------|---------------|-------------------|
|        | Cash             | Supplies        | Equipment        |             | Accounts Payable | Notes Payable | J. Scott, Capital |
| (1)    | \$ 20,000        |                 |                  |             |                  |               | \$ 20,000         |
| (2)    | (1,000)          | \$ 1,000        |                  |             |                  |               |                   |
| (3)    | (15,000)         |                 | \$ 15,000        |             |                  |               |                   |
| (4)    |                  | 200             | 1,000            |             | \$ 1,200         |               |                   |
|        | <u>\$ 4,000</u>  | <u>\$ 1,200</u> | <u>\$ 16,000</u> |             | <u>\$ 1,200</u>  | <u>\$ -</u>   | <u>\$ 20,000</u>  |
|        | <b>\$ 21,200</b> |                 |                  | =           | <b>\$ 21,200</b> |               |                   |



# Transaction Analysis

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Borrowed \$4,000 from 1st American Bank.

The accounts involved are:

(1) Cash (**asset**)

(2) Notes payable (**liability**)



# Transaction Analysis

Borrowed \$4,000 from 1st American Bank.

|     | Assets           |                 |                  | = | Liabilities      |                 | + | Equity            |
|-----|------------------|-----------------|------------------|---|------------------|-----------------|---|-------------------|
|     | Cash             | Supplies        | Equipment        |   | Accounts Payable | Notes Payable   |   | J. Scott, Capital |
| (1) | \$ 20,000        |                 |                  |   |                  |                 |   | \$ 20,000         |
| (2) | (1,000)          | \$ 1,000        |                  |   |                  |                 |   |                   |
| (3) | (15,000)         |                 | \$ 15,000        |   |                  |                 |   |                   |
| (4) |                  | 200             | 1,000            |   | \$ 1,200         |                 |   |                   |
| (5) | 4,000            |                 |                  |   |                  | \$ 4,000        |   |                   |
|     | <u>\$ 8,000</u>  | <u>\$ 1,200</u> | <u>\$ 16,000</u> |   | <u>\$ 1,200</u>  | <u>\$ 4,000</u> |   | <u>\$ 20,000</u>  |
|     | <b>\$ 25,200</b> |                 |                  | = | <b>\$ 25,200</b> |                 |   |                   |

# Transaction Analysis

The balances so far appear below. Note that the Balance Sheet Equation is still in balance.

| Assets |           |          | =         | Liabilities |                  | +             | Equity            |
|--------|-----------|----------|-----------|-------------|------------------|---------------|-------------------|
|        | Cash      | Supplies | Equipment |             | Accounts Payable | Notes Payable | J. Scott, Capital |
| Bal.   | \$ 8,000  | \$ 1,200 | \$ 16,000 |             | \$ 1,200         | \$ 4,000      | \$ 20,000         |
|        |           |          |           |             |                  |               |                   |
|        | \$ 8,000  | \$ 1,200 | \$ 16,000 |             | \$ 1,200         | \$ 4,000      | \$ 20,000         |
|        |           |          |           |             |                  |               |                   |
|        | \$ 25,200 |          |           | =           | \$ 25,200        |               |                   |

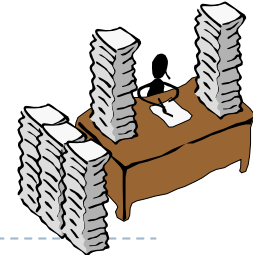
Now let's look at transactions involving

► revenue, expenses and withdrawals.



# Transaction Analysis

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Rendered consulting services receiving  
\$3,000 cash.

The accounts involved are:

(1) Cash (**asset**)

(2) Revenues (**equity**)



# Transaction Analysis

Rendered consulting services receiving  
\$3,000 cash.

| Assets |                  |                 | =                | Liabilities      |                  | + | Equity            |                 |
|--------|------------------|-----------------|------------------|------------------|------------------|---|-------------------|-----------------|
|        | Cash             | Supplies        | Equipment        | Accounts Payable | Notes Payable    |   | J. Scott, Capital | Revenue         |
| Bal.   | \$ 8,000         | \$ 1,200        | \$ 16,000        | \$ 1,200         | \$ 4,000         |   | \$ 20,000         |                 |
| (6)    | 3,000            |                 |                  |                  |                  |   |                   | \$ 3,000        |
|        | <u>\$ 11,000</u> | <u>\$ 1,200</u> | <u>\$ 16,000</u> | <u>\$ 1,200</u>  | <u>\$ 4,000</u>  |   | <u>\$ 20,000</u>  | <u>\$ 3,000</u> |
|        | <b>\$ 28,200</b> |                 |                  | =                | <b>\$ 28,200</b> |   |                   |                 |

# Transaction Analysis

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Paid salaries of \$800 to employees.

The accounts involved are:

(1) Cash (**asset**)

(2) Salaries expense (**equity**)

Remember that the balance in the salaries expense account actually increases.

But, equity actually decreases because expenses reduce equity.



# Transaction Analysis

Paid salaries of \$800 to employees.

| Assets |                  |                 | =                | Liabilities      |                 | +                 | Equity          |                 |
|--------|------------------|-----------------|------------------|------------------|-----------------|-------------------|-----------------|-----------------|
|        | Cash             | Supplies        | Equipment        | Accounts Payable | Notes Payable   | J. Scott, Capital | Revenue         | Expenses        |
| Bal.   | \$ 8,000         | \$ 1,200        | \$ 16,000        | \$ 1,200         | \$ 4,000        | \$ 20,000         |                 |                 |
| (6)    | 3,000            |                 |                  |                  |                 |                   | \$ 3,000        |                 |
| (7)    | (800)            |                 |                  |                  |                 |                   |                 | \$ (800)        |
|        | <u>\$ 10,200</u> | <u>\$ 1,200</u> | <u>\$ 16,000</u> | <u>\$ 1,200</u>  | <u>\$ 4,000</u> | <u>\$ 20,000</u>  | <u>\$ 3,000</u> | <u>\$ (800)</u> |
|        | \$ 27,400        |                 |                  | =                | \$ 27,400       |                   |                 |                 |

Remember that expenses decrease equity.

## Exercise

Presented here are five economic events. For each item, indicate whether the event increased (+), decreased (–), or had no effect (NE) on assets, liabilities, and stockholders' equity.

|                                         | <u>Assets</u> | = | <u>Liabilities</u> | + | <u>Stockholders'<br/>Equity</u> |
|-----------------------------------------|---------------|---|--------------------|---|---------------------------------|
| 1. Received cash for services rendered. | _____         |   | _____              |   | _____                           |
| 2. Purchased supplies on account.       | _____         |   | _____              |   | _____                           |
| 3. Paid employees' salaries.            | _____         |   | _____              |   | _____                           |
| 4. Dividends paid in cash.              | _____         |   | _____              |   | _____                           |
| 5. Expenses paid in cash.               | _____         |   | _____              |   | _____                           |





## Exercise

Presented here are five economic events. For each item, indicate whether the event increased (+), decreased (–), or had no effect (NE) on assets, liabilities, and stockholders' equity.

|                                         | <u>Assets</u> | = | <u>Liabilities</u> | + | <u>Stockholders' Equity</u> |
|-----------------------------------------|---------------|---|--------------------|---|-----------------------------|
| 1. Received cash for services rendered. | <u>+</u>      | = | <u>NE</u>          |   | <u>+</u>                    |
| 2. Purchased supplies on account.       | <u>+</u>      | = | <u>+</u>           |   | <u>NE</u>                   |
| 3. Paid employees' salaries.            | <u>-</u>      | = | <u>NE</u>          |   | <u>-</u>                    |
| 4. Dividends paid in cash.              | <u>-</u>      | = | <u>NE</u>          |   | <u>-</u>                    |
| 5. Expenses paid in cash.               | <u>-</u>      | = | <u>NE</u>          |   | <u>-</u>                    |