

Introduction to Accounting

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Learning Objectives



Upon completion of this course, students will be able:

- 1. To prepare Financial Statements.
- 2. To recognize and record accounting events.
- 3. To prepare trial balances and general ledger accounts.



Accounting

• An <u>information system</u> that <u>measures</u>, <u>processes</u>, and <u>communicates</u> financial information about a business or other economic entity.

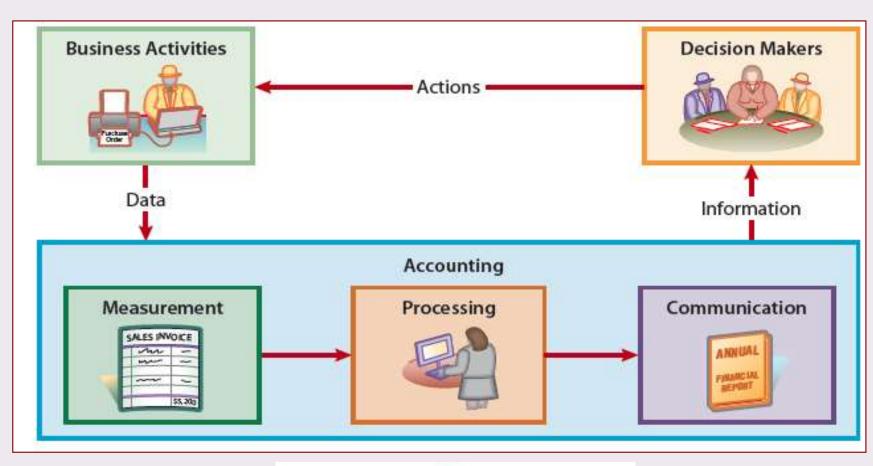


"The basis for business decisions"

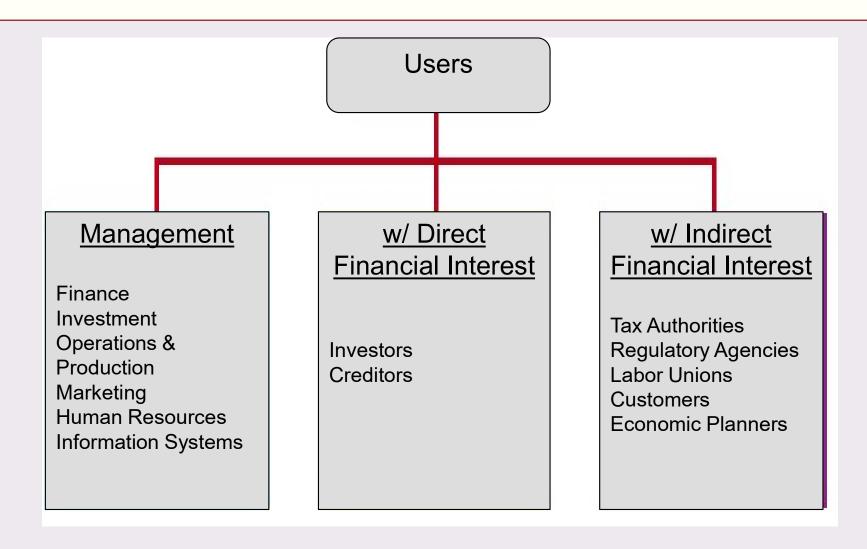
"The language of the business"

Accounting as an Information System

Accounting is a link between business activities and decision makers.



Users of Accounting Information





Financial and Management Accounting

- **External** decision-makers use financial accounting to evaluate how well a business has achieved its goals.
- These reports are called financial statements.
 - They report on a business's financial performance.
- Internal decision-makers use information provided by management accounting about operating, investing, and financing activities.
- It provides managers and employees with information about how they have done in the past and what they can expect in the future.



Financial VS Management Accounting

| | Financial Accounting | Management Accounting |
|-------------|---|-------------------------------------|
| Users | Stockholders, Lenders, Investors, Customers, the Public, Government | Managers, Employees |
| Format | Reports based on GAAP | Flexible, based on user's needs |
| Information | Publicly available (audited, objective and verifiable) | Internal (Confidential and private) |



Accounting VS Book-Keeping

- It is important to distinguish accounting from book-keeping.
 - Book-keeping is the process of recording financial transactions and keeping financial records.
 - It is mechanical and repetitive and is usually handled by computers.
 - Management information systems (MIS) consist of the interconnected business subsystems, including accounting, that provide the information needed to run a business.



Stages in the Accounting Cycle

Data collection



Identify relevant accounting transactions

- Checks
- Invoices
 - Notes

Data preparation and processing



Valuation in monetary units
•Recording
•Classification

- Journal
- Ledger

Communicate information



Financial statements

- Auditing
- Communication
 - Analysis



Basic Financial Statements

Balance Sheet

Income Statement

Cash Flow Statement

Statement of Changes in Equity



The Balance Sheet

| Measures: | The financial position | | |
|--------------|---|--|--|
| Reports: | Three items: 1. Assets 2. Liabilities 3. Equity | | |
| Dated: | At the moment in time when the accounting period ends (e.g. 31 December 20XX) | | |
| Also called: | Statement of Financial Position | | |
| | The "picture" of the company at a specific given time (the reporting date) | | |

The Balance Sheet

Name of the company

Type of the report

Rivendell, Inc.

Balance Shee Year-end date

31 Dec 20XX

Assets

Liabilities

Equity

Accounting Equity: Assets = Liabilities + Equity

The Balance Sheet

- The entity's financial position and risk:
 - What valuable items it possesses (assets)?
 - How much does it owe to third parties?

– What portion of the capital is invested by the owners and what is borrowed?



The Income Statement

| Measures: | The operating performance | | |
|--------------|---|----|--|
| Reports: | Revenues and expenses of the year: 1. Revenues and profits 2. Expenses and losses | | |
| Dated: | Refers to an accounting period (i.e. For the year ended 31 Dec 2015) | | |
| Also called: | Statement of Operations, or Profit and Loss Account | 14 | |

The Income Statement

- Bottom line of Net Income or Net Loss for the period:
 - If revenues exceed expenses = net income
 - If expenses exceed revenues = net loss

Net Income (Loss) = Total Revenues and Profits - Total Expenses and Losses



Income Statement Single-Step Format

Name of the

company Type of the Rivendell, Inc. report Period income Statemer For the Year ended 31 Dec 20XX **Revenues:** Service Revenues **Expenses:** Salary Expense Rent Expense Depreciation **Utilities Income before Taxes Income Taxes Bottom Line Net Income**



The Income Statement

- The entity's performance and return:
 - What revenues is it generating?

- What costs are incurred to generate those revenues?
 - Are the costs more than the revenues???

- What is the final result?
 - Profit? Loss?



Cash Flow Statement

| Shows: | How a company's operating, investing, and financing activities have affected cash during a period. Explains the net increase (or decrease) in cash during the period. |
|----------|--|
| Reports: | Cash flows: 1. Operating activities 2. Investing activities 3. Financing activities |
| Dated: | Covers a span of time (month, quarter, year) |

Cash Flow Statement

Reports three types of activities:

Operating

Cash flows from selling goods and providing services to customers

Investing

Cash flows from the purchase and sale of long-term assets

Financing

Borrowing and repayment of borrowed funds
Equity transactions (issuing stock,
paying dividends, repurchase
of company stock)



Rivendell, Inc.

he year ended 31/12/2016

Name of the company

Type of the report

| 10port 10 year 2110.20 211 | F | Period |
|---|------|---------|
| | 31/1 | 2/2016 |
| Cash flows from operating activities: | | |
| Net income | € | 833 |
| Adjustments to reconcile net income to net cash provided by | | |
| operating activities | | 530 |
| Net cash provided by operating activities | | 1,363 |
| Cash flows from investing activities: | | |
| Purchase of property and equipment | | (548) |
| Change in other assets, net | | 94 |
| Net eash used by investing activities | | (454) |
| Cash flows from financing activities: | | |
| Proceeds from issuance of debt | | 1,651 |
| Issuance of stock related to share-based payments | | 75 |
| Repurchases of common stock | | (2,092) |
| Cash dividends paid | | (236) |
| Net cash used by financing activities | | (602) |
| Effect of foreign exchange rate fluctuations on cash | | 17 |
| Net increase (decrease) in cash and cash equivalents | | 324 |
| Cash and cash equivalents at beginning of period | | 1,561 |
| Cash and cash equivalents at end of period | € | 1,885 |

The Cash Flow Statement

- Is the entity's cash sufficient?
 - How much cash does it generate from its activities?

- Does this cash cover the investment needs of the entity for future growth?
- If not, in which ways does it handle this problem?



Statement of Changes in Equity

Provides:

- a reconciliation of opening and closing equity.
- details of the various equity accounts that are impacted by the period's total comprehensive income.
- information about the effects of transactions with owners in their capacity as owners (distributions and capital contributions).



Statement of Changes in Equity

| Rivendell, Inc. Statement of Changes in Equity | | | | | |
|--|-------------|-----------------|----------------------------|----------------------|-------|
| | Fo | r the Year end | led 31 Dec 20 | XX | |
| | Pref. stock | Common stock | Additional paid-in capital | Retained earnings | Total |
| Beg. balance | | | | | |
| Issuance of stock | | | | | |
| Net Income (loss) | | | | X | |
| Dividends | | | | | |
| Other | | | | | |
| End balance | | | | | |

Main Assumptions & Principles

Assumptions:

- Economic Entity
- Monetary-Unit
- Time-Period
- Going-Concern

Principles:

- Full Disclosure
- Historical Cost
- Revenue Recognition
- Matching
- Materiality
- Conservatism

Qualitative characteristics:

- Relevance
- Reliability
- Comparability
- Understandability
- Timeliness

Assumptions and Principles 1

Entity Assumption

Organization stands apart from other organizations and individuals as a separate economic unit.

Continuity Assumption (Going-Concern)
 Entity will remain in operation for the foreseeable future.



Assumptions and Principles 2

Historical Cost Principle

Assets should be recorded at their actual cost.

Stable-Monetary-Unit Assumption

Effect of inflation is ignored, based on the assumption that the dollar's/euro's purchasing power is relatively stable.



Assumptions and Principles 3

Time Period (Periodicity) Assumption

A business's lifetime is uncertain, but it is useful to estimate net income in terms of accounting periods

 Revenue Recognition (Accrual Accounting) and Matching Principle

Recording revenues and expenses in the period they occur, rather than in the period when cash is received or paid, and matching the expenses to the revenues they helped generate.



Generally Accepted Accounting Principles (GAAP)

 Professional framework for measurement and disclosure of financial information

IFRS and US GAAP

 Define specific guidelines and qualitative characteristics



International Financial Reporting Standards (IFRS)

 Accounting guidelines formulated by the International Accounting Standards Board (IASB)

 Mandatory application by all listed firms in European Union Stock Exchanges from 2005



Requirements for Accounting Information 1

- Reliable: Users must be able to rely on it.
 - Is it <u>faithfully represented</u>, neutral, free from material error, prudent and complete?

- Relevant: Help in the decision-making process
 - Does it affect users' decisions?

 Timely: Information must be available when a decision has to be made.



Requirements for Accounting Information 2

- Comparable: The information should be comparable in the long run and between different companies.
 - Inter- and intra-company comparisons
- Comprehensible: The information must be comprehensible for its potential users.
 - Presented as understandably as possible
- At reasonable cost: Gathering of information should not cost more than the benefit out of using it.



Joint Conceptual Framework

| Objective | To provide financial information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in decision-making | | | |
|---|---|---------------|-------------------------|-------------------|
| Fundamental qualitative characteristics | Relevance | | Faithful representation | |
| Enhancing qualitative characteristics | Comparability | Verifiability | Timeliness | Understandability |

(Joint Conceptual Framework, FASB and IASB, 2010)



Ethical Financial Reporting

- Ethics is especially important in preparing financial reports because users must be able to trust that the reports are accurate and disclose all relevant facts.
- The intentional preparation of misleading financial statements (fraudulent reporting) can result from:
 - distortion of records,
 - falsified transactions, and
 - misapplication of various accounting principles.



Sarbanes-Oxley Act

- In response to the accounting scandals at Enron Corporation and WorldCom, the Sarbanes-Oxley Act of 2002 was passed.
 - It regulates the financial reporting of public companies and their auditors.
 - It requires chief executives and chief financial officers of publicly traded companies to swear that, based on their knowledge, their quarterly statements and annual reports filed with the <u>security commission</u> are accurate and complete.



Limitation of Accounting Data

- Sometimes estimates are necessary!
 - data less objective
- Different methods for the valuation of assets, liabilities, expenses and revenues
 - make it difficult to compare accounting information between companies or in the long run

 Financial accounting concentrates on events happening in the past.

Introduction to Accounting

The Financial Statements

Instructor: Sotirios Karatzimas, Assistant Professor



The Balance Sheet

Name of the company

Type of the report

Rivendell, Inc.

Balance Shee Year-end date

31 Dec 20XX

Assets

Liabilities

Equity

Accounting Equation: Assets = Liabilities + Equity

The Accounting Equation

- In accounting terminology:
 - 1. economic resources → assets
 - 2. creditors' claims → liabilities
 - 3. owners' claims → equity
- The accounting equation:

Assets = Liabilities + Equity



The Accounting Equation

 The two sides of the equation must always be equal, or "in balance":



Assets

- Assets are the <u>economic resources</u> that are <u>expected to benefit</u> the company's future operations. They include:
 - monetary items (cash and money owed to the company by customers)
 - Non-monetary, physical items (inventories, land, buildings, equipment)

Non-physical items (rights granted by patents, trademarks, and copyrights)

Economic Resources



Asset Examples

- Cash and Cash Equivalents
- Accounts Receivable
- Inventories
- Property, Plant and Equipment



Liabilities

- Liabilities are a business's <u>present obligations</u> to pay cash, transfer assets, or provide services to other entities in the future. They include:
 - amounts owed to suppliers for goods or services bought on credit (called accounts payable)
 - borrowed money such as bank loans
 - salaries and wages owed to employees
 - taxes owed to the government
 - services to be performed

Outsider Claims



Expected Future Sacrifice

Liabilities examples

- Accounts payable
- Income taxes payable
- Long-term debt
- Current portion of long-term debt



Equity

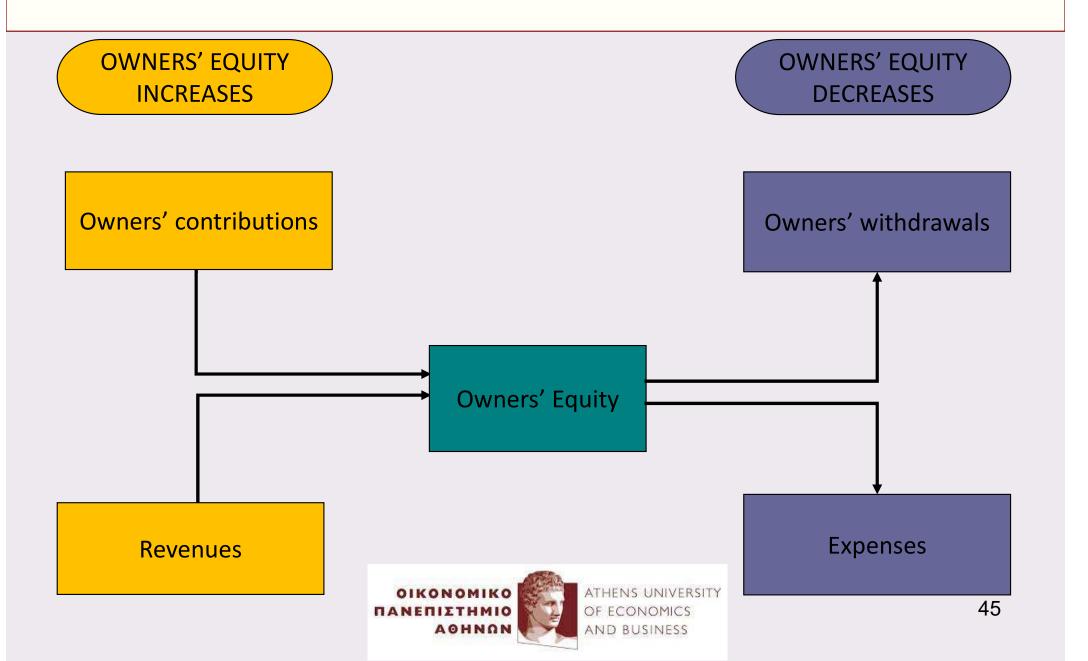
The claims of the owners.

- In Corporations owners are the Shareholders of the firm.
 - Equity is called Shareholders' Equity.

 In other forms of business (proprietorship, partnership) is called Owners' Equity.



Owners' Equity



Shareholders' Equity

- Shareholders' equity represents the <u>claims by</u> the <u>shareholders</u> of a business to the assets of the business.
 - Shareholders equity is what would be left if all liabilities were paid (net assets)

Shareholders' Equity = Assets - Liabilities

Insider Claims

Shareholders' interest in the assets

Shareholder's Equity Components

- Shareholder's Equity
 - Paid-in Capital
 - Common Stock

The amount the stockholders have invested in the corporation. The basic component is **common stock**, which the corporation issues to the stockholders as evidence of their ownership.

Retained Earnings

Revenues

(Expenses)

(Dividends)

Inflows of resources that increase retained earnings by delivering goods or services to customers

Resource
outflows that
decrease
retained
earnings due
to operations.

Distributions to stockholders (usually cash) generated by net income.



Retained Earnings

Increased by

Revenues

Decreased by

Expenses

Dividends

Example

Alpha Co. has current assets of €360 mil., property, plant, and equipment of €600 mil., and other assets totaling €220 mil. Current liabilities are €210 mil. and long-term liabilities €560 mil.

Required

- 1. Write the accounting equation.
- 2. How much are the resources of Alpha?
- 3. How much does it owe to creditors and how much do the owners own?



Answer



Assets

Two categories:

Current Assets Non-Current Assets or Long-term Assets



- Expected to be converted to cash, sold, or consumed <u>during the next 12 months</u> (or within the business's operating cycle if longer than a year)
- Include:
 - Cash and cash equivalents
 - Short-term investments
 - Accounts and notes receivable
 - Inventory
 - Prepaid expenses





Cash and cash equivalents

Cash is the liquid asset that's the medium of exchange

Cash equivalents include money-market accounts or other financial instruments easily convertible to cash





- Cash and cash equivalents
- Short-term investments

Stocks and bonds of other companies the company intends to sell within the next year





- Cash and cash equivalents
- Short-term investments
- Accounts and notes receivable

Amounts that the customers owe to the company from the sale of goods and services





- Cash and cash equivalents
- Short-term investments
- Accounts and notes receivable
- Inventory

Merchandise that the company sells to customers





- Cash and cash equivalents
- Short-term investments
- Accounts and notes receivable
- Inventory
- Prepaid expenses

Amounts paid in advance for expenses such as: advertising, rent, insurance, etc.



 Expected to benefit the company for long periods of time (over 1 year or over the business's operating cycle if longer than a year)

- Include
 - Property, plant and equipment
 - Long-term investments
 - Intangible assets





Property, plant and equipment

Tangible assets that include land, buildings, computers, equipment, furniture & fixtures, etc.

Also called fixed assets.





- Property, plant and equipment
- Long-term investments

Includes stocks and bonds of other companies that the company does not intend to sell within the next year





- Property, plant and equipment
- Long-term investments
- Intangibles

Assets with no physical form, such as patents, trademarks, and goodwill



Assets

| Rivendell, Inc. Partial Balance Sheet | | | |
|--|-------------|-------------|--|
| | 31 Dec 20X1 | 31 Dec 20X0 | |
| Current assets: | | | |
| Cash and cash equivalents | XX | XX | |
| Short-term investments | XX | XX | |
| Inventory | XX | XX | |
| Other current assets | XX | XX | |
| Total Current Assets | XX | XX | |
| Non-Current Assets: | | | |
| Intangible Assets | XX | XX | |
| Property and equipment, net | XX | XX | |
| Other non-current assets | XX | XX | |
| Total Assets | XX | XX | |

The Balance Sheet

Rivendell, Inc. **Balance Sheet** 31 Dec 20XX Assets Liabilities **Current Assets** Cash and cash equivalents Short-term investments Accounts and notes receivable Inventory Prepaid expenses **Equity Non-Current Assets** Intangibles Property and equipment Long-term investments

Example

| | Current Assets | Non-Current Assets |
|--------------------|-----------------------|--------------------|
| Cash | | |
| Furniture | | |
| Receivables | ✓ | |
| Mini van | | ✓ |
| Land | | ✓ |
| 5-year Investment | | ✓ |
| Inventories | ✓ | |
| Office PC | | ✓ |
| 3-month Investment | | |
| Prepaid rent | | 64 |

Liabilities

Two main categories:

Current Liabilities or Short-term

Non-Current Liabilities or Long-term



 Debts payable in the next year or within the business's operating cycle (if longer than a year)

Include:

- Accounts payable
- Income taxes payable
- Accrued expenses
- Current maturities of long-term debt





Accounts payable

Amounts owed to vendors and suppliers for the purchase of inventory





- Accounts payable
- Income taxes payable

Tax debts owed to the government





- Accounts payable
- Income taxes payable
- Accrued expenses

Expenses that are owed but have not been paid:

Interest payable on borrowed money, accrued liabilities for salaries, utilities, and other





- Accounts payable
- Income taxes payable
- Accrued expenses
- Current maturities of long-term debt
 Portion of long-term liabilities that the company will have to pay off within the next year



 Debts due beyond one year or the company's normal operating cycle (if longer than a year)

- Include
 - Long-term bank loans
 - Long-term notes payable
 - Bonds payable





Long-term notes payable

Notes payable, due on a period more than one year



Non-Current Liabilities



- Long-term notes payable
- Bonds payable

Groups of debt securities issued to multiple lenders



Liabilities

| Rivendell, Inc. Partial Balance Sheet | | | |
|--|-------------|-------------|--|
| | 31 Dec 20X1 | 31 Dec 20X0 | |
| Current Liabilities: | | | |
| Current portion of long term debt | XX | XX | |
| Accounts payable | XX | XX | |
| Accrued expenses | XX | XX | |
| Income tax payable | XX | XX | |
| Total Current Liabilities | XX | XX | |
| Non-Current Liabilities: | | | |
| Long-term debt | XX | XX | |
| Other long-term liabilities | XX | XX | |
| Total Non-Current Liabilities | | | |
| Total Liabilities | XX | XX | |



The Balance Sheet

Rivendell, Inc.

Balance Sheet

31 Dec 20XX

Assets

Current Assets

- Cash and cash equivalents
- Short-term investments
- Accounts and notes receivable
- Inventory
- Prepaid expenses

Non-Current Assets

- Property and equipment
- Accumulated depreciation
- Long-term investments
- Intangibles

Liabilities

Current Liabilities

- Accounts payable
- Income taxes payable
- Accrued expenses
- Current maturities of long-term debt

Long-term Assets

- Long-term notes payable
- Bonds payable

Equity

 Represents the stockholders' ownership of the business's assets

- Includes
 - Common stock
 - Additional paid-in capital
 - Retained earnings (*Income/loss*)
 - Treasury stock
 - Revaluation surplus





Common stock

Amount that represents the par value of the shares issued to stockholders





- Common stock
- Additional paid-in capital

Amount of cash received on initial sale of the company's stock in excess of the par value





- Common stock
- Additional paid-in capital
- Retained earnings

Portion of net income re-invested into the business





- Common stock
- Additional paid-in capital
- Retained earnings
- Treasury stock

Amounts paid by the company to repurchase its own stock:

- Needs stock for employee compensation plans
- Want to buy low sell high
- Avoid takeover
- Increase EPS



- Common stock
- Additional paid-in capital
- Retained earnings
- Treasury stock
- Revaluation surplus

The net surplus of any upward revaluation of property, plant and equipment recognized directly in equity



| Rivendell, Inc. Partial Balance Sheet | | | |
|--|-------------|-------------|--|
| | 31 Dec 2016 | 31 Dec 2015 | |
| Stockholders' Equity: | | | |
| Common stock | XX | XX | |
| Additional paid-in capital | XX | XX | |
| Retained earnings | XX | XX | |
| Treasury stock | (XX) | (XX) | |
| Total Stockholders' Equity | XX | XX | |
| Total Liabilities and Stockholders' Equity | XX | XX | |



The Balance Sheet

Rivendell, Inc.

Balance Sheet

31 Dec 20XX

Assets

Current Assets

- Cash and cash equivalents
- Short-term investments
- Accounts and notes receivable
- Inventory
- Prepaid expenses

Non-Current Assets

- Property and equipment
- Accur
- Long
- Intar

Liabilities

Current Liabilities

- Accounts payable
- Income taxes payable
- Accrued expenses
- Current maturities of long-term debt

Long-term Assets

Long-term notes payable

Danda navahla

Always Remember the Accounting Equation:

Assets = Liabilities + Equity

ital

Example

| Account | Asset, Liability or Equity? | |
|------------------------|-----------------------------|--|
| Retained earnings | | |
| Short-term Investments | | |
| Accrued Expenses | | |
| Accounts payable | | |
| Inventory | | |
| Long-term Debt | | |
| Common Stock | | |
| Cash | | |
| Prepaid Expenses | | |



Classification Based on Liquidity

- Assets and liabilities are presented in order of liquidity:
 - 1. Cash → the most liquid asset.
 - Accounts receivable → relatively liquid (cash collections usually follow quickly)
 - Inventory → less liquid (inventory must be sold)
 - 4. Equipment and buildings → even less liquid (these assets are not for sale)



Balance Sheet Format

- Balance Sheet Formats
 - Report
 - Account



Report Format

Rivendell, Inc.
Balance Sheet
31 Dec 20XX

Assets

Current Assets:

..

Non-Current Assets:

٠.

Total Assets

Liabilities and Shareholders' Equity

Current Liabilities:

..

Long term Liabilities:

- -

Total Liabilities

Shareholders' Equity:

..

Total Shareholders' Equity

Total Liabilities and Shareholders' Equity

Account Format

Rivendell, Inc.
Balance Sheet

Example

Prepare the balance sheet of ECONOMY Co. using both the vertical/report and the horizontal/account format.

Also fill in the missing value.

| Accounts payable | €25.000 |
|-------------------------|---------|
| Mini van | €6.000 |
| Loan payable in 2 years | €30.000 |
| Machinery | €10.000 |
| Equipment | €9.000 |
| Retained earnings | €15.000 |
| Cash | €8.000 |
| Inventories | €17.000 |
| Property | €30.000 |
| Accounts Receivable | €18.000 |
| Common stock | ? |

Income Statement

- Summary of the revenues earned and expenses incurred by a business over an accounting period.
 - Many consider it the most important financial report (it shows whether a business achieved its profitability goal)
- Net Income or Loss for the period:
 - If revenues exceed expenses = net income
 - If expenses exceed revenues = net loss



Important Questions!



- What is Revenue?
 - What is cash receipt?
- What is Expense?
 - What is cash payment?

Result from operating a business!

- What is Profit/Income?
- What is Loss?



Revenue Recognition

The amount of revenue can be reliably measured

 It is probable that the economic benefits will be received

- Ownership and control is transferred
 - Refers to cases involving sale of goods



Example

- Company A sells TVs both in cash and with credit. Each TV is sold for €150.
- On 20.09 a cafeteria buys 10 TVs; 6 are paid in cash and the rest are payable in the end of the following month.

- What amount of revenues will the company recognize on the purchase date?
- Cash received: 6 x €150 = €900
- Revenue recognition: 10 x €150 = €1.500

Accrual & Matching Principle

 Revenues and Expenses are recognized as they are earned or incurred.

 Expenses are matched with the revenues they generated at the Income Statement of the period they refer to!



Example 2

- Company A buys the TVs from a supplier for €90 each.
- For the previous sale:

Sale's Revenue:

10 x €150 = €1.500

Cost of the sale:

10 x €90 = €900

Matching Principle:

| Revenues | 1.500 | |
|------------------|-------|--|
| - Cost of Sales | 900 | |
| Profit from Sale | 600 | |

Expense Recognition: Example (1/2)

- StarFish Co. pays its salesmen with a commission of 3% of sales revenue.
- For 2016, total sales revenue reached €250.000.
- The commission to be paid is therefore: €250.000*3% (=€7.500).
- At the end of the period the company managed to pay the 2/3 of the amount (€5.000).
- The remaining €2.500 is owed to the salesmen.



Expense Recognition: Example (2/2)

 At the end of 2016 StarFish Co. recognizes:

Expense (i.e. Commission Expense)

Cash payment

Liability (i.e. Commission Payable)



Profit (Loss) of the period



Sales Revenue

- Cost of Sales
- 1 Gross Profit (or Gross Margin)
 - Operating Expenses
- 2 Operating Profit (or Operating Margin)
 - Interest Expense
 - + Interest Income

Financial Result

- 3 Income before Taxes
 - Income Taxes
- **Net Income (Net Loss)**



Net Sales (Revenues)



- Total sales revenue
 - The amount to be received from customers in return of providing goods or services
- Net of returns and allowances.
 - Sales return is a cancellation of a sale.
 - Sales allowance is a deduction from the original sales invoice price.
- The major revenue source for most companies.

Cost of Goods Sold (COGS)



Also called Cost of Sales

 Cost of the seller of products (or the provider of services) to customers

Largest expense item for most firms



Gross Profit

- Also called Gross Margin
- First step of profit measurement
- Difference between Net Sales and COGS

Gross profit = Net sales - COGS

- Key analytical tool in assessing performance:
 - The amount of profit a company makes from merely selling a product before subtracting other operating costs

Gross Profit

| Rivendell, Inc. | | |
|---|----------|----------|
| Income Statement | | |
| For the periods ended 31/12/15 and 31/12/2016 | 2016 | 2015 |
| Net Sales | 50.000 | 45.000 |
| Cost of Goods Sold | (35.000) | (28.000) |
| Gross Profit | 15.000 | 17.000 |



Operating Expenses

- The on-going expenses incurred by the company, apart from direct expenses for goods and costs directly linked to sales:
 - Salaries and Wages
 - Utilities
 - Supplies-Expensed

— ...



Operating Expenses



- Selling, General and Administrative expenses (SG&A)
 - Selling: relate to the sale of products or services
 - General & Administrative: salaries, rent, insurance, utilities, supplies, depreciation, etc.
- Advertising
 - major expense when marketing is an important element of success



Depreciation



- Cost of assets <u>other than land</u> that will benefit a business enterprise for more than a year is <u>allocated</u> over the asset's service life.
- The amount of expense recognized in any accounting period will depend on
 - the level of investment in the relevant asset (cost)
 - estimates with regard to the asset's service life (useful life) and residual value
 - the method used (straight, declining or production units)



Depreciation

- Used to allocate the cost of tangible fixed assets:
 - Buildings
 - Machinery
 - Equipment

Land is never depreciated!

Expect cases of mines, oil-springs, etc.

- -Furniture and fixtures
- Vehicles



Amortization

- Allocation process applied to:
 - -Patents
 - –Copyrights
 - -Trademarks
 - Franchises



Repairs and maintenance



 Annual costs of repairing and maintaining property, plant, and equipment

 Should correspond to the level of investment in capital equipment and to the age and condition of fixed assets



Operating Profit

Second step of profit measurement:

- Measures overall performance of company's operations:
 - sales revenue expenses associated with generating sales



Operating Profit

| Rivendell, Inc. Income Statement For the periods ended 31/12/15 and 31/12/2016 | 2016 | 2015 |
|--|----------|----------|
| Net Sales | 50.000 | 45.000 |
| Cost of Goods Sold | (35.000) | (28.000) |
| Gross Profit | 15.000 | 17.000 |
| Operating Expenses | (3.000) | (4.000) |
| Operating Profit | 12.000 | 13.000 |



Other (Financial) Income & Expenses

- Revenues and expenses, other than from operations:
 - dividend and interest income
 - interest expense
 - investment gains (losses)
 - gains (losses) from sale of fixed assets



Income Before Taxes

| Rivendell, Inc. Income Statement Data | | |
|---------------------------------------|----------|------------------------------|
| For the periods ended 31/12 | 2016 | 2015 |
| Net Sales | 50.000 | 45.000 |
| Cost of Goods Sold | (35.000) | (28.000) |
| Gross Profit | 15.000 | 17.000 |
| Operating Expenses | (3.000) | (4.000) |
| Operating Profit | 12.000 | 13.000 |
| Other Income | 1.500 | 2.000 |
| Other Expense | (2.100) | (1.700) |
| Income before Taxes | 11.400 | 13.300 ₁₁₂ |

Income Taxes

 Companies pay income taxes calculated on their profits.

Income Taxes = Income before Taxes * Tax rate



Net Income (Loss)

Also called the "bottom line"

 Represents profit/loss after consideration of all revenue and expense



Net Income

| Rivendell, Inc. Income Statement For the periods ended 31/12 | 2016 | 2015 |
|--|----------|----------|
| Net Sales | 50.000 | 45.000 |
| Cost of Goods Sold | (35.000) | (28.000) |
| Gross Profit | 15.000 | 17.000 |
| Operating Expenses | (3.000) | (4.000) |
| Operating Profit | 12.000 | 13.000 |
| Interest Income | 1.500 | 2.000 |
| Interest Expense | (2.100) | (1.700) |
| Income before Taxes | 11.400 | 13.300 |
| Income Taxes 30% | (3.420) | (3.990) |
| Net Income | 7.980 | 9.310 |

| Account | Income State | ment or Balance S | Sheet? |
|---------------------|--------------|-------------------|--------|
| Service Revenue | | | |
| Delivery Truck | | | |
| Fuel Expense | | | |
| Cash | | | |
| Rent Expense | | | |
| Accounts Payable | | | |
| Interest Expense | | | |
| Interest Receivable | | | |
| Prepaid Rent | | | |



Income Statement Format

Income Statement Formats

- Single-step
 - All items of revenue are grouped together, then all categories of expense are deducted
- Multi-step
 - Several intermediate profit measures are provided prior to the amount of net income



Income Statement Single-Step Format

| Rivendell, Inc. Income Statement | | | |
|----------------------------------|---------|--|--|
| For the Year ended 31 D | ec ZUXX | | |
| Revenues: | | | |
| Service Revenues | | | |
| Expenses: | | | |
| Salary Expense | | | |
| Rent Expense | | | |
| Depreciation | | | |
| Utilities | | | |
| Income before Taxes | | | |
| Income Taxes | | | |
| Net Income | | | |



Income Statement Multiple-Step Format

| Rivendell, Inc. Income Statement For the Year ended 31 Dec 20XX | | | |
|---|------|------|--|
| Net Revenues | | | |
| Net operating revenues | XX | XX | |
| Cost of goods sold | (XX) | (XX) | |
| Gross Profit | XX | XX | |
| Operating Expenses | (XX) | (XX) | |
| Depreciation and Amortization | (XX) | (XX) | |
| General and Administrative Expenses | (XX) | (XX) | |
| Total Operating Expenses | (XX) | (XX) | |
| Operating Profit | XX | XX | |
| Interest profit | XX | XX | |
| Interest expense | (XX) | (XX) | |
| Income before Taxes | XX | XX | |
| Income Taxes | (XX) | (XX) | |
| Net Income | XX | XX | |

Comprehensive Income

All changes in equity during a period except those resulting from investments by owners and distributions to owners.

Includes:

- all revenues and gains, expenses and losses reported in net income, and
- all gains and losses that bypass net income but affect stockholders' equity.



Comprehensive Income

| Income Statement (in thousands) | | | |
|---------------------------------|--|--|--|
| \$ 285,000 | | | |
| 149,000 | | | |
| 136,000 | | | |
| _ | | | |
| 10,000 | | | |
| 43,000 | | | |
| 53,000 | | | |
| 83,000 | | | |
| | | | |
| 17,000 | | | |
| (21,000) | | | |
| (4,000) | | | |
| 79,000 | | | |
| 24,000 | | | |
| \$ 55,000 | | | |
| | | | |



Other Comprehensive Income

- Unrealized gains and losses on available-forsale securities.
- Translation gains and losses on foreign currency.
- Plus others

Reported in Stockholders' Equity



Gains and losses that bypass net income but affect stockholders' equity are referred to as

- a. comprehensive income.
- b.) other comprehensive income.
 - c. prior period income.
- d. unusual gains and losses.



Companies must display the components of other comprehensive income in one of three ways:

- 1. A second separate income statement;
- 2. A combined income statement of comprehensive income; or
- 3. As part of the statement of stockholders' equity



Comprehensive Income

Second income statement

V. GILL INC. INCOME STATEMENT FOR THE YEAR ENDED DECEMBER 31, 2012

| Sales revenue Cost of goods sold | \$800,000 600,000 |
|----------------------------------|----------------------|
| Gross profit Operating expenses | 200,000 90,000 |
| Net income | \$110,000 |

V. GILL INC. COMPREHENSIVE INCOME STATEMENT FOR THE YEAR ENDED DECEMBER 31, 2012

| Net income | \$110,000 |
|-------------------------------------|-----------|
| Other comprehensive income | |
| Unrealized holding gain, net of tax | 30,000 |
| Comprehensive income | \$140,000 |
| | |



Comprehensive Income

Combined statement

V. Gill Inc.

Combined Statement of Comprehensive Income For the Year Ended December 31, 2012

| Sales revenue | \$ 800,000 |
|-------------------------------------|---------------|
| Cost of goods sold | 600,000 |
| Gross profit | 200,000 |
| Operating expenses | 90,000 |
| Net income | 110,000 |
| Unrealized holding gain, net of tax | 30,000 |
| Comprehensive income | \$ 140,000 |



Comprehensive Income – Statement of Stockholder's Equity

| V. GILL INC. STATEMENT OF STOCKHOLDERS' EQUITY FOR THE YEAR ENDED DECEMBER 31, 2012 | | | | | lustration 4-20 |
|---|-----------|------------------------------|----------------------|--|-----------------|
| | Total | Compre- hensive Income | Retained Earnings | Accumulated Other Compre- hensive Income | Common Stock |
| Beginning balance Comprehensive income | \$410,000 | | \$ 50,000 | \$60,000 | \$300,000 |
| Net income Other comprehensive income Unrealized holding | 110,000 | \$110,000 | 110,000 | | |
| gain, net of tax | 30,000 | 30,000 | | 30,000 | |
| Comprehensive income | | \$140,000 | | | |
| Ending balance | \$550,000 | | \$160,000 | \$90,000 | \$300,000 |



Comprehensive Income – Balance Sheet Presentation

V. GILL INC.

BALANCE SHEET

As of DECEMBER 31, 2012
(STOCKHOLDERS' EQUITY SECTION)

Illustration 4-21

Presentation of Accumulated Other Comprehensive Income in the Balance Sheet Stockholders' equity
Common stock

Retained earnings

Accumulated other comprehensive income

Total stockholders' equity

\$300,000

160,000

90,000

\$550,000

Regardless of the display format used, the *accumulated other* comprehensive income of \$90,000 is reported in the stockholders' equity section of the balance sheet.



Equity

| Equity | | | |
|----------------------------|-------------|-------------|--|
| | 31 Dec 20X1 | 31 Dec 20X0 | |
| Stockholders' Equity: | | | |
| Common stock | XX | XX | |
| Additional paid-in capital | XX | XX | |
| Retained earnings | XX | XX | |
| Treasury stock | (XX) | (XX) | |
| Total Stockholders' Equity | XX | XX | |

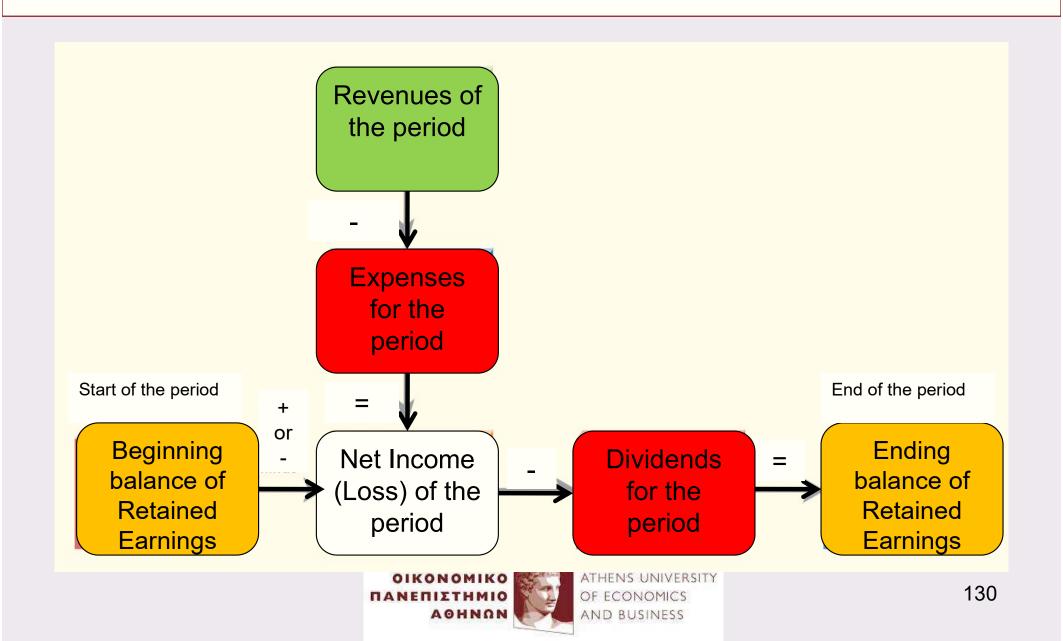


Statement of Changes in Equity

| | Rivendell, Inc. Statement of Changes in Equity | | | | | | | | |
|---|--|--|--|-----|--|--|--|--|--|
| | For the Year ended 31 Dec 20X1 | | | | | | | | |
| | Pref. stock Common Additional Retained Total stock paid-in capital | | | | | | | | |
| Γ | Beg. balance | | | | | | | | |
| | Issuance of stock | | | | | | | | |
| | Net Income (loss) | | | | | | | | |
| | Dividends | | | | | | | | |
| _ | Other | | | | | | | | |
| | End balance | | | *** | | | | | |



Components of Retained Earnings



Statement of Retained Earnings

| Rivendell, Inc. Statement of Retained Earnings For the period ended 31 Dec 20X1 | |
|---|--------|
| Retained Earnings, 1 Jan 20X1 | 10.000 |
| Net Income, year ended 31 Dec 20X1 | 1.500 |
| Cash Dividends | (500) |
| Retained Earnings 31 Dec 20X1 | 11.000 |



- Beg. balance of Retained Earnings is €150.000.
- Revenues €75.000 and Expenses €35.000.
- Pays €10.000 Dividend.
- What is the End balance of Retained Earnings?

| Statement of Retained Earnings | |
|----------------------------------|----------|
| Retained Earnings, beg. balance | 150.000 |
| Net Income (Revenues - Expenses) | 40.000 |
| Cash Dividends | (10.000) |
| Retained Earnings, end balance | 180.000 |

Statement of Retained Earnings - Recap

- Shows what a company did with its net income
- Retained Earnings
 - 1. Portion of net income reinvested into the business
 - 2. Net income increases retained earnings
 - 3. Net losses and dividends <u>decrease</u> retained earnings
 - 4. Net income (net loss) flows from the income statement to the statement of retained earnings
 - 5. Corporations not obligated to pay dividends



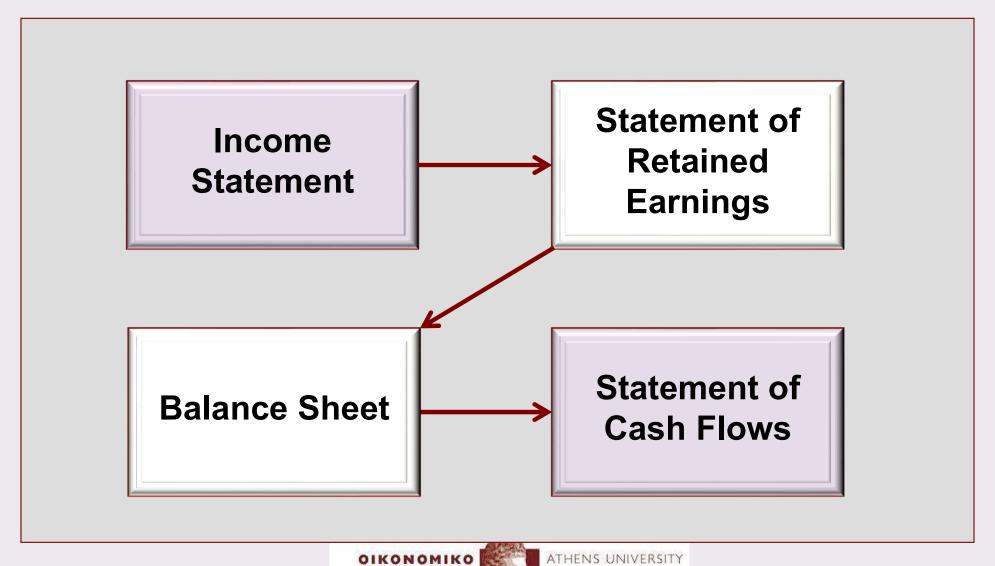
| Question | Financial Statement | Answer |
|---|------------------------|--------|
| How well did the company perform during the year? | | |
| Why did the company's retained earnings change during the year? | | |
| What is the company's financial position at year-end? | | , |
| How much cash did the company generate and spend during the year? | | |
| n | ANERIXTHMIO OF ECON | |

| Information | Financial Statement |
|---|---------------------|
| Revenue | |
| Dividends | |
| Current liabilities | |
| Total assets | |
| Selling, general, and administrative expenses | |
| Ending cash balance | |
| Cash spent to acquire a building | |
| Ending balance of retained earnings | |
| Net income | |
| ΠΑΝΕΠΙΣΤΗΜΙΟ | OF ECONOMICS 13 |

| Information | Financial Statement |
|--|---------------------|
| Income tax expense | |
| Common stock | |
| Income tax payable | |
| Long-term debt | |
| Adjustments to reconcile net income to net cash provided by operations | |



Data flow in the financial statements



OF ECONOMICS

Relationships between the Financial Statements

| The Gap, Inc. | |
|--|---------------------|
| Statement of Income (Adapted) | |
| 12 Months Ended January 28, 2012 | |
| Net sales | \$ 14,549 |
| Expenses | 13,716 |
| Net income | \$ 833 |
| | |
| | |
| Statement of Retained Earnings (Adapted) | |
| Statement of Retained Earnings (Adapted) Beginning retained earnings | \$ 11,767 |
| | \$ 11,767 833 |
| Beginning retained earnings | \$ |



Relationships between the Financial Statements

| The Gap, Inc. | | |
|---|--------------|------|
| Statement of Retained Earnings (Adapted) | | |
| 12 Months Ended January 28, 2012 | | |
| Beginning retained earnings | \$ 11,767 | |
| Net income | 833 | |
| Cash dividends declared | (236) | |
| Ending retained earnings | \$ 12,364 | Н |
| Assets | \$ 7,422 | |
| Balance Sheet (Adapted) | 7 422 | + |
| Lia bilities | \$ 4,667 | |
| Stockholders' equity | | |
| Common stock and additional paid-in capital | 2,922 | |
| Retained earnings | 12,364 | لــا |
| Notalited Carrings | /12 E21\ | |
| Other equity | (12,531) | |

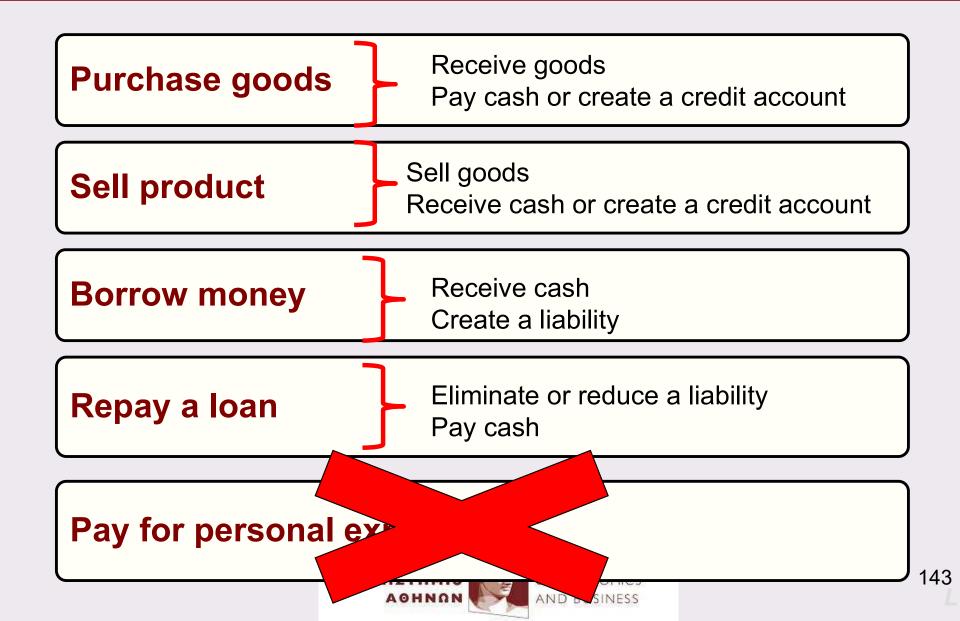
Relationships between the Financial Statements

| The Gap, Inc. | |
|--|-------------|
| Balance Sheet (Adapted) | |
| January 28, 2012 | |
| Assets | |
| Cash and cash equivalents | \$ 1,885 |
| All other assets | 5,53/ |
| Total assets | \$ 7,422 |
| Liabilities | \$ 4,667 |
| Stockholders' equity | 2,755 |
| Total liabilities and stockholders' equity | \$ 7,422 |
| Statement of Cash Flows (Adapted) | |
| Net cash provided by operating activities | \$ 1,363 |
| Net cash used in investing activities | (454) |
| Net cash used in financing activities | (602) |
| Effect of foreign exchange rate fluctuations on cash | 17 |
| Net increase (decrease) in cash and cash equivalents | 324 |
| Cash and cash equivalents, beginning of year | 1,561 |
| Cash and cash equivalents, end of year | \$ 1,885 |

| Income Statement | | | | | | |
|------------------------------|---------------|--|--|--|--|--|
| Revenues | 2.775 | | | | | |
| Expenses | A | | | | | |
| Net Income | В | | | | | |
| Statement of Retain | ined Earnings | | | | | |
| Beginning balance | 7.250 | | | | | |
| +Net Income | C | | | | | |
| -Dividends | 500 | | | | | |
| Ending balance | 7.500 | | | | | |
| Balance S | Balance Sheet | | | | | |
| Total Assets | D | | | | | |
| Liabilities | 4.000 | | | | | |
| Equity | | | | | | |
| Common Stock | 5.000 | | | | | |
| Retained Earnings | E 141 | | | | | |
| Total Liabilities and Equity | F | | | | | |

Business Transactions

- Transaction (<u>economic event</u>)
 - Any event that has a financial impact on the business
 - Can be measured reliably
 - The details are supported by source documents (invoices, receipts, checks, contracts)
 - Provides information about an exchange
 - Something given & Something received
 - Dual system (principle of duality every economic event has two aspects that offset, or balance, each other)
 - Accounting records both sides of a transaction



Balance Sheet Transactions

Transaction 1: Initial Investment of €400.000 in cash

| | Assets | = | Liabilities | + | Equity | |
|-----|-----------|---|-------------|---|-----------------|--------|
| | Cash | | | | Capital (Common | Stock) |
| (1) | + 400.000 | = | | | +400.000 | |



Balance Sheet Transactions

Transaction 2: Loan of €100.000 from Bank

| | Assets | = | Liabilities | + | Equity |
|------|-----------|---|-------------|-------|----------|
| | Cash | | Loan | | Capital |
| (1) | + 400.000 | = | | | +400.000 |
| (2) | + 100.000 | = | + 100.000 | | |
| Bal. | 500.000 | = | 100.000 | | 400.000 |
| | 500.000 | | | 500.0 | 000 |



Balance Sheet Transactions

Transaction 3: Acquire Equipment for Cash €15.000

| Ass | sets | | = | Liabilities | + | Equity |
|-------------------|---------|-----------|---|-------------|---------|---------|
| Ca | ash | Equipment | | Loan | | Capital |
| Bal. | 500.000 | | = | 100.000 | | 400.000 |
| (3 <mark>)</mark> | -15.000 | +15.000 | = | | | |
| Bal. | 485.000 | 15.000 | = | 100.000 | | 400.000 |
| | 500 | .000 | | | 500.000 | |

Preparing the Balance Sheet

Balance Sheet 31 Dec 2016

| Assets | | Liabilities and Equity | |
|----------------------|-------------------|---------------------------------------|--------------------|
| Cash Store equipment | 485.000 15.000 | Liabilities (note payable) Capital | 100.000 400.000 |
| Total assets | 500.000 | Total liabilities & equity | 500.000 |

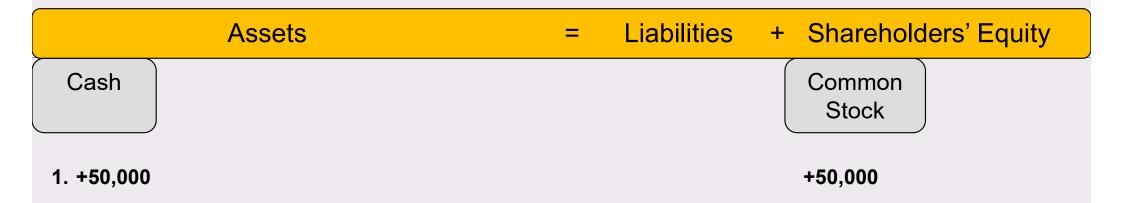


Example

| No | Event | | | | | | |
|----|--|--|--|--|--|--|--|
| 1 | On April 1, some friends invest €50.000 to open Alpha Service, Inc. in return for common stock. | | | | | | |
| 2 | Alpha purchases land for a new location and pays cash of €40.000. | | | | | | |
| 3 | Alpha buys supplies on account, agreeing to pay €3.700 within 30 days. | | | | | | |
| 4 | Received €7.000 cash by providing services for customers. | | | | | | |
| 5 | Repairs Beta's delivery trucks, and Beta promises to pay Alpha €3.000 within 1 month. | | | | | | |
| 6 | Alpha pays €2.700 for the following expenses: rent €1.100, employee salaries €1.200, and utilities €400. | | | | | | |
| 7 | Alpha pays €1.900 on account, which means to make a payment toward an account payable. | | | | | | |
| 8 | The major shareholder paid €10.000 out of her personal bank account to remodel her house. | | | | | | |
| 9 | In transaction 5, Alpha performed services for Beta on account. Alpha now collects €1.000 from Beta. | | | | | | |
| 10 | Alpha receives €22.000 from the sale of land, which is the same amount that Alpha paid for the land. | | | | | | |
| 11 | Alpha declares a dividend and pays the stockholders €2.100 cash. | | | | | | |

Example - Transactions

1: Four friends invest €50.000 to open Alpha Service, Inc., in return for common stock.





2. Alpha purchases land for a new location and pays cash of €40.000.



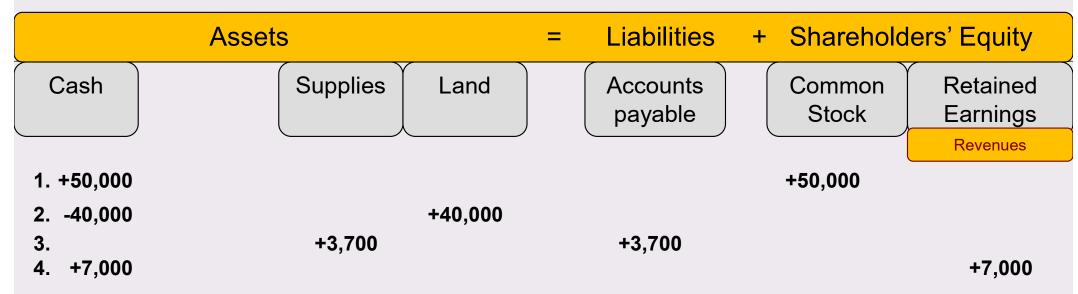


3. Alpha buys supplies on account, agreeing to pay €3.700 within 30 days.





4. Received €7.000 cash by providing services for customers.





5. Repairs Beta's delivery trucks, and Beta promises to pay Alpha €3.000 within 1 month.

| Assets | | | = | Liabilities + Shareholder | | | ers' Equity | |
|------------|---------------------|----------|---------|---------------------------|------------------|--|-----------------|----------------------|
| Cash | Accounts receivable | Supplies | Land | | Accounts payable | | Common Stock | Retained Earnings |
| | | | | • | | | | Revenues |
| 1. +50,000 | | | | | | | +50,000 | |
| 240,000 | | | +40,000 | | | | | |
| 3. | | +3,700 | | | +3,700 | | | |
| 4. +7,000 | | | | | | | | +7,000 |
| 5. | +3,000 | | | | | | | +3,000 |



. Alpha pays €2.700 for the following expenses: rent €1.100, employee salaries €1.200, and utilities €400.

| | Asset | S | | = | Liabilities | + | Sharehold | ers' Equity |
|------------|---------------------|----------|---------|---|------------------|---|-----------------|----------------------|
| Cash | Accounts receivable | Supplies | Land | | Accounts payable | | Common Stock | Retained Earnings |
| | | | | | | | | Expenses |
| 1. +50,000 | | | | | | | +50,000 | |
| 240,000 | | | +40,000 | | | | | |
| 3. | | +3,700 | | | +3,700 | | | |
| 4. +7,000 | | | | | | | | +7,000 |
| 5. | +3,000 | | | | | | | +3,000 |
| 62,700 | | | | | | | | - 2,700 |

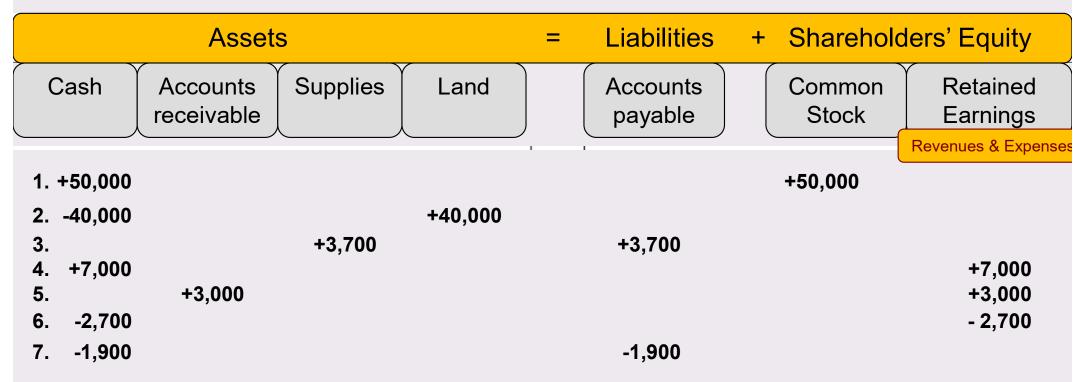


7. Alpha pays €1.900 on account, which means to make a payment toward an account payable.

| | Asset | S | | = | Liabilities | + | Sharehold | ders' Equity |
|--|---------------------|----------|---------|---|------------------|---|-----------------|---------------------------------------|
| Cash | Accounts receivable | Supplies | Land | | Accounts payable | | Common Stock | Retained Earnings Revenues & Expenses |
| 1. +50,000 240,000 3. 4. +7,000 | | +3,700 | +40,000 | | +3,700 | | +50,000 | +7,000 |
| 5. 62,700 71,900 | +3,000 | | | | -1,900 | | | +3,000 - 2,700 |



8. The major shareholder paid €10.000 out of her personal bank account to remodel her house.



Not An Economic Event

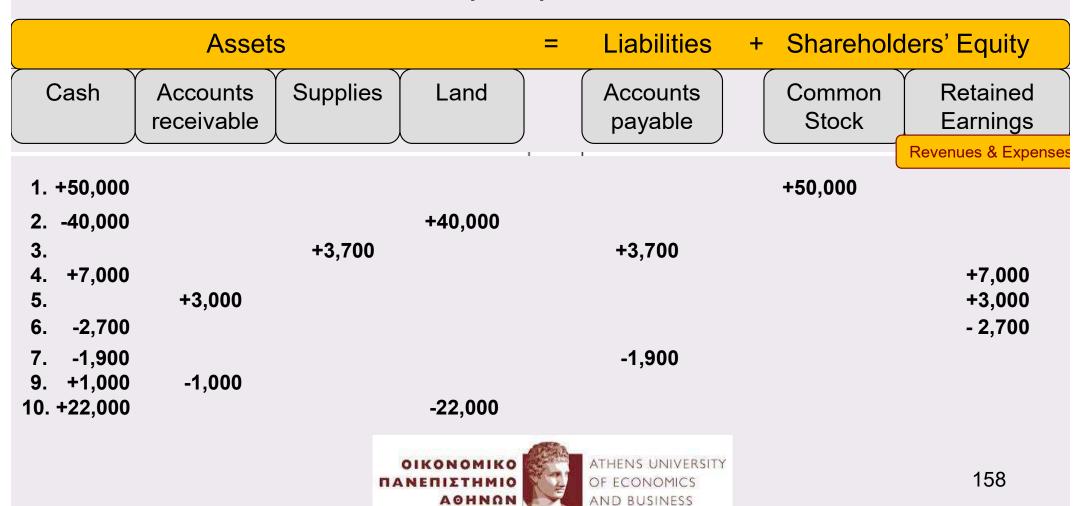


9. In transaction 5, Alpha performed services for Beta on account. Alpha now collects €1.000 from Beta.

| Assets | = | Liabilities - | Sharehold | ders' Equity |
|-----------------------|-----------------------------|---|--|--|
| ounts Supplies ivable | Land | Accounts payable | Common Stock | Retained Earnings Revenues & Expenses |
| | | | +50,000 | |
| | +40,000 | | | |
| +3,700 | | +3,700 | | |
| | | | | +7,000 |
| 5,000 | | | | +3,000 |
| | | 4.000 | | - 2,700 |
| ,000 | | -1,900 | | |
| | sunts vable Supplies +3,700 | tounts vable Supplies Land +40,000 +3,700 | tounts vable Supplies Land Accounts payable +40,000 +3,700 +3,700 -1,900 | ounts vable Supplies Land Accounts payable Common Stock +50,000 +3,700 +3,700 -1,900 |



10. Alpha receives €22.000 from the sale of land, which is the same amount that Alpha paid for the land.



11. Alpha declares a dividend and pays the stockholders €2.100 in cash.

| | Asset | S | | = | Liabilities | + Sharehold | ers' Equity |
|--------------|---------------------|----------|---------|---|------------------|-----------------|-----------------------------|
| Cash | Accounts receivable | Supplies | Land | | Accounts payable | Common Stock | Retained Earnings Dividend |
| 1. +50,000 | | | | | | +50,000 | |
| 240,000 | | | +40,000 | | | | |
| 3. | | +3,700 | | | +3,700 | | |
| 4. +7,000 | . 2 000 | | | | | | +7,000 |
| 5. 62,700 | +3,000 | | | | | | +3,000 - 2,700 |
| 71,900 | | | | | -1,900 | | 2,100 |
| 9. +1,000 | -1,000 | | | | 1,000 | | |
| 10. +22,000 | | | -22,000 | | | | |
| 112,100 | 3 | | | | | - | 2,100 |
| 33,300 | 2,000 | 3,700 | 18,000 | | 1,800 | 50,000 | 5,200 |
| | 57,0 | 000 | | | E 40. 10 | 57,000 | |

Financial Statements

-Income Statement-

| Alpha Service Inc. Income Statement Month ended 30 April | | | | | | | | |
|--|-------|--------|--|--|--|--|--|--|
| Service revenues | | 10.000 | | | | | | |
| Operating Expenses | | 2.700 | | | | | | |
| Salary expense | 1.200 | | | | | | | |
| Rent expense | 1.100 | | | | | | | |
| Utilities expense | 400 | | | | | | | |
| Net Income | | 7.300 | | | | | | |
| | | | | | | | | |



Financial Statements

-Statement of Retained Earnings-

| Alpha Service Inc. Statement of Retained Earnings Month ended 30 April | | | | | | |
|--|---------|--|--|--|--|--|
| Retained earnings, Beginning Balance | 0 | | | | | |
| Plus: Net Income of the period | 7.300 | | | | | |
| Minus: Dividends | (2.100) | | | | | |
| Retained earnings, Ending Balance | 5.200 | | | | | |



Financial Statements

-Balance Sheet-

Alpha Service Inc. Balance Sheet 30 April 2016

| Assets | | Liabilities | |
|---------------------|--------|---------------------------|--------|
| Cash | 33.300 | Accounts payable | 1.800 |
| Accounts receivable | 2.000 | Shareholders' Equi | ty |
| Supplies | 3.700 | Common stock | 50.000 |
| Land | 18.000 | Retained earnings | 5.200 |
| | | | |
| Total Assets | 57.000 | Total Liabilities &Equity | 57.000 |
| | | | |
| | | | |

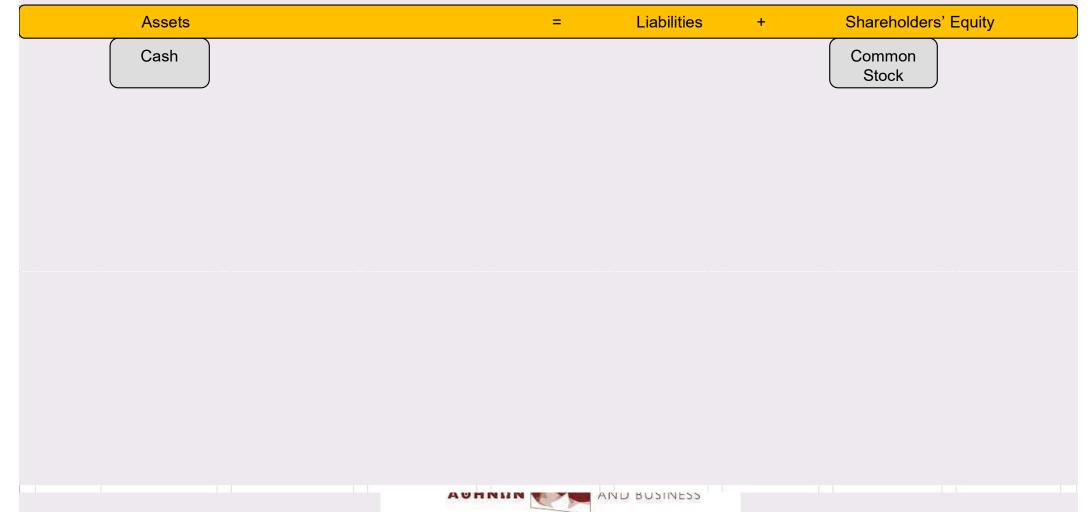


Example

Jorge opens a business providing physical therapy services. During the first month of operation the following events took place:

| Date | Event |
|-------|--|
| Feb 1 | Jorge invested €100.000 in the business in return for common stock. |
| 5 | The business borrowed €50.000, signing a note payable to the bank. |
| 8 | The business paid cash for land costing €105.000. Jorge plans to build an office building on the land. |
| 11 | The business purchased medical supplies for €1.700 on account. |
| 12 | Officially opens for business. |
| 14 | Jorge treated patients and earned service revenue of €5.600, receiving cash for half the revenue earned. |
| 16 | The business paid employee salaries of €2.300 for the first half of the month. |
| 25 | Jorge treated patients and received €1.500 cash at the time of service. |
| 28 | The business paid office rent of €1.000. |
| 28 | The business paid €500 on account. |

Feb. 1: Invested €100.000 in the business in return for common stock.



Feb. 5: The business borrowed €50.000, signing a note payable to the bank.



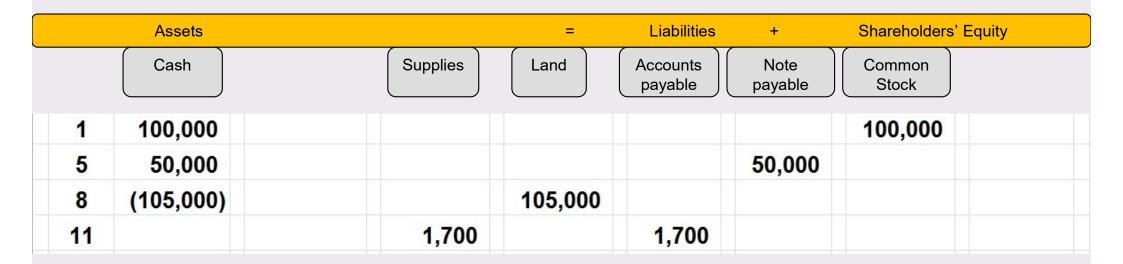
Feb. 8: The business paid cash for land costing €105.000. Jorge plans to build an office building on the land.

| | Assets | = | Liabilities | + | Shareholders' Equity |
|---|---------|------|-------------|-----------------|----------------------|
| | Cash | Land | | Note payable | Common Stock |
| 1 | 100,000 | | | | 100,000 |
| 5 | 50,000 | | | 50,000 | |

Feb. 11: The business purchased medical supplies for €1.700 on account.

| | Assets | | = | Liabilities | + | Shareholders' Equity | |
|---|-----------|----------|---------|------------------|-----------------|----------------------|--|
| | Cash | Supplies | Land | Accounts payable | Note payable | Common Stock | |
| 1 | 100,000 | | | | | 100,000 | |
| 5 | 50,000 | | | | 50,000 | | |
| 8 | (105,000) | | 105,000 | | | | |

Feb. 12: Officially opens for business.



Not An Economic Event

Feb. 14: Jorge treated patients and earned service revenue of €5.600, receiving cash for half the revenue earned.

| | Assets | | | = | Liabilities | + | Shareholders' | Equity |
|----|-----------|---------------------|----------|---------|------------------|-----------------|-----------------|----------------------|
| | Cash | Accounts receivable | Supplies | Land | Accounts payable | Note payable | Common Stock | Retained Earnings |
| 1 | 100,000 | | | | | | 100,000 | |
| 5 | 50,000 | | | | | 50,000 | | |
| 8 | (105,000) | | | 105,000 | | | | |
| 11 | | | 1,700 | | 1,700 | | | |
| 12 | | | | | | | | |

Feb. 16: Paid employee salaries of €2.300 for the first half of the month.

| | Assets | | | = | Liabilities | + | Shareholders' | Equity |
|----|-----------|---------------------|----------|---------|------------------|-----------------|-----------------|----------------------|
| | Cash | Accounts receivable | Supplies | Land | Accounts payable | Note payable | Common Stock | Retained Earnings |
| 1 | 100,000 | | | | | | 100,000 | |
| 5 | 50,000 | | | | | 50,000 | | |
| 8 | (105,000) | | | 105,000 | | | | |
| 11 | | | 1,700 | | 1,700 | | | |
| 12 | | | | | | | | |
| 14 | 2,800 | 2,800 | | | | | | 5,600 |

Feb. 25: Jorge treated patients and received €1.500 cash at the time of service.

| | Assets | | | = | Liabilities | + | Shareholders' E | Equity |
|----|-----------|---------------------|----------|---------|------------------|--------------|-----------------|----------------------|
| | Cash | Accounts receivable | Supplies | Land | Accounts payable | Note payable | Common Stock | Retained Earnings |
| 1 | 100,000 | | | | | | 100,000 | |
| 5 | 50,000 | | | | | 50,000 | | |
| 8 | (105,000) | | | 105,000 | | | | |
| 11 | | | 1,700 | | 1,700 | | | |
| 12 | | | | | | | | |
| 14 | 2,800 | 2,800 | | | | | | 5,600 |
| 16 | (2,300) | | | | | | | (2,300) |

Feb. 28: The business paid office rent of €1.000.

| | Assets | | | = | Liabilities | + | Shareholders' E | Equity |
|----|-----------|---------------------|----------|---------|------------------|-----------------|-----------------|----------------------|
| | Cash | Accounts receivable | Supplies | Land | Accounts payable | Note payable | Common Stock | Retained Earnings |
| 1 | 100,000 | | | | | | 100,000 | |
| 5 | 50,000 | | | | | 50,000 | | |
| 8 | (105,000) | | | 105,000 | | | | |
| 11 | | | 1,700 | | 1,700 | | | |
| 12 | | | | | | | | |
| 14 | 2,800 | 2,800 | | | | | | 5,600 |
| 16 | (2,300) | | | | | | | (2,300) |
| 25 | 1,500 | | | | | | | 1,500 |

Feb. 28: The business paid €500 on an account payable.

| | Assets | | | = | Liabilities | + | Shareholders' l | Equity |
|----|-----------|---------------------|----------|---------|------------------|-----------------|-----------------|----------------------|
| | Cash | Accounts receivable | Supplies | Land | Accounts payable | Note payable | Common Stock | Retained Earnings |
| 1 | 100,000 | | | | | | 100,000 | |
| 5 | 50,000 | | | | | 50,000 | | |
| 8 | (105,000) | | | 105,000 | | | | |
| 11 | | | 1,700 | | 1,700 | | | |
| 12 | | | | | | | | |
| 14 | 2,800 | 2,800 | | | | | | 5,600 |
| 16 | (2,300) | | | | | | | (2,300) |
| 25 | 1,500 | | | | | | | 1,500 |
| 28 | (1,000) | | | | | | | (1,000) |

Questions

- a. How much are total assets?
- b. How much does the business expect to collect from customers?
- c. How much does the business owe in total?
- d. How much of the business's assets does Jorge really own?
- e. How much net income or net loss did the business experience during its first month of operations?

The Account

 Record of all changes (increases and decreases) in a particular asset, liability, or stockholders' equity during a period.

 The basic summary device (or storage unit) in accounting!

Two formats: 4-Column and <u>T-Account</u>

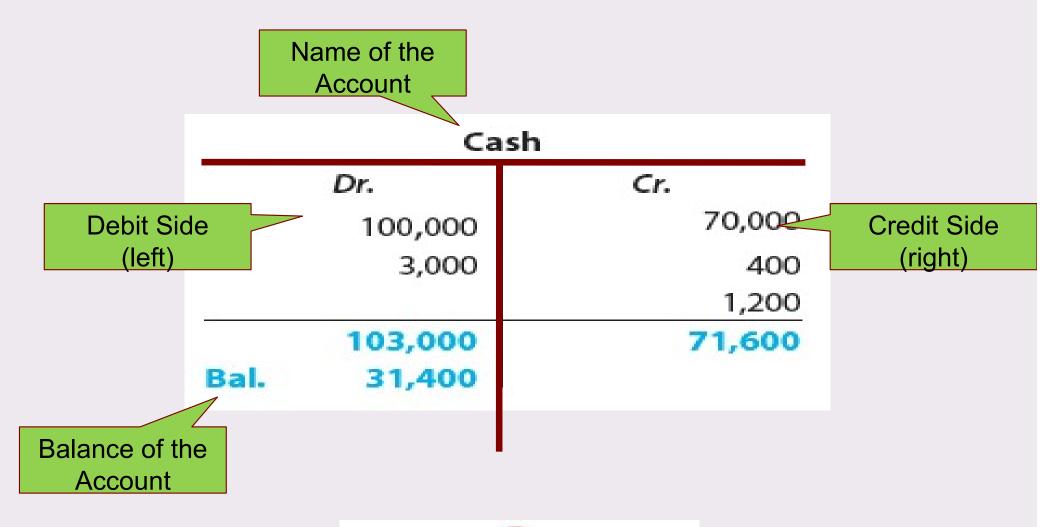


Four Column Account

| Account: Ca | ash | Acco | unt No. 101 | | | |
|--------------------|------|--------|-------------|------------------|--------|--|
| | | | | Balance | | |
| Date | Item | Debit | Credit | Debit | Credit | |
| 2014 Apr 2 3 | | 50,000 | 40,000 | 50,000 10,000 | | |



The T-Account





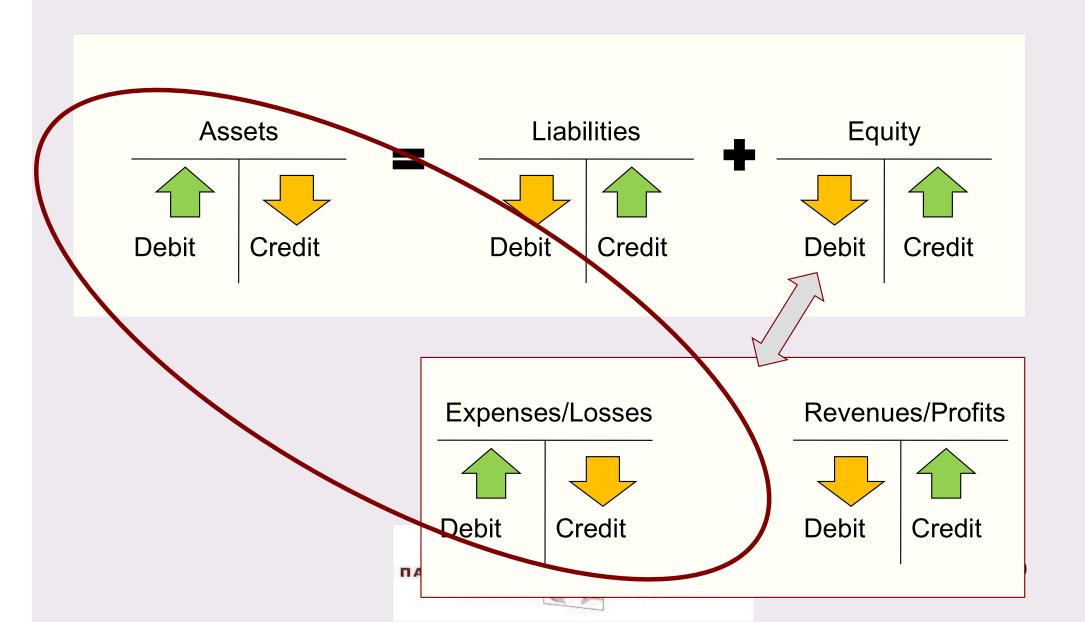
Rules of Double-Entry Accounting

- The double-entry system follows two rules:
 - 1. Every transaction affects at least two accounts.
 - 2. Total debits must equal total credits.

- For every transaction:
 - one or more accounts must be debited
 - one or more accounts must be credited



Rules of Debit and Credit



Normal Balance

 The normal balance of an account is its usual balance and is the side (debit or credit) that increases the account.

| Account | Increa | ses by | Normal | balance |
|-------------|--------|--------|--------|---------|
| | Debit | Credit | Debit | Credit |
| Assets | X | | X | |
| Liabilities | | X | | X |
| Equity | | X | | X |
| Revenues | | X | | X |
| Expenses | X | | X | |

Types of Accounts

- Permanent Accounts
 - Balance Sheet accounts
 - Carried over to the next period.

- Temporary Accounts
 - Revenues and Expenses, Dividends
 - Relate to a limited period.



The Ledger

 In an accounting system, each account is kept on a separate page or card, which are placed together in a book or file called the general ledger or the ledger.

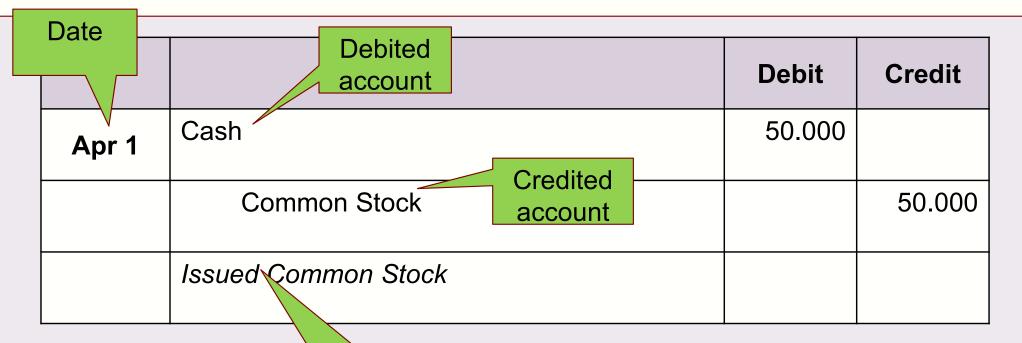


The Journal

- Chronological record of transactions
- 3 steps
 - Specify each account affected by the transaction and classify by type
 - Determine if each account is increased or decreased (debit or credit)
 - 3. Record in the journal



Journal Entry



Explanation



Post to the Ledger

Journal

| | | De | bit | Cre | dit |
|-------|---------------------|----|-----|-----|------|
| Apr 1 | Cash | 50 | 000 | | |
| | Common Stock | | | 50. | .000 |
| | Issued Common Stock | | | | |

General Ledger

Cash

Common Stock

50.000

50.000 ←



01.01.2017: Received €50.000 cash and issued stock to the shareholders.

Accounting Equation

Journal Entry

| | | Debit | Credit |
|-------|--------------|--------|--------|
| 01/01 | Cash | 50.000 | |
| | Common Stock | | 50.000 |

Ledger Accounts

Cash Common Stock
50.000 (01.01) 50.000 (01.01)



02.01.2017: Paid €40.000 cash for land.

Accounting Equation

Assets = Liabilities + Stockholders' Equity

+ 40,000

- 40,000

Journal Entry

| | | Debit | Credit |
|-------|------|--------|--------|
| 02/01 | Land | 40.000 | |
| | Cash | | 40.000 |

Ledger Accounts Cash Land

50.000 (01.01)

40.000 (02.01)

40.000 (02.01)



03.01.2017: Purchased supplies for €3.700 on account.

Accounting Equation

Journal Entry

| | | Debit | Credit |
|-------|------------------|-------|--------|
| 03/01 | Supplies | 3.700 | |
| | Accounts Payable | | 3.700 |

Ledger Accounts

Supplies

Accounts Payable

3.700 *(03.01)*

3.700 *(03.01)*



| Date | Event | | |
|--------|--|--|--|
| July 1 | Joan invests €40.000 in cash to form Design Inc. In return receives common stock. | | |
| 1 | The firm orders office supplies of €5.200. | | |
| 3 | Joan rents an office for the firm. She pays in advance €3.200 for two months' rent. | | |
| 5 | The business receives the office supplies ordered on July 2 and an invoice for €5.200 to be paid. | | |
| 6 | Purchases equipment totaling €16.320 for which €13.320 was paid in cash and the rest was agreed to be paid next month. | | |
| 9 | The firm paid €2.600 for the amount owed for the office supplies received on July 5. | | |
| 10 | The firm performed services for a customer for which it collected €2.800 in cash. | | |
| 15 | The firm performed services of €9.600 for a customer, that will be collected in the future. | | |
| 19 | Received in advance €1.400 for services to be performed in the future. | | |
| 22 | Received €5.000 for the services provided on July 15. | | |
| 26 | Paid employee salaries, €4.800. | | |
| 30 | Paid cash dividend of €2.800. | | |

The Trial Balance

 An accounting tool used to ensure that the total of debits and credits in the accounts are equal.

| Blue Design Stud Trial Balance | Blue Design Studio | |
|-----------------------------------|--------------------|--------|
| July 31, 2014 | DEBIT | CREDIT |
| Cash | 22,480 | |
| Accounts Receivable | 4,600 | |
| Office Supplies | 5,200 | |
| Prepaid Rent | 3,200 | |
| Office Equipment | 16,320 | |
| Accounts Payable | | 6,280 |
| Unearned Revenue | | 1,400 |
| Common Stock | | 40,000 |
| Dividends | 2,800 | |
| Revenue | | 12,400 |
| Salaries | 4,800 | |
| Utilities | 680 | |
| | 60,080 | 60,080 |

Preparation and Use of a Trial Balance

- The steps involved in preparing a trial balance are:
 - List each account with a balance, with debit balances in the left column and credit balances in the right column.
 - 2. Add each column.
 - 3. Compare the totals of each column.
- The trial balance proves whether the accounts are in balance but does not detect all errors.



Finding Trial Balance Errors

- If the debits and credits in a trial balance are not equal, look for these common errors:
 - A debit was entered in an account as a credit, or vice versa.
 - The balance of an account was computed incorrectly.
 - An error was made in carrying the account balance to the trial balance.
 - The trial balance was summed incorrectly.



Flow of Accounting Data (1/2)

Transaction Occurrence

Transaction Analysis

Record to the Journal (Journalize)

Post to the Ledger (Posting)



Flow of Accounting Data (2/2)

Post to the Ledger (Posting)

Prepare Trial Balance

Adjust the Accounts ⇒ Adjusted Trial Balance –

Prepare the Financial Statements

Close the Accounts Closing Trial Balance

Chart of Accounts

- Organizations use a chart of accounts to list all their accounts and account numbers.
- Account numbers usually have two or more digits.
 - The first digit indicates if the account is an Asset,
 Liability, Equity, Revenues or Expenses account.
 - The second, third, and higher digits indicate the position of the individual account within the category.



Chart of Accounts

| Balance Sheet Accounts | | | | |
|---|--|---|--|--|
| Assets | Liabilities | Stockholders' Equity | | |
| 101 Cash 111 Accounts Received 141 Supplies 151 Land 191 Office Furniture | 201 Accounts Payable ole 231 Notes Payable | 301 Common Stock 311 Retained Earnings 312 Dividends | | |
| | | Income Statement Accounts (Part of Stockholders' Equity) | | |
| | Revenues | Expenses | | |
| | 401 Service Revenue | 501 Rent Expense 502 Salary Expense 503 Utilities Expense | | |