

## Introduction to Accounting

Instructor: Sotirios Karatzimas, Assistant Professor

Dept. of Accounting and Finance



## 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.

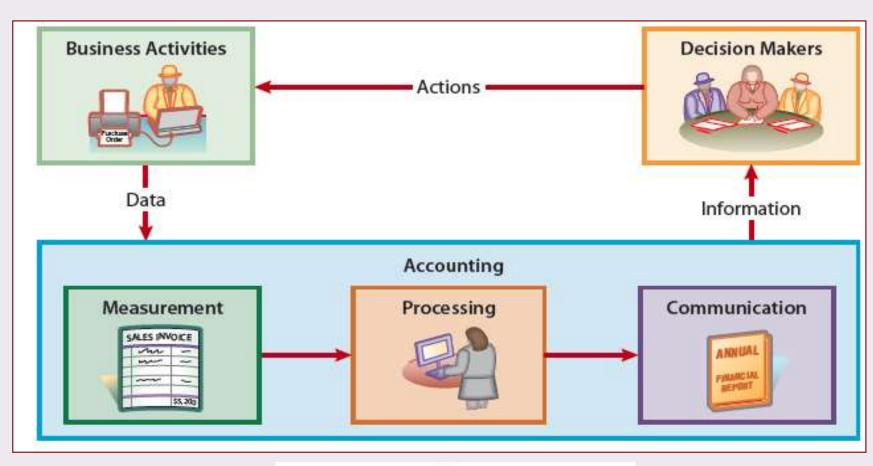


"The basis for business decisions"

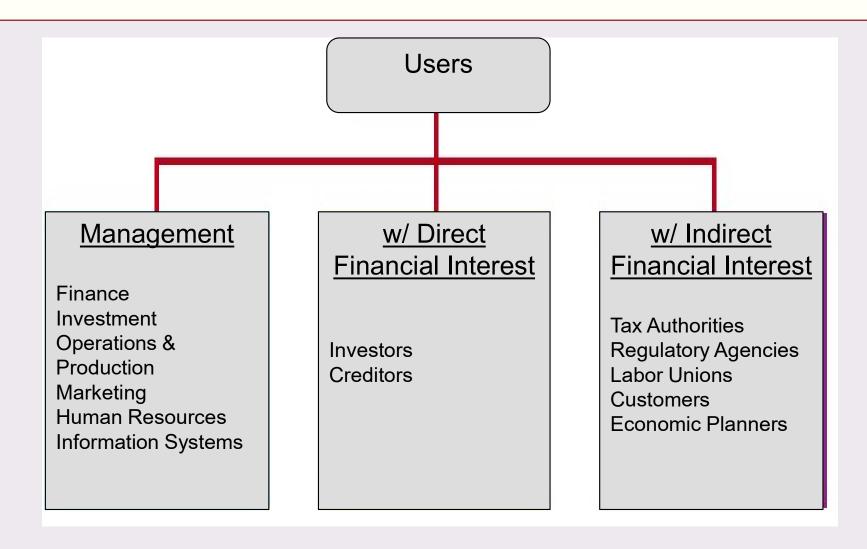
"The language of the business"

## 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 31/12/20<del>16</del>

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 <b>useful</b> 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**

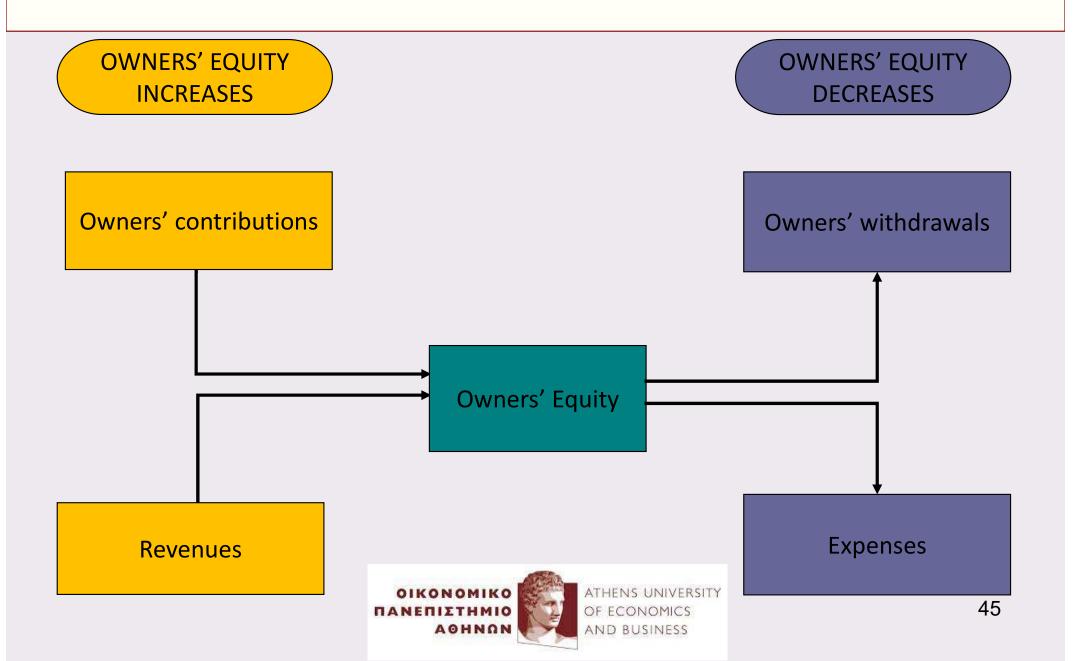
The claims of the owners.

- 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

	<b>Current Assets</b>	Non-Current Assets
Cash		
Furniture		
Receivables	<b>✓</b>	
Mini van		<b>✓</b>
Land		<b>✓</b>
5-year Investment		<b>✓</b>
Inventories	<b>✓</b>	
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	<b>13.300</b> <sub>112</sub>

### **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					llustration 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	<del></del>	\$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	

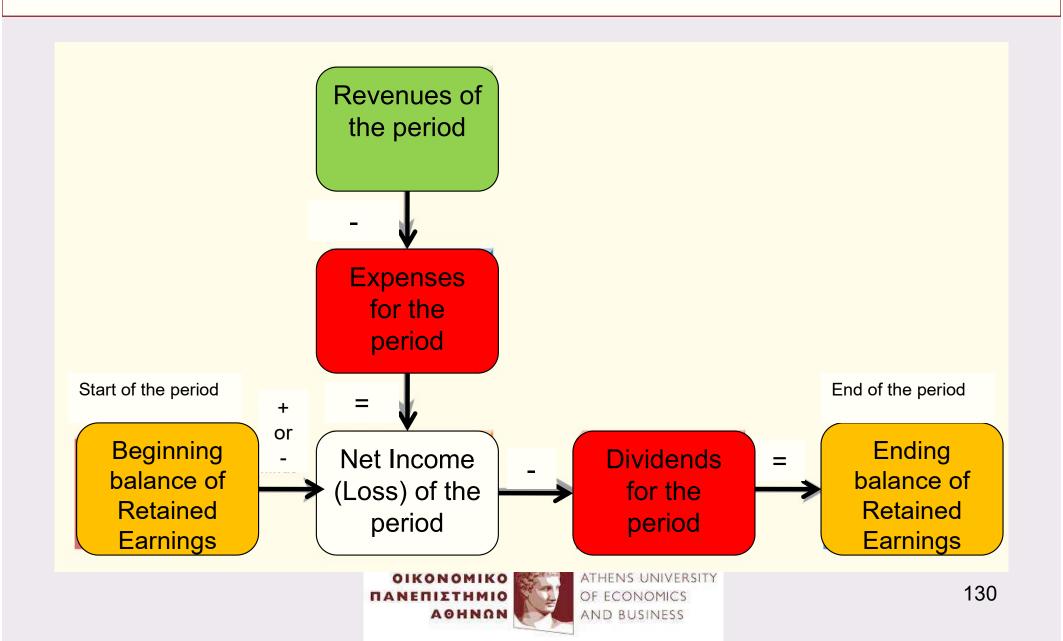


### Statement of Changes in Equity

	Rivendell, Inc. Statement of Changes in Equity							
	For the Year ended 31 Dec 20X1							
		Pref. stock	Common stock	Additional paid-in capital	Retained earnings	Total		
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



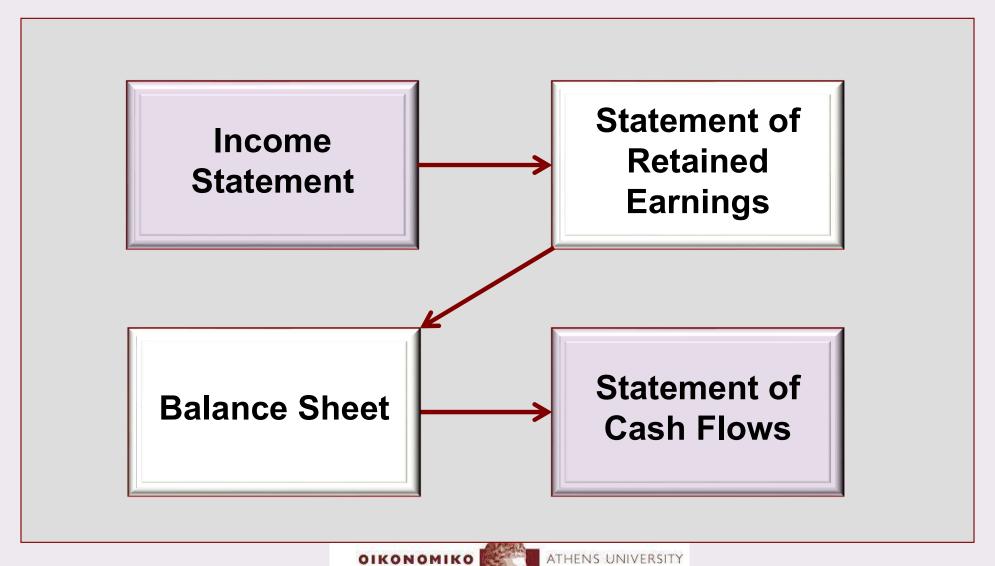
Question	Financial Statement	Answer
How well did the company perform during the year?		
Why did the company's retained earnings change during the year?		
What is the company's financial position at year-end?		,
How much cash did the company generate and spend during the year?		
n	ANERIXTHMIO OF ECON	

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	\$ and the same of th



### 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	$\dashv$
Liabilities Liabil	\$	4,667	
Stockholders' equity			
Common stock and additional paid-in capital		2,922	
Retained earnings		12,364	له
		/12 E21\	
Other equity		(12,531)	

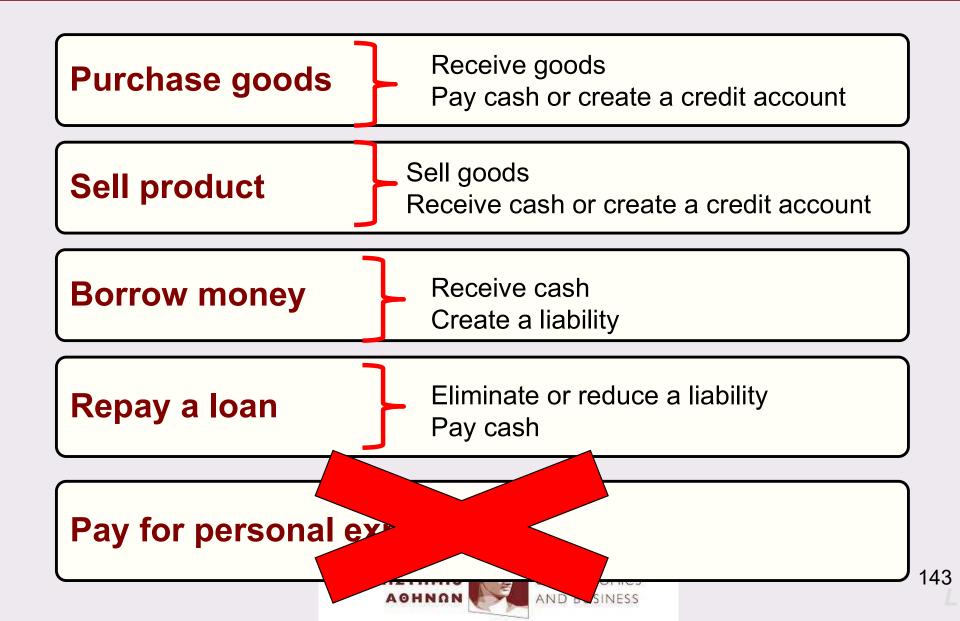
### Relationships between the Financial Statements

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 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

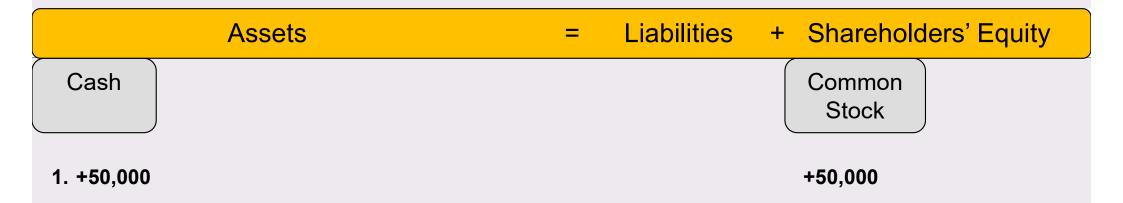


# Example

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.



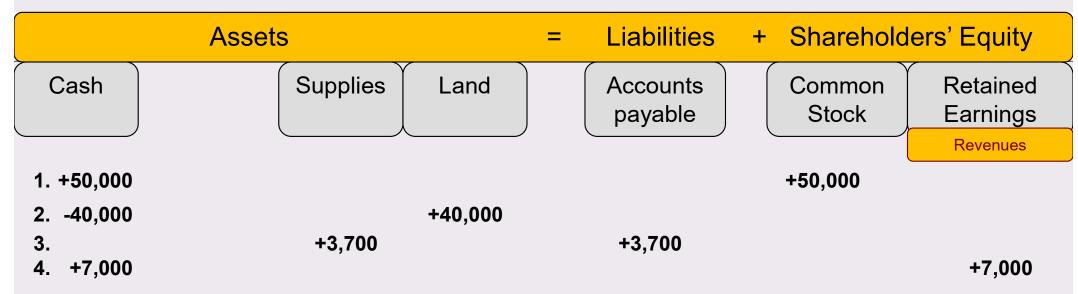


**3.** Alpha buys supplies on account, agreeing to pay €3.700 within 30 days.





**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	+	+ Shareholders' 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.

Assets			=	Liabilities	+	+ Shareholders' 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

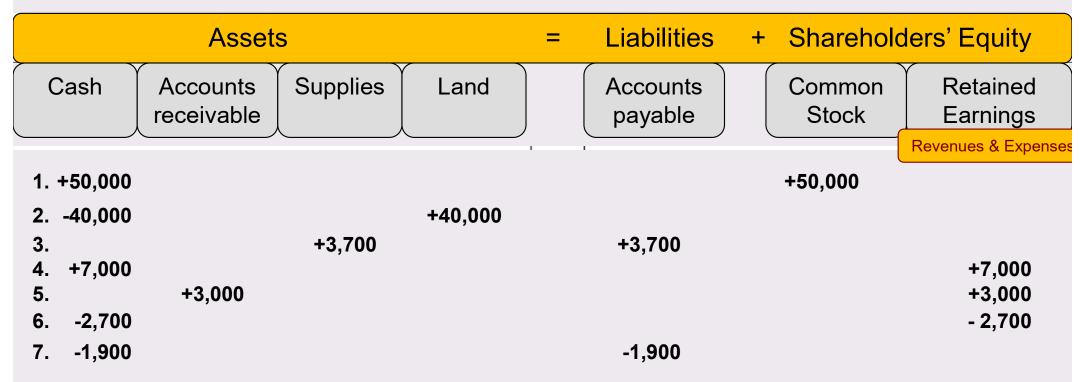


7. Alpha pays €1.900 on account, which means to make a payment toward an account payable.

	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**

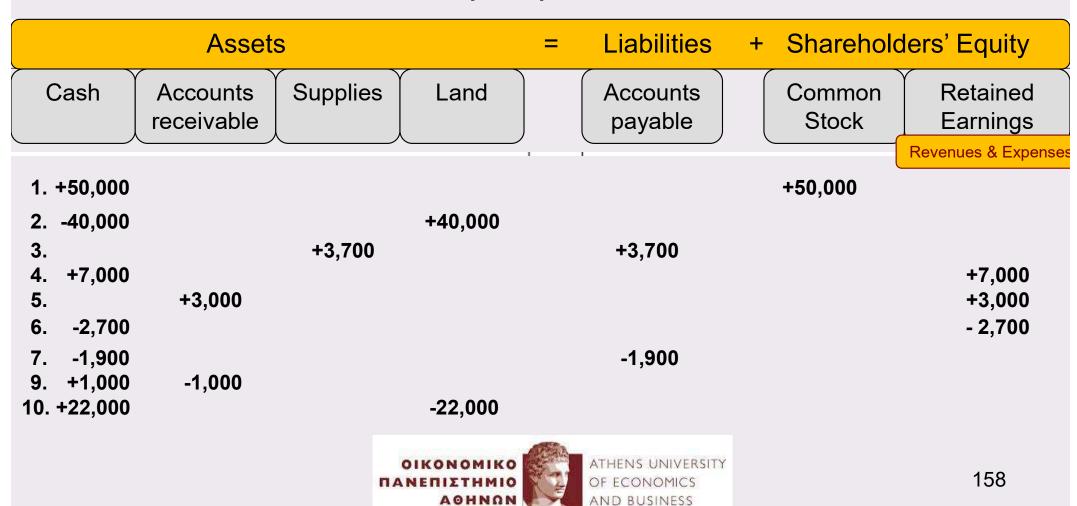


9. In transaction 5, Alpha performed services for Beta on account. Alpha now collects €1.000 from Beta.

	Asset	S		=	Liabilities	+	Sharehold	ders' Equity
Cash	Accounts receivable	Supplies	Land		Accounts payable		Common Stock	Retained Earnings Revenues & Expenses
1. +50,000							+50,000	
240,000			+40,000					
3.		+3,700			+3,700			
4. +7,000	- 0 000							+7,000
5.	+3,000							+3,000
62,700					4.000			- 2,700
71,900 9. +1,000	-1,000				-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 5.	T3 000						+7,000 +3,000
62,700	+3,000						+3,000 - 2,700
71,900					-1,900		_,
9. +1,000	-1,000				ŕ		
10. +22,000			-22,000				2.400
112,100	3 <del></del>		-				2,100
33,300	2,000	3,700	18,000		1,800	50,000	5,200
	57,0	000			E 452 150	57,000	<i>J</i>

## **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' Equity				
Supplies	3.700	Common stock	50.000			
Land	18.000	Retained earnings	5.200			
Total Assets	57.000	Total Liabilities &Equity	57.000			

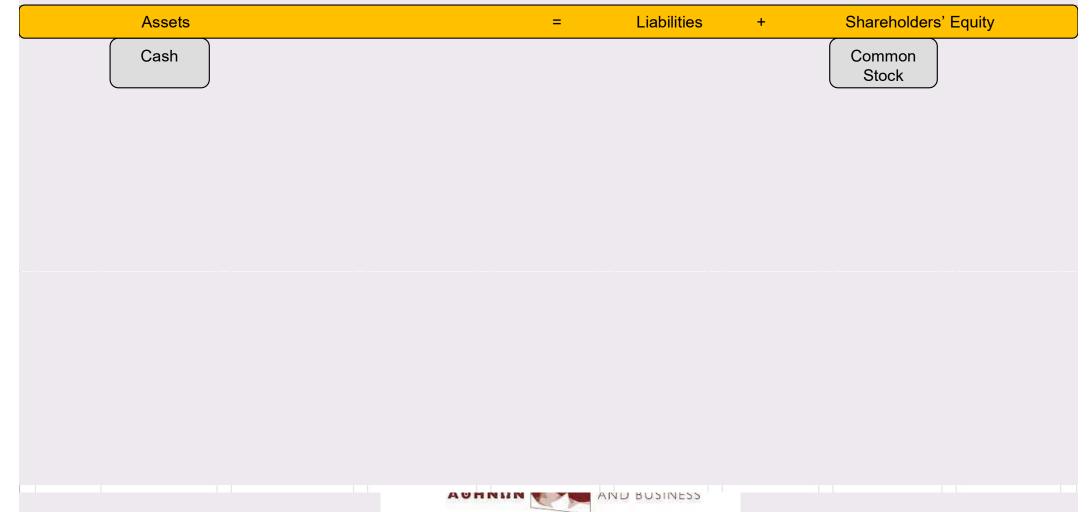


# Example

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.



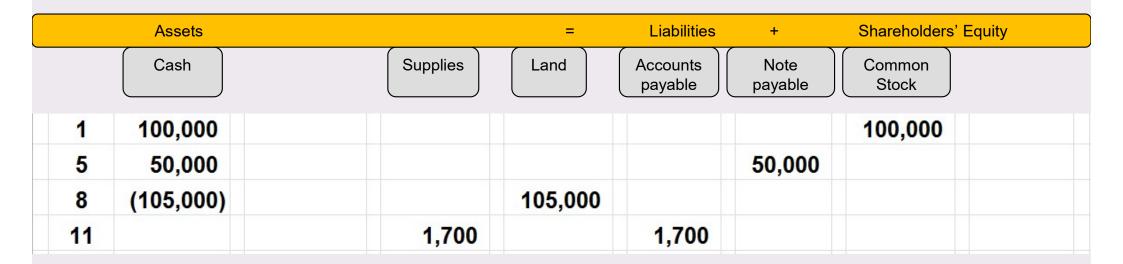
**Feb. 8:** The business paid cash for land costing €105.000. Jorge plans to build an office building on the land.

	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>

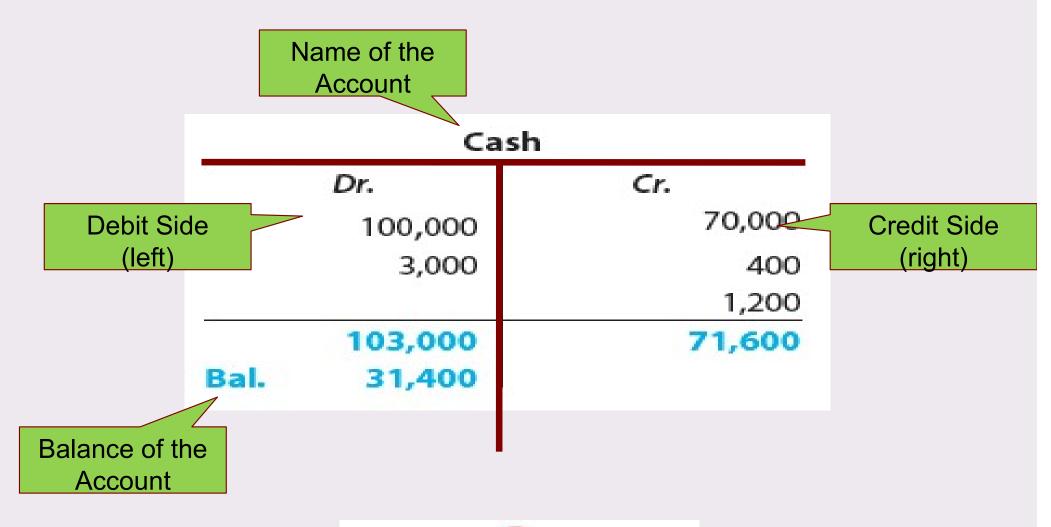


## Four Column Account

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





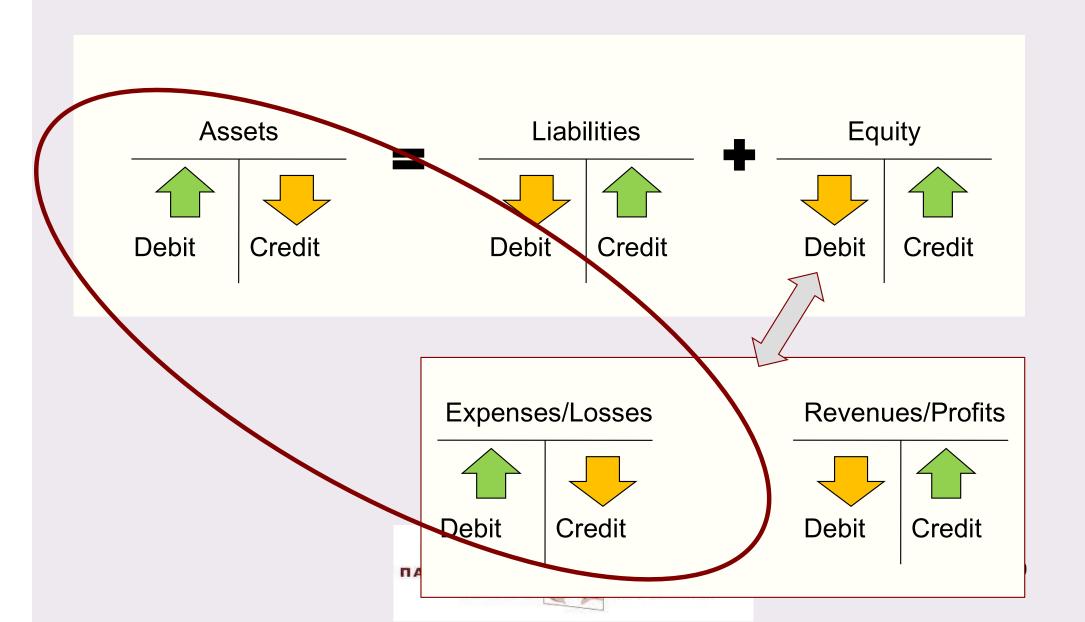
# Rules of Double-Entry Accounting

- 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.

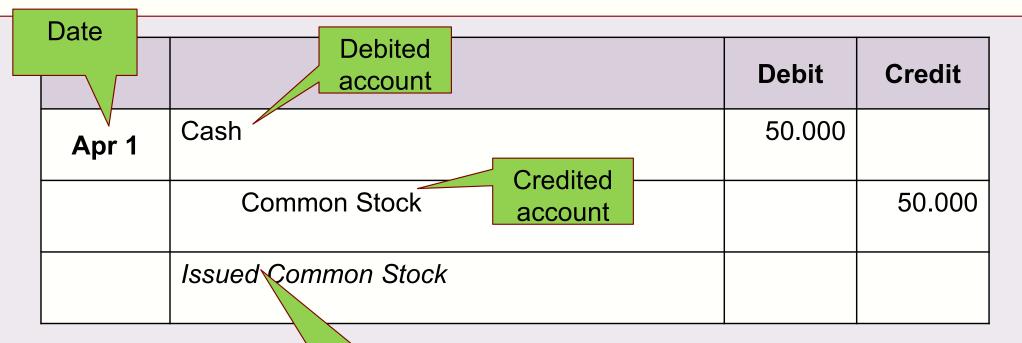


#### The Journal

- 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		
<ul> <li>101 Cash</li> <li>111 Accounts Received</li> <li>141 Supplies</li> <li>151 Land</li> <li>191 Office Furniture</li> </ul>		301 Common Stock 311 Retained Earnings 312 Dividends		
		Income Statement Accounts (Part of Stockholders' Equity)		
	Revenues	Expenses		
	401 Service Revenue	e 501 Rent Expense 502 Salary Expense 503 Utilities Expense		