

# What is Risk

## Suggested Grade

Grades 4-5

## Suggested Time

50 minutes

## Teacher Background

Before students can become informed investors, they must understand that every investment carries some level of risk. Risk is the “exposure to a chance of loss.” Each investor must decide what level of risk is acceptable to him or her. This is called “risk tolerance.” Once a person’s level of risk tolerance is understood, they can build their portfolios to match their risk level. Most investments fall into three categories:

- **Conservative**—Investment-grade bonds and preferred stocks are considered conservative.
- **Moderate**—Include growth stocks, which are stocks that pay little or no dividends because the company is investing all of its earnings in its rapid growth, particularly young companies with great potential.
- **Speculative**—Stock investments are volatile and can lead to large profits or severe losses.

## Vocabulary

**Bonds:** IOUs that a company or government sells when it borrows money.

**Earnings:** Whatever profits or net income remains after subtracting the company’s expenses from its revenue; a company’s profit.

**Earnings Growth Rate:** How quickly company’s earnings grow from year to year. It is expressed as a percentage.

**Risk:** The chance of losing all or part of the value of an investment.

**Risk Tolerance:** An individual investor’s ability to accept loss of some or all of the money they have invested. An individual’s risk tolerance is based on a number of factors including age, financial stability, amount of time before invested funds are needed for other purposes.

**Stock:** A type of security that signifies ownership in a corporation and represents a claim on a part of the corporation’s profit (or loss). Companies usually issue stock to raise money for a variety of reasons, including expanding or modernizing their operations.



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**Stockholders:** Also known as shareholders; one who owns shares in a business.

**Volatility:** Indicates how much and how quickly the value of an investment, market, or market sector changes.

## Performance Objectives

Students will be able to:

- Define and illustrate the three major kinds of risk.
- Understand stocks, bond, and cash.
- Research two industries and decide the level of risk their Stock Market Game team would take if they invest in companies within these industries.
- Persuade their team to purchase or not purchase a particular stock.

## Materials

Stock Talk, Vol. 18, No. 2

Activity Sheet 1: Finding Risk in Earnings Growth Rates

Activity Sheet 2: Finding Your Risk Tolerance: How Much Risk Do You Like?

## Springboard Activity

Ask your students to rank on a scale of 1 to 10 the following activities, 1 being the least risky and 3 being the most risky.

Write these activities on the board:

- Playing Soccer without wearing shin guards.
- Hitting softball without a helmet.
- Riding a bike without a helmet in rush hour traffic.
- Driving without a seat belt on a quiet country road.

Have students discuss the differences they see in the activities. The answer we want to derive is that all the activities are risky, but some are more dangerous than others.

Explain to your students that risk means the chance of getting hurt or suffering an injury or loss. As a class, rate the activities again using the following terms:

- Conservative: Little risk of injury
- Moderate: Medium risk of injury
- Speculative: High risk of injury

When buying stock, the amount of risk tolerance or chance of losing money often means an investor's willingness to chance losing money in the short term to possibly have big long-term gains.



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## Procedure

### All Levels

Students participate in a shared reading of *Stock Talk, Vol. 18, No. 2*.

### Novice & Apprentice Level:

After the shared reading, organize the students into their SMG teams and have them discuss the following two questions:

1. Suppose you're saving to buy something in the next year or so. Would you invest in stocks, bonds or cash? Why?
2. Suppose you're saving for something way off in the future, such as retirement. Would you invest in stocks, bonds, or cash? Why

### Master & Grand Master Level

Explain that "Growth Rate" describes how much a company's profit grows from year to year.

Have SMG teams to complete *Activity Sheet 1: Finding Risk in Earnings Growth Rates*. Afterwards have the teams research five stocks in the same industry using Yahoo! Finance, NASDAQ, or their favorite stock quote lookup site.

The teams should rank the stocks of these companies from riskiest to most conservative based on each company's earnings growth rates.

## Assessment

Have students complete *Activity Sheet 2: Finding Your Risk Tolerance: How Much Risk Do You Like?*

## Application

### Novice and Apprentice Levels:

Have students write a paragraph about their individual risk tolerance and what types of stock they would suggest their teams to purchase. Have each student select a stock his or her team should buy and explain why he or she selected this stock.

### Master and Grand Master Levels:

It is important for students to understand that they can research different aspects of a company to evaluate if investing in it is worth the risk. Have students write about their personal investment strategies and how they evaluate the risk levels of the companies they would buy.



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## Enrichment Activities

Have students write a business letter to a potential investor to encourage the investor to purchase shares in a particular company. This company can be high risk, with great potential for success or a low risk company that will provide a steady income.

## Answer Keys

### Activity Sheet 1

INTERNET INDUSTRY		
Company	Earnings Growth Rate*/year	Your Rank
Yahoo (YHOO)	-10%	Speculative
Google (GOOG)	65%	Speculative
eBay (EBAY)	17%	Moderate
Amazon (AMZN)	-34%	Speculative

FOOD INDUSTRY		
Company	Earnings Growth Rate*/year	Your Rank
Campbell Soup (CPB)	6%	Conservative
Kellogg (K)	6%	Conservative
General Mills (GIS)	2%	Conservative
Kraft Foods (KFT)	5%	Conservative

*\*These Earnings Growth Rate numbers are used for demonstration purposes only and not meant to represent real Growth Rate percentages.*

Answers will vary for questions 1 and 2. Encourage your students to conduct research to prove their opinion, debate, and compromise when appropriate.

### Activity Sheet 2

Risk is a personal thing. Based on factors such as age, salary, and family situations, people's risk tolerances vary greatly.



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Your risk tolerance will change for many reasons. What do you think your tolerance for risk will be in the following situations? Put L for low, M for moderate, and H for High.

1. You are your present age. Your mom and dad want to start a small investment portfolio for your college costs.

Your tolerance for risk is M.  
You want to use the money in a short timeframe.

2. You are now 27 and have a good job and few bills. You want to invest so that in five years you can take a year off and travel to Europe. You have \$50,000 to invest and will need \$25,000 to take the trip of your dreams.

Your risk tolerance is H.  
You would have time to recover from losses if any.

3. You are in your forties. You have paid for your home, make a lot of money at your job and have no children. You have inherited \$100,000 and want to invest the money so you can buy a second home in the mountains in 10 years.

Your risk tolerance is H.  
You have the time and the mean to replace any lost money.

4. You are 35 and a cook for a fast-food restaurant. You barely make enough money to pay the rent and buy groceries for your family. Your grandmother left you \$5,000 in her will. You want to invest the money.

Your risk tolerance is L.  
You would not be in a position to lose any money.



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# Activity Sheet 1: Finding Risk in Earnings Growth Rates

The earnings growth rate is how fast a company is making money.

**Conservative:** A company that is growing its earnings at 5% to 10% a year for many years will probably continue growing at that rate for the next few years. A conservative investment will probably not make a lot of money, but it won't lose a lot of money either.

**Moderate:** A company that is growing its earnings at 15% to 20% a year over several years will be a moderately risky investment. It may have more trouble continuing that growth rate in the next year than will a stock with a conservative growth rate. You may make more money than with a conservative stock, but you may also lose more money too.

**Speculative:** A company that has 25% or greater earnings growth rate usually has trouble sustaining its earnings growth rate. A company with a negative earnings growth rate also can be quite speculative. If its earnings start improving, it could increase in price. But this may take a while and the stock may go down quite a bit before it rises in price again.

Review the earnings growth rates of the following stocks and rank them as conservative, moderate or speculative stocks.

INTERNET INDUSTRY		
Company	Earnings Growth Rate*/year	Your Rank
Yahoo (YHOO)	-10%	
Google (GOOG)	65%	
eBay (EBAY)	17%	
Amazon (AMZN)	-34%	

\*These Earnings Growth Rate numbers are used for demonstration purposes only and not meant to represent real Growth Rate percentages.

1. Which Internet Industry stock would you buy and why?



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2. Which Internet Industry stock would you avoid and why?

FOOD INDUSTRY		
Company	Earnings Growth Rate*/year	Your Rank
Campbell Soup (CPB)	6%	
Kellogg (K)	6%	
General Mills (GIS)	2%	
Kraft Foods (KFT)	5%	

\*These Earnings Growth Rate numbers are used for demonstration purposes only and not meant to represent real Growth Rate percentages.

1. Which Food Industry stock would you buy and why?

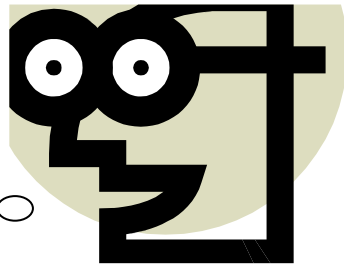
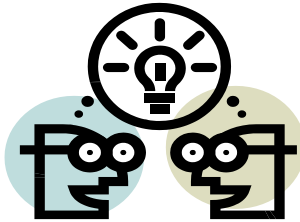
2. Which Food Industry stock would you avoid and why?



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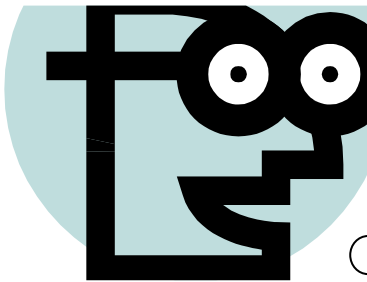


# Activity Sheet 2: Finding Your Risk Tolerance: How Much Risk Do You Like?



Risk is a personal thing. Based on factors such as age, salary, and family situations, people's risk tolerances vary greatly.

Your risk tolerance will change for many reasons. What do you think your tolerance for risk will be in the following situations? Put L for low, M for moderate, and H for High. Then, explain your answers.



1. You are your present age. Your mom and dad want to start a small investment portfolio for your college costs. Your tolerance for risk is

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2. You are now 27 and have a good job and few bills. You want to invest so that in five years you can take a year off and travel to Europe. You have \$50,000 to invest and will need \$25,000 to take the trip of your dreams. Your tolerance for risk is \_\_\_\_\_.

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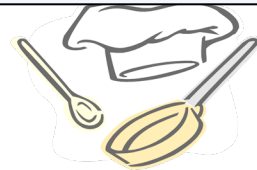
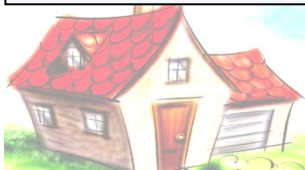


3. You are in your forties. You have paid for your home, make a lot of money at your job and have no children. You have inherited \$100,000 and want to invest the money so you can buy a second home in the mountains in 10 years. Your tolerance for risk is \_\_\_\_\_.

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4. You are 35 and a cook for a fast-food restaurant. You barely make enough money to pay the rent and buy groceries for your family. Your grandmother left you \$5,000 in her will. You want to invest the money. Your tolerance for risk is \_\_\_\_\_.

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