

# Some Thoughts About Investing

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## Goals and Limitations

### ◆ Limited time

- Can't cover this in a comprehensive or nuanced way
- At best an overview

### ◆ My hope

- To give some sensible and useful information
- To give you a starting point that will lead to further study

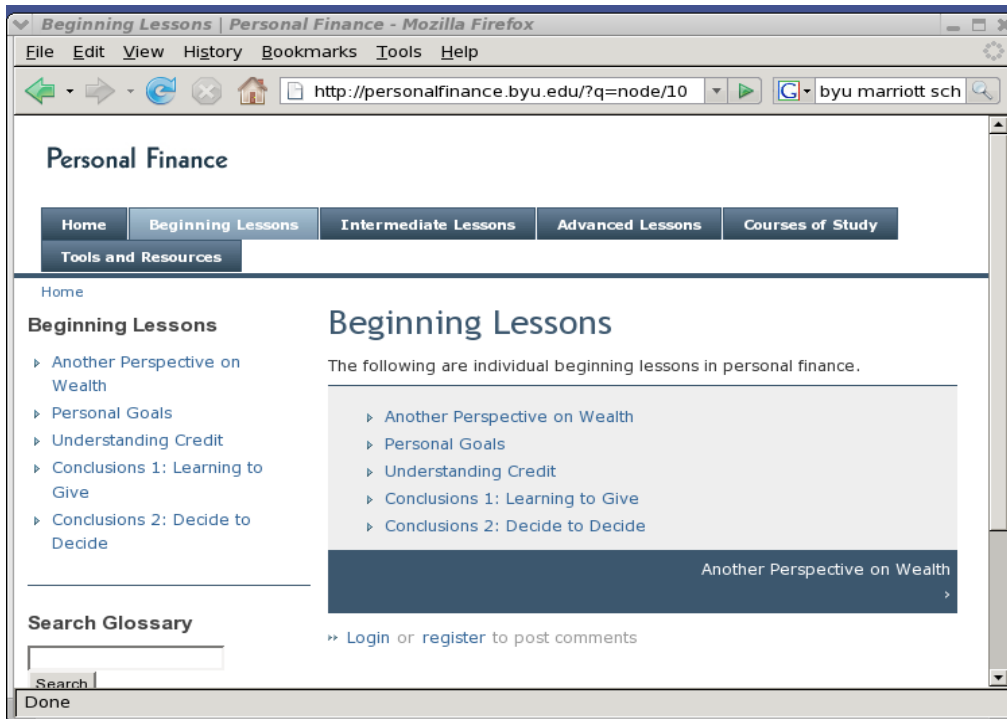
### ◆ Where to go next

- <http://personalfinance.byu.edu/>
- Professor Bryan Lorin Sudweeks' full course notes for his personal finance class



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Personal Finance

Home Beginning Lessons Intermediate Lessons Advanced Lessons Courses of Study

Tools and Resources

Home > Advanced Lessons > Retirement 3: Employer Qualified Plans

### Advanced Lessons

- ▶ Tax Planning
- ▶ Investments 1: Before you Invest
- ▶ Investments 2: Your Investment Plan
- ▶ Investments 3: Securities Market Basics
- ▶ Investments 4: Bond Basics
- ▶ Investments 5: Stock Basics
- ▶ Investments 6: Mutual Fund Basics
- ▶ Investments 7: Building Your Portfolio
- ▶ Investments 8: Picking Financial Assets

## Explain Defined-Contribution Plans

With a defined-contribution plan (DCP), your employer contributes a specific amount to your retirement plan while you are working; then, when you retire, your employer is absolved of any further responsibilities. In a defined-contribution plan, both you and your employer generally contribute to the fund. Your pension is determined by how much both you and your employer invest each year, how fast the [investment](#) grows, and how many years your investment is able to grow.

### Advantages and Disadvantages

The advantages of defined-contribution plans include that they have strong growth potential, they are portable, and they provide you with greater control. These plans are also tax advantaged in the sense that the contributions and earnings are [tax-deferred money](#). The main disadvantage of these plans is that there is no guarantee as to the actual amount of money you will receive at retirement; in other words, defined-contribution plans shift the risk from your employer to you.

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## Introduction

- ◆ An Investment Plan
  - What are your investment goals?
  - What kind of return is expected?
  - Tolerance for risk?
  - What assets should you invest in?
  - How will you evaluate your investments?

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## Are You Ready to Invest

- ◆ What things should you take care of before you invest?
  - A budget
  - Life and health Insurance
  - Other higher priority uses of your money?
    - Credit card debt
    - Pay day loans
    - Other consumer debt

## Know Yourself

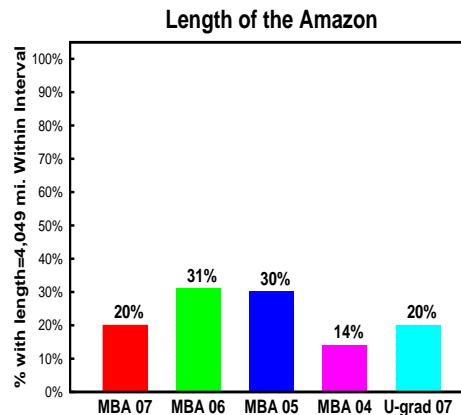
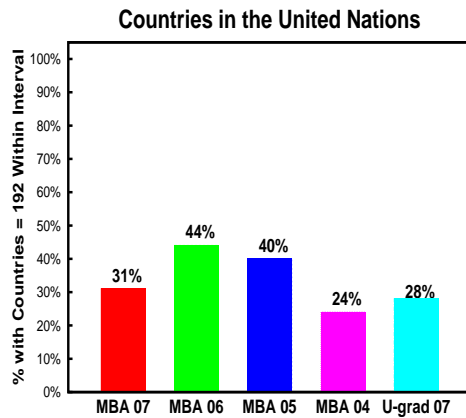
- ◆ Don't invest haphazardly.
  - You need goals
  - Specific goals; not just "to save for retirement."
- ◆ Think about risk.
  - How much risk can you tolerate
- ◆ Have realistic expectations about return
  - Historically, stocks have outperformed government bonds by about 6-7% per year
  - I do **not** expect the premium to be this large in the future: 3-4% more realistic

# Some Silly Questions

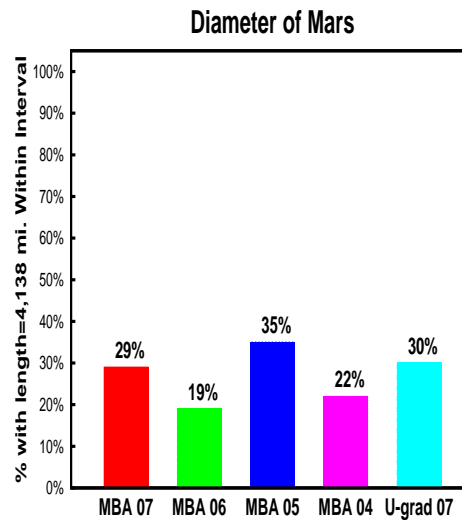
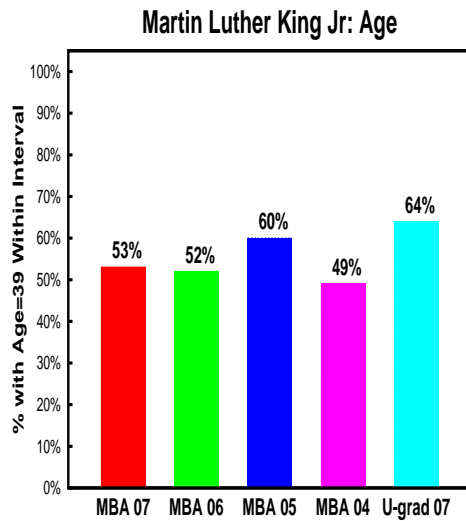
1. How old was Martin Luther King Jr. when he died? Form a 90% confidence interval.
2. How many countries are in the United Nations? Form a 90% confidence interval.
3. Length in miles of the Amazon River? Form a 90% confidence interval.
4. Diameter of Mars in miles? Form a 90% confidence interval.

# Overconfidence

- You probably don't know as much as you think you do
- You probably overstate the probability you are correct
- You are probably overconfident



# Amazon's are From Mars



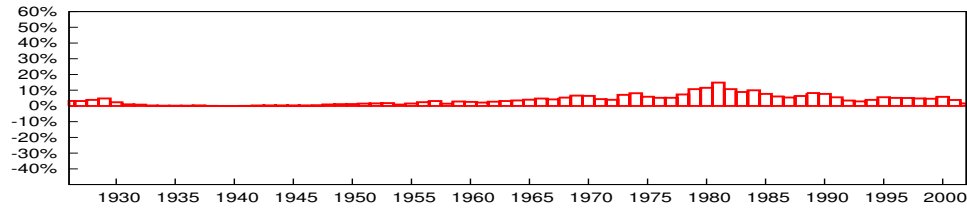
## Overconfidence

- ◆ Typically 90% of people surveyed believe they are above average in driving skill
- ◆ Overconfidence not about smart vs dumb:
  - Before Challenger tragedy, NASA claimed risk of a catastrophic launch failure was 1 in 100,000.
  - 2 failures in the first 117 launches.
- ◆ People trade too much
  - A typical investor who trades frequently does poorly
  - Loses more money in trading costs than he/she makeup in "stock picking skill."
  - Worse for men but woman don't do great either

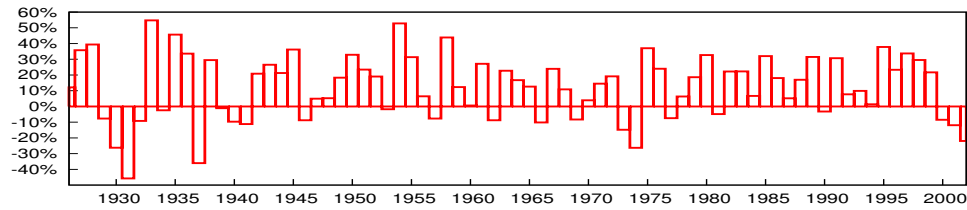
# Understand Risk

- ◆ What is risk?
- ◆ What makes some investments riskier than others?

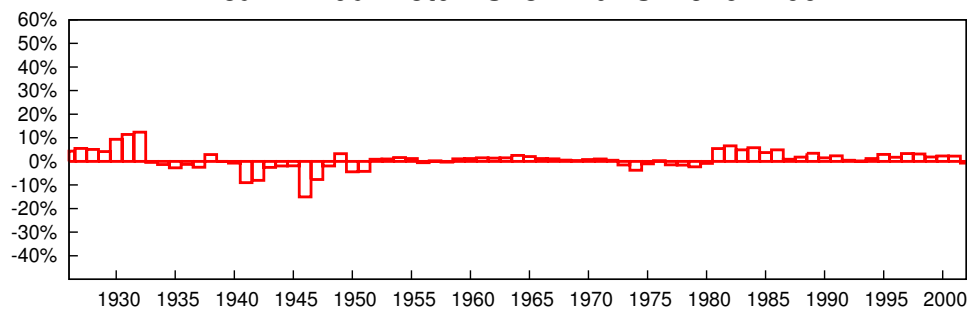
**Nominal Annual Returns for T-bills: 1926 - 2002**



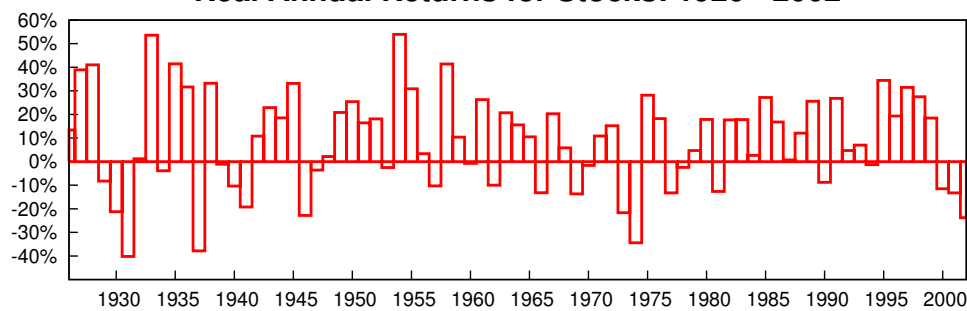
**Nominal Annual Returns for Stocks: 1926 - 2002**



**Real Annual Returns for T-bills: 1926 - 2002**



**Real Annual Returns for Stocks: 1926 - 2002**



# Understand Risk

◆ What source of risk do you face as an investor?

- Inflation risk

	1962	2006	Increase	Rate
Candy Bar	\$0.05	\$0.65	1200%	6.0%

- Interest rate risk
- Employment risk
- Market risk
- Financial risk
- Liquidity risk

◆ You can take a risk tolerance test at the Personal Finance site.

# Asset Classes: Risks and Benefits

◆ Cash and Cash equivalents

- Savings account, money market account, etc
- Why are they useful?
- How should you use them?
- Risky?

◆ Bond Market

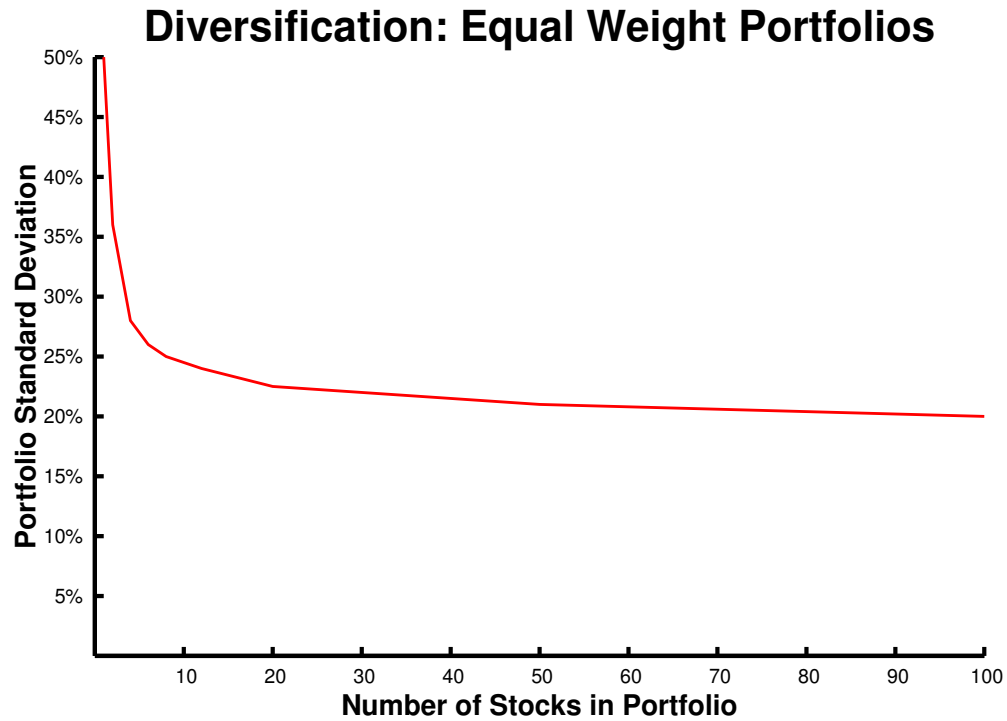
- Taxable, tax free, and inflation adjusted bonds
- What are the advantages?
- How should you use them?
- Risky?

# Stock or Equity

- ◆ Equity
  - What are the advantages?
  - How should you use them?
  - Risky?
- ◆ Real Estate
  - What are the advantages?
  - How should you use them?
  - Risky?

# Diversification

- ◆ Buy a variety of assets
- ◆ Diversification involves more than buying 5-6 different stocks:
  - Different Companies
  - Different Industries
  - Different Countries
- ◆ How does diversification work?
  - How does diversification eliminate or reduce some risk?
  - What are the “costs” of diversification?



## Invest Low-Cost and Tax-Efficiently

- ◆ Always pay attention to your costs.
- ◆ Costs can destroy an otherwise good investment plan
- ◆ Be careful of
  - Brokerage costs
  - Mutual Fund fees
    - Expense ratio
    - Turnover
    - Front-end loads
    - Back-end loads.

## Invest Low-Cost and Tax-Efficiently

- ◆ Taxes are an important cost.
- ◆ Try to **defer** or eliminate taxes
  - 401K, 403b, 457 plans
  - IRA, Roth IRA
  - College savings plans: 529 and Coverdell Education Savings Accounts
- ◆ Downside to tax advantaged plans?
- ◆ At the **minimum** you should take advantage of full matching by your employer. Don't throw away money.

## Invest for the Long Run

- ◆ Most investors are poor stock pickers
  - You won't make money from "picking the best stocks."
- ◆ You will make money from
  - Time value of money
  - Bearing risk
- ◆ **Real Geometric Average Returns: 1802 - 2001**

Period	T-bills	T-bonds	Stocks
1802 - 1870	5.1%	4.8%	7.0%
1871 - 1925	3.2%	3.7%	6.6%
1926 - 2001	0.7%	2.1%	6.9%
1802 - 2001	2.9%	3.5%	6.9%

## Invest for the Long Run

- ◆ Realistically you are going to have to take on some risk to build wealth.

Security Type	Start Date	Investment Amount	Worth 2003
T-bills	1926	\$1.00	\$20
Stocks	1926	\$1.00	\$1,950

Security Type	Start Date	Amount 1926	Real Worth 2003
T-bills	1926	\$1.00	\$2
Stocks	1926	\$1.00	\$182

- ◆ Remember, these are historical numbers. I expect smaller rates of return for stocks in the future.

## Who Should You Invest With?

- ◆ Invest with reputable and licensed people and institutions
- ◆ Yes, online brokers are fine
  - Be careful of fee and costs
  - Practice prudent Internet security to safeguard account
- ◆ Reputable and licensed financial advisors are also a good choice.
  - Be careful of fees and costs
  - Incentives are important
    - Fee-only advisor
    - Advisors paid on commissions

## What Should you invest in?

- ◆ Individual Assets
  - I really discourage this. There is just a lot of evidence that people are bad at this type of investing.
  - At the very least don't buy your own companies stock.
- ◆ Mutual Funds
  - A good choice.
  - However, not all mutual funds are created equally
  - Ho do you find a good one
- ◆ Exchange Traded Funds
  - Operate like mutual funds except are traded on exchanges

## Types of Mutual Funds and ETFs

- ◆ **Equity Funds:** Invest primarily in stocks.
- ◆ **Fixed Income Funds:** Invest primarily in fixed income.
- ◆ **Balanced and Income Funds:** Both equities and fixed income securities (bonds).
- ◆ **Asset Allocation Funds:** Like balanced funds except the manager may dramatically vary the proportion in stocks or bonds.
- ◆ **Index Funds:** Try to match the performance of an index.
- ◆ **Sector Funds:** Concentrate on a particular industry.

## What Do You Want From a Fund?

- ◆ What does an investor want from a fund?
  1. Low cost way to diversify
    - Not the goal of every fund
    - Fund may be a building block to diversification
  2. Provide exposure to different asset classes: stocks, bonds, value, growth, etc.
    - Need fund to stick to its style
    - Some “actively managed funds” don’t do this well: style drift
    - Index funds more reliable in this regard

## What Do You Want From a Fund?

3. Expert Management
  - **Active Portfolio Management**
  - Expert decision based on superior information
  - Paying professionals for their “stock picking skills”
  - A way to possibly **beat the market**
    - Beating the market is not the same as achieving a higher return than the market.
    - On average one can achieve a higher return than market by investing in riskier assets.
    - Beating the market implies performing than an index with a similar asset mix.

## Performance of Actively Managed Funds

- ◆ Past performance is **not** a good predictor of future fund performance
  - Ranking systems such as Morningstar are no exception
- ◆ No evidence that most managers add value
  - Not saying that fund managers have no skills
  - Managers charge you for their skill
  - After costs funds typically do a little worse than indexes
  - Overall, little evidence active management worth the cost

## Can We Find a Good Manager?

- ◆ Maybe we should look at the characteristics of the fund manager?
- ◆ MBA managers outperform non-MBA managers on average.
  - The differences in average return are explained completely by differences in risk.
- ◆ High SAT score predicts better future performance.
  - Not explained by risk.
  - However, managers don't report SAT score
- ◆ Characteristics matter but investor doesn't have enough info to screen this way.

## Predicting Performance: Costs

- ◆ **It is difficult to make money.**
- ◆ **Fact:** mutual funds report returns after costs (including expenses and trading costs due to turnover).
  - If the fund trades enough it will drive down returns (turnover).
  - If the expenses of a fund are high it will drive down the return.
- ◆ Pay attention to costs: fees, expense ratio, and turnover
- ◆ For most people the best fund choices are low cost indexes that help them build a diversified mix of assets.

## Conclusion

- ◆ Questions