Intro to Financial Planning

What is my life expectancy?

- born in 1930
  - men 57
  - women 60
- 65 in 1995
  - men 81
  - women 85
- 75 in 2005
  - men 86
  - women 88
- born in 1990
  - men 72
  - women 79
- 65 in 2055
  - men 97?
  - women 104?
- 75 in 2065
  - men 102?
  - women 105?

How long will I live?

- unknown
  - financially plan for 110

When Will I Retire?

- how about age 65
  - work for 43 years
  - retire for 45 years

If you do not plan for retirement …

Do not plan on retiring.

How Will I Pay for Retirement

- Pension?
  - company-paid retirement
    - being eliminated
- Social Security?
  - government-paid retirement
    - seriously underfunded
- 401(k) and IRAs
  - individual contributions
    - you are responsible for your future

How Much Will I Need

- $2,000,000 ???
  - 40 years in retirement
  - $120,000 per year
    - about $37,000 in today's dollars 40 years from now
- $4,100,000 ???
  - 60 years in retirement
  - $217,000 per year
    - about $37,000 in today's dollars 60 years from now

assumes 5% earned on investments during retirement and equal periodic withdrawals

Where Will I Get $2 *(or 4)* Million?

- invest $5,200 per year toward retirement
  - *(17% of $30,000 annual salary)*
- $100 per week for 40 years at 9%

double for $4 million

Start Early – Invest Often

The Math Behind the Numbers

How Much Will I Have?

$$FV = C * \left[\frac{(1+i)^n - 1}{i} \right] * (1+i)$$

FV = Future Value
C = Constant amount invested each period
i = periodic rate of interest
n = number of periods

The Rule of 72

$$\frac{72}{\text{annual rate of return}} = \text{number of years needed to double your investment}$$

$5000 Invested Annually for 40 years at 9%

$$FV = 5000 * \left[\frac{(1+.09)^{40} - 1}{.09} \right] * (1+.09)$$

$1,800,000.00

$96.16 Invested Weekly for 40 years at 9%

$$FV = 96.16 * \left[\frac{(1+.0017)^{2080} - 1}{.0017} \right] * (1+.0017)$$

$2,000,000.00

Where to Invest to Get 9% Return

HISTORICAL AVERAGE ANNUAL RETURNS thru 2011

- Cash 3.8%
  - savings
  - checking
  - money mkt
  - CDs
- Bonds 5.4%
  - corporate
  - government
- **Stocks 10.5%**
  - **Dow (DJIA)**
  - **S&P 500**
  - **NASDAQ**

Notes:
bonds do well when interest rates are dropping…rates are near all-time lows now at around 2%…down from 15% in 1981.
Regarding Cash: Money Market rates are currently below 1%

- Stock
  - ownership in a company
    - shares traded in stock market
- Bonds
  - debt of a company or government
    - buy bond = loaning money to earn interest

But Aren't Stocks Risky?

<u>ALL INVESTING INVOLVES RISK</u>

No one can predict what a stock will do.

AND

No one can predict what the market will do.

BUT…

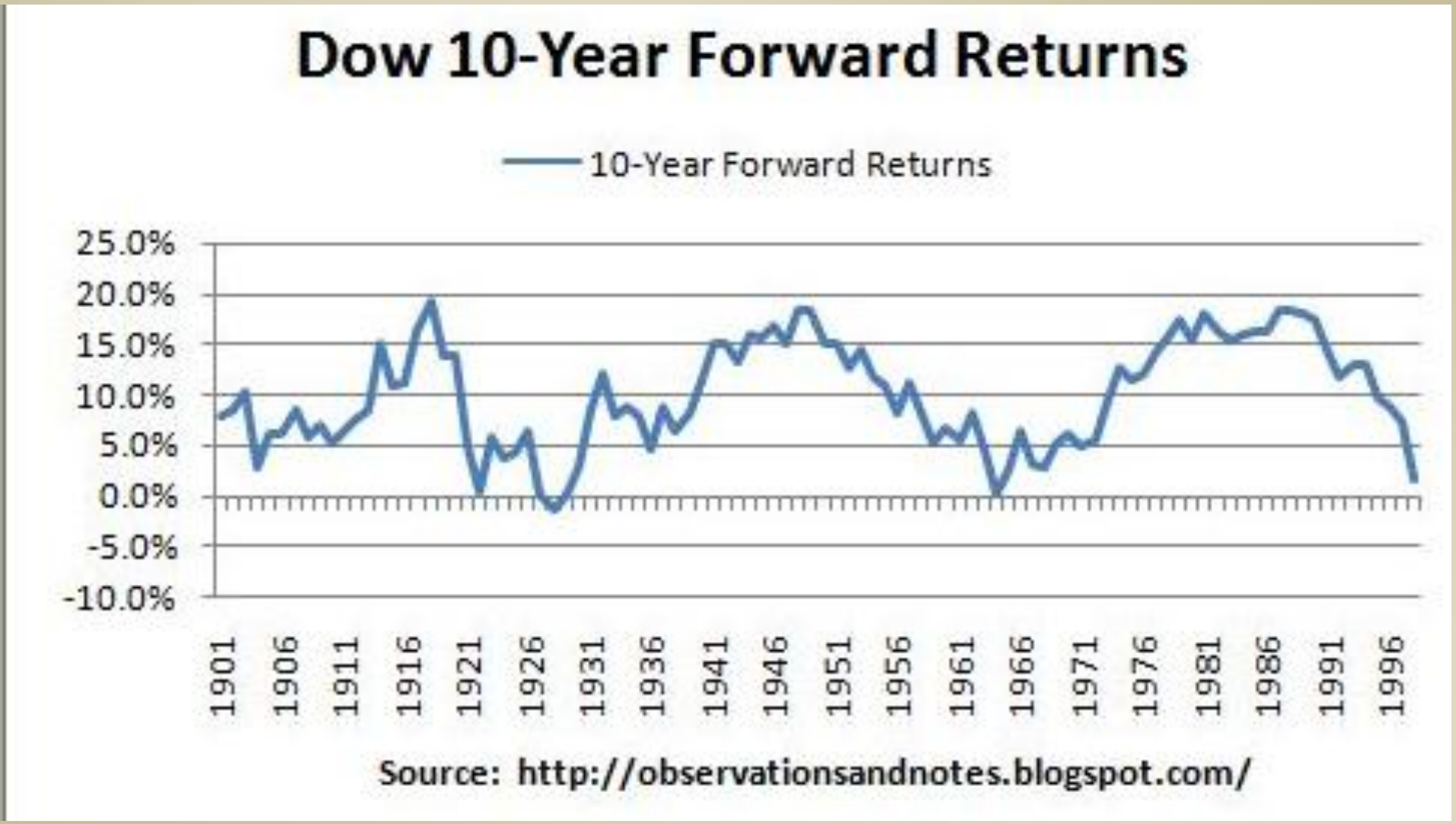
Over the long term the market has trended up at and average rate around 10%

'32 – '11 = 11.1% '86-'11 = 10.5% '91 – '11 = 9.4%


1960 thru 2010
1.40K
1.20K
1.00K
0.80K
0.60K
0.40K
0.20K
© 2012 Yahoo! Inc.
1960
1965
1970
1975
1980
1985
1990
1995
2000
2005
2010


Jan 2000 thru Mar 2012
1.50K
1.40K
1.30K
1.20K
1.10K
1.00K
0.90K
0.80K
0.70K
© 2012 Yahoo! Inc.
2000
2002
2004
2006
2008
2010
2012

only three* 10-year periods w/o gain



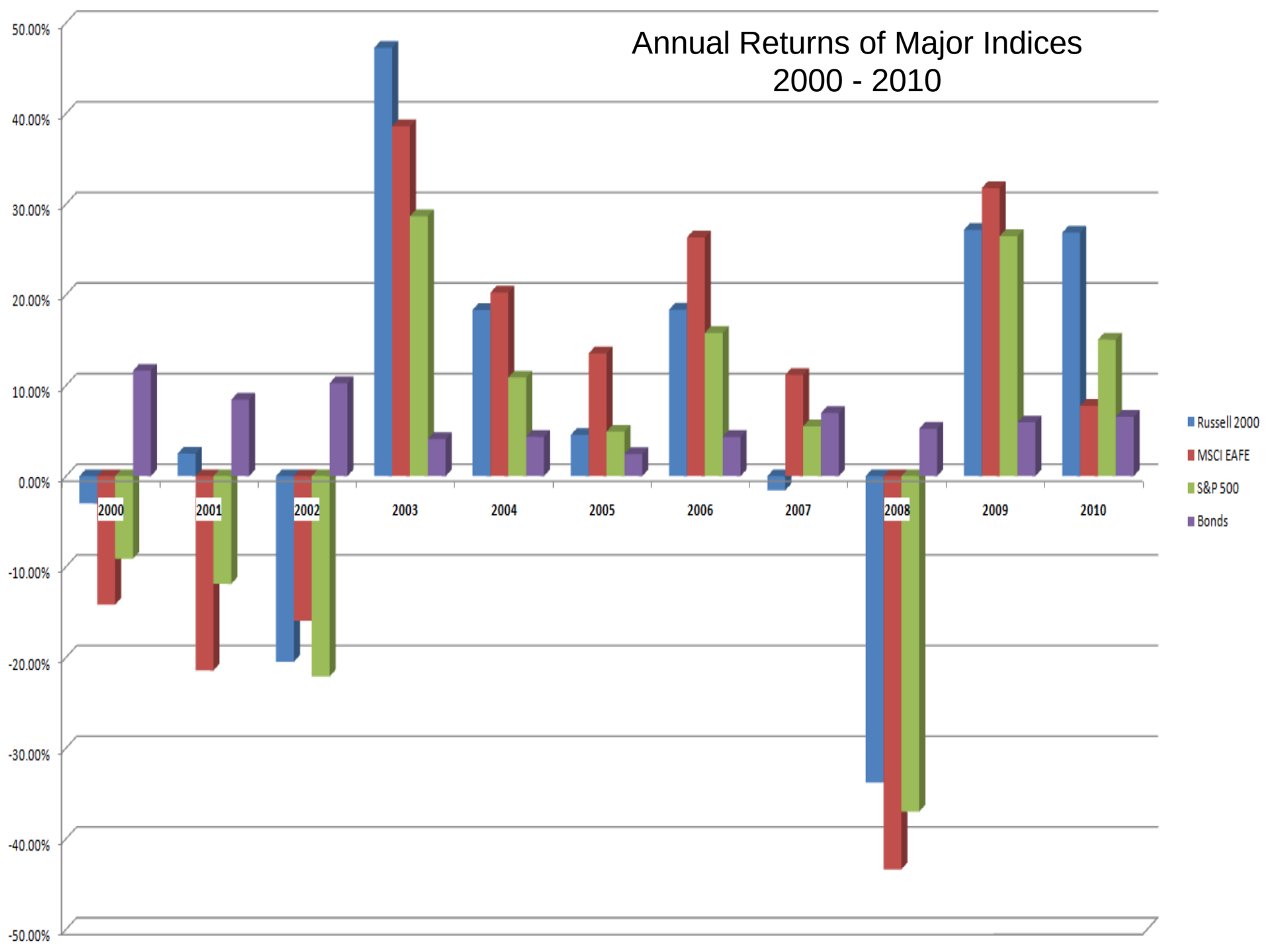
*thru 2007 (‘08 – ’10 not so good) ‘01 – ‘11 was 4.5%

no 20-year periods w/o gain

thru 2007

How Can I Minimize My Risk?

- <u>Diversification</u>
  - investing in different types of investments
    - *stocks and bonds*
    - *domestic and international*
    - *small-cap and large-cap*
    - *growth and value*
  - *spreads out your overall risk*
    - *90% of the return with 50% of the risk*


Annual Returns of Major Indices
2000 - 2010
50.00%
40.00%
30.00%
20.00%
10.00%
0.00%
-10.00%
-20.00%
-30.00%
-40.00%
-50.00%
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Russell 2000
MSCI EAFE
S&P 500
Bonds

How Can I Invest in the Whole Market?

- Mutual Funds
  - pooling of money
  - managed by mutual fund company
- Index Funds
  - mirror a market index
  - beat most other funds over time
  - low costs

Stock Indexes Measure the Market

- Dow 30
  - largest companies in all sectors (not trans or util)
- S&P 500
  - more of the largest companies
- NASDAQ Composite
- Wilshire 5000
  - 7000 different companies (total market?)
- Russell 2000
  - smaller companies

What if the Market Crashes?

- When stocks do poorly, bonds do well
- If U.S. is down, some foreign markets are up
- Don’t put all your eggs in one basket

Where Should I Invest?

- Asset Allocation
  - proportion of your portfolio invested in certain security types
    - stocks, bonds, real estate, cash
  - *the further you are from needing the money, the more risk you can take*
    - *risk / return ratio*
      - *the higher the risk the higher the return* or loss
  - minimize stock exposure as you near retirement

What is the Proper Allocation?

- Allocation depends on age and risk tollerence.

20's	30's	40's
75% US stocks[1] 25% Foreign stocks 0% bonds[3]	70% US stocks[1] 20% Foreign stocks 10% bonds[3]	65% US stocks[1] 15% Foreign stocks 20% bonds[3]

50's	60's
60% US stocks[1] 10% Foreign stocks 30% bonds[3]	50% US stocks[1] 10% Foreign stocks 40% bonds[3]

[1] Total Stock Market Index Fund

[3] U.S. Bond Market Index Fund

Rebalancing

- Over time certain investments do better than others.
  - messes up allocation
  - need to rebalance periodically
    - at least once per year
    - buy losers ,sell winners
      - buy low, sell high

Timing the Market

- Buy Low – Sell High
  - there is no proven measure of when the market peaks or bottoms out

Spend time in the market, not timing the market

Dollar Cost Average

- invest fixed amount periodically
  - buy more when price is low
    - you like when market goes down when you're buying
  - less when price is high
  - average cost is less than average price
    - guaranteed to beat the market

Price		Quantity		Cost
$10.00		10		$100
5.00		20		100
4.00		25		100
20.00		5		100
25.00		4		100
		64		$500

- Average Price:

  $64 / 5 = $12.80

- Average Cost:

  $500 / 64 = $7.81

How do I Invest?

Set it and forget it!

- Target Date Funds (Life Style Funds)
  - automatically change allocation as you age
  - automatically rebalances periodically
  - automatically dollar-cost-averaging
    - when set up with your bank

- Vanguard Target Retirement 2050
- Fidelity Freedom 2050 Fund