
Stock Valuation – The Buffett Way

Week 1: The Basics of Savings and Investments

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Agenda

- Welcome to class
- Course objectives
- Course structures
- The basics of savings and investments
 - Saving and investment perspectives
 - What are the basics of investment
 - How business and their stocks grow
 - Net worth in business

Welcome to Class

- Lecturer: Shu Liu
 - MBA from Tepper School of Business, Carnegie Mellon University, graduated in May 2010
 - Concentrations: Finance, Strategy and Marketing
 - Experiences:
 - Business consultant for two small business companies
 - Staff engineer at Pratt & Whitney in East Hartford, CT since 2005
 - BS, MS and PhD in Mechanical Engineering
 - Hobbies: investment, tennis, hiking, music
 - Contact Information
 - Email: shucmu@gmail.com
 - Tel: 860-781-6072
 - Office hour: flexible
 - Course references:
 - Books: The Intelligent Investor, Security Analysis, F Wall Street, etc.
 - Web site: www.timelessinvestor.com

Course Objectives

- Cover complete spectrum of investment topics (breadth)
- Discuss when, why and how of contemporary investment practice (depth)
- Demonstrate ready-to-use MS Excel spreadsheet tools necessary for solid investment analysis (concrete solution)
- Teach students the techniques for assessing fundamental stock value – financial statement and earning power approaches
- Train to search efficiently and analyze complex real-world investment situations

Course Structures

- Topics
 - The basics of investment and savings
 - Investing from a business perspective – case study
 - How to find opportunities and manage a portfolio
 - Successful investment psychology
- What are we going to cover?
 - basics of investment, value investment, intrinsic value of stocks and business, spreadsheets to calculate stock value; portfolio strategies, financial statement analysis
 - Mutual funds vs hedge funds; bond; investment psychology
- What are we going to do?
 - Lectures, real life examples, case study and discussion
 - Final quiz

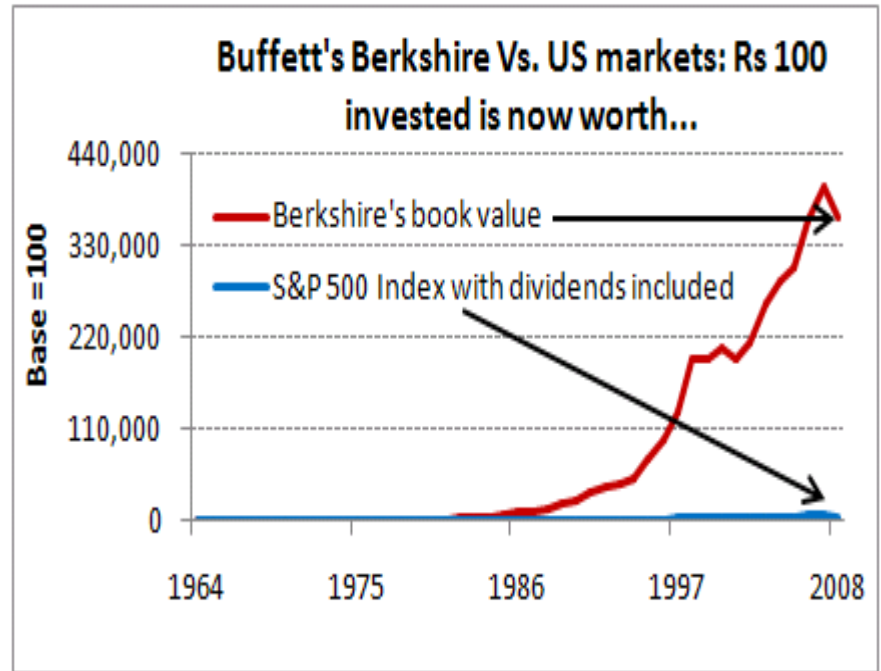
Saving and Investment Perspectives



Is life predictable?!



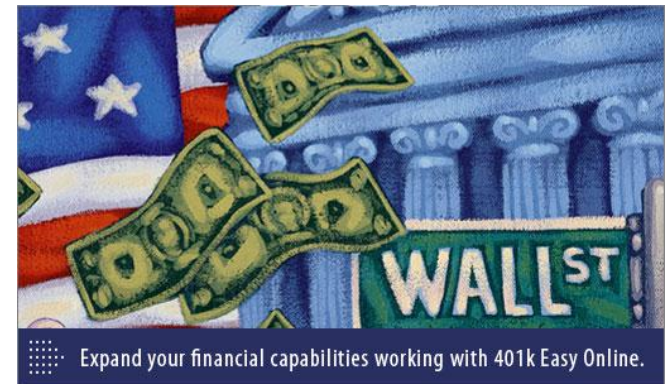
Technical analysis



Buffett's portfolio

Saving and Investing Won't Get You There

- Did someone tell you that working hard, living below your means and investing in a diversified portfolio is the key to a healthy and happy financial future?
- Should we invest in 401k, in mutual funds, believe that you're in it for the long term?
- It is estimated that the average mutual fund investor will earn an average annual return of 4% to 6%, which means that it would take 51 ~ 76 years for \$50,000 to grow to \$1 million.

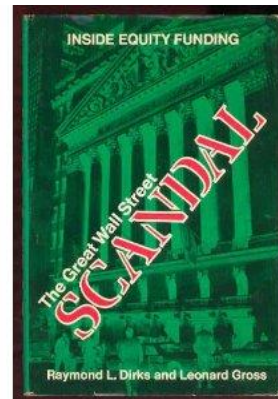


My Investment and My advisor

- Most mutual fund companies are paid based on how much money they manage rather than how well they manage it.
- The brokerage firms and mutual funds that control Wall Street want you to believe that investing is too hard and too dangerous to do on your own.
- Think about it: When is the last time an adviser from the plan sat down with you to discuss your goals and options?



$$\sum_{\forall i} x_i = 0$$



How much will you need in retirement?

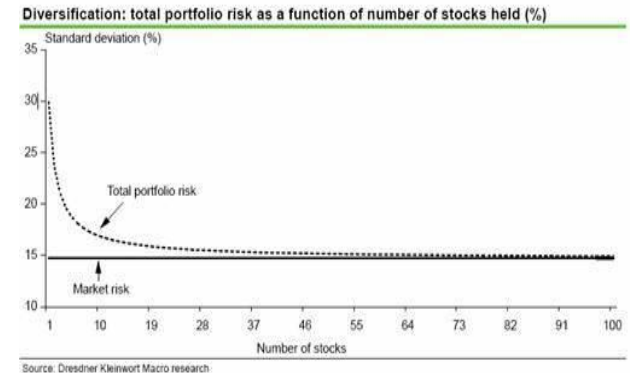
- How much will I need to make \$4,000 a month?
- Planning for your retirement by focusing on the end result – your future net worth or income – is quite possibly the worst way to approach the subject.
- If you do not have enough and you achieve anemic returns, you'll have very little. If you save an decent amount and earn very high returns on your investments, you'll have considerable sum.



The 7 Myths of Investment

1. “It’s a Great Investment”

Whole life insurance – perfect mutual fund?!



2. You should diversify

Warren Buffett: the wide diversification (the type of diversification practiced by most mutual funds) is only required when investors do not understand what they are doing.

3. You need to be “in the Stock Market”

Most people don’t truly understand how “the markets” work



The 7 Myths of Investment (cont.)

4. You need to take high risks to earn high returns

Trader and speculators are generally optimists or pessimists. While they may work when it comes to short-term speculation, they have no place in long term, business-like investing. Over the long term, the big money is made by realists.

5. Start early. Today's good

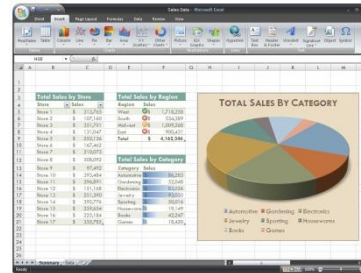
Great investments don't come along every day.

“Assiduity” – Charlie Munger



The 7 Myths of Investment (cont.)

6. Investment requires a lot of brainpower, time and work



7. You can't beat the markets ("the big boys")

Institutional investors – hedge funds, mutual Funds, brokerage houses, pension funds

Individual investors – have a comfortable Retirement. Satisfactory return with minimum risk



Double talk

Investment versus Speculation – the Intelligent Investor

According to Graham, all an investor has to do is to buy companies at a lower price than their "true" value, subject to certain stringent tests. Sooner or later, the price will rise.



Graham was not interested in what companies actually did. All he wanted to know was what they were really worth.

Through detailed analysis, an investor can discover the true value...

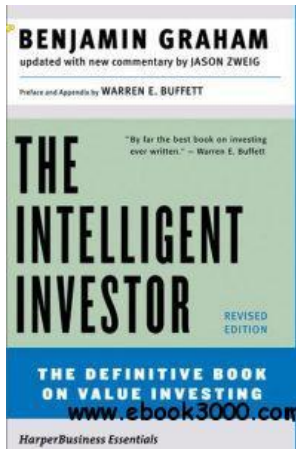


This is amazing. Why hasn't anyone else thought of this?



Most books about the market focus on predicting price trends.

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Benjamin Graham



Here it is.



There's a preface by Warren Buffett.

I read the first edition of this book in early 1950...

In his preface Buffett recommends Chapters 8 and 20 as the most important.

... We are convinced that the average investor cannot deal successfully with price movements by endeavoring to forecast them....



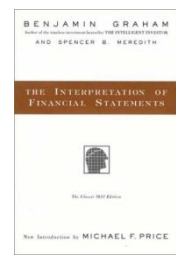
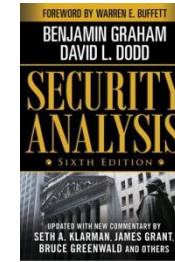
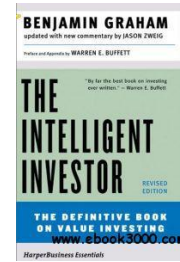
This is amazing.

Wow!

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Investment versus Speculation

– quotes from “The Book”



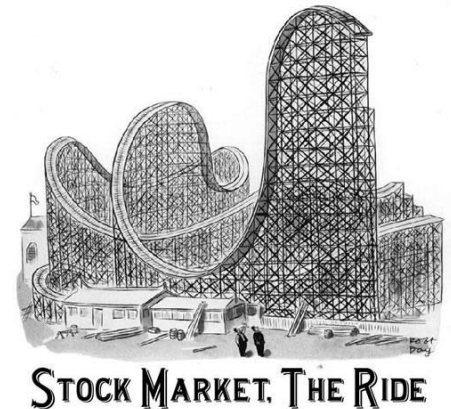
An investment operation is one which, upon thorough analysis promises safety of principal and an adequate return. Operations not meeting these requirements are speculative.

- In most periods the investor must recognize the existence of a speculative factor in his common-stock holdings. It is his task to keep this component within minor limits, and to be prepared financially and psychologically for adverse results that may be of short or long duration.
- There is intelligent speculation as there is intelligent investing. But there are many ways in which speculation may be unintelligent. Of these the foremost are: (1) speculating when you think you are investing; (2) speculating seriously instead of as a pastime, when you lack proper knowledge and skill for it; and (3) risking more money in speculation than you can afford to lose.
- Never mingle your speculative and investment operations in the same account, nor in any part of your thinking.

What are the Basics of Investment?

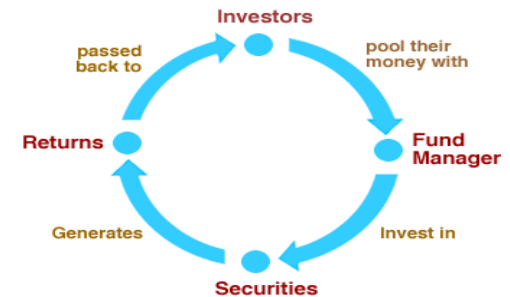
- The stock market
 - The stock market is a place to value, buy and sell business, either in whole or in part.
 - When you buy shares of stock, you are buying a piece of the business's value – your share of the net worth and future cash flows of that business. **Price follows value.**
 - Put the two together – a predictable future and a discounted price – and you'll know exactly how to make money in the stock market.
- The efficient market theory

Stock markets are efficient – prices generally reflect the value of the business they represent.



What are the Basics of Investment? (cont.)

- Bonds – they are not just for “old” people
 - CDs, TBs, corporate bonds
 - From 1962 to 2007, the average annual interest rate in US treasury bonds was more than 7%!
- Mutual funds and their fees
 - The three fundamental, return killing flaws
 - They are, by law, required to be over-diversified
 - They can't, by law, put a lot of money in their “best” ideas
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 - Fees associated
 - Management fees, commissions, trails, 12b-1 fees, transfer agent fees, and more
 - 80% mutual funds perform similar to or worse than the index



What are the Basics of Investment? (cont.)

- What is the best way to invest
 - Wall Street's story: young investors should invest in mutual funds – those aggressively invest in stocks – because risk tolerance; retirees should invest in bonds and bond mutual funds.
 - The truth: your age and the size of your portfolio have absolute no bearing on whether you should be investing in stocks, bonds, mutual funds, or others. It should be based on your understanding of stocks, the stock market and the risk.
- Debunking myths about risk
 - Market risk – volatility, fake risk
 - Overpayment risk – real risk, risk is inherent in the price you pay



How Business and their Stocks Grow?

- The basics of business
 - A company cannot sustain growth for long periods of time unless it is generating enough cash to do so (e.g. Lucent Technology)
 - In the world of business, cash is king.
- When companies generate cash
 - Paying off debt
 - Entering new markets
 - Acquisitions
 - Buying back shares
 - Paying dividends



How Business and their Stocks Grow? (cont.)

- When companies can't generate cash
 - Assuming more debt
 - Shedding assets
 - Selling stocks
- Cash: how companies generate the green stuff
 - Business owner needs more sales or clients because that turns into more cash
 - In business, the cost of acquiring a new customer is usually much higher than the cost of doing business with a repeat customer.



How Business and their Stocks Grow? (cont.)

- One example (Charlie's IT company)



Charlie, your friend, is a brilliant IT guru, comes to you with a dream:

Start his own IT business
Needs \$20,000
You pay up the cash

Charlie will do all the work and earn 75% of all sales as salary. At the end of the year, split the profit 50/50 with you.

Deal?

Profit and loss statement, Year 1

	31-Dec
Revenues	\$75,000
Salary	\$56,250
Advertising	\$7,000
Office Supplies	\$4,800
Utilities	\$3,150
Depreciations	\$1,600
Net Income, before taxes	\$2,200
Taxes	\$330
Net Profit	\$1,900

How Business and their Stocks Grow? (cont.)

- One example (Charlie's IT company) - cont

Profit and loss statement, Year 2

	31-Dec
Revenues	\$180,000
Salary	\$135,000
Advertising	\$18,000
Office Supplies	\$6,200
Utilities	\$3,950
Depreciations	\$1,600
Net Income, before taxes	\$12,750
Taxes	\$1,957
Net Profit	\$11,092



Your eyes jump out of your head when you see the results – 28% of your original \$20000 investment!

Isn't that GREAT!?



How Business and their Stocks Grow? (cont.)

- One example (Charlie's IT company) - cont

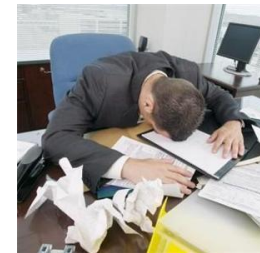
Charlie explains the Depreciation – a stunning different story!

Charlie is going to close the business, and liquidate everything. What you receive in the end: \$3,800!!

To rectify the situation, one of these three should happen:

- Charlie to lower his salary
- You have to stop taking profit for biz to grow
- Charlie asks for more money and debt

What is the point? Earning vs cash



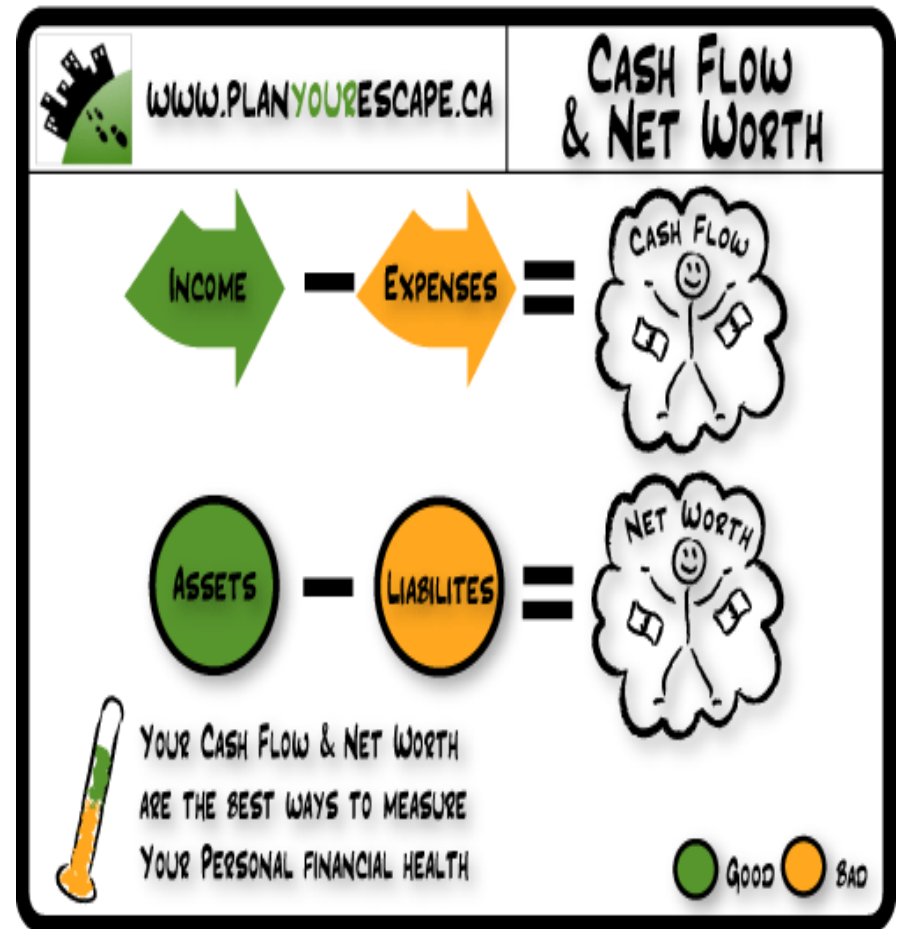
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Net Worth in Business

- A company's net worth
 - In business, net worth is called “shareholder Equity”, “stockholder's equity”, or “net asset value”.
 - It is equal to total assets minus total liabilities.
- Your personal financial goal
 - Financial freedom
 - Have a solid net worth and have the ability to generate enough cash to support yourself and grow your wealth.



Net Worth in Business (cont.)

- Understanding assets and liabilities (www.investopedia.com)

Example Company Balance Sheet December 31, 2007			
ASSETS		LIABILITIES	
Current Assets		Current Liabilities	
Cash	\$ 2,100	Notes Payable	\$ 5,000
Petty Cash	100	Accounts Payable	35,900
Temporary Investments	10,000	Wages Payable	8,500
Accounts Receivable - net	40,500	Interest Payable	2,900
Inventory	31,000	Taxes Payable	6,100
Supplies	3,800	Warranty Liability	1,100
Prepaid Insurance	1,500	Unearned Revenues	1,500
Total Current Assets	<u>89,000</u>	Total Current Liabilities	<u>61,000</u>
Investments	<u>35,000</u>	Long-term Liabilities	
Property, Plant & Equipment		Notes Payable	20,000
Land	5,500	Bonds Payable	400,000
Land Improvements	6,500	Total Long-term Liabilities	<u>420,000</u>
Buildings	180,000		
Equipment	201,000	Total Liabilities	<u>481,000</u>
Less: Accum Depreciation	<u>(56,000)</u>		
Prop. Plant & Equip - net	<u>337,000</u>		
Intangible Assets		STOCKHOLDERS' EQUITY	
Goodwill	105,000	Common Stock	110,000
Trade Names	<u>200,000</u>	Retained Earnings	229,000
Total Intangible Assets	<u>305,000</u>	Less: Treasury Stock	<u>(50,000)</u>
Other Assets	<u>3,000</u>	Total Stockholders' Equity	<u>289,000</u>
Total Assets	<u>\$770,000</u>	Total Liabilities & Stockholders' Equity	<u>\$770,000</u>

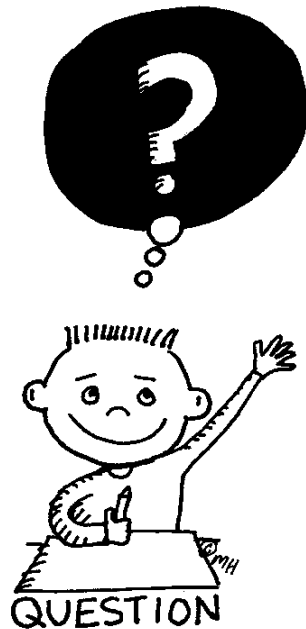
The notes to the sample balance sheet have been omitted. <http://finance.varolmak.com>



Net Worth in Business (cont.)

- High-cost businesses
 - Ford Motor: to build a car, an auto manufacturer has to make a significant investment in plants and equipment, both of which will wear out and must be repaired or replaced. That required a lot of cash. It doesn't leave much left over for growth.
- Low-cost businesses
 - Coca-Cola: does not spend too much cash just to keep their doors open. And they generate a lot of excess cash.

Q & A



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