

**INVEST 5,000 A YEAR**

**GROW IT BY 8% A YEAR**

*The historical rate for solid investing*

Year 10

**72.4 THOUSAND**

**The Chestnut and Cedar  
Stock Report**

Year 20

**229 THOUSAND**

**INVESTMENT HANDBOOK  
FOR YOUNG ADULTS**

Year 30

**566 THOUSAND**

**Joseph Spinella**

**CPA, MBA**

Year 40

**1.29 MILLION**

**Founder**

***CHESTNUTANDCEDAR.COM***

Year 50

**AMASS 2.87 MILLION**

The  
Chestnut and Cedar  
**Stock Report**

Investment Handbook  
For  
**Young Adults**

**By Joseph Spinella**

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To my Mother  
for the book she should have written,

and

to my Father  
for his invaluable knowledge of investments.

## **From the publisher**

The first thing hitting my eyes when I saw the cover was, “I can make 1.29 million in forty years! 2.87 million in fifty years!!” Wow! What? Forty years? Fifty years!?! Whom is the author kidding? Will I be around for fifty more years? That’s half a century, practically. Why would you, the young investor, think you need to plan ahead that long? Why indeed? The payoff is great...but investing \$5,000 every year, and not touching your money for forty years? Fifty years? Is this really NECESSARY???

## **MORE THAN YOU CAN IMAGINE!**

The U.S. Census Bureau reports that the average life expectancy of the baby boomers is 74 years for men and 79 years for women...

**WORKING AN AVERAGE OF 40 YEARS.**

Just following the trend (by linear extrapolation), established in the last century, today’s 25-45 year-olds, the “X” generation, will live an average of 101 years and 108 years respectively...

**AND SPEND 50-60 YEARS OF THEM WORKING.**

If you belong to the leading edge of the “Y” generation, starting off on your own, or looking for work, your chances of living for 120 years to ETERNITY are better than 80%. Don’t believe me? Read “Fantastic Voyage: Live Long Enough to Live Forever” from Ray Kurzweil.

**Do you need the author’s advice? You bet your savings!**

Steven Kingsley  
Publisher

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# Preface

To My Twins, Mary Rose & Jo Jo:

As you become young adults and have a few dollars in your pockets, investing in the market may be of interest to you. When investing in the market, keep in mind a few things:

Remember, there's more to life than making money. The college you attend follows you forever. Your major and profession guide you down a certain path. Your spouse and where you live are important influences as to your friends and your happiness. While I don't think counting cards and keeping up with the Jones is the way to live, if you are into counting, wait until you're retired before adding up the final score.

The way the rules are set up, the game is stacked in favor of the house. Everyone wants to get their hands on your money. Try to keep everyone's fingers out of your pockets. Why play the game if the odds are against you? "Because the stock market is one of the few places where with \$10,000 and two back-to-back "ten baggers" you can become a millionaire!"

I suggest that you stay with the basics. Forget the CMA account; keep your investment, trading, insurance, mortgage and checking accounts separate. Don't put all your eggs in one basket. Go with the regular account; don't attach credit cards or checks to your investments. Make it difficult to spend your investments. With a regular account, you need to call your broker for funds. Sometimes, that extra step is a wake up call, to prevent you from closing out a potentially good investment. Also, never allow any direct withdrawals from your investment account. It is very tempting when opening an account to go with all of the bells, whistles, and extras. Security brokerages and banks have mastered the use of technology and some of their products are truly beneficial. Nonetheless, keep your investment, trading,

insurance, mortgage and checking accounts separate. Use separate companies, and always keep an emergency fund (cash) at your local bank. Using the online features and all the extras are fine for your trading account, but for your investment account, “keep it simple.” Make it inconvenient to spend your investments.

Read the fine print on the application when you open your brokerage account, to learn the rules of the game. If you don’t, you may sign away many of your rights from day one.

When dealing with your stockbroker, remember that he’s first a commissioned salesperson. The brokers are backed by the advertising, marketing, and research departments of their firm. The show is impressive, lots of credentials, stock research, free dinners and excellent commercials. Nowadays, the game is to manage your account for a fee. The truth is they know how to bring in accounts and process orders. Use their research, but remember that it’s your money and your responsibility to invest it wisely, not theirs.

The way the rules are set up, the research analyst is in a peculiar relationship with his firm. Companies pay large underwriting fees to brokerages firms; those same firms supply research reports regarding the companies that are paying them. While the research is normally excellent, read it with a skeptical mind. In the past, there have been abuses and a breakdown in the firewalls established in the industry. Always keep your eyes open for a good business that also can become a good investment. The so-called professionals usually don’t discover a good investment until the real money has already been made. Regarding earning estimates, it’s impossible to project out to the penny; if it happens, something is wrong.

Remember, the companies that you invest in are controlled by people you don’t know. Many critics believe that there’s a layer of power and money that is kept out of the public view, and that the Board of Directors reports to them, not the shareholders. Many critics also believe that there is no such thing as someone having a fiduciary duty to protect your money, and that it’s an unnatural concept that does not exist. Most people are basically honest;

however, for the Board Member, CEO, CFO, etc., it's only a job. When you see the big name colleges in the bios of the management team, keep in mind that it only confirms that they excelled in academics. Making money and building a business are more involved than formal schooling alone.

Companies don't grow in straight lines. When a company has steady, exact growth rates, be careful.

When investing in the stock market, think of a four year time frame: from the current presidential election year to the next. Usually, the political powers try their best to have the economy running the smoothest at election time.

Regarding the business writers and their recommendations, remember that many majored in English and Journalism in college. In some cases, they have not worked in a non-publishing or teaching capacity.

Diversification is essential for successful investing. I'm from the school of picking a few stocks and making your own decisions. I don't believe in over diversification. Having between 8 to 12 or so stocks, in mostly different industries, should suffice. Picking mutual funds to have a balanced portfolio, means that your stocks will be spread so thin, and in so many different investments, that it will be almost impossible to beat the averages. If there is a winner in the group, it will be so diluted that your gain will be very small. Don't be afraid of investing!

Tax deferred IRAs and other pension accounts have their place in the investment world. I always recommend maximizing a company's pension and 401K contributions. Never leave money on the table. However, if you need your funds before retirement, the taxes and fines are prohibitive.

Try to have a combination of after-tax and pretax investments. Short-term savings for a down payment for a house and yearly events like vacations should always be done with after-tax dollars. This way, you know it's all yours.

Stay with the basic investments (stocks and bonds), until you are an expert. Options, puts, calls, shorting and margin are all very risky. Many investors lose money on them. Some hedge funds can be wild; if investing in them, think of it as Atlantic City money. Day trading is a full time profession; if you participate in it, treat it as such.

There is nothing wrong with having your money invested in a saving account at your local bank. Preservation of capital is a very good strategy.

While going for the long shot every now and then is fine, be prepared in case you lose money.

Your house is also a big investment. Protect it. Pay the mortgage off as quickly as possible. Don't roll over credit card and medical expenses into your mortgage. When your investments are up, sell a little to pay down your mortgage.

I've almost forgotten the most important points: You need to establish a habit of regular savings. Don't forget to reinvest the dividends - they really add up!

Best of luck in your endeavors.

Love,

— **Dad**

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Last, but first in my heart, my wife Nicole, for her support and honesty, and my twins, Jo Jo and Mary Rose, who give me daily pride, challenges, and happiness.

## **PART ONE: START INVESTING NOW!**

### **Chapter 1 - The Envelope System**

**The envelope system was a disciplined approach to saving and spending, and was the precursor to today's financial planning models.**

My first introduction to savings and investing was watching my parents manage the envelope system. The process was simple. They divided their take home pay into three parts: savings, room and board and spending. Each expenditure would be put into a separate envelope and deposited into a passbook savings account, a checking account, or left in the envelope to be used for specific expenses. Many families managed their personal finances by using the envelope system. If you tried spending beyond the amount in the envelope, the items just went back at the cash register. If you did overspend, you had to redistribute the cash in the remaining envelopes. It was a zero sum game. Using your savings was discouraged, since that was rainy day money, for college funds, and for keeping you out of the poor house when you became old. The system worked well; it was a disciplined approach to savings and spending.

Prior to the past one or two generations, the majority of seniors who lived beyond their working careers found that old age meant living in substandard conditions. Life was not fun for them and living in poverty was miserable. No one wants to go back to those days! That is why social security was started. Currently, the newscasters and lawyers are preaching that the social security system is broken and benefits will not be available to you when

it's your time to collect. That is not true! If you paid into social security, you will receive your benefits! At the end of the day, the government controls the treasury's printing presses, and they will just print more money if necessary. We are the wealthiest country in the world, and the government will honor its obligations! Social Security, however, was only created to be a safety net to prevent seniors from living on the streets and dying of starvation; it was not created to make you wealthy.

While this book discusses many concepts, the principles behind the envelope system hold true today. High school and college graduates need to establish a pattern of regular savings. Taking a portion of every paycheck and saving it is the key for financial wellness. People are motivated to save for a variety of reasons: A car, engagement ring, wedding, vacation, house, furniture, college, and retirement, whatever. There are a few financial concepts that are critical to understand. First, as mentioned above, it's imperative to establish a program of regular savings when you're young. Second, time is on your side. For young adults, the time value of money works in your favor. You probably have seen the banking advertisements: if you save \$2,000 per year for 50 years, at 8.0%, you can retire with \$1.1 million. Third, you also need to understand the differences in investing in a pretax or after-tax mode. There are substantial penalties for withdrawing savings from tax deferred accounts. If you have a short-term need, for instance, to buy an engagement ring, savings in after-tax dollars is preferred. If you're saving long-term for retirement, then a pretax account is recommended. Some planning is involved. Young adults should start saving now, and get into the habit of paying themselves first. It's imperative that you develop an additional cash flow that will supplement social security when retiring. The envelope system was so popular because its underlying financial principles worked. The savings, living, and spending model is still sound financial management. Enjoy the remaining chapters of this book, but remember, finance is a life long study.

## **Chapter 2 - Time Value of Money**

**The time value of money  
gives young adults a competitive  
advantage in building wealth.**

I am purposely discussing the Time Value of Money concept in the opening sections of this book. I want to emphasize that being young has a big financial advantage: the accumulation of money grows exponentially if you start saving in the early adult years. The dollar amounts need not be large; time will grow it for you.

Examples are all around you. The person who bought a house in the 1940's now worth 20 times its cost. A friend who purchased a McDonald's franchise for \$30,000 in the early 1960's now worth millions. The engagement ring that cost \$2,000 twenty five years ago is now worth \$12,000. These are all examples of asset appreciation and wealth building driven, in part, by the Time Value of Money.

The Time Value of Money concept can also be effectively applied to wealth distribution. The teacher who retires and is given a pension option of \$140,000 today; or \$1,300 a month for the rest of her life. The lottery winner, who has to choose between a lump sum payment, or installment payments over 20 years. Your car payment, mortgage, and investments all use time value of money concepts.

Normally, when the Time Value of Money is discussed, most people think of the old adage: "A dollar today is worth more than a dollar tomorrow." While most investors also believe this, it may or may not be true, because the adage implies the investor has a "risk free" asset. Do you know that in the late 1990's, some of

the Japanese banks were “paying” a negative return on their savings accounts? Depositors would receive back slightly less than their original deposits. The economy was so bad in Japan, that a very small guaranteed loss was a lot better than the market place alternatives. For approximately 20 years, from 1985 to 2005, the Japanese real estate and stock market took severe hits (losses). My point is that making rate of return assumptions using computer spread sheets is easy. What the Japanese learned was that it’s difficult to achieve these assumptions. In the early 1980’s, investors did notice that Japan’s economy was “hot.” Few people, however, imagined the 20-year economic downturn that followed. Today, many U.S. investors are solely interested in making their “return”, and are jeopardizing their principal savings, while trying to get a little extra cash flow. Some retirees are now buying “junk bonds” (i.e. high risk debt securities with high interest rates) to generate higher current income levels. In effect, they are emphasizing current cash flow needs over principal protection, which is usually a mistake.

Recently, some hedge fund investors lost significant money in Bayou Management, when the founder absconded with their money. The founder promised to turn \$100 million into \$7.1 billion. Promising a 71 “bagger” should have raised concerns. These investors lost sight of appropriate risk / reward levels. Understanding interest compounding should have alerted these investors to the fact that there was a problem. Some of the best investments for the past 25 years were Berkshire Hathaway, General Electric, and AIG. These companies grew their businesses 15% to 20% per year; their shareholders became very wealthy with these returns. What possessed intelligent money managers to believe that a relatively small and undistinguished hedge fund could duplicate and surpass the results that only a few achieved over the past quarter century? Be careful and skeptical when relying on overly optimistic promises and time value of money projections. Calculations don’t make money; it’s the people and infrastructure behind the calculations that make money.

## *Chapter 2 – Time Value of Money*

The Time Value of Money does not make you “bullet proof” in the real world of investing:

- It **does not** protect you from the loss of principal by investing in the common stock of companies that continually report losses or worse, eventually file for bankruptcy.
- It **does not** protect you from the risk of loss by investing in fixed rate bonds when interest rates are very low, and then watching the bond’s value fall, over time, as market rates rise.

But the Time Value of Money does offer some powerful advantages for patient investors. Investments with low to medium risk profiles are likely to grow at relatively consistent rates over the long haul.

- Low risk investments include:
  1. Commercial bank deposits
  2. U.S. Treasury Securities, as well as, Government Sponsored Enterprises
- Medium Risk Investments include:
  1. Corporate bonds that are rated investment grade
  2. Blue Chip U.S. stocks, including many of the companies in the Fortune 500 list (published annually by Fortune magazine)

Below are three tables that are intended to help you appreciate the effects of Time Value of Money:

1. The future value of a single payment
2. The future value of a series of payments (annuity payments)
3. An expected monthly payment table

Try to visualize how time and rate affects the value of money.

### (1) The Future Value of a Single Payment of \$10,000

**It answers the question: How much can you expect to make from a single investment?**

(Payment made in the beginning of the year)

<b>Years/ Rates</b>	<b>5</b>	<b>10</b>	<b>20</b>	<b>25</b>	<b>50</b>
4%	12,167	14,802	21,911	26,658	71,067
6%	13,382	17,908	32,071	42,919	184,202
8%	14,693	21,589	46,610	68,485	469,016
10%	16,105	25,937	67,275	108,347	1,173,909
12%	17,623	31,058	96,463	170,001	2,890,022
15%	20,114	40,456	163,665	329,190	10,836,574

**The passage of time builds wealth!**

Notice how time builds wealth even at the lower return rates. This is the advantage that young investors have.

This is also one reason why some seniors are able to pass along substantial inheritances to their children. For many retirees, their spending drops, and if their income covers insurance, living and overhead expenses; their nest egg is allowed to grow untouched; and it adds up.

Below is a future value table for annuity payments. Annuity payments are amounts paid or received for a specified number

of periods. The table below is valuable when determining future IRA and 401k account balances. These tables, however, while useful, are fixed. They don't reflect an increase or decrease in the amount saved during the period. Normally, once you start working your pay increases over the years through a combination of merit raises, promotions and new positions by changing employers. For self employed individuals compensation rises over time as your business grows and prospers. At some future point, however, it's not uncommon for your earnings to decrease and a young adult starting a career may make as much as the senior leaving the position. Expect your IRA contributions to fluctuate as you travel your journey through life.

**(2) Future Value of Annual Installment Payments of \$2,000**

**It answers the question: How big will your IRA nest egg be?**  
(Payments made in the end of each year)

<b>Years/ Rates</b>	<b>5</b>	<b>10</b>	<b>20</b>	<b>25</b>	<b>50</b>
4%	10,833	24,012	59,556	83,292	305,334
6%	11,274	26,362	73,571	109,729	580,672
8%	11,733	28,973	91,524	146,212	1,147,540
10%	12,210	31,875	114,550	196,694	2,327,817
12%	12,706	35,097	144,105	266,668	4,800,037
15%	13,485	40,607	204,887	425,586	14,435,433

Charts, graphs and tables can look good on paper and in theory. They rarely, however, factor in life situations. The time you take off to raise your children. The long spell of choppy employment in your forties or fifties. The unwise and expensive IRA withdrawals to pay college or medical bills. A trip with your aging parents to Europe. Not to mention at least one Enron type investment.

Nevertheless, a consistent savings approach, along with reinvesting interest and dividends earned from your investments, usually builds wealth over time.

Accumulating money is not the whole game. Time Value of Money is also used to compare alternative strategies and assumptions as you proceed through your working years and retirement. For example: 1) how much of your nest egg do you live off, versus how much to you leave to your heirs as inheritance; 2) how much money can you withdraw from your savings and still have money at some future date. You need to make some basic assumptions, such as: When will you be retiring, and how long are you going to live? What market rates can you expect? The payment schedule below should give you some idea about the payments you can expect from your savings.

### **(3) Monthly Payments from \$200,000 of Savings**

**It answers the question: How much monthly income will your nest egg provide?**

(No remaining balance at the end)

<b>Years/ Rates</b>	<b>5</b>	<b>10</b>	<b>20</b>	<b>25</b>	<b>30</b>	<b>35</b>
4%	3,671	2,018	1,208	1,052	952	883
6%	3,847	2,209	1,426	1,282	1,193	1,135
8%	4,028	2,410	1,662	1,533	1,458	1,411
10%	4,214	2,621	1,914	1,802	1,741	1,705
12%	4,405	2,841	2,180	2,086	2,037	2,011
15%	4,699	3,187	2,601	2,530	2,498	2,483

\$200,000 doesn't look like much when you factor in inflation, and realize that it must last your entire remaining life. That is why annuities with life-time payments are purchased.

## Chapter 2 – Time Value of Money

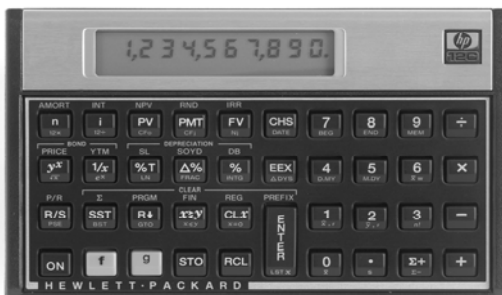
While the Time Value of Money concepts are relatively easy to understand, the underlying mathematics is difficult. The best way to learn about the time value of money is to experiment with a calculator; it's fun and easy.

Just know the basics! The guys who “slice and dice” cash flows for mortgage backed securities, get wild with this stuff. However, it all boils down to understanding a few keys and keystrokes on the calculator.

Mathematically, it is about solving an equation involving four basic factors: **Amount**, **Payment**, **Rate**, and **Time**.

### Introducing the HP 12C

The HP 12C business calculator makes understanding and using the Time Value of Money concepts very easy. Investors should understand how to use this calculator. For many years the HP 12C was the gold standard of business calculators. Today there are more choices, such as modern menu driven financial calculators, and programs like Excel and TValue; these are excellent tools and I suggest you learn how to use them. The HP 12C is quick, easy, durable and portable. It's also inexpensive and when the kids drop it, it doesn't break. Learning how to use this calculator will reinforce the time value of money concepts.



Picture courtesy of Hewlett-Packard Development Company, L. P.

**There are basically ten keys which one needs to understand; they are as follow:**

<b>Key</b>	<b>Description</b>
<b>n</b>	The time period, usually in years or months
<b>i</b>	The interest rate, the time periods and interest rates must be comparable
<b>PV</b>	Present value or today's value
<b>PMT</b>	Recurring payment amount
<b>FV</b>	Future value
<b>f (Gold Key) CLX</b>	Clears calculator (the combination of pressing F (Gold Key) followed by CLX)
<b>g (Blue Key)</b>	Changes calculator to the blue keys
<b>g Beg (7 key)</b>	Cash flow starts in the beginning of the period. If you ever rented an apartment, you pay in advance of moving in
<b>g End (8 key)</b>	Cash flow start at the end of the period (In arrears)
<b>CHS</b>	Changes signs to positive or negative cash flow

Let's discuss the concepts by using hypothetical examples and assumptions. These examples are used solely for the purpose of learning how to use the calculator and understanding time value of money concepts:

### **Calculating Future Value:**

You are 22 years old and have \$10,000 to invest with a 50-year time horizon (yes; that is how long you will be working). You know of a stock or mutual fund that has an historical 10 year return of 8% and feel that the investment could return the same over the next 50 years (good luck – I can't predict next year, much

less the next 50!). That said, how much could you anticipate having, assuming no more payments, when you retire in 50 years?

\$10,000 today invested over 50 years at a hypothetical return of 8% = \$469,016. Outlined below are the HP procedures:

**Enter:** f “gold key” – CLX [clears the calculator’s memory]

**Enter:** g “blue key” – end (the 8 key)

**Enter:** 50 –Press “n”

**Enter:** 8 – Press “i”

**Enter:** 10,000 – Press “CHS” and then “PV”

**Press:** FV = \$469,016

**Making Quick Changes:** Now suppose, (using that same amount and rate) you delay your initial investment until you are 47 years old. Your investment term, therefore, would be 25 years. How much can you expect in 25 years?

**Enter:** 25 –Press “n” (Only change term, and recalculate FV)

**Press:** FV = \$68,485.

Look how your projected future value dropped from \$469,016 to \$68,485; by reducing your savings period. A 50% reduction in time reduced your projected future value by 85%!

**The critical advantage that young investors have, is that time is on their side.**

**Investing early  
can make a big difference in the  
quality of your life when retired.**

The nice feature of the HP12C is that making scenario changes is easy and fast. The calculator stores the data and only changes need to be inputted.

**Calculating the Future Value of Annuity Payments:** Let's use another hypothetical example; make annual payments of \$2,000 at the end of every year for 50 years at a hypothetical 8% rate:

**Example of annual payments:**

**Press:** f – “gold key” CLX [clears the calculator's memory]  
**Press:** g “blue key” - end (the 8 key)  
**Enter:** 50 – Press “n”  
**Enter:** 8 – Press “i”  
**Enter:** 2,000 – Press “CHS” followed by the “PMT” key  
**Press:** FV = \$1,147,540

**Making Quick Changes:** Example of monthly payments of \$166.67, the beginning of each month:

**Example of monthly payments:**

**Enter:** 50 – g “blue key” – Press “n”  
**Enter:** 8 – g “blue key” – Press “i”  
**Enter:** 0 – Press “PV”  
**Enter:** 166.67 – Press “CHS” and then “PMT”  
**Press:** FV = \$1,321,981

I'm emphasizing, all things being equal, that regular monthly savings throughout the year is more valuable than a lump sum year-end contribution.

**Another Example of Future Value Annuity Payments:** Assume you work for a company and your salary is \$50,000 per year. The company matches 50% on the first 4% of your 401k contributions. The company also allows for an additional 10% non-matching

## Chapter 2 – Time Value of Money

contribution, resulting in a total annual contribution of \$8,000. Invested at an 8% rate, after 50 years, assuming no salary raises, your 401k balance would equal \$4,590,161. This is the beautiful part of the time value of money concept.

Because individuals are now living longer, the time value of money works to their benefit. Remember, this is just an example in understanding the time value of money concept. The return percentages used are just hypothetical examples.

Pre-tax versus after-tax returns will be discussed later.

### Calculating Payments:

While I'm reviewing the benefits of a financial calculator, I would like to do one real estate mortgage example. For this exercise, let's use a \$150,000 mortgage, with a 6% interest rate, paid monthly for 15 years. To determine the monthly payment, here are the HP procedures:

**Press:** f – CLX

**Press:** g – END (1<sup>st</sup> Payments in arrears)

**Enter:** 15 – g – n (converts years to months)

**Enter:** 6 – g – i (converts the 6% annual rate to a monthly rate)

**Enter:** 150,000 – CHS – PV

**Enter:** PMT = \$1,266 (excluding property taxes)

**Making Quick Changes:** Now let's calculate the payment of a 30-year mortgage:

**Enter:** 30 – Press “g” and “n”

**Enter:** PMT = 899 (excluding property taxes)

In this example \$367 [\$1,266-\$899] per month of additional payments will reduce the mortgage term by 15 years. When possible, I highly recommend a 15 year mortgage. A shorter term 15 year mortgage substantially reduces the interest that is paid to the bank when compared to the conventional 30 year mortgage. Here's how:

Total payments on a 30 year mortgage	323,640
<u>Total payments on a 15 year mortgage</u>	<u>227,880</u>
Pre-tax cash flow savings	95,760

It would take the average young adult over a decade to save \$95,000.

### Calculating Interest Rate:

Finally, it's important to discuss at least one interest rate example. Assume that you won the million dollar lottery, and were offered \$50,000 pre-tax, per year for 20 years, or a lump sum, up-front, pre-tax payment of \$530,179. How do you determine which option to take? The first step is to determine what discount interest rate is being used by the lottery. Then it's a function of comparative shopping. Is the interest rate being offered by the lottery better or worst than similar market rates? Here are the HP procedures to solve for interest:

- Press:** f – CLX
- Press:** g – BEG (1<sup>st</sup> payments in advance)
- Enter:** 20 – Press “n”
- Enter:** 530,179 – Press “CHS” then “PV”
- Enter:** \$50,000 – PMT
- Press:** i = 8%

Some issues are individual specific. If you need the money, take the cash upfront. If however, you want the annuity, you should calculate the discount rate used (in this case 8%) and then determine if a better (but credit equivalent) market rate is

available to you. Using after-tax dollars is a more accurate technique.

Nonetheless, now you have the information and skills needed to make a more informed decision, as to taking your winnings upfront or over time.

### **Tricks to Watch Out For**

When dealing with financial products, discuss the products in finance terms. What is the cost? What are the terms of the contract? What is the rate you are receiving or paying? Does cash exchange hands upfront or at the end? Can rates and terms change? Watch out when companies sell the payment amount; i.e. the monthly car payment, the copier lease payment, the monthly mortgage payment, your monthly annuity payment. Stop here! This is one of the techniques used by companies to avoid disclosing the true costs. Remember “the devil is in the details.” By selling products using rate factors or absolute payments, true financing costs are subtly built into the purchase price. The salesperson is selling the affordability of the payment and not the cost of the product. That can also work in your favor; my point is that understanding Time Value concepts can help one make sound decisions.

When dealing with money and investing, thoroughly understanding the time value of money is a must know topic. There’s a huge benefit from starting to invest early in life; try not to miss the opportunity. There are ways to catch up, but building assets gets harder as time passes.

## Chapter 3 – Getting Started

**Don't be intimidated about opening a small account. The goal is to build equity. Start by investing the seed capital that can grow into a portfolio.**

The process of opening an account and getting started is as simple as filling out an application and sending the money in. What young adults really need, however, is to align themselves with reputable firms that can help them meet their financial objectives. You need to decide what types of investment products match your personality and will achieve your financial goals.

Are you looking for safety? Are you trying to grow your equity? Is income a consideration? Are you interested in extreme speculation, where all your capital is at risk? Do you need handholding or do you prefer self investing through online services? The range of companies that can assist you in achieving your objectives is wide; there are banks, insurance companies, real estate investment companies, mutual fund companies, brokerage firms and private hedge funds, all of which offer a broad range of competitive investments that can help you build your wealth.

Over the past few decades, financial service companies have used technology to build and offer some truly amazing products and services for their clients. The sophistication and broad selection of choices can be overwhelming. The technology, however, is not the critical issue; it's more important to determine how a firm and its services fit into your needs. Keep your eye on the money, not on the technology glitz. Focus on building wealth. It's easy to convert wealth into income in later years.

## Picking a Firm

### Types of Firms

- **Banks**
- **Brokerage Firms**
- **Mutual Fund Companies**
- **Insurance Companies**
- **Real Estate Investment companies**
- **Private Hedge Funds**

Because of the repeal of the Glass-Steagall Act and other safety nets that were instituted during the depression of 1929, in today's environment, many financial service companies have overlapping products and divisions under the umbrella of their corporate parents. Here's a starting point for the types of firms in the marketplace. Keep in mind that the firewalls separating the product offerings are now very vague.

- **Banks** – Pure banks take in deposits and originate loans. The difference between what they pay depositors and what they charge for their loans, less expense, is their profit. Currently banks can, and often do, offer a complete range of competitive products across all financial services segments. Banks like Citigroup are truly one stop financial shopping centers.
- **Brokerage Firms** – They facilitate the trading of debt and equity investments. Their services include investment

- advice, research, money management, online trading and a menu of banking and insurance products, such as check writing, loans, margin and annuities. Excluding investment banks, there are two types of brokerage firms:
  - full-service brokers
  - discount / online brokers
- **Mutual Fund Companies** – They provide professional investment management by pooling the capital of individual investors.
- **Insurance Companies** – Insurers offer a complete range of investment and insurance products, including solutions for: Insurance, Retirement, Investing and Estate Planning needs. Their annuities are popular investments for income orientated investors.
- **Real Estate Investment Companies** – REITS are companies that specialize in real estate and mortgage investments.
- **Private Hedge Funds** – Private investment management companies usually focus on institutional investors and wealthy individuals.

### Opening an Account

The main focus of this book is investment products; as such, brokerage firms will be emphasized in this chapter. Many of the concepts, however, apply to all the businesses.

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## **PART TWO: TYPES OF SECURITIES**

### **Chapter 4 - Bank Savings**

**When dealing with money, safe is good!**

Why in the world would a stock picker turned author open a critical chapter in his book with FDIC insurance?

I started here because somewhere along the way I realized that some investors get unnerved by stock fluctuations. Many investors can't take the emotional stress of big swings. They like "secure and steady". There's a lot to be said for safety. Preservation of capital is the most important aspect of becoming wealthy. All the great investors have one thing in common: They know how to minimize their losses.

FDIC insurance is an excellent failsafe mechanism for investors. Banks, in general, have some very creative and innovative product offerings that meet the investment goals of many young investors. When opening an account, focus on the FDIC insurance regulations. Make sure your accounts are titled properly, the paperwork is in order, and coverage is maximized.

When dealing with money, safe is good!

**FDIC Insurance** – Visit the FDIC website.

**When all else fails, FDIC insurance  
can act as a “nuclear bomb shelter”  
for your money.**

To prevent a recurrence of the banking failures that followed the 1929 crash, where depositors lost everything if their local banks failed, the government created a safety net to pay depositors their balances, dollar for dollar, in the event of a bank failure. Since the establishment of the FDIC in 1933, not one penny has been lost to depositors on insured funds, as a result of a banking failure.

The FDIC (Federal Deposit Insurance Corporation) was established by Congress as a safety net for depositors, and as a way to promote stability and regain public confidence in the nation’s financial system. Currently, the FDIC insures bank deposits up to \$100,000 per depositor, per bank (not per branch). Only bank deposits are insured and include: checking, savings, now, money market, CD, and retirement accounts. All other banking products, such as US treasury bills, bonds, securities, insurance, mutual funds, annuities, and safety deposit boxes are not FDIC insured. The insurance covers principal plus accrued interest through a bank’s closing date. US treasury bills, bonds and notes are guaranteed by the federal government, and therefore not insured by the FDIC.

## **FDIC Insurance Categories**

- **Single Accounts**
- **Joint Accounts**
- **Self Directed Retirement Accounts**
- **Revocable Trust Accounts**

FDIC insurance can exceed \$100,000 per depositor if various ownership categories are in use. Each category gets the additional coverage! However, multiple accounts per depositor under the same category are aggregated. If, for instance, a depositor has checking, savings, and CD accounts all under the same name, they all count as a single account for insurance purposes.

The four critical ownership categories are:

- **Single Accounts** – \$100,000 per depositor.
- **Joint Accounts** - Deposits owned by two or more people; each co-owner must have equal rights to withdrawal money and documented on the signatory cards. – \$100,000 per depositor.
- **Self Directed Retirement Accounts** (IRA, Roth IRA, Keogh) \$100,000 per depositor – numbers of beneficiaries do not affect the insurance limits.
- **Revocable Trust Accounts** –\$100,000 per depositor, per qualifying beneficiary. Qualifying beneficiaries include spouse, children, grandchildren, parents, siblings, as well as adopted and stepchildren. The beneficiaries must also be named in the account records, and the title on the account must indicate that the account is an informal

revocable trust account. Common terms used are: Payable on Death (POD); In Trust For (ITF); or As Trustee For (ATF).

For example, given a husband, wife and two children with one grandparent:

- If both parents have **single accounts** with \$125,000, owned individually, under each name, they will be insured for \$200,000 or \$100,000 each; \$50,000 will be left uninsured.
- If the same parents have a **joint account** with \$225,000, they will be insured for \$200,000 or \$100,000 each; \$25,000 will be left uninsured. Including the above items, \$400,000 is insured by the FDIC.
- If the husband has an additional \$50,000 **joint account** with his mother, the husband has already reached the insurance limit, so his half is uninsured. His mother is insured for her half, or \$25,000. In total, \$425,000 is insured by the FDIC.
- If the same parents have **separate self directed retirement accounts** (IRAs) totaling \$100,000 each, they will be insured for another \$200,000. The FDIC coverage now amounts to \$600,000 plus the \$25,000 for the grandmother.
- If the parents have an **informal joint revocable trust** (POD) totaling \$400,000, each naming two children as beneficiaries, they are insured for an additional \$400,000 or \$100,000 for each “qualifying beneficiary.” The total FDIC insurance coverage amounts to \$1,000,000 plus the grandmother’s \$25,000. All in one bank.

Maximizing the FDIC insurance is no different than estate planning. The titling of the accounts on the signature cards is paramount.

Savers, young and old alike, need to thoroughly understand the FDIC insurance rules. If all else fails, FDIC insured accounts can act as a “nuclear bomb shelter” for your money.

### **Savings Accounts**

A saving account is a bank account that earns interest at a federally insured institution. It can either be a statement saving account or a passbook account. Your funds are secure, liquid and provide a positive return. There are no early withdrawal penalties. Interest is subject to federal and state income taxes. The bank will use the deposits to reinvest in the community, primarily through issuing consumer and commercial loans. The loans normally return more than the rates paid to depositors, thus resulting in a profit for the bank.

### **Money Market Accounts**

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## Chapter 5 – Equity Instruments

**Taking ownership risk is only prudent if a potential extra cash flow benefit is obtainable.**

### News Flash!

**Recent studies, as published in a New York Times article on 12/4/2005, titled “Aging Brings Wisdom, but Not on Investing” indicated that the stock picks of an average 30 year-old investor beats the stock picks of an average 65 year-old investor by 1.8% percent per year.**

This, however, is not really a new concept. That’s why it only made page six of the Sunday Money section. Think about it; young investors take more risk, are less diversified, and have lower balances. Historically, young adults have been able to identify trends that older adults can’t envision. The old story was that in 1943 Tom Watson Sr., the founder of IBM, said: “I think there is a world market for maybe five computers.” It was his son Tom Watson Jr. who saw and capitalized on the coming trend in computers. It was mostly young adults who participated in Microsoft’s IPO on 3/13/1986, at an opening price of \$21 per share. (A \$21,000 investment at the IPO price, after 20 years, is worth approximately \$7,200,000.) Young adults purchased Yahoo cheap; the older adults are paying top dollar for Google.

My concern, however, is that young adults, while having great ideas, are investing in equity instruments without knowing the nuances of the details involved. That aloofness can be costly. **This book explains the details.** My prior book, *The Chestnut and Cedar Stock Report – A Guide for Investors*, discusses how to

pick stocks and focuses on the strategies and analysis needed in selecting and timing securities.

### Why invest in equities?

Investors participate in equities because equity returns are higher than other financial assets.

**Over the past 75 years, common stocks provided a real rate of return around 7%, while treasury bonds had a real rate of return close to 3%.**

Exact rate of returns are inconclusive. Studies by some of the best minds in the country, regarding the real rate of return on common stocks, over the past 50 to 100 years, are not exact. All the studies have different results; nonetheless, for conversational purposes, stocks historically outperform debt instruments. The general belief is that, over the past 75 years, stocks provided a real return of approximately 7%, while treasury bonds had a real return of close to 3%. Therefore, equity investments should return approximately 4% over treasury bonds; this is the extra that is earned by investors for taking the risks of investing in the marketplace. **The extra juice that equity investors earn over fixed income returns is called the equity premium.**

The Real Rate of Return is the annual return, adjusted for inflation.

Lastly, as today's young adults get older, the trends that were discussed in the NYT's 12/4/05 article "Aging Brings Wisdom, but Not on Investing" may also apply to them. As young investors age, "their cognitive abilities may diminish and gradually decline.

*Chapter 5 – Equity Instruments*

This presumably affects decision-making, and may make one less capable of picking market-beating stocks.” So don’t gloat!

### **Remember**

**There are three primary decisions to make when investing: Which security, what price, and when to sell.**

### **Common Stock**

Common stock is the ownership interest in a corporation. Shareholders bear all the risks and rewards of ownership. It enables investors to independently and voluntarily participate in the economic activities of a business. From a text book standpoint, shareholders are passive investors and have limited liability; they can only lose their investment, and are not responsible for the liabilities of the business. Shareholders are also last in line to claim the assets and income of a company.

### **Some of the main benefits of owning stock are:**

- It provides a natural hedge against inflation; for young investors, it’s an excellent savings vehicle.
- Over a long period of time (a decade or two), the return on common stocks is usually better than fixed income securities.
- It’s the primary method of ownership and control of a corporation.

- Profits are returned to the shareholders through dividends, share repurchases, and reinvestment in the business.

The drawbacks to common stocks are that the risks are high, and stock prices can be volatile.

Common stock, evidenced by a stock certificate, entitles the owner to a prorated financial interest in a company. Shareholders also have the right to vote for the Board of Directors. While one share usually equates to one vote, different classes of stock with different ownership rights and votes, are allowed.

**Shareholders are entitled to the following:**

- Last claim on a company's assets in the event of liquidation. In most cases, don't expect anything in a wind-down situation; the attorneys, accountants and bankers get paid first.
- Preemptive rights may be attached to the shares, which grant the shareholder the right to purchase additional shares to keep proportional ownership in the company.
- Inspection of the books and records of a company.
- Ability to sue management for unauthorized transactions.

**Dividends are not a right, but a privilege.** Some companies, however, make it a practice to pay out a certain percentage of their cash flow as dividends. Tying dividend payments to cash flow forces cash flow management on a company; as the business grows the cash flow dividend to shareholders automatically increases.

## *Chapter 5 – Equity Instruments*

Common stock held by the company is referred to as treasury stock. Par value is the original value assigned to the company, and paid for by the original investors.

While the returns generated from common stock may be high compared to other asset classes, there is also a great deal of risk involved in ownership. For instance, consider the computer industry. Google, Yahoo and eBay are all relatively new start-up companies that are taking the leadership positions away from Microsoft, Intel and Cisco. Two decades ago, the leaders were IBM, Burroughs, NCR, Sperry, Digital and Wang.

As leadership and profits change, so does the value of the shares. Business is fast moving; while returns are high, investors need to focus on the “risk- reward” equation.

**Added Perks:** Owning shares of a company may have an added perk. Many companies offer shareholders discounts to their products. J.P. Morgan, for example, used to offer to their shareholders discounted tickets to the Christmas Show at Radio City Music Hall. Call the investor relations departments of the companies you own stock in, to find out about the perks they offer their shareholders. You may be surprised!

**Do Your Homework!**

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## Chapter 6 – Bonds

**Bonds are IOU's: Investors loan out money, to be paid back at a later date.**

The key to investing in bonds, as well as other fixed income securities, is to understand the interrelationships among: **Rates** (Yield), **Ratings**, the **Yield Curve**, and **Laddering**.

The natural beginning to bond investing starts with the yield. The yield answers the question: “How much money will you be making from your investment?” There are different ways to analyze, calculate, and view the yield, depending on the specifics of the deal and the use by the investor. They are discussed below.

**Types of Yields** - The yield is the annual amount received from an investment, expressed as a percentage. The typical kinds of yields used by investors are:

- **Coupon Rate** – The stated annual interest paid on a bond, expressed as a percentage of par value.
- **Current Yield** – The annual interest payout on the bond, expressed as a percentage of the current market value.
- **Yield-to-Maturity (YTM)** – The all-in interest rate earned on the bond, incorporating both the annual interest paid, as well as adjustments for any premiums or discounts realized from the purchase. It's the interest rate used to discount the cash flows. The YTM calculation assumes the bond will be held to maturity.

## Chapter 6 – Bonds

- **Yield-to-Call (YTC)** – The all-in interest rate earned on the bond that is held to its call date, using the bond’s stated call price (call premium), and expressed as a percentage.
- **Yield-to-Put (YTP)** – The all-in interest rate if held to the bond’s put date.
- **Yield-to-Worst (YTW)** – Lowest of the YTM or YTC calculations. It’s used by conservative investors as an estimate of the expected yield. It assumes the worst possible scheduled scenario for the repayment of the bonds, and considers all the possible call date options.
- **Tax Equivalent Yield (TEY)** – The yield that a taxable bond would have to pay to be equivalent to a tax-free bond

As we move through this chapter, you will find that there are multiple market factors that influence bond rates. The base rate always starts with a secure market rate; the rate is then increased as the level of risk increases. Some of the typical risk factors that affect the rate are the credit worthiness of the issuer and the terms of repayment.

## Bond Rating Agencies and How They Grade

**Rating agencies and their grades are going to play an increasingly important role as the baby boomers age and rely more and more on fixed income securities to cover their living expenses.**

Bond rating agencies review a company's credit worthiness to determine if a company can repay its debts in a timely fashion. They then grade the company. The rating system is clearly explained and the agencies try to make the reasons behind the rating decisions as transparent as possible. Normally, the CFO of an organization coordinates with the rating agencies, to supply all proper documents and to answer the boiler plate questions. The rating agency meets with the management, clients, bankers, and suppliers, to properly grade the company. Yes, there is some "wheeling and dealing" involved, but at the end of the day, these agencies are extremely diligent and will not jeopardize their reputation and business for a few dollars. They also have other sources of revenues, like subscription based services, so most clients are not material. Some critics say that it's easy to get new clients in this industry. Just by issuing an unsolicited rating on a transaction, clients seem to line up in fear of lower ratings. The rating companies put their reputations and careers on the line with each rating; they take their responsibilities very seriously.

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## **Chapter 7 – Treasury Securities**

**Go to [www.treasurydirect.gov](http://www.treasurydirect.gov).  
It's worth the education!**

### **Introduction to Treasury Direct**

Every income-oriented investor should be knowledgeable of Treasury Direct, which is electronic direct investing with the government. They have a whole menu of products, ranging from series EE and I bonds to treasury bills, notes, bonds, and tips. Rates, terms, conditions, and fees are all disclosed. It gives you the flexibility of managing your own savings portfolio, knowing that your money is secure and backed by the full faith and credit of the U.S. government.

### **U.S. Treasury Securities**

U.S. Treasury securities are debt obligations of the U.S. government, and are backed by the full faith and credit of the United States. The treasury department offers a full range of investment and savings products, ranging from bills, notes, bonds and tips. The securities can be purchased directly through Treasury Direct or through brokers. They are ideally suited for civic-minded investors looking for extremely secure and liquid investments. The rates are competitive but low, and there is an active secondary market. Treasury securities are exempt from state and local taxes, providing investors with a small yield enhancement.

Interest on U.S. treasury securities is subject to federal income taxes.

## *Chapter 7 – Treasury Securities*

There's a difference between savings bonds and treasury bonds: treasury bonds are marketable; savings bonds are not. Saving bonds are not transferable. Institutional investors and professional money managers deal with treasury bonds.

Treasury securities are rated triple A by Moody's and Standard & Poor's and are considered risk-free investments. There is, however, an interest rate risk inherent in these securities. The price of treasury securities fluctuates inversely with interest rates. If interest rates increase, the price of these securities will decline in the secondary market. If one needs to sell prior to maturity, and if interest rates have increased, the current value can be less than the original purchase price, resulting in a loss of principal. Additionally, some treasury bonds issued before 1985 have call provisions.

Since 1986, all investment securities issued by the treasury are electronic book entries only. Paper securities are being phased out.

There is an advantage in using a broker to purchase treasury securities. Banks, brokers and other institutional investors use the "commercial book-entry system." When using this system, treasury instruments can be pledged as collateral. The use of government securities as collateral is not available using Treasury Direct. Treasury zero coupon and STRIPS bonds may also be available through a broker.

Government securities are an excellent way of preserving one's capital (and demonstrating patriotism) while receiving a competitive interest rate.

## Summary of Treasury Securities

	<b>T Bills</b>	<b>T Notes</b>	<b>T Bonds</b>	<b>TIPS</b>
Type	Treasury Bills	Treasury Notes	Treasury Bonds	Treasury Inflation Protected Security
Term	Short-term usually 4, 13 or 26 weeks	2,3,5 &10 years	10 to 30 years	5,10, and 20 years
Rate / Interest	Sold at a discount	Fixed rate paid every 6 months	Fixed rate paid every 6 mos.	Fixed rate paid every 6 months Principal is adjusted daily for inflation and paid at maturity
Min. Purchase	\$1,000	\$1,000	New bonds avail. 2006	\$1,000
Max. Purchase	Noncompetitive: \$5m Competitive: 35% of offering amount	Same	Same	Same
Issue Method	Electronic entry into your account	Same	Same	Same

## **Chapter 8 – Government Agencies and Related Securities**

**Government sponsored agency  
bonds usually pay more than  
treasury securities.**

### **Introduction**

The government supports certain sectors of the economy it deems to be of national interest. It does so by establishing both public and private corporations/agencies to finance their particular missions. The main areas are: housing, farming, education, exports, small businesses, and utilities. These corporations issue safe, but not risk free, debt instruments to the public, at rates that are slightly more competitive (higher) than treasury instruments.

**Are these solid credit quality investments?** Yes, without a doubt.

**Are these investments guaranteed by the government?** Some are; some are not. If the bonds are issued by a Federal Agency, such as Ginnie Mae, then the debt is backed by the full faith and credit of the U.S. Government. If, however, the bonds are issued by a Government Sponsored Enterprise (GSE), such as Fannie Mae or Freddie Mac, then they are not guaranteed by the federal government.

Therein lies the issue: there seems to be a dichotomy between what is written by the GSEs and what is believed (inferred) by investors. Some of these GSEs are clearly telling their bondholders that their debt is not guaranteed by the federal government. Investors, however, are receiving and accepting thin spreads (low rates) on the assumption that there is an implied guarantee that the U.S.

Government will make bondholders whole in the unlikely event of a default. It seems that many investors are betting that, because of the affiliation that these agencies have with the federal government, if defaults occur, the federal government will bail them out.

When the creditworthiness of the GSE bonds is discussed, you often hear terms like “very secure,” “the government would probably,” “almost risk free,” or “essentially backed.” These are wiggle room terms that should automatically raise red flags to alert investors. Prudence is essential. The author operates under the assumption that unless there is a guarantee in writing, there is none.

**Some Food for Thought** - Over the years, the issue as to whether or not the debt of these GSEs is guaranteed by the government has been discussed at length. The documentation seems to be clear that the U.S. Treasury will only back Agency debt that it explicitly guarantees. Additionally, the budgeting department of the U.S. government prepares national debt calculations, keeping the debt of some of the Government Sponsored Enterprises out of the calculations. The budget numbers don't lie.

Let's be very clear, if a default ever occurs, our government has the money to make everyone whole. We are the richest country in the world. The question is: Should the taxpayers bail out real estate investors or any investors? You just don't know which way the votes will go.

**Don't misinterpret my point!** GSEs provide excellent investment opportunities for income orientated investors. These corporations have major advantages over their competitors. They have a “cheap” cost of funds compared with similar public companies. Some, however, are leveraged, and their operations would be hindered, if they were standalone organizations.

*Chapter 8 – Government Agencies and Related Securities*

Nonetheless, inexpensive borrowing rates and high leverage permit these agencies to maximize their profits and cash flows. They also are exempt from certain state and local taxes.

Life is long, however, and many different situations may present themselves. When lenders tell you that certain debt obligations are not guaranteed, believe them! This way, you can implement a proper diversification strategy, so you won't be overly exposed to any one asset class, in case of an unexpected crisis.

**The main issuers:**

Agency	Public / Private	Sector	Explicit US Government Guarantee?
Fannie Mae	Public	Housing	No
Freddie Mac	Public	Housing	No
Federal Home Loan Bank	Private	Housing	No
Federal Farm Credit System	Private	Farming	No
Tennessee Valley Authority (TVA)	Private	Utilities	No
Sallie Mae	Public	Education	No
Private Export Funding Corp. (PEFCO)	Private	Exports	Yes
U.S. Agency for International Development (AID)	Private	Foreign Housing	Yes
Financial Assistance Corp (FAC)	Private	Farming	Yes
General Services Administration	Private	Housing	Yes
Small Business Administration (SBA)	Private	Small Business	Yes

## **Background of the main players**

**Ginnie Mae (GNMA)** - The Government National Mortgage Association was created in 1968 and is a wholly-owned corporation of the U.S. Department of Housing and Urban Development (HUD). Ginnie Mae provides insurance programs, which insure the repayment of principle and interest on federally-insured mortgage-backed securities issued by FHA, VA, RHS and PIH. Ginnie Mae is the only MBS backed by the full faith and credit of the U.S. Treasury. Because of this written guarantee, Ginnie Mae's debt securities yield slightly less than other non-guaranteed agency securities. Ginnie Mae has insured over \$2 trillion in MBS, helping more than 30 million American families gain access to affordable housing. Ginnie Mae insures the repayment of certain debt securities.

**Fannie Mae (FNMA)** – The Federal National Mortgage Association, rated AAA by the credit rating agencies, was chartered by congress in 1938 and is a by-product of the 1929 depression. Their logo describes their mission: “Our Business is the American Dream.” They help low, moderate and middle income people obtain mortgages to buy homes. Normally mortgage applications are approved by lenders, on a case by case basis, and a determination is made if the borrower's loan is eligible to be sold to Fannie Mae (or Freddie Mac). Fannie Mae purchases mortgage loans from lenders, packages them as securities, and sells them to investors, acting, in essence as a bridge between savers and potential homeowners. In 1968 Fannie Mae became a public company. Investors can participate in Fannie Mae, either by purchasing equity shares, or through their numerous debt offerings. One can purchase their shares, bonds, notes and MBS through brokerage firms.

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## Chapter 9 – Derivatives

### Introduction

**Derivatives are financial instruments that derive their value from a completely different instrument.** The standard types of derivatives are: *Options, warrants, interest rate swaps, and futures.* I believe that this is the area, in my generation, which has the potential to “blow up” the financial markets. The bottom line is that the baby boomers are not satisfied with low returns and are taking an inordinate amount of risk to obtain better returns. This emotional need to push the envelope to the limit has consequences. What’s happening is money is chasing high returns. For now, Sarbanes-Oxley has restricted the movers and shakers of industry. The lawyers and auditors are now firmly in control of business! Mediocre returns are being sold as reasonable and acceptable. The so called “smart and aggressive” money is bypassing the main street stock, bond, and mutual fund investments and is moving to the hedge funds and private companies. The shift in business has taken derivatives to the forefront of investing strategies. While many derivative products are value-added and have a true economic purpose, like interest rate swaps, some are purely speculative with unlimited leverage. “It is just mind-boggling as to what possesses people to create and enter into some of these contracts. A variety of contracts settle decades in the future and are pegged to various stock prices, indexes, and currencies. The landscape is scattered with derivatives that ran astray: Enron, Long-Term Credit Management, Metallgesellschaft, China Aviation, more recently Refco, just to name a few. Using derivatives for risk management, hedging and locking in profits is fine; taking unhedged leveraged positions, however, is risky and can lead to substantial losses.

Banks employ derivatives to hedge their business risks; they are big users of interest rate swaps. They issue long-term fixed rate loans, like mortgages or leases, which initially are funded by floating rate debt. Subsequently, they lock in their profits, and

match fund their incoming and outgoing cash flows by swapping floating rate debt to fixed rate debt. Hopefully, bank hedging strategies will perform as intended under distress conditions. Hedge funds, on the other hand, are under a great deal of pressure for high returns, and are believed by many to use derivatives to speculate on price movements. The concern is that they may expose themselves, and the financial markets, to an unhealthy level of risk. The doomsday scenario is that if a large hedge fund incurred large losses it could result in not meeting its counterparty obligations, causing a ripple failure among the counterparties. This could cause a collapse in the financial markets. It's equivalent to an individual selling stock, only to find out that the buyer is unable to pay for the security. If this ever happens, pandemonium will follow. A safety net is needed to prevent a catastrophic rippling through the financial system if a party fails. You must keep this in mind before investing in derivatives! The rest of this chapter will explain the main types of derivative products.

### Stock Options

**Stock options are called wasting assets.  
When the exercise date expires, an  
unexercised option becomes worthless.**

A stock option is a contract that gives the holder the right to purchase or sell shares of a security at a specified price (strike price) on or before a given date (expiration date). This is a risky instrument! Forget the rhetoric for a minute; options are a gamble. The option marketplace is very orderly and efficient, making trading these instruments easy. There are classes, books, seminars, TV shows, websites and companies that can help train someone

in the option markets. Nevertheless, options are highly leveraged financial instruments that carry extreme risk. You can lose all of your investment overnight. The fact that the cost basis of options is less than the underlying securities does not limit your risk. A lot of small losses can add up to a significant loss. Once the time elapses, when the exercise date passes, the option is worthless and the premium spent for the option is gone forever. Options are classified as derivatives because the price of options is dependent on the value of the underlying securities. They are also called wasting assets. With stocks, you are buying an ownership position in a company. If your initial decision is not great, which happens often, time may be able to cure your mistake. With options, you don't have room for timing mistakes. On a more positive note, there are many other valuable uses and benefits of options.

### **Calls versus Puts**

**Calls – Betting that prices will increase.**

**Puts – Betting that prices will decrease.**

A call option gives the holder the right to buy the underlying security at the strike price, on or before the expiration date. The holder of a call option is betting that the security will increase in value and exceed its strike price. The holder can then call in the security for a profit. A put option is the reverse of a call option; it gives the holder the right to sell the security at the strike price, up to the expiration date. The holder of a put option is betting that the security will decline below the strike price. This way, he can “put” the stock to the counterparty.

## Option Styles

Exchange traded options are usually “American-style,” where the holder can exercise his option any time before the expiration date of the option. However, there are also “European-style” options, where the holder is limited to exercising his option to a specified period of time. A “capped-style” option is where the holder of the option is limited in potential profit by a price cap. If the stock price reaches the cap, the option is automatically exercised. In the case of a call option, the cap price is equal to the strike price plus the cap interval. With a put option, the cap price is equal to the strike price less the cap interval.

## Strike Price

This is the exercise price for which the underlying security can be purchased, as with a call option, or the selling price in the case of a put option. When the underlying security is at the strike price it is considered to be “at-the-money.” An “in-the-money” option is one that has intrinsic value. An “out-of-the-money” option is one with no intrinsic value.

## Intrinsic Value and Time Value

Intrinsic value is the dollar amount of the option that is in-the-money. In the case of a call option that is in-the-money, it is the difference between the strike price of the option and the higher market value of the underlying security. It excludes any premium for the time value of the option. With a put option, it is the difference between the strike price and the lower market value of the underlying security.

Time value is the difference between the premium on the option and the option’s intrinsic value. It’s the portion of the premium that is attributed to the time value of the option.

### Example

What makes options and puts so appealing is leverage. Let's use Pfizer as an example: on 7/6/05 the stock was selling at \$26.85 and their August 27 ½ calls traded at 75 cents. Thus a 100 share contract cost \$75 plus commission. **Options expire on the third Friday of the month**, in this case August the 19<sup>th</sup>. (They actually expire on the third Saturday of the month, but the markets are closed.) If you were to buy 100 shares of the stock, it would cost \$2,685. If the price increased to \$30 one would have a profit of \$315 or an 11.7% increase. Now, if you purchased the \$27 ½ (strike price) calls for 75 cents, and Pfizer increased to the same \$30 per share, prior to August 20<sup>th</sup> your profit would be \$175 or a 233% increase. The profit (or loss) is based on the strike price plus the premiums paid, compared to the market value ( $\$27 \frac{1}{2} + .75 = \$28 \frac{1}{4} - \$30$ ) or \$1.75 profit per share, times 100 (number of shares in one option contract) = \$175. **Options are written on blocks of 100 shares.** That's a lot of leverage! Look at the difference in your return: if you purchased the stock the return was 11.7%, but by using options the return was 233%. That's the benefit of leverage; for \$75 you controlled \$2,685 worth of stock. Pfizer's January 06, \$27 ½ options costs \$1.50 and their January 07, \$27 ½ Leaps cost \$2.80. **LEAPS are long-term options** with an expiration date up to three years in the future. The longer out one goes, the more expensive the option. The risk is that if Pfizer stays flat until the option's expiration date, the option holder loses 100% of his investment, while the stock holder maintained his investment. Options are all about timing. As a postscript, the January 06 options expired worthless as the stock closed at \$24.28 on 1/17/06.

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## Chapter 10 – Funds

### Types of Funds

- **Mutual Funds**
- **Index Funds**
- **Closed-End Funds**
- **Exchange Traded Funds**
- **Hedge Funds**
- **Separately Managed Accounts**

#### **Mutual Funds (Open-End Funds)**

**Exactly what is a mutual fund?** A mutual fund is a pool of individual investors' money, invested in marketable securities, and managed for a fee by financial professionals.

#### **What does one need to know when investing in mutual funds?**

Start by investigating the answers to some fundamental questions:

- Do the objectives of the fund, as stated in the fund's prospectus, match your goals and objectives?
- Who is the fund manager and what is his background? What is his investment philosophy? What is his track record? How much time remains on his contract?
- Do the top holdings of the particular fund match the types of investments you are interested in?
- What recent investment changes did the fund managers make?

## Chapter 10 – Funds

- Typically, how long are securities held by the fund?
- How does the manager determine the right time to sell?
- What rate of return did the fund generate for the past 1, 3, 5, and 10 year periods?
- What are the monetary, legal and operational risks?
- What is the tax position of the fund? Are there upcoming tax distributions? Will you be buying a dividend? Is the fund sitting on any large unrealized capital gains or losses?
- What is the current net asset value of the fund, and have the assets been growing or shrinking over the past 1, 3, 5, and 10 year periods?
- Is the expected return appropriate for the level of risk that is involved, and does it match your goals and financial profile?

Lastly, analyze all the fees and expenses, then calculate if the cost is worth the investment. A balanced perspective is needed. On one side of the scale is the importance of keeping expenses to the minimum, knowing that every dollar spent is a reduction in one's return; on the other side are the realities that good fund managers need to be paid a fair compensation. It boils down to a cost versus potential return decision.

Always remember that the historical results have no bearing on future performance, but they do show the pedigree of the fund.

**Background** - By pooling funds, small investors are able to benefit from the economies of scale that only the very rich enjoyed a century earlier. When owning a mutual fund, you are actually hiring a professional portfolio manager to navigate the financial markets for you. Open-end mutual funds are set up as investment companies, where investment income and capital gains / losses are passed through to the shareholders. Open-end mutual funds have a fluctuating, constantly changing, amount of shares. Mutual funds also have various classes of stock, usually with different fee structures. Purchases and redemptions are made directly with

the fund. Mutual funds' shares do not trade on the stock exchanges. With purchases, the cash inflows to the fund are invested by the fund manager. Redemptions are cash outflows from the fund, usually paid out of the fund's cash accounts. If cash is unavailable, securities are sold to meet the redemptions. The constant and sometimes unpredictable inflows and outflows of cash make it difficult to manage mutual funds. Shares are always priced at the fund's net asset value at the end of the day.

### **Net Asset Value (NAV)**

**(Assets-Liability) / Number of Shares Outstanding**

The net asset value of a fund will change on a daily basis as the fund's underlying portfolio fluctuates in value.

**How do distributions affect the NAV?** Fund distributions reduce the NAV of the fund (on the fund's ex-dividend date). If reinvested in additional shares, the shareholder will have no change in the aggregate value of his investment. He will however, have more shares at a lower per-share price. Always check your statement to ensure that reinvested shares are credited to your statement. When calculating your return, you will need to factor in all distributions.

The growth of mutual funds has availed the average investors to sophisticated money management tools.

**What are the benefits and drawbacks to mutual funds?**

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## **Chapter 11 – Annuities**

**Annuities are a juggling act  
between rate of return,  
security, and cash flow needs.**

An annuity is an investment contract with an insurance company, where in return for your paid premiums, the insurance company agrees to make periodic payments to you at specified dates. Interest earned is tax-deferred until withdrawals are made. Rates may be fixed or variable. Annuity earnings do not offset social security payments.

Annuities originated in the Roman days when citizens would make a one-time payment in exchange for annual stipends. However, it was in 1653 when Lorenzo Tonti of France, in an effort to raise money for France's war efforts, reinvented and popularized the concept of an annuity lottery.

The concept was wild. A group of individuals would raise capital and form a tontine. The parties would make a one-time contribution and receive interest on their investment until their death. When a member died, the pool of funds would get redistributed to the remaining members, therefore increasing their investment. After a predetermined number of years lapsed (a decade or two), the remaining funds would be distributed to the surviving members. In some situations, the last member surviving would receive the entire pool of funds. It was a form of lottery. Guess what happened? Yes, the members started killing each other off to get a bigger share of the pool! Of course, the concept was picked up by other countries, like Britain and the U.S. Eventually the "survivor take all concept" was outlawed. When the depression hit in the 1930's, there was an emphasis on savings. The general

feeling was that insurance companies were safe and would be around to make the payouts. Deferred and immediate income annuities grew as acceptable investment products because of the economic conditions of the time. Currently, annuity sales exceed \$200 billion dollars annually and are growing.

## Types of Annuities

### Types of Annuities

1. **Fixed Annuities**
2. **Variable Annuities**
3. **Immediate Income Annuities**

1. **Fixed Annuities** are for long-term investors, looking for secure and definite cash flow streams. The annuity holder pays either a lump sum (single premium), or regular payments (multiple deposits), to an insurance company, in return for a guaranteed dollar amount, to be paid in the future for a specified period of time (or one's remaining lifetime). The interest rate received is a fixed rate, and accumulates tax free until paid. Interest rates offered are usually higher than CD and short-term money market rates, and are normally closer to long-term bond rates.

**Variable Annuities** are for the more adventurous long-term investors, looking to participate in the financial markets to increase their payouts. Their returns are tied directly to predetermined benchmarks, such as market rates, indexes, or funds. Future payments may be fixed or variable. Usually, these policies have a minimum guaranteed payment, to migrate the downside risk. The key is that the returns will fluctuate.

2. **Immediate Income Annuities** are for those investors needing payments to commence within a year of paying the premiums. Immediate annuities are ideal for retirement income, divorce settlements, and settling personal injury or wrongful death lawsuits.

**The different phases of an annuity:**

**Phases of an Annuity**

1. **The Accumulation Phase**
2. **The Payout Phase**

1. **The accumulation phase** is when the premiums are being paid and the value of the policy is growing, either at a fixed or variable rate of interest.
2. **The payout phase** occurs when the payments are being made to the annuity holder. Policy holders can be paid a lump sum, periodic payments (when you need the money), systematic payments, or systematic payments for your life (annuitization), or the longer of either your life or your spouse's life. Payments can also be fixed or variable. Death benefits and nursing home payouts are also available. Be careful! Annuitizing an annuity (an oxymoron, if you think about it) can be an irrevocable transaction.
3. **Fees, Expenses, and Bonuses to Watch For** – Realize that annuities are offered by insurance companies, which are there to make a profit. Usually, fixed annuities have no upfront sales charges; your complete investment goes to work for you from

day one. Variable annuities, however, may have upfront expenses or commissions, depending on the company and your investment choices. A nice plus is that some companies allow you to withdraw interest without penalties, up to a certain limit. Usually, however, there are substantial early withdrawal penalties and other fees that should be noted:

4. **Surrender Charges** – Penalties for withdrawals exceeding a certain agreed upon percentage, say 10%. These back-end fees are normally in the 7% to 8% range. The surrender charge penalty is usually reduced 1% each year from date of purchase. Annuity holders need to be very careful. Some companies have substantially higher fees, especially for first year contract withdrawals. These deferred sales charges can get complicated; sometimes when guaranteed interest rates change, the surrender charge schedule resets. Read the fine print on these contracts.
5. **Market Value Adjustment (“MVA”)** –The annuitant may also be charged an MVA in addition to the surrender charges for early withdrawals. The MVA is the interest rate differential between the original contract’s interest rate and the going rate at the time of the early withdrawal. If interest rates have gone up from your deposit date, you will have lost money. If interest rates have declined, you will have made money on this clause, and it will reduce some of the back-load surrender charges.
6. **Bonus** – Some insurance companies offer attractive upfront bonuses that are added to your contract’s value. Bonuses normally range from 1% to 5%. For example, if one’s deposit is for \$100,000, given a 2% bonus structure, the contract’s value would be

\$102,000. If bonuses are given, you need to watch out for higher surrender charges, longer surrender periods, increased mortality expenses, etc. Just be careful; the added expenses can be more than the extra bonus.

7. **Mortality and Other Expenses** (“M&E”) – The fees the insurance company charges to provide the annuitant with a steady cash flow stream. These costs cover the expenses of providing a lifetime income stream, death benefits, long-term care insurance, commissions paid to the broker, etc. The mortality charge is a certain percentage of your account, usually 1% plus. There are also maintenance fees, rider charges, indirect fees paid by the mutual funds, and so forth.

**What are sub-accounts?** Sub-accounts are investment choices that are offered by variable annuities. The return earned on a variable annuity depends on the performance of the underlying investments. The sub-accounts are similar to mutual funds.

**What are 1035 exchanges?** This is the section of the tax code that permits switching from one annuity to another, without paying tax. Your funds, however, need to stay within annuities. You are not allowed to switch from an annuity to an insurance policy. Be careful when switching, to prevent a taxable event.

Annuities are not a typical investment choice for young adults. However, every situation is different; remember that annuities are very long-term contracts. It’s important for the insurance carrier to be around to pay the benefits. Moody’s, Standard and Poor’s and A.M. Best are rating agencies that can provide information and ratings of the insurance carriers. Some of these annuities have interesting features and riders that can offer very good value. Keep in mind that most annuity contracts can be cancelled within a few

days of making your deposit, with a full refund! Check with the company on its refund policy before buying.

As the baby boomers retire, possibly without pensions and with small social security checks, they will need a steady cash flow stream from their savings. Annuities are the answer to their concerns and should become the next big investment trend.

## **PART THREE: APPENDIX**

### **Appendix A – Major Stock Indexes**

#### **The Major Indexes**

- **Dow Jones Industrial Average**
- **Dow Jones Transportation Average**
- **Dow Jones Utility Average**
- **NYSE Composite Index**
- **NASDAQ Composite Index**
- **NASDAQ-100 Index**
- **S&P 500 Index**
- **Value Line Composite Index**
- **Russell 2000 & 3000 Indexes**
- **Wilshire 5000 Total Market Index**
- **Wilshire 4500 Completion Index**

Investors have embraced stock indexes. There are now stock indexes for every conceivable investment style, trend and market segment. A market index is a method of tracking the price performance of a group of securities. There are a myriad of investments that allow you to participate in the price action of particular indexes. If your investment is tied to an index, then understanding the underlying calculations is important.

## Calculation Methods

**Calculation methods used to determine the value of an index can have a large effect on your investment results.**

- **Price Weighted** – The aggregate individual prices of the stocks in the index are added together, and divided by the number of companies. A divisor is used to adjust for stock splits, stock dividends, etc. The focus is the stock price, not the size of the company. The higher stock prices in the index have a greater impact than the lower priced stocks. The DJIA is priced weighted.
- **Market Capitalization Weighted** – Market capitalization weighing occurs when the weight of each security in the index is in proportion to the stock’s capitalization. More emphasis is given to the large, high priced or overvalued companies, than to the smaller or undervalued stocks. Most indexes are market capitalization weighted.
- **Unweighted** – The unweighted method tracks the performance of the underlying stocks, where equal dollar amounts are invested in each security. The Value Line Composite Index is the best example of an unweighted index.

## Description of the Major Indexes

**Dow Jones Industrial Average (DJIA)** –Developed by Charles Dow in 1896, it is a group of 30 well established industrial blue chip companies, which cover most of the economic activities in the United States. It excludes Transportation and Utility stocks,

## *Appendix A – Major Stock Indexes*

as they are followed under separate indices. The DJIA is the oldest of the indexes, and was kept simple; Charles Dow just took the total of 12 companies' stock prices and divided by the number of companies. Of the original 12 companies, only GE remains in the index. In 1928 the index was increased to 30 companies. The Dow became immortalized on October 28, 1929 and October 29, 1929 as it dropped 24.5% in two days. (It did, however, recover 12.3% the following day). The plummeting of the Dow is historically viewed as the watershed event that ushered in the Great Depression.

**NYSE Composite Index** – The NYSE Composite Index tracks the price performance of all the companies listed on the New York Stock Exchange, and is weighted by market capitalization.

**NASDAQ Composite Index** - This index tracks the price measurement of all the stocks listed on the NASDAQ stock exchange. The index is market-capitalization weighted.

**NASDAQ-100 Index** – The NASDAQ-100 Index tracks the price performance of the 100 largest non-financial stocks listed on NASDAQ, and the index is based on a modified market capitalization calculation. Among many eligibility requirements, it includes only stocks that have an average minimum daily trading volume of 200,000 shares. Rebalancing is reviewed quarterly.

**S&P Index** – The S&P 500 index is weighted by market capitalization and tracks the performance of 500 of the most widely held and most respected U.S. based companies. Rebalancing is reviewed monthly.

**Value Line Composite Index** – This index measures the performance of the 1700 companies covered in the Value Line Investment Survey. The index is based on an unweighted index and assumes equally weighted positions in all 1700 stocks.

**Russell Indexes** – The Russell 2000 Index measures the performance of the smallest 2000 companies in the Russell 3000 index. The very small micro-capitalization stocks are not included in the index. The Russell 3000 includes approximately 98% of the U.S. market. These indexes are market capitalization weighted.

**Wilshire Indexes** – The Wilshire 5000 Total Market Index tracks the performance of the 5,000 plus U.S. headquartered companies that have readily available price data. The Wilshire 4500 Completion Index includes all the securities in the Wilshire 5000, except for those companies that make up the S&P 500. These indexes are market capitalization weighted. They also have float-adjusted versions, believed to be more useful benchmarks, which include only those shares that are available to investors.

## **Appendix B – Exchanges**

### **The Major Exchanges**

- **The New York Stock Exchange**
- **The American Stock Exchange**
- **NASDAQ**
- **Electronic Communication Networks**
- **The Chicago Board of Options Exchange**
- **The New York Mercantile Exchange**
- **Chicago Mercantile Exchange**

### **Introduction**

The exchanges are the places where buyers and sellers of securities (stocks, bonds, options and futures) come together to make trades. The main focus of this section will be the stock exchanges. They are the mechanisms used by investors to exchange investment securities. Companies use the exchanges when they raise money by selling shares, or when they repurchase shares. The stock exchanges are also popular vehicles used by company owners to raise cash by selling shares (to cash out). Stock exchanges connect buyers with sellers, and ensure that transactions are safe and secure. Prices, in most cases, are determined by the buyers and sellers, not the exchanges. The operations of most industrial organizations are not affected by the secondary trading of shares. The trading of shares by company owners usually has no physical impact on an organization, unless control is affected.

Technology improvements have been changing the way the exchanges operate. In the United States, the NYSE is the dominant exchange, even though it uses a “people intensive” auction system. It merged with Archipelago’s automated trading platform, to better compete against NASDAQ and other electronic communication networks (ECNs). Computers can now handle the matching of orders faster and cheaper than the existing manual auction system. Investors also prefer the control over their trades that automation provides. The NYSE, therefore, is under competitive pressure to automate, to maintain, and grow its worldwide listing and trading leadership position. The NYSE operates with a major physical presence on Wall Street, while NASDAQ and the other ECNs conduct trades through a network of computers around the country.

Automation of the NYSE may have the following effects:

**Automating the NYSE will speed up trading time and reduce costs; this could, in turn, increase price volatility.**

**The physical NYSE building** will probably, in the future, evolve into a museum and tourist attraction. As computers take over more and more functions, the trading floor may become obsolete. The open outcry system, where floor brokers shout out prices, will be missed.

**The Floor Traders** traditionally execute trades on behalf of their clients by matching buyers with sellers. Their positions will most likely be eliminated as automation progresses. Computers will reduce the need for people to match buyers with sellers, as is done on NASDAQ.

**The Specialists** work to maintain a fair and orderly market; they do so by providing liquidity and managing prices. They set opening prices and provide bid and ask quotes to brokers throughout the day. If needed, they use their own capital to balance out order flow distortions, in order to maintain an orderly market. They also trade on their own account. The specialists of the “old” NYSE will evolve into market makers of the “new” NYSE.

**Market Makers** are broker-dealers who work with NASDAQ and specialize in specific stocks. There are multiple market makers for every stock, who are obligated to stand ready to buy or sell at least 100 shares, on a regular and continuous basis, at a publicly quoted price. They are also required to provide two-sided quotes; bid and ask prices that they will honor. Market makers hold an inventory of a particular stock, and provide it to the market as needed. To help offset the market risk of buying high and selling low, they make a spread, which is the difference between the bid and the ask price. Take that spread of a few pennies, and multiply it by the shares traded, and you can conclude that these players make significant money.

**The Day Traders** are the ones who will see and feel the differences in exchanges similar to those that young adults will see. They look to profit from pennies. The stocks that trade on the NYSE are watched over by specialists, who manage prices. They set the opening prices, and try to keep price swings to a minimum. This makes it hard for day traders to make a quick gain. However, because NASDAQ is automated, it has no specialists keeping prices in line. It uses market makers to provide order by their bid and ask quotes. NASDAQ stocks have larger daily price swings, creating more opportunities for traders and investors alike. The greater price volatility of NASDAQ securities versus NYSE securities is believed to be due to the smaller and less mature companies found on NASDAQ. Nonetheless, by automating the NYSE, it will speed up trading time and reduce cost, but it may increase price volatility, which can be profitable to traders.

Order flow and emotions can more easily move prices. News becomes important, because small price movements equate to money for day traders.

There are exchanges all over the world. In the United States there are the major exchanges and several smaller regional exchanges.

### **The Major Stock Exchanges Are:**

**The New York Stock Exchange (NYSE).** Founded in 1792, it is commonly known as “The Big Board.” It is the largest exchange in the world for the listing and trading of securities. The NYSE lists approximately 2,800 companies, with a total market capitalization of over \$20 trillion. On an average day, 1.6 billion shares, valued at \$56 billion, are traded. Trading starts at 9:30 a.m. and closes at 4 p.m. There are, however, overtime opportunities with extended hours. This is the place where executives and heads of state want to have a photo opportunity, ringing the opening bell of the exchange. Companies listed on the exchange have to meet certain size (listing) requirements to substantiate that they are successful organizations, with the financial resources deserving secondary markets where their shares can trade. The NYSE still uses floor traders to make trades. Its merger with Archipelago is expected to automate their processes more fully, and transform them into a publicly traded for-profit company.

**The American Stock Exchange (AMEX).** Founded in 1849, today it lists over 600 mostly smaller and younger midsize growth companies. Trading hours are from 9:30 a.m. to 4 p.m. Many exchange-traded funds, derivatives, and bonds are traded on the AMEX. Listing requirements are favorable to smaller companies that don’t qualify for the NYSE. The majority of AMEX’s trading volume and growth is derived from exchange-traded funds. It merged with NASDAQ in 1998.

## *Appendix B - Exchanges*

**NASDAQ.** Founded in 1971, it is the largest of the automated computerized trading platforms, and lists over 3,200 companies.

**Electronic Communication Networks (ECNs).** These are companies with customer friendly, computerized systems that automatically match customer orders. They are generating significant volume, and threatening the existing exchanges. Archipelago and Instinet were ECNs. ECNs have been growing quickly because their fee structures are less than the bid/ask spreads that are charged by the market makers. There is always a market for low cost alternatives. ECNs are filling that niche.

**The Chicago Board Options Exchange (CBOE).** Founded in 1973 by the Chicago Board of Trade, with the intent to standardize and trade public option contracts. Today, CBOE is the largest option exchange in the world.

**The New York Mercantile Exchange (NYMEX).** Founded in 1872 as the Butter and Cheese Exchange of New York; added fruit and poultry contracts 10 years later and changed its name to NYMEX. It is now the world's largest physical commodity future exchange and trading forum for energy and precious metals.

**Chicago Mercantile Exchange (CME).** Founded in 1898 as the Chicago Butter and Egg Board; changed its name to CME in 1919. Today, CME is the second largest exchange for futures and options on futures in the world.

There are also a few regional stock exchanges in the United States, as well as major exchanges in many foreign cities.

### **Regulators**

The SEC – Securities and Exchange Commission - regulates the exchanges in the United States.

## **Appendix C – Retirement Savings**

**Retirement – actually more like semi-retirement – will be here in the blink of an eye. Be prepared!**

### **Introduction**

Many investors believe that saving for retirement officially starts when you open a retirement account. In reality, however, retirement savings start when you begin to accumulate equity. Until you have equity, you have nothing. Equity is the quotable market value of one's assets, less any associated debt. Assets are anything that can be monetized into cash. Investing in real estate, for example, is saving for retirement. Many individuals have multiple properties generating a positive cash flow. Equity accumulates as the mortgages are paid down and property values increase. Some individuals live in oversize homes, with the intent of building equity, while enjoying their savings. When retired, they down size to a less expensive home and live off the difference as a retirement fund. There is no right or wrong way to build equity. Small business owners, for instance, often buy the building instead of renting space. The building then becomes their retirement nest egg when it is paid off. Savings in the form of precious stones and metals is also acceptable, if you know how to convert these assets into cash. Collectables and personable property, however, are not retirement savings. Enjoy them for what they are. Typically, these are not reliable sources of equity, and would only be counted as savings when they are converted into cash; not one second before. Any equity that can be converted to cash is savings, to be used as one sees fit, including retirement. All your equity, however,

## *Appendix C – Retirement Savings*

should not be tied up in your house. You need both a place to live and a cash flow to supplement social security in retirement. Pensions and retirement accounts are the “main stream” methods of providing a cash flow, when you are no longer able to work.

Company sponsored pension plans, while greatly diminished over the past few decades, still exist in some business enterprises. As firms downsize pension plans, they usually switch over to company matching 401(k) plans, giving employees greater control over their retirement assets. Employees should only consider pensions or 401(k) plans as equity, when the balances are vested. Additionally, uncertainties exist until one’s pension is both vested and funded. It’s not unheard of to get laid off immediately before being vested or a company going out of business and unable to pay its future pension commitments.

To protect its elderly citizens and to promote saving and investing, the government established tax incentives for certain savings and investment accounts. These, primarily retirement accounts, are intended to help maintain adequate living conditions for individuals in their twilight years. Retirement accounts are protected under the law and contain rules, restrictions, and other safeguards to help ensure that financial assets are available upon retirement.

While retirement plans are normally invested in financial assets, there are no guarantees that these assets will maintain their worth in the future. Depressions, recessions and business failures happen; the value of financial assets can change quickly, and in some cases, can evaporate overnight.

For the purpose of this section, we are discussing tax deferred retirement and savings accounts. IRAs are personal retirement accounts, while 401(k)s are business retirement accounts. Contributions drive the tax benefits, while withdrawals mainly trigger any tax liability. The plans vary, but the typical way

that tax incentives are used to help citizens save are discussed as follows:

**Tax incentives used to promote savings:**

- **Pretax – IRAs, 401(k), 403(b) and 457 plans**
- **After-tax – Roth accounts, 529 plans and Coverdell ESA's**

1. **Contributions are invested using pretax wages.** These are the traditional IRA and 401(k) accounts. There are two types of incentives:
  - a. **Upfront tax benefit** – Contributions are based on pretax dollars. If your salary, for example, is \$50,000 and you contribute \$4,000 to an IRA, your adjusted gross income would be \$46,000; thus, your contribution is based on pretax dollars.
  - b. **Accumulative tax benefit** – Investment earnings, profits, and gains are tax deferred; the earnings are not included in your adjusted gross income.

Withdrawals are governed by statute and taxed as ordinary income when you retire. Early withdrawals, subject to certain exceptions, are penalized. While these plans benefit everyone, they are particularly valuable to individuals in their peak earning years, who anticipate being in a lower tax bracket when retired.

2. **Contributions are made with after-tax wages.** These are the Roth accounts. They also have two types of incentives:
  - a. **Accumulative tax benefit** - Earnings on the account are not taxed, allowing the account to grow and accumulate tax free.
  - b. **Back-end tax benefit** - Withdrawals are not taxed.

Roth accounts are particularly attractive to young adults and individuals who have the income to pay the taxes today. The accounts are allowed to grow tax free. Subject to certain stipulations, withdrawals are tax free, protecting one's retirement nest egg against future taxes.

3. **Contributions are made with after-tax dollars for qualifying education expenses.** These are the 529 plans and Coverdell Education Savings Accounts. Taxes on the earnings generated from these accounts are also deferred or eliminated upon the occurrence of a specific event (i.e. used for education).

With retirement and savings accounts, you need to keep abreast of the current IRS regulations. The tax laws and rates are constantly changing, especially with earning limits and contribution amounts. Visit [www.irs.gov](http://www.irs.gov) for specific and up-to-date regulations.

The first and most important step in securing your retirement future is to maximize any company matching savings plans that may be available to you, as well as to fully utilize available tax benefits and deductions for 401(k) and IRA contributions. Never leave any money on the table; it's normally better to defer taxes then to prepay them. The Roth accounts may be the exception. There is a lot to be said for having your retirement assets free and clear of taxes.

By maximizing your 401(k) or IRA contributions from the very beginning of your working career, your spending habits will develop around your net pay. Many young adults, who start saving for retirement with their first paycheck, may not feel their contributions, and their retirement savings may go into an automatic mode.

**Automatic savings, however, create other problems:**

**If you take a step back and look at the big economic picture, there are concerns.** Over the past few decades, large parts of the working population were baby boomers, who had their retirement savings on automatic. Most of the money went into equities, causing equity values to be somewhat inflated. As the population ages and money starts flowing out of the market to fund retirement, children's college bills or their daughters' weddings, stock values may decrease. PE ratios may shrink. Your investment approach will differ, depending on where you are in your life cycle. Young adults need to monitor this issue closely, to avoid having their retirement savings used to cash out the baby boomers, to their detriment.

Wider investment choices and inexpensive trading tools are needed to prevent mishaps from occurring, when assets are passed from one generation to another.

**Early withdrawals on pretax IRAs are another issue for investors.** If you need your money early, the government can take approximately half in taxes. Yes, that's correct; one half! With these accounts the government has an informal, but real, lien on your assets. Another way of looking at it is that the government has its hands in your retirement wallet. Early withdrawals carry excessive penalties, and the higher income can move you into higher federal and state tax brackets. Advance planning is required because early withdrawals are expensive.

**How much can you contribute into these plans?**

Below are the contribution limits on IRA & 401(k) plans:  
(Contributions are subject to earnings limits)

**Traditional & Roth IRA Contribution Limits**

<b>Tax Year</b>	<b>Amount</b>	<b>Catch-Up Contributions</b>
2006	\$4,000	\$5,000
2007	\$4,000	\$5,000
2008	\$5,000	\$6,000
2009	Indexed to Inflation	
2010	Indexed to Inflation	

**Traditional and Roth 401(k), 403(b) and 457 Plan Contribution Limits**

<b>Tax Year</b>	<b>Amount</b>	<b>Catch Up Contributions</b>
2006	\$15,000	\$20,000
2007 to 2010	Indexed to inflation	

Catch-up contributions are extra contributions allowed for participants age 50 and older. It’s a common pension plan practice that’s been around for decades, to allow older workers the opportunity to “beef-up” their pensions before retiring.

Summarized below are the main types of retirement accounts:

**Social Security, don’t forget, is also a retirement account that provides a nice cash flow and some health benefits.**

**IRAs** are tax-deductible personal retirement savings accounts available for anyone not covered by another retirement plan. Contributions are tax-deductible, but are subject to adjusted gross income earnings limits. 2006 contributions are limited to \$4,000. Individuals age 50 and over are capped at \$5,000. The assets and earnings in the account grow tax-free until withdrawals are made. Distributions at retirement are taxed as ordinary income. Normal distributions can begin at 59 ½ and are mandatory at 70 ½. Early withdrawals made before 59 ½, allowing for certain exceptions, are subject to a 10% penalty, plus inclusion as ordinary income. The rules require that in the year when you reaches age 70 ½, you must take a Minimum Required Distribution (MRD). This applies to all tax-deferred accounts, except for Roth accounts. The IRS has life expectancy factors, which need to be applied against the balances, to calculate the MRD. Shortfalls on MRD are subject to a 50% penalty.

**Roth IRAs** are retirement accounts where contributions are non-deductible and are made with after-tax dollars. The earnings / profits on the assets, however, are allowed to grow tax-free. Contribution limits are the same as traditional IRAs; they are also subject to adjusted gross income limits. The big benefit is that normal distributions made after age 59 ½ are tax-free! To qualify, however, there is a five year holding period. As with traditional IRAs, there are early withdrawal penalties on distributions made prior to 59½. Contributions, however, can be made past age 70½ and there is no mandatory distribution age.

**401(k) and 403(b) Plans** are pretax employer sponsored savings programs. 401(k)s are for-profit, business sponsored plans, while 403(b)s are for tax-exempt not-for-profit organizations, typically schools and hospitals. 401(k) plans often match a portion of the employees' contributions, while 403(b) plans do not offer a matching contribution. There are no limits on earnings.

## *Appendix C – Retirement Savings*

Contributions on both plans, for 2006, are capped at \$15,000; and \$20,000 for participants age 50 and over. Remember, if you worked for and left a small company, immediately take your 401k funds with you by rolling them over into an IRA. Never leave your 401k plan savings at small companies.

**457 Plans** are pretax deferred compensation plans for state and local government employees. Contributions are pretax, and withdrawals are treated as ordinary income. The nice part of these plans is that there is no 10% penalty for early withdrawals. Contribution limits are the same as 401(k) and 403(b) plans. The negative is that there is no employer matching. If you are within 3 years of retirement, you may be able to contribute up to twice the contribution limit. You need to contact your HR department for exact figures.

**Roth 401(k) or Roth 403(b) Plans** are after-tax company sponsored savings programs. There are no income limits on Roth accounts. Contributions, however, are capped at \$15,000 in 2006 plus an additional \$5,000 for participants age 50 and over. The accounts grow tax-free. Qualified distributions are subject to a 5 year waiting period, made on, or after the employee attains age 59 ½. Non-qualifying distributions are taxed on the earnings (profit) portion of the distribution.

The employer's matching contributions are still made with pretax dollars, and will accumulate in a separate account that will be taxed as ordinary income when the funds are disbursed.

### **Small businesses and the self-employed options:**

**SEP IRAs** are Simplified Employee Plans, where employers set up separate IRAs for each employee. Contributions, however, are much larger than your traditional IRAs; SEP IRA owners can contribute up to 25% of compensation, capping at \$44,000 in 2006. Contributions are vested when funded.

**SIMPLE IRAs** are Savings Incentive Match Plans for Employees. A traditional IRA is set up by a small employer on behalf of his employees. In 2006, employees can contribute up to \$10,000 into a Simple IRA. Catch up contributions are capped at \$12,500. The employer will also make a matching contribution based on a percentage of the employee's wages. Employers usually match, dollar for dollar, up to 3% of the employee's compensation. There are also other matching options available to employers.

**Solo(k) plans** are pretax retirement accounts for small business owners, their partners and families. These plans offer significantly faster and higher contribution limits. In 2006 employees can contribute up to \$15,000 in wages. Employees age 50 and over can add another \$5,000 in catch up contributions. The employer can also contribute up to 25% of the employee's pay as profit sharing; 20% for the self-employed. Contributions are capped at \$44,000 in 2006. Distributions rules are similar to traditional 401(k) plans.

**Keogh plans** are tax deferred retirement accounts. Contributions in 2006 are subject to a \$44,000 ceiling. There are two types of plans:

- **Money Purchase Pension Plans** are defined contribution plans where the employer's contribution percentage is fixed when the Adoption Agreement is established. **Contributions are mandatory** regardless of the company's profit level.
- **Profit Sharing Plans** are savings accounts where a percentage of the employee's pre-tax pay is contributed, by the employer, to a tax deferred retirement account. Contributions are voluntary for the company and are based on profits.

There are also Keogh defined benefit plans with much higher contribution levels. They are, however, more complex.

## **Asset Allocation**

The big unknown with retirement planning is how long you'll live during retirement. The longer you live, the more money you will need. Normally, as individuals age, their investments become more conservative, and cash flow becomes increasingly more important. Going forward, retirement asset allocation models should contain a bigger growth component, to ensure that retirement assets last one's entire life.

## **Educational tax deferred savings plans**

**Coverdell Education Savings Accounts (Educational IRAs)** are trust/custodial accounts set up specifically to pay for educational expenses for a designated beneficiary under the age of 18, or for a special needs person. There are strict limits on income; 2006 contributions are capped at \$2,000 per beneficiary. These accounts are allowed to grow tax-free. Withdrawals are also tax-free when used to pay qualifying education expenses, such as tuition, fees, books and supplies, as well as room and board. Unused amounts are treated as non-qualifying distributions and taxable to the beneficiary. The taxable amount represents that portion of the account that accumulated from the tax-free earnings; it's treated as ordinary income and subject to a 10% penalty. There are, however, tax-free rollover provisions for the beneficiary's family members under 30 years old. Unused account balances must be distributed within 30 days after the beneficiary's 30<sup>th</sup> birthday or death.

If the beneficiary (student) is eligible for financial aid, then balances in this or other custodial accounts will most likely reduce his/her chances of getting financial aid. If a parent owns the account, up to 5.6% of its value will be used in the federal financial aid formula.

**529 Plans** are state-operated prepaid tuition programs and college saving accounts. This is the rich men's piggy bank, used to fund their children's education. There are many benefits; here are just a few. 1) Parents maintain control of the assets. 2) Contribution limits are usually \$250,000 and up. 3) There are no income or net worth limits. 4) Plan contributions are not considered part of your estate for federal tax purposes. 5) Future tuition costs at some schools are paid at today's prices. 6) Contributions are made with after-tax dollars. 7) Earnings are exempt from federal (and certain state) taxes, as are withdrawals that are used to pay qualified education expenses. 8) Under the federal financial aid formula, 529 savings accounts are treated as assets of the parents; as such, only 5.6% (or less) of its value would be available for college costs. Private universities, however, may have different rules.

Student assets, assessed in the financial aid formula in 2006 at 35%, will be reduced to 20% in the 2007-2008 school year.

Tax deferred retirement and savings accounts are a benefit that every citizen should take advantage of.

## About The Author

Joe Spinella, CPA, MBA, is the founder of the Chestnut and Cedar Stock Report ([www.chestnutandcedar.com](http://www.chestnutandcedar.com)). He has authored the book *“The Chestnut and Cedar Stock Report – A Guide for Investors,”* as well as having published *“Assets Securitizations: The Future is Now”* with WG&L’s Banking Outlook. His hobby is investing. He is married, has twins, and lives in Mahwah, New Jersey. He gets his greatest enjoyment watching his children’s progress in karate. His professional experience includes:

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# Joseph Spinella

## The Chestnut and Cedar Stock Report

### ***INVESTMENT HANDBOOK FOR YOUNG ADULTS***

#### Excerpts

- **The Time Value of Money** gives young adults a competitive advantage in building wealth.
- There are three primary decisions to make when investing in stocks: Which security, what price, when to sell.
- Bonds offer investors a way of preserving their capital, while getting a steady and predictable cash flow.
- Derivatives are financial instruments that derive their value from other, completely different instruments.
- When all else fails, FDIC Insurance can act as a “nuclear bomb shelter” for your money.

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