

Money & Finance: What You Need To Know



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Simple Everyday Concepts About Money & Finance You Need To Know In This Rough Economy

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Introduction:

The purpose of this book is to serve as a basic guide for your everyday encounters with the topics of Money & Finance. This book will explain these concepts in simple straight-forward terms.

Money and Finance are a part of our everyday lives; in some way, shape, or form we are involved with money each and every day of our lives. Whether we are spending it, earning it, handling it on the job, making decisions about it, just thinking about it we all deal with it in some way or the other every single day. Some of us do way more than others of course 😊

To help wrap our minds around the HUGE and COMPREHENSIVE topic of Money we can start by knowing **Point #1** – that, generally, there is only a limited monetary base that spawns the supply of money that is in circulation at any given time. So, for the purposes of this article, in layman terms that means there are only so many \$10 bills that went to print by the FEDS, only so many \$20 bills, so many \$100 bills, and so on and so forth; for the most part, the printing of new money every day is to replace some of those that had already been in circulation but has become old, damaged, etc. ^[1] As of the 4th of November 2009 the Federal Reserve reported that the U.S. dollar [monetary base](#) is approximately \$1,999,897,000,000. ^[2]

As of the 4th of November 2009 the Federal Reserve reported that the U.S. dollar monetary base is approximately \$1,999,897,000,000.

Point #2 – Primarily, our economy is based on an investment and credit system; this sounds like a simple statement but it is actually very complex. The terms “investment” and “credit” cover a super wide range of meanings and concepts but for our purposes we are going to try and stick to the very simple basics.

Simply put we are going to think of “investments” as assets that we gather along the way through life and hopefully we can get some type of return or value from it that satisfy the cost we paid for that “investment”; we want to make our investment worth every bit of it at the very least and hopefully even more. We are going to think of “credit” as buying something without paying for it until a later date in time; you owe for whatever you got until you pay for it.

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Now let's couple Point #1 (a limited monetary base for the supply of money in circulation) with Point #2 (the system aka the economy in which this money is circulated is based on investments and credits). Depending on how much you know, the decisions you make, and a little luck you can get a hold of and keep a good size portion of the "money pot".

So, when you hear the rich getting richer and the poor getting poorer it just means that somehow the rich, and/or their affiliates, with a little luck and sometimes pre-advantage, keeps figuring out how to create more monetary wealth, among other forms of wealth. We, the everyday middle class and poor, cannot just go and ask the government to print us some more money because the rich took it all. No, we have to figure out how to get that money to migrate back over to our side and have the money supply more evenly distributed.

"...the rich, with a little luck and sometimes pre-advantage, keeps figuring out how to create more monetary wealth, among other forms of wealth."

A few basics to help with at least keeping some of the money supply on our side of the fence and maybe even pulling some back from over the rich's side of the fence include the topics of: (1) applying for credit and handling credit offers in everyday life; (2) the importance of your credit score for everyday life; (3) basics of time value of money concepts for everyday life; (4) understanding certain key and everyday concepts in Finance; (5) understanding the basics of saving for retirement and your kids education; (6) the basics and importance of drawing up a mock budget for your everyday life; and (7) Understanding how to quickly calculate basic key financial figures for everyday life purchases such as home purchase or refinance and other major obligations.

Applying for credit and handling credit offers in everyday life

Whether you are applying for credit cards, loans, and/or large credit purchases in general how do you know if you are getting a good deal? Or, it may be that sometimes you get a credit card offer or a loan offer in the mail; how do you know when to take advantage of that offer or when to dump it in the trash? The complicated answer is it depends; the basic/fundamental answer is explained below.

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Well, there are certain key factors you want to look for when applying for and/or accepting credit offers; those key factors are (1) Interest Rate (2) Terms (3) Loan Amount (4) Payments and (5) Cost of Credit.

Interest rate – on a credit card you want the lowest possible interest rate; you also would prefer for the interest rate to be fixed for infinity. However, sometimes you might get an offer that is running a 0% promotional interest rate for the first 6 – 12 months of activating the card; thereafter, the interest rate jumps to a variable interest rate of 19% - 25%. How do you handle this offer? I call this offer 20% sweet and 80% sour. You want to take all the advantage you can take within that first 6 – 12 months. Buy up all you want to buy as long as you pay your minimum payments without missing a beat 100% of the times; also payoff the grand total you owe by the end of the 6 – 12 promo months.

You want to take all the advantage you can take within that first 6 - 12 months promo period. Buy up all you want to buy as long as you pay your minimum payments....

Also, you may want to transfer a balance from a higher interest rate credit card to that 0% credit card while within that 6 – 12 months period. The same applies here in that you want to make sure you pay all minimum payments or more on time every month and absolutely pay off the full amount by the end of the promo period.

Some credit card offers come with a 0% promo interest rate on purchases and a 2.99% or 3.99% fixed interest rate on balance transfers for the life of the transferred balance with no prepayment penalties. I love these offers; for the simple fact that usually I have more than one credit card with a balance owed or balance owed on something else I am financing and the interest rates are usually higher on those debts. So, in this case I would transfer whatever I can from that higher interest rate to that 2.99% or 3.99% fixed interest rate.

Here's a clever example: once upon a time I had purchased a brand new car from the dealership and the interest rate was at 7.99% for 6 years. My monthly payments were somewhere around a little over \$300.00 per month. Well, after a year and half or so of making payments on my car I got a credit card offer from American Express for a credit limit of \$18,000; the offer was for a promo of 0% interest on purchases for 12 months and a 3.99% fixed interest rate on balance transfers for the life of the transferred balance; no prepayment penalties. To me it was a no brainer; I even thought that AMEX had messed up and the offer was a mistake but it was not a mistake. I took full advantage and

transferred my full balance due on the car to the AMEX credit card. Not only did I get a lower interest rate with lower minimum payments but I got my title in the mail and a small refund due to rounding off errors they made while calculating my pay-off balance.

Terms – the terms are the months over which you have to pay back your debt owed. Ok, so you got the best possible interest rate you can get and hopefully it's fixed or reasonable if it is variable. You want to make sure that the terms given to you are affordable and feasible. For instance, let's say you got a loan for \$20,000 and your interest rate is at 5% fixed; your loan provider or bank wants you to pay that loan back in 5 years and there is no prepayment penalty. The only problem is your monthly payments in this case is approximately \$377 per month; you can probably pay it but it would be a crunch for you the whole time through it and you may even run the risk of defaulting on a payment here and there. Well, try to negotiate a 6 year term instead which would make your monthly payments equal \$322; paying \$55 less per month. And, generally speaking it is in your favor to have more of your money upfront to hold on to than to have that money later. In other words, if you were given the option to be paid \$100 today versus getting that \$100 a year from today, all other things being equal it would be better to be paid that \$100 today.

Make sure the lender makes it absolutely very clear and certain of the amount you are financing. Time and time again lenders jilt borrowers out of huge sums of extra money tacked on to the borrowers' debt.

Loan Amount – Make sure the lender makes it absolutely very clear and certain of the amount you are financing. This is probably the MOST CRITICAL basic you must know. Time and time again lenders jilt borrowers out of huge sums of extra money tacked on to the borrowers' debt. You see for each specific amount of loan or debt you are financing and given a certain interest rate (especially if it is a fixed interest rate), and a certain terms of payments (i.e. 60 months, 72 months, etc), there can only be one corresponding monthly payment for that loan. Now, depending on the calculator, or software program that is used there may be small rounding off differences but too much difference in calculations may be cause for serious concern. A \$50 difference in payments per month over 72 months adds up to be \$3,600. Now, imagine if this you typical 30-year home mortgage; \$50 over 360 months adds up to a whopping \$18,000! That's highway robbery. Later in this journal I will explain in quite easy to follow steps how to check that all these factors (interest rates, terms, payments, & loan amount) are what they are

supposed to be; in other words, that they match up accordingly.

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Add up your total monthly payments to be made over the life of your loan terms and subtract the amount you financed and this is your cost of credit.

Also, make sure the loan or credit card limit is worth applying for or accepting. One example to explain this is as follows: let's say you have a credit card balance of \$5000 with an interest of 18.99%; well, another credit card company comes along and is offering you a credit card with a 0% promo interest for 6 months with a balance transfer fee of 3% of the balance; thereafter the interest rate jumps to a variable 15.99% and the credit limit is only for \$2500. If the only reason why you would consider getting another credit card is for you to take advantage of the balance transfer offers then this is not the card to make a move on. So, you are paying \$75 to transfer fees; you now have a balance over here and balance over there; the two minimum monthly payments combined may possibly be more than the one payment you were making before; it may show up on your credit report as too many cards open and too many balances owed; if this in turn affects your credit score now the lender starts playing with your interest rates (variable) and one or both interest rates may go up on you. I mean, it is possible you can end up squeezing a little bit of "savings" from this offer but you run the risk of too many other variables and it really more than likely is not worth it.

Payments – all three of the previously mentioned factors affect your payments. Just make sure your payments are calculated right and they are most feasible and economical while being worthwhile! As mentioned before, your lender might tell you that your monthly payments are going to be X dollars at X interest rate (fixed) for X number of months for the amount of the loan you are financing. However, when you run the numbers to make sure that your payments are correct you find that you are coming up with different monthly payment. It happens way too often and the more we make the everyday common public aware of how to check these numbers then maybe we can stop this exploitation.

Cost of Credit – take a reality check and see how much the credit you received has cost you. Add up your total monthly payments to be made over the life of your loan terms and subtract the amount you financed and this is your cost of credit. Sometimes you may not even want to face the facts when doing this exercise.

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The importance of your credit score for everyday life

Yes, yes, yes the credit score system is not a perfect system; it is just about on the same level of perfection as our tax code system. However, they both do have strong valid components when looked at from different angles and ultimately, they are what we have to work with.

Your credit score might be higher with one credit rating agency and lower with another.

Your credit score is a score from 300 – 850. The three main credit rating agencies for personal (individual) purposes are: (1) Equifax (2) Experian and (3) Transunion. They all keep track of your credit score and lenders, utility companies, phone, internet, and cable companies, and host of other businesses verify your score with these credit rating agencies before extending credit or service to you. This is why sometimes you have to pay a deposit to get your lights turned on and sometimes you don't because it all depends on your credit background check. Your credit score might be higher with one credit rating agency and lower with another. These agencies base their score on different criteria and lenders and other businesses use whatever score or agency is suitable enough for their purposes.

“...chances are slim to none, in the business-admin field, in getting any justifying and rewarding job your education and knowledge deserve if your credit score is below average.”

Generally speaking, your credit score can affect a number of different things in your everyday life; it can affect (1) your job (2) whether or not you are given any credit or service for that matter (3) your credit limit and (4) your interest rate.

Your credit score affecting your job – You may have worked so hard to get through your years and years of college and now ready for a nice job; or you may simply just want to move on up to a bigger and better job with your added experience and knowledge over the years. The fact is that chances are slim to none, in the business-admin field (any position that primarily deals with money, finance, & accounting), in getting any justifying and rewarding job your education and knowledge deserve if your credit score is below average. So, you end up stuck at a certain career-level until your credit background improves. The higher your credit score the better your chances are in securing a well-paid, well-worth job.

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Your credit score determining whether you are extended credit – Sometimes you may find it hard to get approved for credit for that big screen TV you want; or you might not be

able to get approved for a new car purchase; or your water company wants you to pay some ridiculous security deposit before they turn your water on. There is a strong chance that your reason for being denied credit or for having to pay a ridiculous down payment to get the credit or service is because of your credit score. Again the higher your credit score the easier it is for you getting credit extended to you and in most cases without any down payments or security deposits, and so on.

My critique here is that, for the most part, the rich have good credit because they can afford to have good credit; now here you have a struggling family probably struggling for a while fell victim to the credit system even though trying so hard along the way elevate their status. Now they try to get some water turned on at their dwelling and gets hit with a ridiculous deposit fees. In this case, I would say the system helps those who can help themselves and does not help those who cannot help themselves even if they may want to help themselves.

The cost of credit is way more for someone with challenged credit versus someone with very good to excellent credit.

Your credit score affecting your credit limit – based on your credit score coupled with other factors sometimes you are only given a limited amount of credit and not all the credit you desired. For instance, you may need a \$10,000 loan but may only be approved for \$7,000. This may also be due to your debt-to-income ratio but your credit score may also be a huge reason why your credit request was limited. Again, the higher your credit score the better are your chances.

Your credit score affecting your interest rate – this is one of the most crucial effect your credit score can have on your credit needs. Generally speaking, the higher your credit score the lower your interest rate on your loans, services, or whatever credit is extended to you. The lower your credit scores the higher your interest rate. All other things being equal, we already saw the effect the interest rate has on your loan payments; taking this a step further when you add up all your loan payments and subtract the amount you are financing the difference is your cost of credit.

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The cost of credit is way more for someone with challenged credit versus someone with very good to excellent credit. Someone with below average credit may have their total monthly payments summed up to be \$25,000 and their loan amount was only for \$10,000 yielding a cost of credit of \$15,000 (\$25,000 - \$10,000)! That's more than the loan you

borrowed! For that same \$10,000 loan someone with very good to excellent credit may have their monthly payments summed up to be \$12,000 for a cost of credit of \$2,000.

...a dollar today is worth more than being given that same dollar 5 years from today.

Basics of time value of money concepts for everyday life

The concept of time value of money starts out very simple and then it evolves into being very complex. The whole concept hinges on one basic fact that the value of one dollar today is more than the value of that same dollar a year from now or five years from now or to be very technical, a day from now.

The nominal value of money is the value given in name only; the value on the face of the bill (face value).

Take for example, old people are always talking about when they use to go the movie theatres, put gas in their car, and go out to eat with one dollar in their pocket and still come back home with change; you can try doing the same thing today and see how far you will get with one dollar in your pocket. So, this means that the Present Value (PV) of money is always greater than the Future Value (FV) of money. In other words, a dollar today is worth more than being given that same dollar five years from today. In other words, if you wanted to give me that same \$1 five years from today you might need to give me \$5 for it to be the equivalent of that dollar today. Hopefully, generally speaking, we never get to see interest rates rise that steep.

From this main basic concept the time value of money concept expands; so what is the cause for this phenomena? Well, fluctuations in interest rates are the underlying reason for the differences in money value as time goes by. How that interest rate is captured and decided upon is beyond the scope of this book; but do know that given the applicable interest rate you can see the amazing transformation of the value of money as it moves through time. Drawing a timeline is best when calculating money using different time scenarios and interest rates.

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Also, as the **nominal** value (value in name only) grows from one year to the next it is said it gains interest. [3] This gain is calculated either by simple interest or by compound interest; we calculate simple interest based on the original amount only. For e.g. if you are saving \$1000 @ 3% simple interest per year then each year your savings will grow by \$30 (\$1000 x .03). On the other hand, if you are saving \$1000 @

Real value of money refers to the value in terms of comparing purchasing power from one year to the next. [4]

...do not use a normal 10-digit calculator; I have seen business managers working on capital budgeting plans....with a desktop calculator.

3% compounded annually then your gain will be calculated not only on that original \$1000; the 2nd year gain will be calculated on that \$1000 plus the interest that it had gained from the 1st year; then the 3rd year calculated by using the original \$1000 plus the interest from that year and the interest from the 2nd year and interest from the 1st year, and so on and so forth. So after three years your total will be as follows: $(1000 \times 1.03) \times (1.03) \times (1.03) = \1092.73 . After three years simple interest your total is as follows: $(1000 \times .03) = \$30$; so \$30 multiplied by 3 = \$90; for a total of \$1090; some people call it “interest on top of interest.” So as you can see you come out ahead with compound interest especially when dealing with larger sums of money and a higher frequency of compounding per year i.e. semi-annually, quarterly, etc.

As the **real** value (value in terms of comparing purchasing power from one year to the next) of money shrinks from one year to the next it is said it loses interest; [4] the calculations involved is called discounting the value of money. The same principle applies here but in reverse.

Also, there are perpetuities which are constant streams of cash flows without end [5]; and annuities which are level streams of regular payments that last for a fixed number of periods. [6]

So, suppose someone comes to you with this scenario: I am 25 years old and I want to have \$250,000 in my bank account at age 50; I then want to know if this \$250,000 is enough for me to draw \$1000 per month for at least about the next 30 years after hitting age 50. In other words, up to age 80. So, the person continues and wants to know how much is needed to be saved per year, and at what interest rate to make this possible, if at all possible. How do you wrap your mind around this scenario? Or, the person might say he/she wants that \$250,000 to provide monthly payments to him/her for infinity. How much would the monthly payments be if the money was to last to infinity providing interest rates are a factor?

For the above scenario please do not use a normal 10-digit calculator; not even a scientific calculator. I have seen business managers working on capital budgeting plans that conceptually mirror these same scenarios and they attempt to draw up a capital budget with a desktop calculator. Either a financial calculator, Microsoft Excel, or some other

program or template capable of performing financial calculations is recommended.

The key components for time value of money calculations are: (1) Present Value (PV); (2) Interest Rate (i); (3) Payments (PMT); (4) Terms (nper); and (5) Future Value (FV). The idea is to always try to gather as much of these pieces of information as possible; then adjust your calculations as you move along the applicable time line. Given any three pieces of information you can usually figure out the other two. In our example above, we have (1) FV (2) nper (3) I - the interest rate which we will decide on when we find a suitable one that fits his/her long-term life plan; in one case a certain interest rate may not be enough to cover the planned scenario; using another interest rate might cover it and some.

*Risk influences
interest rates
which in turn
influence cost.*

Going through every detail of working out this problem is beyond the scope of this book. However, the solution to the scenario is a two part solution and we start with the same basic concept that a dollar today is worth more than a dollar years from now. In step one, we factor in the interest rate and we calculate how much needs to be saved per month to accumulate the \$250,000. In step two, we figure out at what interest rate the \$250,000 will need to be invested for the person to withdraw either \$1000 per month for 30 years or how much the person will be able to withdraw per month for infinity using that same money invested at that same interest rate.

Understanding certain key and everyday concepts in Finance

Whenever someone or an entity lends money out to another person or entity there is always a risk for the lender; based on that risk the lender determines what to charge the borrower for that loan. So, we can conclude that the total interest rate on a loan is in part tied to the risk for the lender. Risk influences interest rates which in turn influence cost.

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For further illustration imagine you being asked by someone to perform a very risky highly potential life threatening task. Would you charge a very high fee or modest or low fee for doing this task? Of course, a super high fee I would imagine. Now imagine a group of spectators watching and waiting to

see if you can accomplish this “risky task” and they even begin betting on whether or not you will accomplish the task. To sweeten the bet, and because you are getting such an enormous sum of money, a portion of your money will be given to the winners. Now, keep in mind that chances are either unknown or super low that you will get this task accomplished; in other words, super risky. How many people do you think would be willing to bet on you? If they do how much do you think they would be willing to pay for that bet? In comparison to less risky investments you could expect a small number of people willing to spend very little on betting on you.

...the higher the risk the higher the expected return....the lower the risk the lower the expected return.

Referring to the above case: the amount you are charging = the return; the nature of the job = risk; the fact that no one knows who you are nor anything about your history of doing this task also = risk; the amount people are paying for bets = the price. The stocks and bonds market, trading, investing, insurance companies, and the whole financial world work in many ways similar to this idea.

As you are dealing with your financial affairs in life here are a few key financial concepts to keep in mind:

Risk and return – primarily speaking, the higher the risk the higher the expected return and the lower the price will be for that investment i.e. stock, bond, etc; I sat down with an investment banker once and the investment banker was trying to tell me he had this super financial product for me; he went on to say that it was about some very low risk investments that pay super high returns. RED FLAG! RED FLAG! RED FLAG!

Risk and return – primarily speaking, the lower the risk the lower the expected return and the prices tend to be a little more than the lows to about average.

Risk and return – there is a mid-grade expected return for medium risk investments; the prices tend to be about a little higher.

The idea is that the expected return is positively related to risk. [7]

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Investment period – generally speaking, the longer the investment is held the higher the interest rate on that investment should be; take for instance a cash CD; the bank

“The more interest is compounded on a per year basis on your investment the more your investment earns.”

might offer you 3% for a 2-year CD and 5% for a 5-year CD with a minimum deposit; for those 5 years you are running the risk of being deprived of that money if an emergency comes up and if you do touch it you get penalized/charged for it. It's all about risk.

Compounded Interest – the more interest is compounded on a per year basis on your investment the more your investment earns. So, \$1000 savings @ 3% compounded quarterly earns more than \$1000 savings @ 3% compounded semi-annually or annually.

Payments – Lower payments do not always mean a better deal; lower payments over a shorter period is better than lower payments over a longer period.

Interest rates – Likewise lower interest rates do not always mean a better deal; lower interest rates over a shorter period is better than lower interest rates over a longer period. In fact, there are even cases where a higher interest rate over a shorter period is better than a lower interest rate over a longer period.

Cost of capital – the cost of borrowing that loan; add up all your monthly payments and subtract your loan amount.

Lower payments do not always mean a better deal; likewise lower interest rates do not always mean a better deal.

Present Value – when given a loan and given two options at two different interest rates for two different period of time for life of the loan, try to calculate the Present Value (PV) of that loan; comparing the loans on a present value basis gives a much clearer picture than just looking at your payments.

Understanding the basics of saving for education & retirement

It is never too late nor too early to begin to save; of course when it comes to saving for your retirement and saving for your kids' education the earlier the better; if you can get in more than 30 years of solid savings then good for you.

The idea is to get to a certain point in time when you decide you want to kick back or slow down. At that point you want to have enough savings accumulated or some type of retirement funds to live comfortable for the remainder of your life. Whichever route you use for your savings, the more

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time and money you invest coupled with a little knowledge, research, attentiveness, and being proactive about your savings the better chances you will have to accumulate enough wealth to live comfortably.

The more time and money you invest coupled with a little knowledge, research, attentiveness, and being proactive about your savings the better chances you will have to accumulate enough wealth to live comfortably.

Or, it could be that at age 32 you have a child and you want to have some savings for educational purposes when your child hits age 18. So, you are looking at 18 years of savings; it may help to adjust your frame of mind as follows: I am 32 years old and I want to have \$200,000 in my bank account at age 50; I then want to be able to withdraw \$1000 per month to go towards my child's education for the next 4 – 6 years and still be able to live comfortable during that time. How much do I need to save per month at what interest rate to make this possible? If the answer to the problem is unrealistic then make the necessary adjustments. But, at least you begin to get yourself in the right frame of mind.

It is very important to know that it takes a lot of self-discipline to save but you have to for your future and your children's future. Saving starts with self-discipline and we the middle class and poor must do better. We have got to try and try harder to prioritize, self-sacrifice, minimize our mistakes, and self-discipline ourselves to be able to save.

Let's look at a few different scenarios:

Scenario #1: Putting \$5,000 in a savings account @ 5% interest compounded annually

Simply letting \$5,000 sit in this type of savings account for 5 years amounts to \$6,381.41 at the end of that 5 years; a gain of \$1,381.41.

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Scenario #2: Saving \$1,000 per year @ 5% compounded annually

Years	Annual Savings	Rate	Interest Gained	Total Accum.
1	\$ 1,000.00	5%	\$ 50.00	\$ 1,050.00
2	\$ 1,000.00	5%	\$ 102.50	\$ 2,152.50
3	\$ 1,000.00	5%	\$ 157.63	\$ 3,310.13
4	\$ 1,000.00	5%	\$ 215.51	\$ 4,525.63
5	\$ 1,000.00	5%	\$ 276.28	\$ 5,801.91
9	\$ 1,000.00	5%	\$ 551.33	\$ 11,577.89
14	\$ 1,000.00	5%	\$ 979.93	\$ 20,578.56
15	\$ 1,000.00	5%	\$ 1,078.93	\$ 22,657.49
19	\$ 1,000.00	5%	\$ 1,526.95	\$ 32,065.95
20	\$ 1,000.00	5%	\$ 1,653.30	\$ 34,719.25
49	\$ 1,000.00	5%	\$ 9,921.33	\$208,348.00
50	\$ 1,000.00	5%	\$ 10,467.40	\$219,815.40
51	\$ 1,000.00	5%	\$ 11,040.77	\$231,856.17
52	\$ 1,000.00	5%	\$ 11,642.81	\$244,498.97
53	\$ 1,000.00	5%	\$ 12,274.95	\$257,773.92
54	\$ 1,000.00	5%	\$ 12,938.70	\$271,712.62
55	\$ 1,000.00	5%	\$ 13,635.63	\$286,348.25
56	\$ 1,000.00	5%	\$ 14,367.41	\$301,715.66
57	\$ 1,000.00	5%	\$ 15,135.78	\$317,851.44
58	\$ 1,000.00	5%	\$ 15,942.57	\$334,794.02
59	\$ 1,000.00	5%	\$ 16,789.70	\$352,583.72
60	\$ 1,000.00	5%	\$ 17,679.19	\$371,262.90

You can also choose to save \$1,000 per year in a savings account @ 5% per year compounded annually and accumulate a nice sum of money over time. I like this scenario compared to scenario #1 because you can pace yourself and not have to come up with \$5,000 on the spot. An investment such as this is more on the safer side in terms of “risk and return”. Remember that one of the general rules in finance is that the lower the risk the lower the return; therefore, this model only yields 5% interest. It may even be possible to get this type of savings FDIC insured due to the low interest on savings it is yielding. Today, savings at your local banks average about 1% on ordinary savings but there have been better times in our economy where FDIC savings has yielded close to 5% interest.

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Scenario #3: Saving \$500 per year @ 5% compounded annually

Years	Annual Savings	Rate	Interest Gained	Total Accum.
1	\$ 500.00	5%	\$ 25.00	\$ 525.00
2	\$ 500.00	5%	\$ 51.25	\$ 1,076.25
3	\$ 500.00	5%	\$ 78.81	\$ 1,655.06
4	\$ 500.00	5%	\$ 107.75	\$ 2,262.82
5	\$ 500.00	5%	\$ 138.14	\$ 2,900.96
9	\$ 500.00	5%	\$ 275.66	\$ 5,788.95
14	\$ 500.00	5%	\$ 489.97	\$ 10,289.28
15	\$ 500.00	5%	\$ 539.46	\$ 11,328.75
19	\$ 500.00	5%	\$ 763.48	\$ 16,032.98
20	\$ 500.00	5%	\$ 826.65	\$ 17,359.63
49	\$ 500.00	5%	\$ 4,960.67	\$ 104,174.00
50	\$ 500.00	5%	\$ 5,233.70	\$ 109,907.70
51	\$ 500.00	5%	\$ 5,520.38	\$ 115,928.08
52	\$ 500.00	5%	\$ 5,821.40	\$ 122,249.49
53	\$ 500.00	5%	\$ 6,137.47	\$ 128,886.96
54	\$ 500.00	5%	\$ 6,469.35	\$ 135,856.31
55	\$ 500.00	5%	\$ 6,817.82	\$ 143,174.12
56	\$ 500.00	5%	\$ 7,183.71	\$ 150,857.83
57	\$ 500.00	5%	\$ 7,567.89	\$ 158,925.72
58	\$ 500.00	5%	\$ 7,971.29	\$ 167,397.01
59	\$ 500.00	5%	\$ 8,394.85	\$ 176,291.86
60	\$ 500.00	5%	\$ 8,839.59	\$ 185,631.45

Maybe you can realistically only save \$500 per year; well, the risk is still on the low-side; and with less yearly savings your return and total accumulated over time will be less. In 50 years you would accumulate a little under \$110K; but, on a brighter note your money will have actually quadrupled over that time period. This is why a good, solid, constant yearly savings is recommended to have better results over the years.

Maybe every year you may want to structure your taxes throughout the year to get a refund; hopefully, at tax time your refund is large enough for you to put aside \$1,000 in savings at that time; you do this every year and eventually you will become accustomed to this habit. Before you know it, you can be on your way to a much better financial stability.

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The younger you are it is likely the more reluctant you will be to bother around with any type of disciplined savings or

savings period for that matter; then as you get older that is when you realize the idea of savings starts to make a lot of sense. But remember, the earlier you start the better; scenario #4 will plant a mental image in your head, hopefully for life, to better express this concept.

Scenario #4: Saving \$1,000 per year @ 10% compounded annually

Savings from birth make it possible to retire by age 50 as a millionaire!

<u>Years</u>	<u>Annual Savings</u>	<u>Rate</u>	<u>Interest Gained</u>	<u>Total Accum.</u>
1	\$ 1,000.00	10%	\$ 100.00	\$ 1,100.00
2	\$ 1,000.00	10%	\$ 210.00	\$ 2,310.00
3	\$ 1,000.00	10%	\$ 331.00	\$ 3,641.00
4	\$ 1,000.00	10%	\$ 464.10	\$ 5,105.10
5	\$ 1,000.00	10%	\$ 610.51	\$ 6,715.61
9	\$ 1,000.00	10%	\$ 1,357.95	\$ 14,937.42
14	\$ 1,000.00	10%	\$ 2,797.50	\$ 30,772.48
15	\$ 1,000.00	10%	\$ 3,177.25	\$ 34,949.73
19	\$ 1,000.00	10%	\$ 5,115.91	\$ 56,275.00
20	\$ 1,000.00	10%	\$ 5,727.50	\$ 63,002.50
49	\$ 1,000.00	10%	\$ 105,718.96	\$ 1,162,908.53
50	\$ 1,000.00	10%	\$ 116,390.85	\$ 1,280,299.38
51	\$ 1,000.00	10%	\$ 128,129.94	\$ 1,409,429.32
52	\$ 1,000.00	10%	\$ 141,042.93	\$ 1,551,472.25
53	\$ 1,000.00	10%	\$ 155,247.23	\$ 1,707,719.48
54	\$ 1,000.00	10%	\$ 170,871.95	\$ 1,879,591.42
55	\$ 1,000.00	10%	\$ 188,059.14	\$ 2,068,650.57
56	\$ 1,000.00	10%	\$ 206,965.06	\$ 2,276,615.62
57	\$ 1,000.00	10%	\$ 227,761.56	\$ 2,505,377.19
58	\$ 1,000.00	10%	\$ 250,637.72	\$ 2,757,014.90
59	\$ 1,000.00	10%	\$ 275,801.49	\$ 3,033,816.40
60	\$ 1,000.00	10%	\$ 303,481.64	\$ 3,338,298.03

So, once a year you place \$1,000 in a savings account @ 10% per year compounded annually and your savings look even better over time. \$1,000 per year is less than \$100 per month; less than \$25 per week. It is a sacrifice worth making to become a millionaire in 50 years or less providing that you (parent/guardian starts off the process for you) start saving from birth/early childhood; the average retirement age, for statistical purposes, is age 65. So, you can retire 15 years earlier as a millionaire! However, I would recommend age 55 if you are a qualifying candidate to receive a pension at your job. This way you retire as a millionaire and you retire collecting a pension for the rest of your life! Or, you have up

to 15 years from birth to begin saving \$1,000 per year and retire at age 65 as a millionaire; this is very real and possible!

The more bills, lines of credit, savings, and the likes the more crucial and critical it is to draw up a budget.

So, the above scenarios illustrate the basic concept of your savings/investment growing over time. This is the basics; it is in theory. You will not be able to walk down the street to your local bank and open a regular savings account paying 10% on savings; that is the reality. But, there are other investment vehicles such as the bond market where investment in which bonds pay different rates from 0% - 18% and more. The same concept applies that I have explained as far as calculating how money grows; also, remember the rule, the greater the return the higher the risk and vice versa. As a matter of fact, abnormally high returns are likely unsustainable. [8] But, at a younger age you can afford to take more risk; as you get older you may want to lower your risk.

A savings/investment of \$1,000 per year with an interest rate of 15% compounded annually will accumulate to over \$1,000,000 in 35 years and over \$10,000,000 in 52 years!

Basics and importance of drawing up a mock budget for your everyday life

So, in line with saving, investing, paying every day bills, and handling our money in general, drawing up a budget plan is crucial. The more bills, lines of credit, savings, and the likes you have the more crucial and critical it is to draw up a budget. Even if you do not have a lot going on with your money it is best to get into a budgeting frame of mind because remember it is never too early to begin to save for retirement; you will want to retire some day and time waits for no man or woman, for that matter. So, as long as you are making an income then think about a budget plan also.

On a personal level, for budget purposes, our total salary or wage is referred to as gross income, then subtract the taxes and that equals disposable income subtract your monthly expenses and that figure equals discretionary income, and so on. For our purposes, however it is broken down and referred to the bottom line is the same.

In general, just as a business, we want our income minus our expenses to equal a profit; we also want our net cash flows (cash coming in – cash going out) to be a positive balance. Cash inflows minus cash outflows do not equal

profits; it equals net cash flows; a very critical concept to understand is that profits and net cash flows are two very different things. This concept becomes more pertinent as you get into owning your own business, heading up a corporation, and so on.

A very critical concept to understand is that profits and net cash flows are two very different things.

So, let's say you have a home rent or mortgage, car payment, utility bills, credit card bills, and food and gas bills that are a priority every month; food and gas may be more like every week. Your income seems like it should definitely cover these bills with no problem but in reality every month it is more like a tight squeeze. Of course, you are spending on other miscellaneous things as well.

Well, it really helps to draw up a "mock budget" at least every 3 weeks to see where you stand; I say "mock budget" because it does not have to be anything formal. There is no set time period; you may want to draw up a budget for 3 weeks today and maybe for 2 weeks or a month the next. I suggested every three weeks because if you get paid weekly then sometimes you have to save up 2 weeks pay to pay for the rent or mortgage alone; for some people maybe 2 weeks and few days.

Your mock budget is more than likely going to be a moving budget due to constantly updating it with actual incoming and outgoing cash activities over the budgeted time period.

So, as you draft a rough budget on paper group your income by the week or pay period; group your expenses with your income accordingly; in other words, whatever you had spent, dime for dime, in week one gets applied to your week one income you bring home; note when paying the bills make it a huge goal to try and avoid late charges. Draw out what this budget would look like over 3 weeks and see what your net cash flow equals. You may be able to see where you can spend a little more on something you want in week 1 but not in week 3; or you might need to cut down your spending on the "other stuff" in week 2 and 3, but have room to spend a little something extra in week 1 and so on. Therefore, make the necessary adjustments; your mock budget is more than likely going to be a moving budget due to constantly updating it with actual incoming and outgoing cash activities over the budgeted time period.

It is from this mock budget you can see where you either have room for savings or can try to make some adjustments to have room for savings. Remember: savings to be able to retire comfortably; savings for your children's education; savings for the unexpected; for you to become financially stable, etc. All this basic info all tie in together.

Mock budget illustration:

3 weeks Mock Budget - Oct 21 - Nov 4 2011					
	Money going Out	Money Coming In			
Georgia Power	\$ 135.36	\$ 520.00	pd 10/21/11		
Discover	\$ 60.00	\$ 340.00	pd 10/21/11		
Water bill	\$ 95.14				
Penny Talk	\$ 15.00				
AT&T	\$ 14.95				
Child Care	\$ 100.00				
Cellphone	\$ 82.36				
SimplyTech	\$ 77.48				
Albert	\$ 45.00				
misc	\$ 160.00				
more misc	\$ 73.71				
Totals	\$ 859.00	\$ 860.00		\$ 1.00	10/21/2011
Child Care	\$ 100.00	\$ 520.33	pd 10/28/11		
Gas	\$ 52.91				
Comcast	\$ 31.83				
Gas	\$ 30.00				
Misc	\$ 22.00				
Totals	\$ 236.74	\$ 520.33		\$ 283.59	10/28/2011
Child Care	\$ 100.00	\$ 520.00	pd 11/4/11		
Mortgage	\$ 952.00	\$ 300.00	pd 11/4/11		
Totals	\$ 1,052.00	\$ 820.00		<u>\$(232.00)</u>	11/4/2011
Net Cash Flows				\$ 52.59	11/4/2011

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Understanding how to quickly calculate basic key financial figures for everyday life purchases such as home purchase or refinance and other major obligations.

Have you ever noticed how fast a salesperson speaks during his sales pitch? Especially when it comes to talking about numbers, they almost seem to have it memorized and make it sound like it is such a good buy. Well, as fast as a fast-talking and jive-talking as they are you have to get your mind-frame trained to focus on certain key info just as fast; they have their agenda and you should have yours too; that is the bottom-line and all that matters at the end of the day in these situations.

....get your mind-frame trained to focus on certain key info just as fast; they have their agenda and you should have yours too;

So, focus on the following: (1) Interest rate; (2) Amount Financed – the Present Value; (3) terms of payments – how many months or years (periods) to repay; (4) Payments; and for good measure (5) Cost of capital – total payments minus amount financed.

Technically speaking, you only need three components of the above information to figure out the others. So, once you are very clear what those pieces of information are then you want to proof check the calculations to make sure you are not getting robbed again. You are already getting robbed by the price alone on some of these purchases out here today.

The following examples further illustrate how to calculate key figures in a financed purchase or loan:

Example #1:

You are about to buy a house; the mortgage company says that you are approved for a home loan of \$80,000 at a fixed low interest rate of 4.25% for 30 years. Your monthly payments for the loan itself will be \$550 per month and you will pay escrow separately at \$100 per month so your total monthly payments will be approximately \$650 per month.

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Let's verify this:

According to the mortgage lender, \$80,000 @ 4.25% for 30 years should equal out to be \$550 per month; remember the escrow is separate. \$80,000 is your Present Value (PV); 4.25% is your interest rate; 30 years is your terms of payment.

Using Microsoft Excel follow these steps:

- Enter in 80,000, 4.25%, and 360 (note: for the number of months in 30 years) in three separate cells
- Click on another separate cell and enter “=pmt(then click on the cell with the interest rate/12 then put a comma, then click on the cell with the 360 put a comma, then click on the cell with the 80,000)
- Press enter and your payments are calculated equaling \$393.55 per month
- If you entered the 80000 in cell A2; the 4.25% in cell A3, and the 360 in cell A4 you would click on a separate blank cell and your formula would specifically look like this:
=PMT(A3/12,A4,A2)
- Press enter and your payment is displayed (\$393.55 per month); note: payments are displayed as negative amounts because you are paying this amount out.

Now, what was your lender quoting you? \$550 per month; \$156.45 extra per month for 360 months equals \$56,322!

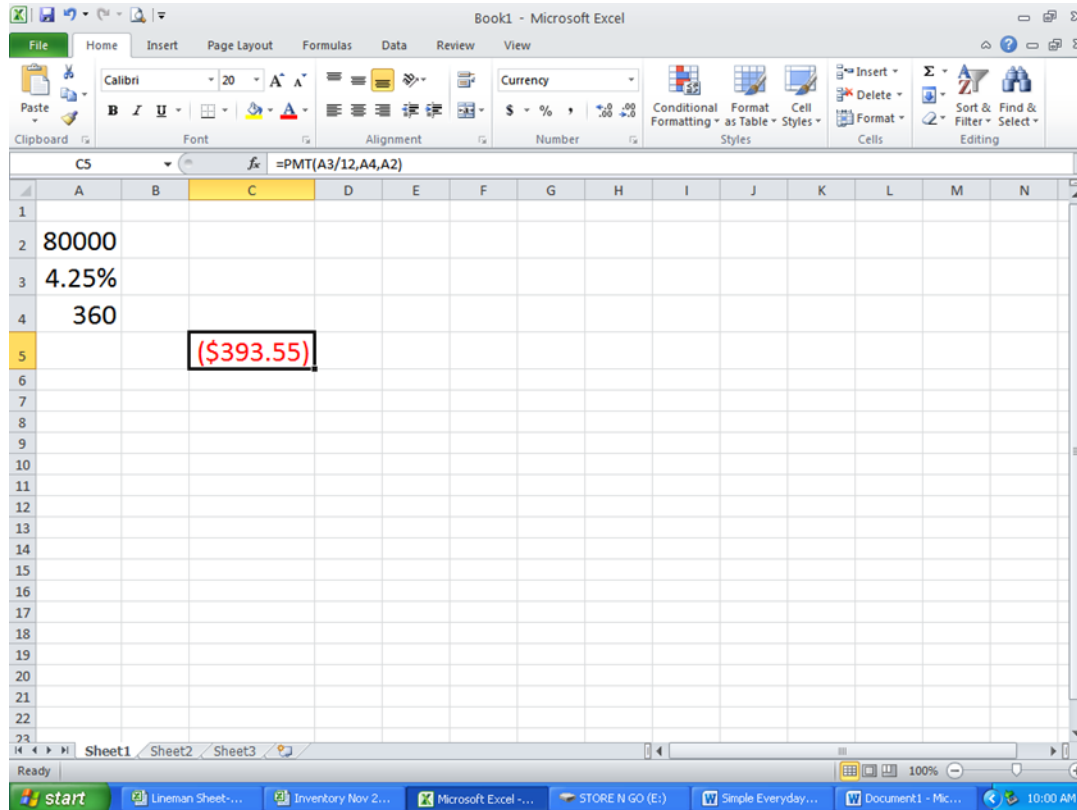
Using a Finance calculator follow these steps (remember to always clear the memory in the calculator):

- Enter 80,000; press the “PV” button
- Enter 4.25 divided by 12; press the “i” button
- Enter 360; press the “n” button
- Press “COMP” button
- Press “PMT” button

It works out to be approximately the same \$393.50

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Example #1 in Microsoft Excel:



* Notice the formula entered in the formula bar

Example #2:

Let's say you've been approved for a \$25,000 car and your monthly payments will be \$415 per month with a 10% down payment; the interest rate is @ 6% for 72 months.

First break down the problem:

- \$25,000 minus \$2,500 (the 10% paid up front) = \$22,500
- the rest of the problem basically follows the solution to Example #1
- your PV = 22500; your i equals 6%/12 = .5; your n = 72
- Using Excel or a finance calculator your payments work out to be approximately \$372.89

Looking at the car dealer's calculations his monthly payment calculation matches up with a loan for \$25,000; your loan was for \$22,500; you already paid 10% up front for the down-payment.

Example #3:

This is for your very typical Rent-a-center businesses; your “low monthly payments to purchase a computer” businesses, and so on: they should get a PHD in “robbery and screwy”. The ad on the radio says that if you have never owned a computer before this is your chance to get it; no credit check; own a computer for only \$10 a week for 24 months.

So, you think \$10 a week is not bad for a computer; and that is because I am being generous. I have heard on the radio more like \$15 a week. Using the \$10 example, \$10 per week for 104 weeks (2 yrs) equals \$1040. You can get a nice comparable desk top or lap top computer for \$500 or less; so paying \$540 more is paying at an interest rate of approximately 84.6% on that \$500 for 104 weeks! An (APR) interest rate of 84.6%; WOW! And an effective interest rate of 108%!

...paying \$540 more on a \$500 computer over 2 years by making monthly payments of \$10 per week is paying at an APR of 84.6%! And at an effective interest rate of 108%!

To get the 84.6% in Microsoft Excel follow the steps below:

- Enter in 2; **-\$10**; and 500; (note: when entering payments, enter as negative amount)
- Enter these figures in separate cells in Microsoft Excel; for example in cells A1, A2, and A3.
- In a separate cell enter the following formula:
 $=RATE(A1*52,A2,A3)*52$
- This calculates your interest rate @ 84.6%

To get the 108% effective interest rate follow the steps below:

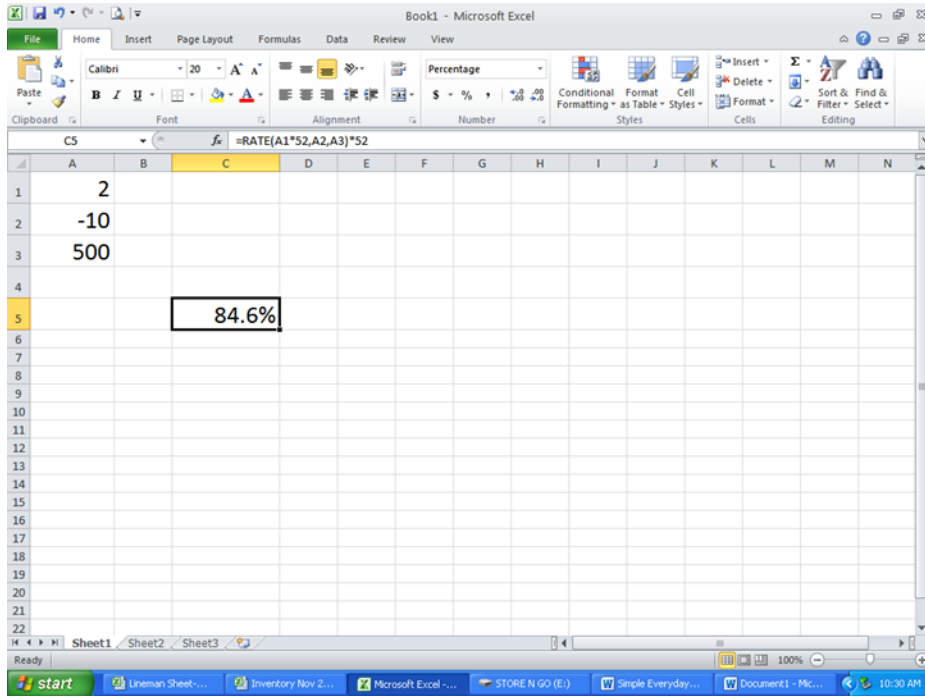
- total payments of \$1040 - \$500(the comparable price of a comp) = \$540
- $\$540/\$500 = 108\%$

To get the 84.6% using a financial calculator follow the steps below:

- Enter 500 PV
- Enter 104 n
- Enter -10 PMT
- Press COMP I (this equals 1.62648)
- Multiply that i by 52 equals 84.6%

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Example #3 in Microsoft Excel:



*Note: Formula in Formula Bar; also, multiply by 52 first because payments are for 52 weeks per year for 2 years; multiply by 52 again to convert weekly interest rate to per annum interest rate

Conclusion

*Above all:
Praise the
Most High
and put God
first in your
finances and
whatever
you do!*

So, at the end of the day, in business it all boils down to “money talks”; I hope the simple, basic, and everyday concepts expressed in this book can help you with your everyday encounter with your finances. Remember, in order for these concepts to work at its best you must make some adjustments accordingly if not made already; prioritize your schedule; practice self-discipline and self-sacrifice; minimize on mistakes and unwise decisions as much as possible. No one knows yourself better than yourself; you know where you need to improve. It’s always easier said than done so saving the best advice for last but to be put before and above all: Praise the Most High and put God first in your finances and whatever you do!

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Sources:

¹ The source for this comment is from <http://www.factmonster.com/ipka/A0774850.html>

² This statement is from http://en.wikipedia.org/wiki/Money_supply

³ Nominal value of money definition was taken from:
[http://en.wikipedia.org/wiki/Real_versus_nominal_value_\(economics\)](http://en.wikipedia.org/wiki/Real_versus_nominal_value_(economics))

⁴ Real value of money definition was taken from:
[http://en.wikipedia.org/wiki/Real_versus_nominal_value_\(economics\)](http://en.wikipedia.org/wiki/Real_versus_nominal_value_(economics))

⁵ This definition is taken from chapter 4 of “Corporate Finance Seventh Edition” by ROSS, WESTERFIELD, & JAFFE

⁶ This definition is taken from chapter 4 of “Corporate Finance Seventh Edition” by ROSS, WESTERFIELD, & JAFFE

⁷ This assertion is from chapter 12 of “Corporate Finance Seventh Edition” by ROSS, WESTERFIELD, & JAFFE

⁸ This assertion is from chapter 11 of “Corporate Finance Seventh Edition” by ROSS, WESTERFIELD, & JAFFE

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Some additional readings were from the following online sources:

http://en.wikipedia.org/wiki/Money_supply

http://en.wikibooks.org/wiki/Principles_of_Economics/Money_Supply

http://en.wikipedia.org/wiki/Monetary_base

<http://www.factmonster.com/ipka/A0774850.html>

[http://en.wikipedia.org/wiki/Real_versus_nominal_value_\(economics\)](http://en.wikipedia.org/wiki/Real_versus_nominal_value_(economics))

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