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Investment Newsletter – September 2011

This quarter we will continue a series on risks to retirement with a look at the effects of inflation and how it interacts with investment strategy in retirement. But first we discuss the current economic and investment environment.

Too Much Debt = Recession, Greek Default, Falling Markets

The Economic Cycle Research Institute (ECRI) announced this week that the U.S. is "tipping into recession". They added: "And there's nothing that policy makers can do to head it off." Last year in June, leading indicators were pointing to a recession. The Federal Reserve pushed it back by a year with its quantitative easing program. This program pushes up asset prices (and business confidence?) by substituting one IOU from the government (called money) for another IOU (called a bond). This policy has done nothing to relieve the main problem in the economy – too much debt. Now the psychological effect is wearing off as well. This is not a surprise.

Europe has also re-discovered that it has a debt problem. The small country of Greece has been spending its way to bankruptcy for years. The only possible way it doesn't default is if the other members of the Euro zone pay its bills for it. If the responsible countries (e.g. Germany) pay the bills of their free spending neighbors, any remaining budget discipline will go out the window. It has become clear that paying for "national welfare" for entire countries is not going to fly, politically, in the long run. Right now the only question is: How much are the Germans (and everyone else) prepared to pay to put off the default by a few more months?

Sooner or later all will admit that Greece cannot pay back its debts and the European banking system is in big trouble. Until they fix the problems with the banks, the economy will suffer from uncertainty and tightening credit.

In the last ten years, the world economic model has been based on emerging economies such as China lending money to Europe and the U.S. to buy goods from the emerging economies. This is not sustainable. To get back

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on a solid growth path, the developed economies must reduce debt. There is no other way. We are in for some painful re-adjustment here.

The market has dropped significantly, but amazingly, we still see rallies "on hopes for a solution to the Greek crisis". The only solution here is default - which will not generate better earnings or cash flows. Despite this gloomy outlook, there is always some price for stocks that is low enough to generate returns sufficient to compensate for the risks. Our holdings meet that criterion. The market as a whole, however, does not. We can expect further declines in the market over the next few months. We are anxious to see what opportunities come our way.

Managing the Risks of Retirement Finances: Focus on Inflation Part II

Bonds

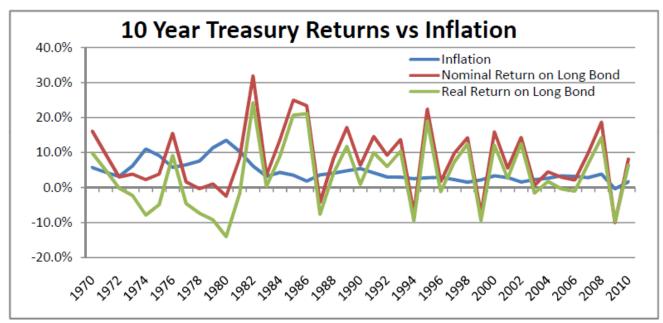
Bonds can be classified in an almost unlimited number of categories. We've focus on four broad classifications for our analysis:

- 1. Long term fixed rate bonds
- 2. Short term fixed rate bonds
- 3. Floating rate bonds
- 4. Treasury Inflation Protected bonds (TIPs)

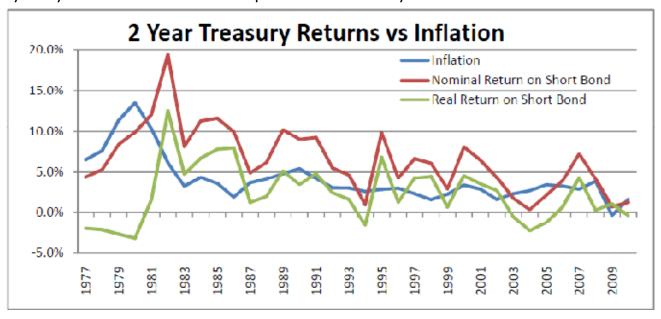
Within the first three categories there are many different levels of credit risk depending on the issuer. Each category includes debt owed by federal and state governments, municipalities, corporations, and bundled consumer debt. Each category also includes a range of maturities. For our purposes we will use 10 year U.S. Treasury bonds for the first category, 2 year Treasury bonds for the second category, and 10 year TIPs for the fourth category. Prime rate business loans are our proxy for the floating rate bond category. For each category, the graphs below show inflation, the nominal returns and the real returns after inflation. The periods vary in accordance with the data available.

While most think of bond returns as low risk, the chart on the next page clearly demonstrates that returns on long maturity bonds are quite volatile and substantial losses in purchasing power happen regularly – especially when inflation rises. On the other hand large gains come when inflation falls. Unfortunately, the 1.6% inflation rate observed in 2010 provides little chance of falling inflation; rising inflation and negative real returns seem more likely.

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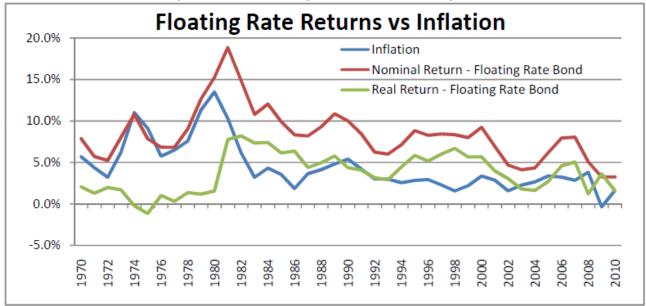


The returns for short term bonds, as shown by the chart for 2-year Treasury Bonds below, are less erratic than returns on longer bonds. You get your money back sooner and so inflation has less time to eat away your purchasing power before you reinvest. Only in periods of dramatically rising real interest rates do you incur negative real returns on short term bonds. As you should expect, lower risks go with lower returns: the average real return on 2-year treasuries, 2.4% is less than the 3.5% average real return earned by 10-year treasuries over the periods covered by our data.



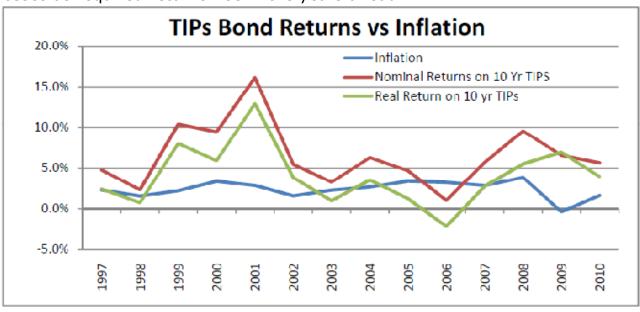
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The chart below shows returns on floating rate loans made by banks to their "Prime Rate" customers. Investors can invest in these loans using various types of funds traded on the exchange just like stocks. These days most such loans are priced as a spread over the London Inter Bank Offered Rate (LIBOR). For funds specializing in lower credit quality borrowers, the spreads are higher than for "Prime borrowers" and therefore these funds have higher real returns than shown here, while still moving in line with changes in inflation. Note that Prime floating rate real returns have only gone negative (just barely) for 2 years (74-75) over 40 years. When considering inflation risks, floating rate funds are less risky than fixed rate bonds. They also have higher average real returns, 3.7%. We attribute this to the fact that these investments incur credit risk where as Treasury Bonds do not (at least until now).



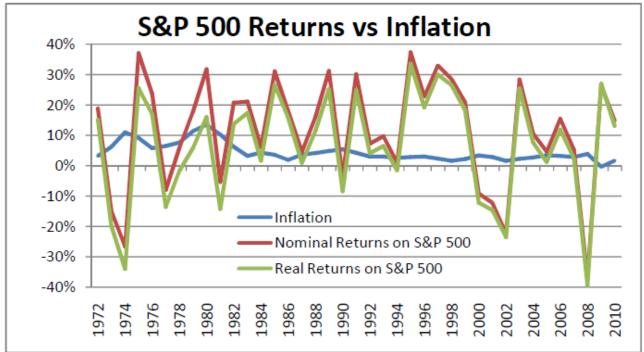
TIPs bond maturities range up to 30 years. The chart on the next page is for 10-year TIPs bonds issued by the U.S. treasury. These bonds are relatively new and therefore we only have returns going back to 1997. Every year the principal amount of these bonds is adjusted upward by the change in the CPI (i.e. by inflation). TIPs coupon payments are specified as a percentage of principal and therefore these adjust each year as well. Quoted yields for TIPs bonds are "real yields" because the inflation component is added to principal. Therefore, although we are looking at long term bonds, they are not subject to inflation risks. Like all long term bonds, however, they are affected by changes in the real interest rate required in the market. In the 14 years of data that we have, we see that these had negative real returns only in 2006. This was caused by a .5% increase in real rates that year. Looking at our earlier chart for real returns on T-Bills we conclude that TIPs bonds would have also done poorly in the 1981, 1983, and 1994-1995. Over our 14 years of data, the "real return" on TIPs has averaged 4.0%. In 2011 there has been

tremendous interest in TIPs and real yields are at .58% for the 10-year TIPs at June 30, 2011. From such a low real rate, it is likely that investors will incur losses as required returns rise in the years ahead.



Stocks

For stocks, we'll focus on the Standard and Poor's 500 stock index (S&P 500) which represents the largest stocks in the U.S.



Intuitively, one would expect that stock returns would rise with inflation given that companies get to raise prices when inflation comes along. It turns out, however, that there is a small negative relationship; stock returns tend to

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drop as inflation increases. This effect is relatively small and is not very important relative to the 6.7% average real stock return over the period of our data. The data indicate that each 1% increase in inflation tends to decrease real stock returns by 1.55%. Looking at the graph on the previous page, however, we see the extreme gyrations in returns on the stock market dwarf the impact of inflation.

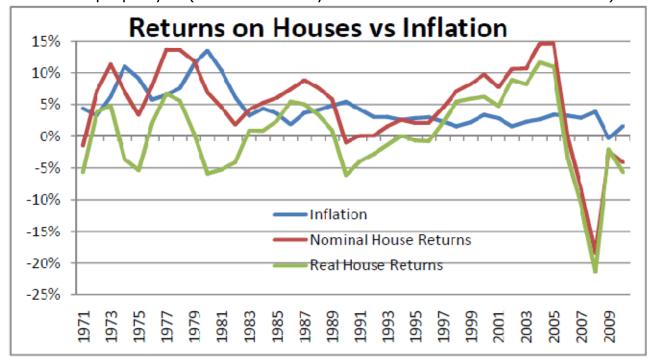
Real returns on all of the bonds that we looked at so far also are inversely related to inflation – meaning increases in inflation lead to lower real returns. The 10-year Treasury Bonds are most affected; their real returns drop 1.21% for each 1% increase in inflation. At the end of this newsletter we provide a summary of data from our analysis.

Real Estate – house, apartments, NNN

For real estate we'll look at three particular types that are commonly purchased directly by investors:

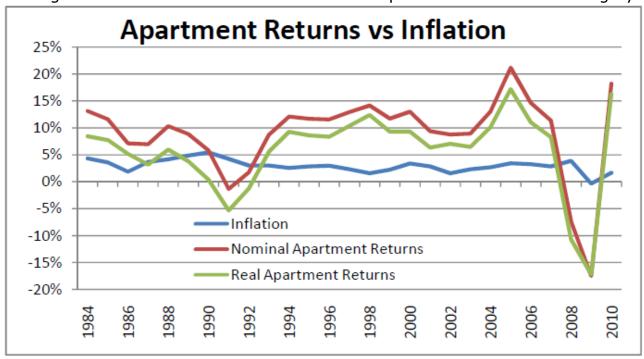
- 1. Houses as a residence
- 2. Apartments
- 3. Commercial retail property leased on a triple net basis (NNN retail).

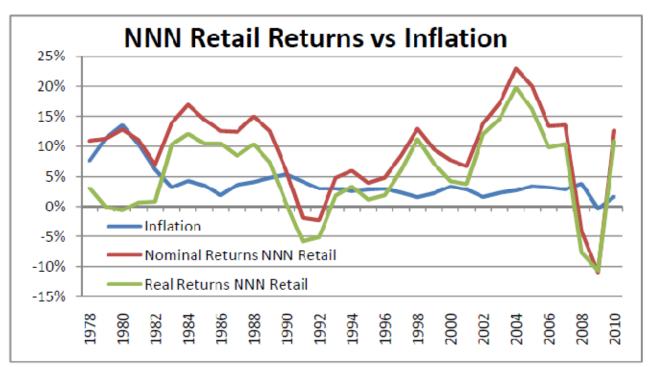
Most real estate is bought with the help of a mortgage that covers a large portion of the purchase price. We call this leverage and it will increase returns on real estate whenever appreciation exceeds the after-tax net cash carrying cost of the property¹. (See the January 2003 newsletter for further details).



¹ Net here means net of income on the property. For an owner-occupied home that would mean taking into account its rental value to you.

Unfortunately, leverage greatly complicates the calculations of real returns and is not included in historical databases. Therefore we will look at un-levered returns. Generally, leveraged properties will have higher returns – especially in a rising inflation environment. We use national price indices for each category.



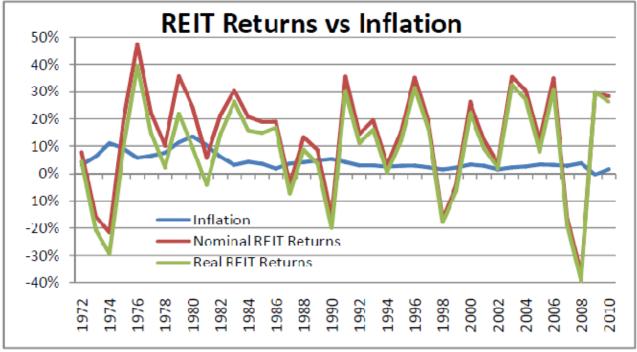


NNN Retail properties have the highest average nominal returns in the real estate category, but because apartment real returns rise with inflation, they

have higher real returns. Houses are far behind, eeking out just .4% average real returns. All three types of real estate have nominal returns that rise when inflation rises. But only Apartment real returns actually go up when inflation increases. In the other cases real returns drop as inflation rises.

Real Estate Investment Trusts (REITs)

REITs are companies that own real estate as an investment and are allowed to pass the income through to shareholders without paying taxes at the corporate level. To get this favorable tax treatment, they must pay out at least 90% of taxable income. These companies trade just like stocks on the stock market. You get the underlying cash flows of real estate with the liquidity of a stock. REITs have the highest average real returns of all the asset classes we analyzed – even better than stocks. Unfortunately, returns on REITs tend to drop as inflation increases. For every 1% rise in inflation, real returns for REITs drop 1.22%. This indicates that the majority of REITs are more like NNN retail than apartments. The difference is how fast rents can rise when inflation rises. If we want to use investments in this category to reduce inflation risks for our retirement spending, we should seek out REITs that own apartments or hotels (hotels can re-price rooms every night).

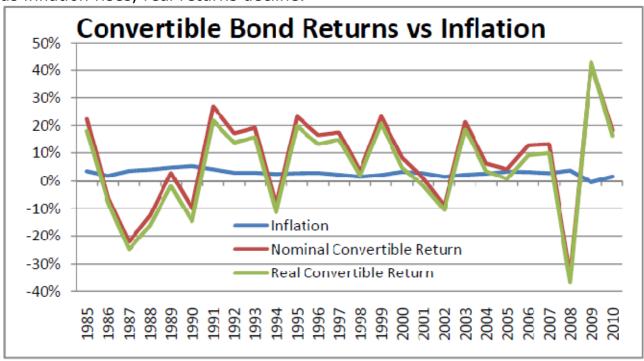


Convertible Bonds

Convertible bonds are bonds that can be converted into stock in the issuing company - they are a middle ground between bonds and stocks. These are usually medium term bonds with a fixed conversion. Thus a rising stock market eventually causes them to rise and fall with the stock. Because real

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returns on longer term bonds and stocks decline with rising inflation, convertible bond returns also decline. Convertibles have higher real returns than other bonds because of their participation in stock value increases. But, as inflation rises, real returns decline.



Summary and Conclusions

The table below shows arithmetic average returns for the various asset classes both nominal and real (inflation adjusted). Gold has been included here as well - though this asset is complicated enough to require its own newsletter. Also shown are the correlations of nominal returns with inflation. Positive correlation means the returns move up with inflation and vice-versa. The regression coefficients tell us the magnitude of the expected change in the real or nominal return for a given change in inflation.

Summary Statistics of Asset Returns versus Inflation

			Inflation Co-Movement		
	Average Returns		Nominal Returns		Real Returns
				Regression	Regression
	Nominal	Real	Correlation	Coefficient	Coefficient
Inflation	4.5%	0.0%	1.00	1.00	1.00
Money Market	3.0%	-1.3%	0.36	0.17	-0.74
Tbill	6.0%	1.5%	0.73	0.86	-0.14
T Bond 10yr	8.1%	3.5%	-0.10	-0.31	-1.21
T Bond 2yr	6.5%	2.4%	0.46	0.65	-0.33
Floating	8.3%	3.7%	0.68	0.73	-0.28
TIPS bond	6.5%	4.0%	0.18	0.65	-0.40
S&P 500	11.3%	6.7%	-0.10	-0.58	-1.55
Homes	4.9%	0.4%	0.21	0.45	-0.51
Apartments	8.9%	5.8%	0.18	1.20	0.22
Retail NNN	9.6%	5.4%	0.15	0.36	-0.62
REITs	13.5%	8.8%	-0.03	-0.21	-1.22
Convertible Bonds	7.6%	4.6%	-0.42	-6.11	-7.01
Gold	8.5%	4.0%	0.20	1.77	0.59

Contact Information: RayMeadows@BerkeleyInvestment.com 510-367-3280