

PDV *OBSERVATIONS*

Inaugural Edition

WELCOME to this inaugural edition of *Observations*, a quarterly newsletter published by **PDV Financial Management!** We are excited to provide this newsletter to our clients and friends. Our goal is to present practical and non-technical information on investing and the financial markets in each issue. Please call or write us if you have any suggestions as to how we can improve *Observations* or if you have particular topics you would like to see discussed. If you know someone who would be interested in receiving complimentary copies of *Observations*, please tell us. We hope you will enjoy reading *Observations* as much as we enjoyed preparing it.

A Primer on the Risks of Bond Investing

Investors often have a portion of their investment portfolios invested in bonds for a variety of reasons. One of the primary reasons for investing in bonds is to obtain an income stream. Another reason is that bonds are generally considered a less risky asset class than stocks. Depending on the risk tolerance level, investment time horizon and income needs of a client, PDV *Financial Management* will generally allocate at least a portion of a client's assets to bonds.

When investing in bonds, a common approach that some investors take is to select those bonds with the highest yields or generating the highest level of income. However, this approach can expose investors to unexpected risks. This article will discuss the nature of these risks, and is intended to be only a generalized discussion of fixed-rate bonds. Investing in bond mutual funds, variable-rate bonds and specialized bonds involves other considerations and will not be covered here.

There are essentially four types of risk associated with U.S. bond investing (foreign bonds also involve currency risks). The first type of risk is **credit risk** or the risk of default by the issuer of the bond, meaning the bond

issuer fails to pay interest and/or principal when due. Generally speaking, all other factors such as the term of the bonds being equal, higher yields come at the expense of higher credit risks.

The second type of risk is **interest rate** or **market risk**. The price or value of bonds moves in the opposite direction to interest rates. Under normal economic conditions, long-term bonds tend to yield more than short-term bonds because investors insist on a higher return if they have to tie up their money for a longer time. The bonds with the longest maturities will therefore tend to generate the highest yields, but will drop in value the most if interest rates rise. This decline in value can completely wipe out

Inside This Issue:

- ◆ A Primer On The Risks Of Bond Investing p.1
- ◆ Mortgage-Backed Securities: Not Your Typical Bond p.2
- ◆ PDV Offers Assistance on Managing Retirement Assets p.4
- ◆ Price-Earnings Ratio: A Useful But Imperfect Measure p.5

the yield and produce a negative return. This happened to many bonds in 1994 when interest rates moved up sharply.

The third type of risk is **call** or **prepayment risk**. This is the risk that the bond issuer will prepay the bond off in full before its maturity date, forcing the investor to reinvest the principal amount at a rate lower than the return generated by the bond. Prepayments tend to accelerate during periods of declining interest rates. Only some bonds carry call

risk, and investors usually get a higher yield for assuming call risk on a bond. It is important to determine whether a higher yield entails call risk. If so, the investor should make sure he or she is being adequately compensated by the higher yield.

Lastly, fixed-rate bonds are subject to **inflation risk**. Inflation devalues the future

fixed income stream to be generated by such bonds. Investors should take this factor into consideration when deciding how much of their portfolio should be allocated to bonds.

In reality, the yield of a bond is a very important factor, but only one of many that need to be analyzed in selecting bond investments. In

selecting bonds for its clients, PDV *Financial Management* considers factors that may impact the creditworthiness of bond issuers, the nature of any call risks, the prevailing level and any likely changes in the

direction of interest rates, as well as the prevailing and any likely changes in the composition of the yield curve. The yield curve shows the relative yields of bonds with different maturities. We assist our clients in selecting bonds with characteristics that match their investment time horizon and risk tolerance level.

The bonds with the longest maturities will therefore tend to generate the highest yields, but will drop in value the most if interest rates rise. This decline in value can completely wipe out the yield and produce a negative return.

Mortgage-Backed Securities: Not Your Typical Bond

Have you ever been approached by someone trying to sell you a "Ginnie Mae fund" that is guaranteed by the U.S. government?

Does the governmental guaranty mean that you cannot lose money on the investment? The answer is no. If this surprises you, read on.

What is commonly known as a "Ginnie Mae fund" is actually a mutual fund that invests in what are known as mortgage-backed securities ("MBS") issued by The Government National Mortgage Association ("Ginnie Mae"). Because the value of MBS can and does fluctuate, it follows that the value of a Ginnie Mae fund that invests in a variety of MBS will also fluctuate. The value of your

shares in the Ginnie Mae fund therefore may be worth less at the time of sale than your purchase price.

To understand why a security guaranteed by the U.S. government can generate investment losses, one needs to understand the nature of MBS. A MBS is essentially a bond that is backed by a pool of mortgages with the same interest rate. The interest and principal payments on this pool of mortgages are collected and "passed through" to the holder of the MBS. The three biggest issuers of MBS are Federal National Mortgage Association ("Fannie Mae"), Federal Home Loan Mortgage Corporation ("Freddie Mac") and Ginnie Mae. Only MBS issued by Ginnie Mae are guaranteed by the U.S. government, meaning it will continue to make the interest

and principal payments on any mortgage that defaults.

The yield and income stream to be generated by a MBS are extremely difficult to predict. Unlike a typical fixed-rate bond that generates a fixed amount of interest payment periodically, the amount of income produced by the MBS will fluctuate based on the level of prepayment of the underlying mortgages.

A mortgage-backed security is essentially a bond that is backed by a pool of mortgages with the same interest rate.

Payments will increase as prepayments accelerate, and payments will decrease when prepayments slow. (As noted below, investors should not assume that increased payments are beneficial.) The primary determinant of prepayment activity is the level and direction of interest rates. MBS are marketed to investors based on various assumptions about interest rates and prepayment levels, but these assumptions can turn out to be incorrect, thereby generating unpredictable and possibly disappointing total returns.

Because of the nature of MBS, the U.S. governmental guaranty only eliminates credit risk (ensuring the payments on the underlying mortgages backing the MBS will continue to be paid and passed through to investors), but interest rate and prepayment risks still remain. (See the article on page 1 for further discussion of the nature of these risks.) It is these residue risks that can cause MBS investors to lose money despite the governmental guaranty.

The interest rate and prepayment risks associated with MBS are greater than those of a typical bond. When interest rates are rising, prepayments of mortgages slow because

homeowners have less or no incentive to refinance. Less money (principal prepayments) is returned to investors, denying them the opportunity to invest the proceeds at the higher prevailing rates. Unlike the typical bond whose maturity is fixed, the effective maturity of the MBS will actually be lengthened by rising rates (known as extension risk). As the effective maturity stretches out, the MBS is devalued more severely than a fixed-maturity bond.

While a MBS may be devalued more than a typical fixed-maturity bond in a rising interest-rate environment, the MBS does not have the capital appreciation potential of a typical bond in a climate of declining interest rates. A typical bond that cannot be prepaid (i.e. a non-callable bond) generally appreciates in value when market interest rates drop, because the bond continues to pay a higher rate than market rates. However, mortgage prepayments tend to accelerate during periods of declining interest rates. This has the effect of returning the investor's money at an inopportune time, because it prevents the investor from continuing to benefit from the high yielding mortgages, forcing him or her to reinvest the principal prepayments at lower prevailing rates. Because of this, a MBS does not have the capital appreciation potential of a typical non-callable bond when interest rates fall.

While a MBS may be devalued more than a typical fixed-maturity bond in a rising interest-rate environment, the MBS does not have the capital appreciation potential of a typical bond in a climate of declining interest rates

As you can see, a MBS does not have the appreciation potential of a typical bond in a climate of declining interest rates, and may

be devalued more than a typical bond in a rising interest-rate environment. Why then invest in something that seems to involve "the worst of both worlds?"

Despite their limitations, MBS can have a place in your portfolio given the appropriate circumstances. MBS issued by Ginnie Mae have no credit risk, while those issued by Fannie Mae and Freddie Mac have very little credit risk. If the interest-rate

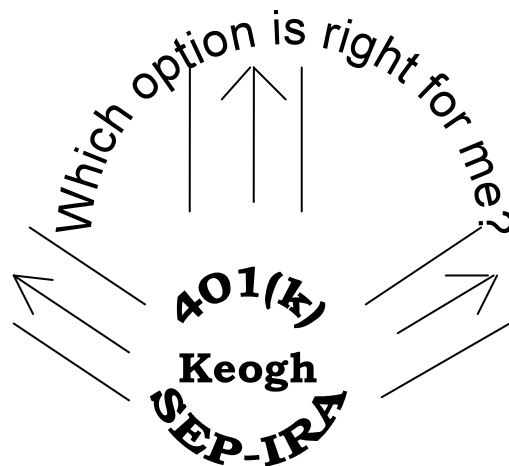
environment seems relatively stable and the related assumptions about mortgage prepayments with respect to the MBS seem realistic, MBS issued by Ginnie Mae offer investors the potential to earn a higher yield than treasuries with comparable maturities, while assuming the same credit risk. The best time to buy MBS is when their values have plummeted in a market with volatile interest rates, but where interest rates are stabilizing.

PDV Offers Assistance on Managing Retirement Assets

In recent years many companies have shifted the responsibility of investing for retirement onto their employees. This is reflected in the emphasis towards defined contribution retirement plans such as 401(k) plans, and away from defined benefit retirement plans. Employees are now increasingly faced with the challenge of having to invest their retirement assets themselves. The amount of assets that they are able to accumulate by retirement is largely or completely dependent on the nature of their own investment decisions.

The growth in what are commonly known as 401(k) retirement plans has been robust. The 401(k) plans offered by companies can differ, but typically employees have the right to contribute a certain amount of their salaries on a pre-tax basis into their 401(k) accounts, with the employer making matching contributions up to certain capped amounts. The employee's contribution is fully vested right away, with the employer's matching contribution typically vesting over a

number of years. Earnings on the contributions are tax-deferred.



A typical 401(k) plan will offer several investment options for a plan participant, who can allocate the retirement assets in his/her account among such options. Subject to legal limits, the participant/employee typically has the right to change the rate of contribution and the way the assets are allocated at least annually, and maybe more frequently.

Because these plans offer tremendous tax advantages (including the immediate tax benefit from pre-tax contributions), people should set aside as much as they can from their salaries to channel into such accounts. With the tax-deferral feature and the wonderful phenomenon of compounding, people can build up substantial assets over the long term. As the account balance has the potential to grow in such a way as to represent the primary capital base for generating income for retirement years, it is important that you devote the appropriate attention to making your investment allocation decisions.

In addition to 401(k) plans, Keogh, SEP-IRA and IRA plans also offer tax benefits to those who qualify for these plans. Recently, several clients approached us about the possibility of having PDV *Financial Management* manage the assets in their 401(k) accounts. We are very happy to be of assistance in this regard. In a typical situation, we would evaluate the underlying investment choices offered by the 401(k) plan (most of which typically are mutual funds), and then allocate the client's retirement assets in his/her retirement account among the

investment options based on the client's financial situation, goals, and risk tolerance level. At the client's request, we would also monitor the underlying investments on an ongoing basis.

If you are interested in discussing the possibility of having us assist you with the investment of your retirement assets, such as those that are a part of a **401(k), Keogh, SEP-IRA or IRA plan**, please call us. We would be delighted to have the opportunity to discuss with you how we may be of assistance.

PRICE-EARNINGS RATIO: A USEFUL BUT IMPERFECT MEASURE

What drives stock prices?

Anyone who has invested in stocks has probably experienced the frustrations of the stock market's short-term volatility. The market can seem totally irrational over short periods of time. Have you ever owned stock in a company which reports good news, only to be greeted by a drop in the price of the company's stock? If you have, you are certainly not alone. Rather than possibly succumbing to these natural feelings of frustration at the market's short-term volatility and feeling compelled to sell a stock at an inopportune time when its short-term performance has not met one's expectations, it may be more productive to refocus one's efforts on evaluating stocks based on their fundamental prospects over longer investment time horizons.

Over the long term, it is generally dividend and/or earnings growth that drives the price of a stock. In evaluating equity investments for its clients, PDV *Financial Management* takes a long-term perspective and looks for undervalued equities. The

price-earnings ratio ("p/e ratio") is one of many factors that we use to assess the value of a stock (i.e. its price relative to its fundamental prospects).

The p/e ratio is simply the current market price of the stock divided by its actual (or estimated) earnings per share over a certain period. People choose different time periods for calculation, with the more common ones being the previous fiscal year, the immediately preceding four quarters or the upcoming fiscal year. For example, a stock currently selling for \$20 per share, with total reported earnings per share of \$2 over the past four quarters, would have a "trailing" p/e ratio of 10. P/e ratios are widely reported in financial newspapers.

What determines a stock's p/e ratio and what does it mean? A company's prospects for growing its dividends and/or its earnings affect the p/e ratio of its stock. Generally, stocks that are perceived by investors to have good growth prospects command higher p/e ratios, as investors are willing to pay more now for a dividend and/or

earnings income stream which is expected to grow relatively faster over time.

Some investment advisors think that generally stocks with low p/e ratios are undervalued, while those with high p/e ratios are overvalued. Others go further to establish rules which say they will not invest in stocks with p/e ratios over a certain arbitrary number. Unfortunately, we believe effective p/e ratio analysis cannot be reduced down to such mechanical rules.

First, p/e ratios vary across industries. A stock with a p/e ratio of 10 in one industry may be overvalued, while another with the same ratio in a different industry may be undervalued. You need to know something about the relative p/e ratios prevailing among different industries.

Second, p/e ratios should not be analyzed as absolute numbers (i.e. under 10 is good, over 10 is bad). Rather, the ratio should be evaluated relative to the fundamental prospects of a stock. A stock with a p/e ratio of only 10 may be overvalued if it is only expected to grow dividends and/or earnings by 5% annually, while another stock with a greater p/e ratio of 20 may be undervalued if it is expected to achieve 50% annual growth in the next few years.

Third, the p/e ratio of a company's stock should be compared with those of other companies in the same industry. The better companies in the industry deserve higher p/e ratios than their industry peers.

Fourth, the p/e ratio of a stock should be compared with the historical range of ratios for the stock. A company with prospects that are generally better than its historical fundamentals deserves to trade at the higher end of its historical range of p/e ratios.

Finally, there are some inherent limitations with the p/e ratio as a valuation tool. While the price of the stock is easily and readily discernable, the earnings portion of the formula can produce distortions. Generally Accepted Accounting Principles ("GAAP") in some instances allow companies great latitude and flexibility in how they report earnings. While managing a company's earnings within GAAP is legal and widespread, it can distort to some degree the true earnings-growth picture for a company. Also, with the massive write-offs that have been taken by corporate America in the past few years, it can be challenging, to say the least, to get an accurate handle on the earnings outlook of a company on a *normalized* ongoing operating basis.

To conclude, the p/e ratio as a valuation tool does have limitations, and should not be mechanically applied. However, viewed with the proper perspective, the p/e ratio serves as one of many useful factors that an investor should consider when evaluating the investment merits of a particular stock.