

A monthly update of asset class performance, trends, & topics for long-term investors

Asset Class Returns

| Bonds | <u>2000</u> | <u>2001</u> | <u>2002</u> | Last 10 yrs. | 9/19 2003 |
|--------------|-------------|-------------|-------------|-----------------|--------------|
| Short-term | 6.7 | 5.8 | 3.9 | 5.3 | 12 |
| Five-Year | 6.7 | 5.9 | 10.4 | 7.6 | 2.3 |
| Intermediate | 13.5 | 8.2 | 15.0 | 7.9 | 1.6 |
| Long-term | 19.7 | 4.3 | 16.3 | 9.1 | 3.4 |
| U.S. stocks | | | | | |
| Large Market | -9.3 | -12.1 | -22.2 | 9.3 | 19.2 |
| Large Value | 10.2 | 3.9 | -14.9 | 10.8 | 20.2 |
| Small Micro | -3.6 | 22.8 | -13.3 | 11.6 | 45.3 |
| Small Market | 2.5 | 12.7 | -19.1 | 9.0 | 39.8 |
| Small Value | 9.0 | 22.6 | -9.3 | 12.8 | 39.7 |
| Real estate | 28.4 | 13.2 | 4.2 | 9.1 | 23.0 |
| Int'l stocks | | | | | |
| Large Market | -14.0 | -20.8 | -14.6 | 4.0 | 20.9 |
| Large Value | -0.2 | -15.3 | -8.5 | 6.8 | 30.7 |
| Small Market | -5.4 | -10.5 | 1.9 | 3.0 | 41.8 |
| Small Value | -3.1 | -4.6 | 5.8 | 3.8 | 47.8 |
| Emerg. Mkts. | -29.2 | -6.8 | -9.4 | 3.5 | 37.6 |

Descriptions of Indexes

| Descriptions of Indexes | | | | |
|-------------------------|---------------------------------|--|--|--|
| Short-term bonds | DFA One-Year Fixed Income fund | | | |
| Five-Year bonds | DFA Five-Year Global Fixed | | | |
| Intermediate bonds | DFA Intermed. Gov't Bond fund | | | |
| Long-term bonds | Vanguard Long-term U.S.Treas. | | | |
| U.S. Large Market | DFA US Large Co. fund | | | |
| U.S. Large Value | DFA Large Cap Value fund | | | |
| U.S. Small Micro | DFA US Micro Cap fund | | | |
| U.S. Small Market | DFA US Small Cap fund | | | |
| U.S. Small Value | DFA US Small Value fund | | | |
| Real Estate | DFA Real Estate Securities fund | | | |
| Int'l Large Market | DFA Large Cap Int'l fund | | | |
| Int'l Large Value | DFA Int'l Value fund | | | |
| Int'l Small Market | DFA Int'l Small Company fund | | | |
| Int'l Small Value | DFA Int'l Small Cap Value fund | | | |
| Emerging Markets | DFA Emerging Markets fund | | | |

"Last 10 yrs." returns are ended 12/31/02 and for U.S. Large Value (3/93), U.S. Small Value (3/93), Int'l Large Value (3/93), Int'l Small Market (10/96), Int'l Small Value (1/95), and Emerging Markets (5/94) include simulated data prior to fund inception (in parentheses).

This information is obtained from sources we believe are reliable, but we cannot guarantee its accuracy.

Past performance does not guarantee future returns.

This newsletter is published by TAM Asset Management, Inc.

1100 Mar West St., Suite D Tiburon, CA 94920 Phone: 415-435-5045 eFax: 781-623-4691 email: trout@tamasset.com Web Site: www.tamasset.com

Editor: Jeffrey C. Troutner

© 2003 TAM Asset Management, Inc.

Markets Update September 22, 2003

Yes, the year-to-date returns on the left are real—much to the chagrin of most market prognosticators. The so-called experts kept everyone's focus on the "low expected return" and continued overvaluation of growth stocks while small company, value, and foreign stocks surged ahead. More proof that market timing is one of the most costly and frustrating of investor behaviors.

Fixed Income Strategies (Part 2)

Jeff Troutner, TAM Asset Management, Inc.

The August 27 *Asset Class* newsletter covered the role of fixed income in a portfolio, the risk/return benefits of short-term bonds, and the advantages of a yield curve-based strategy over a pure indexed or laddered bond strategy.

U.S. versus Global Bonds

The principles outlined in the previous *Asset Class* apply in developed foreign markets as well, and adding foreign bonds to the portfolio mix increases the portfolio diversification and should result in lower volatility due to the addition of uncorrelated assets. However, foreign bond investments are subject to the risk of currency fluctuations and should be fully hedged against the U.S. dollar.

Adding foreign bonds to the portfolio also introduces the possibility of more attractive yield curves than our own, since foreign economies are not perfectly correlated with the U.S. For example, if Germany is experiencing an inverted yield curve (higher rates on shorter maturities) at a time when the U.S. curve is normal, a portion of the bond portfolio might be allocated to short-term, currency-hedged German bonds to improve the portfolio's risk/return characteristics.

Individual Bonds versus Bond Funds

An investor choosing an indexed or variable maturity approach should consider the costs and expertise needed to implement these strategies. A bond fund can achieve the necessary diversification and implement portfolio changes with much greater "buying power" than individual investors can with their smaller holdings. Brokerage firms are notorious for their high spreads and commissions on bond purchases, particularly with less liquid bonds such as municipals. Laddered portfolios have less concern about costs, especially Treasury-only ladders with bonds purchased directly from the U.S. Treasury, but these portfolios miss out on the advantages of the variable maturity (yield curve) strategy and global diversification.

Rebalancing the stock/bond allocation can also be much more costly using individual bonds, particularly for smaller accounts. A 10% shift in allocation on a \$500,000 portfolio is a \$50,000 purchase or sale of a bond fund. To properly maintain the risk/return/maturity characteristics of an individual bond portfolio-laddered or notan investor or advisor might be faced with buying or selling many individual securities in "odd lots" (typically considered less than \$100,000 in the corporate bond world).

Allegiance Capital presents some statistics on laddered bond portfolio performance (in a common attempt to promote active bond management).¹ Table 1 below shows the returns for a 5-year laddered portfolio compared to the DFA Five-Year Global Fixed Income fund, which employs a global variable maturity strategy.

Table 1

| 5-Year Ladder Portfolio Returns vs. DFA Five-Year Global Fixed 1993-2002 | | | | |
|---|--------|--|--|--|
| DFA fund | Ladder | | | |
| 7.6% | 5.7% | | | |

Another disadvantage of individual laddered bond portfolios is the fact that most are limited to U.S. Treasury issues due to cost and ease of management. This eliminates any additional yield available from high quality corporate or global bonds. Adding corporate and/or global bonds to bond ladders increases costs and complexity due to call features, changing credit risks, and currency hedging.

The chart below shows the performance of the DFA Five-Year Global Fixed Income fund compared to the Morningstar database of "World Bond" funds with at least 10 years of data (class A shares only). DFA's variable maturity strategy delivered one of the highest 10-year returns with the *lowest* return volatility.

Taxable versus Municipal

The highest tax-bracket investors should consider the after-tax advantage of municipal bonds over taxable bonds. However, municipal bond management is generally more costly and time consuming than taxable bond management and involves different risk considerations. For example, municipal bonds are generally less liquid than Treasury and corporate bonds. This can result in larger spreads between bid and ask prices. Investors also tend to concentrate municipal bond purchases to bonds of their home state for tax reasons

and this increases diversification risk (investors in California are feeling the impact of over concentration as this is written). Municipal bonds can also have complex call features and other provisions that introduce uncertainty into the management process. All of these factors should be considered before municipal bonds are chosen over U.S. Treasury or high quality corporate bonds.

If municipal bonds are the appropriate investment, we believe the value-added by professional management via a low-cost, institutional municipal bond fund is preferable in most cases.

Conclusion

- The bond market is efficient and active strategies, such as interest rate forecasting, do not enhance bond portfolio returns.
- · Current interest rates are the best predictor of future rates.
- Bond investors are most sensitive to portfolio volatility and downside risk.
- Bonds offer risk reduction, income, and rebalancing benefits in a balanced portfolio.
- Short-term bonds offer better risk/return benefits than intermediate or long-term bonds.
- A variable maturity strategy takes advantage of changing yield curves and is preferable to indexed or laddered strategies.
- Global diversification, properly hedged for currency risk, can add value to a U.S.-only bond portfolio.
- · Low-cost, institutional bond funds can add value over individual bond portfolios for most investors.
- The tax advantages of municipal bonds should be viewed against the potential of higher trading costs, credit risks, lack of diversification, call provisions, and other challenges of municipal bond management.

¹Active Management, The Superior Selection to "Laddering" Portfolios; www.allegiancecapital.com/sctn1d.html

