

An Interview with Ian MacKinnon, portfolio manager, Vanguard Municipal Bond Portfolios

A Top-Down Approach to Investing in the Municipal Bond Markets

In this month's Mutual Fund column, Albert Fredman discusses closed-end municipal bond funds and contrasts them with their open-end cousins.

Open-end municipal funds tend to be more actively managed. However, performance differences among similar funds (those investing in similar quality and similar maturity bonds) are relatively small and that makes fund expenses particularly influential.

Among those funds with the lowest expenses and that perform well against their peers are the Vanguard Municipal Bond Fund portfolios, with individual portfolios that cover the full range of maturities and credit qualities, including several state-specific portfolios.

In early April, portfolio manager Ian MacKinnon discussed the management of the municipal bond portfolios with Maria Crawford Scott.

What are the basic investment objectives of the fund?

The objective is preservation of principal and maintenance of a high level of dividend income. We are total return maximizers.

To achieve that objective, we seek to purchase securities that we believe will produce an attractive level of interest income, and that will provide the best total return over our investment horizons, which are typically one to three years. That's not the maturity, but our investment horizon.

What is the difference between the various bond portfolios?

Our municipal bond portfolios are distinguished from one another by their basic maturity structure—long-term, intermediate-term, and short-term—and by the average quality of the issues—for instance, we have a high-yield portfolio and a portfolio with an average quality of triple-A [the highest rating]. We also have a number of state-specific portfolios that appeal to investors in states with relatively high income tax rates.

The portfolio turnovers appear to be relatively low in all of your portfolios. Do you do much active management

The Vanguard Municipal Bond Fund portfolios are part of the Vanguard family of funds, P.O. Box 2600, Valley Forge, Pa. 19482; 800/635-1511; www.vanguard.com.

in terms of changing the structure of the portfolio based on your interest rate outlook?

Yes, we do. All of the portfolios are actively managed and all of the portfolios typically have durations that can fluctuate as much as 20% from their benchmark. [Editor's Note: Duration is a measure of a bond fund's interest rate sensitivity and measures the midpoint of when all cash flows, including return of principal, are received; the shorter the duration, the less a fund's value fluctuates for a given change in interest rates.] However, we've had such an extended bull market starting in the early '80s and going into the early to mid-'90s that the portfolios have many securities with a lot of embedded, unrealized capital gains. We keep our eye on that and try to minimize the potentially adverse effect of capital gains realizations on individuals' tax liabilities. So, as we look at opportunities in the market, we look at them within the context of trying to manage realized gains.

Where do the decisions start—with an interest rate outlook?

Yes, we have a top-down management philosophy and style. The most pivotal decision for the portfolio is its duration positioning relative to its benchmark. And in the current environment, given our negative interest rate outlook, we're generally shorter than our benchmarks in all of the portfolios. Of course, the benchmark varies from portfolio to portfolio—the intermediate portfolio has a different benchmark [with a shorter duration] than a long-term portfolio. If we were bullish on interest rates, we would be longer than our benchmarks.

What are the benchmarks?

The benchmarks are set up to reflect the mid-point of the range of permissible average maturities for each portfolio allowed in the prospectus. We do not use any specific index as a guide because most of the portfolios predate the creation of municipal bond indexes that equate with our portfolio's average maturities.

What follows once you've determined the duration relative to the benchmark?

At the next level, we look for certain relationships that we try to exploit—relationships concerning the various issuing sectors, the average credit qualities of the issuers, the current term structure [the yield curve], volatility, and the relationship between taxables and tax-exempts. Sometimes these relationships get out of whack, and we use that as an opportunity to get rid of a weighting, or to overweight or underweight.

The third level would be what I would call the tactical level and that would be specific issue selection.

How do you exploit term structure relationships?

We're looking to get the biggest bang for the buck in terms of yield per unit of risk, and there are segments of the term structure at certain times that offer pretty good trade-offs. Right now, for instance, let's say that the five- to 15-year area represents the steep section of the yield curve. Consequently, you're picking up good increments of yield per unit of maturity extended. Once you get beyond 15 years, the yield curve is relatively flat, so you're not getting much additional return for the risk in terms of extended maturity.

That relationship doesn't change in the municipal bond market, does it?

That is correct. The yield curve on munis is a much more predictable one than the yield curve for taxable securities because you don't have the activity of the Fed influencing the very short end as dramatically as it does with taxable bonds. In fact, to my knowledge, the yield curve for municipals has never inverted. But over time, you do get some substantial and noteworthy differences in the amount of curvature and where you get the biggest pickup in yield relative to maturity extension. But as a general rule, it's that five- to 15-year area that's the sweet spot of the curve.

And how do you exploit the relationship of taxables to tax-exempts?

Well, the ratios of municipal yields to Treasury yields has a "normal" relationship, but based on supply and demand and various other economic factors, that can get out of whack. When municipals are particularly cheap relative to taxable bonds, we might buy a municipal bond and simultaneously short [sell] a Treasury bond. The end result of that transaction is that you have not changed your duration [average maturity], since any change from buying the municipal bond is effectively neutralized by the shorting of the U.S. Treasury, but you are going to benefit if the relationship of munis to Treasuries is restored to its normal level. The bottom line is that by going simultaneously long and short, you neutralize everything except the relationship between taxables and tax-exempts. Of course if munis were rich relative to Treasuries, you'd reverse the process—you'd buy a Treasury contract and you'd sell a mu-

nicipal bond. Or you could do it purely in the futures market.

Over the years, we've been quite extensive observers and exploiters of that relationship.

When you mentioned relationships that you exploit, you didn't mention geographical relationships. Does that enter the picture?

We would look at that more as an issuing sector—for instance, Pennsylvania as an issuing sector or Texas as an issuing sector. Or it may overlap into one of our other strategies, which may call for a play into a specific state. For instance, California, Massachusetts, Pennsylvania, and Texas are four states in which we have chosen to overweight based on our analysts' opinion of improving credit conditions.

Throughout all of our management, there is a credit overlay which is part tactical and part strategic—you try to buy securities that the analysts believe will be upgraded, and you try to unload securities that the analysts believe will be downgraded.

What does it mean to be diversified in the municipal bond market? For instance, do you need to be diversified by type of issue, or by geographical location?

We look at diversity in several different ways. We have literally hundreds of specific issues in each of the portfolios, so within the context of any specific issue going sour we're very well protected. For the state-specific portfolios, obviously the avoidance of the state income tax is paramount, so they're non-diversified portfolios, and all of their exposure is focused within the specific state, although they are also insured bonds.

As far as diversity by strategy, we would look to the market weights as a sort of baseline if we have no opinion—so California, New York, and Texas would typically be much larger in size in a given portfolio than, let's say, North Dakota, or Montana, or Wyoming, which have virtually no issuance whatsoever. Beyond that, we would overweight or underweight those issuing sectors based on our credit analysis.

At the third level, how do you go about picking a particular issue?

The issue has to have the characteristics that we're looking to have in the portfolio—whether it's in the right issuing sector; say, if we're making a bet on California, then the issue should be from California. That narrows the field down. Typically, we would look at the new issue calendar to see whether it's possible to buy securities in quantity. Vanguard portfolios tend to be quite large relative to the mutual fund industry—a typical lot size is anywhere from \$10 million to \$30 million.

We're also looking for good structural characteristics. We look very carefully at the callability of bonds, and we try to buy bonds with ample call protection so that our upside is

not truncated by the proximity of a call date, or we try to buy at discounts that will provide us with good upside in the event that rates decline. And every security that we purchase is reviewed by the credit analysts, so we have a credit overlay that dictates what we buy.

If you go through this winnowing process, you get down to a fairly short list of securities that fit all of the criteria. Then you get down to the portfolio manager's assessment of relative value—if it's priced cheaply in the market.

Do you find much value in the market?

The markets have gotten much more efficient over the years, particularly with all of the communications and data delivery services, so that you don't really see many securities that are outrageously out of whack.

The municipal market is so enormous and diverse, I would have thought there would be opportunities.

In our investment universe, it's much more efficient.

There are over a million separate municipal issues, but probably the average issue size would be somewhere between \$100,000 and \$1 million, and we're just not dabbling in that world, nor are any of the other institutional investors. It's just too difficult to establish a meaningful position

What about unrated securities?

There are lots of potential opportunities in unrated securities, and lots of potential risk. The two go hand in hand. In our high-yield portfolio, we do dabble in the non-rated securities and we've had our share of victories and we've had our share of defeats. Typically, you'll get 300 to 500 basis points [a basis point is 0.01%] more yield and you'll get an unconventional investment-grade general obligation security. And there's a reason why you're getting 300 to 500 more basis points and that's the incremental credit risk, which is substantial. I would not recommend that segment of the market to individual investors for direct investing. You need a lot of diversification to get rid of the specific risks, and it takes a lot of research. Some of the offering documents for these non-rated deals are several inches thick.

Are the bonds that you purchase all within the safety zone of the alternative minimum tax?

We generally avoid bonds subject to the alternative minimum tax where we can. And in almost all of our portfolios, we do avoid it, but in New Jersey, in Pennsylvania, and our high-yield portfolio, we have small portions of securities whose interest might fall under the alternative minimum tax.

In the two states, we are confined to investing within the state and in order to obtain diversification, we've found

that it's necessary to buy bonds that we otherwise wouldn't buy. It's not a problem with credit quality, but we've decided the risk of being underdiversified is greater than the pain of the alternative minimum tax. And it turns out that only a very small portion of the population is potentially subject to the tax. So the vast majority of shareholders get the benefits of the diversification, and they get a little bit of extra yield from the AMT bonds.

What would prompt you to sell a security?

Obviously, when we change our duration strategy—let's say we decide to shorten duration—something has to be sold. But we typically go through a number of stages of evaluation to determine what that is. The first thing we do is look at the amount of unrealized gains in the portfolio to determine whether anything can be sold without generating realized gains and the tax liability that comes from that. And rather than realizing gains, we may instead short futures to shorten the duration.

Of course, if you have shareholder redemptions, you don't have the choice of shortening futures contracts—you've got to raise cash to meet the redemptions, assuming there are no reserves in the portfolio. So the next level of evaluation is to determine which strategy we are trying to underweight. For instance, we still have a somewhat negative opinion of New York, so to the extent that we have New York securities in the portfolio and we wanted to lighten up, that would be the first place we'd look to sell.

Then, of course, you get down to individual securities valuations, and that's a decision as to whether the current market price exceeds our expectations or is below our expectations. If it's below, we would hold on to it and maybe even acquire more. If we think it's gone sour, we would sell.

What is your outlook for the municipal bond market?

We're looking for rates all along the municipal curve to go up 20 to 40 basis points from where they are today, and we would have the identical forecast for taxable rates, as well. We think long-term Treasuries are going to go up to around 7¼% by this time next year, and that the Fed will tighten an additional two times; once in May, and once later on in 1997, which will probably take us up to a 6% federal funds rate.

Inflation has been creeping up little by little over the years, and we think it's going to be somewhere between 3½% and 4½% in 1997. The Federal Reserve obviously will be somewhat more aggressive in tightening if we get up to 4½% inflation, and less aggressive if we come out at 3½%. But we think the general direction is up, and so all of our portfolios are tilted toward the short end of their benchmarks. And all of them, I would say, are generously endowed with cash reserves.

