A passionate debate often occurs whenever the topic of bond laddering is raised as an alternative to active, professional bond management. While there is nothing inherently inappropriate with the implementation of passive ladders, there are often large opportunity costs associated with their use. Some of these costs include sacrificing potential higher returns, less flexibility in managing risk, lack of diversification, and potentially higher fees.

Professional (Active) Fixed Income Management

Fixed Income Portfolio Managers are investment professionals with many years of firsthand experience gained from researching, analyzing and making investment decisions within the fast-paced and increasingly sophisticated world of fixed income markets. A disciplined team of professionals continually interact to bring forth the best investment ideas in an effort to provide higher returns, while at the same time responsibly managing the risks sometimes associated with better performance.

There are four components of fixed income investing that proactive managers utilize in actively seeking higher returns (while responsibly managing risk). In brief, these are:

- Using macroeconomic models to provide managers with multiple detailed interest rate scenarios as a resource in decision making.
- Determining the optimal investment maturity position with respect to the shape of the yield curve.
- Dynamic under-weighting, over-weighting, and rotation of investment sectors to actively take advantage of market inefficiencies.
- Utilize a combination of careful credit scrutiny and relative spread analysis when selecting individual securities.

The numerous advantages of professional management will be addressed in more detail on the following pages. In the meantime, let's take a quick look at bond ladders.

Bond (Passive) Ladders

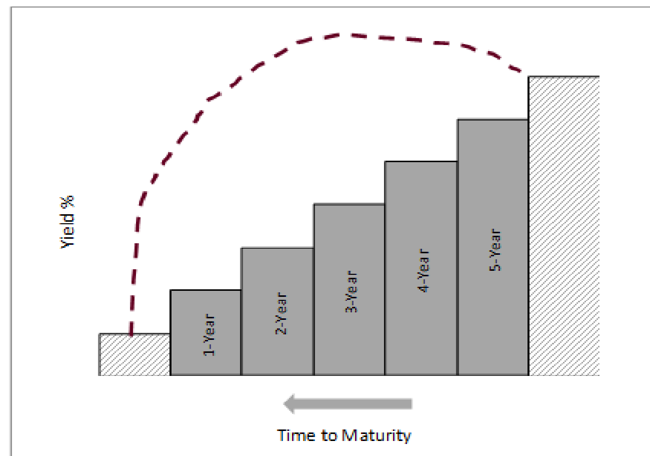
A bond ladder gives the fixed income investor the ability to build a portfolio of bonds with staggered maturities so that only a portion of the portfolio matures in any given year. Because the bonds are held to maturity, the ladder is maintained by reinvesting the proceeds from a maturing bond into a new, longer bond at the opposite end of the ladder (see figure on next page).

Laddering is a passive solution which attempts to mitigate interest rate risk across all interest rate cycles. For instance, if a ladder is used in a period of rising interest rates, the proceeds from maturing bonds are reinvested in higher yielding bonds, gradually increasing the portfolio's yield.

Source: Genter Capital Management

If a laddered bond matures during a period of declining interest rates, the proceeds are reinvested in lower yielding bonds, which reduces the long-term return of the portfolio. The argument is made that a ladder allows an investor to be invested in a variety of maturities so that changing interest rates won't affect the bulk of the portfolio.

This is a hypothetical example of a bond ladder. A series of securities can be staggered across any group of maturities. As a bond approaches maturity, the proceeds are reinvested in a new bond with a maturity at the longest end of the ladder.



Drawbacks of a Laddered Portfolio

One of the primary limitations of a bond ladder is this method's inferior ability to manage risk. An investor utilizing a ladder must commit to a specific bond on that exact day of purchase. A ladder does not allow for portfolio adjustments to take advantage of significant market opportunities in between maturities. Additionally, a ladder:

- Requires a firm commitment of assets over time. If an investor needs to sell a portion of the ladder for any reason (between maturities), the return of principal at the time of redemption isn't guaranteed.
- Does not fully address the four main risks to bond investing: credit, income tax, market price, and reinvestment. Active management has a much higher capability of addressing these risks.
- Difficult to fully achieve in the municipal sector. More than 90% of longer municipal bonds have a 10-year call provision. This call option negatively impacts the viability of building a successful laddered portfolio.
- Does not allow for optimal yield curve positioning. The term structure of interest rates is continually changing, creating numerous investment opportunities that a passive strategy such as laddering is unable to take advantage of.

Source: Genter Capital Management

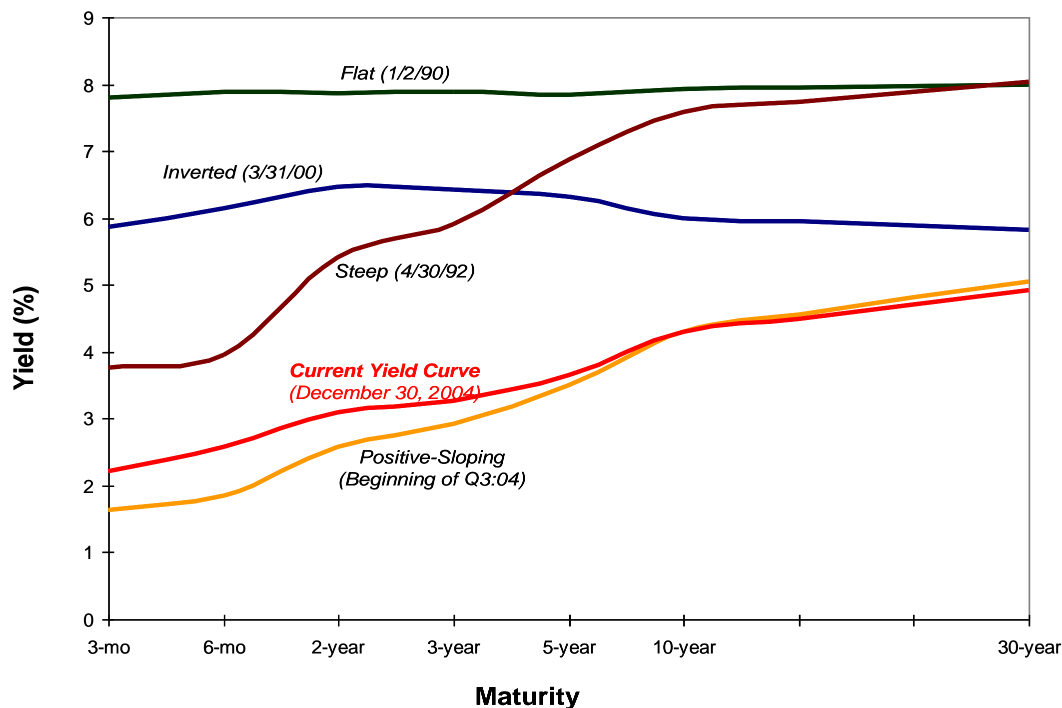
- Does not provide for the ability to take profits. Buy-and-hold investors often place a premium on having coupon income while ignoring changes in the principal of a bond and the prospects of relative security performance.

- Does not offer the benefit of credit analysis. If an investor owns corporate bonds in a ladder they may have less incentive and ability to buy, sell, or swap those issues if a sudden change in the financial health of a credit occurs in between laddered maturities (e.g. MCI, AT&T, AIG, State of California).

Benefits of Active Management

Several advantages of proactive fixed income management were mentioned on the first page and are expanded upon here.

1) Professional, active fixed income managers constantly assess the current and perceived



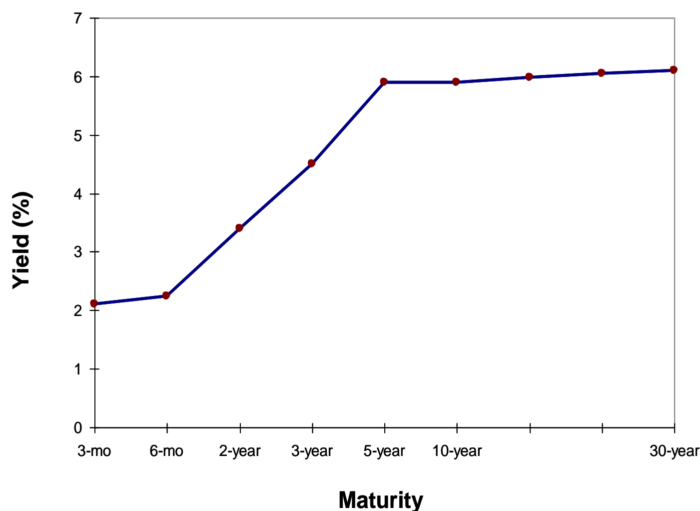
future shape of the yield curve. We know from history that the term structure of interest rates is not static. It is very much dynamic with respect to the future economic outlook of the country.

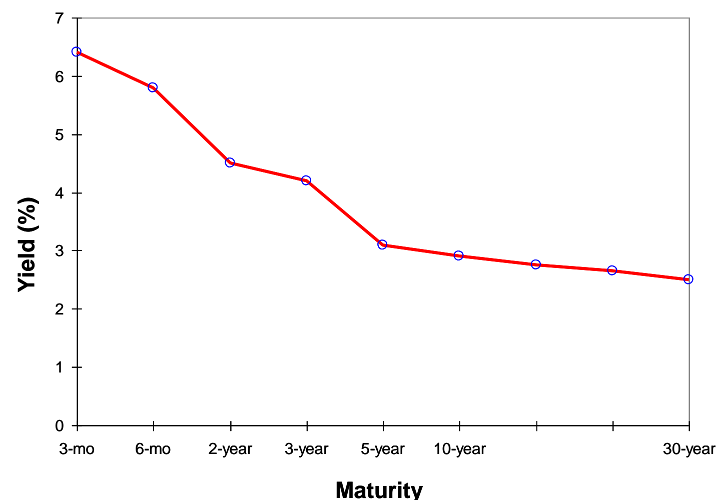
Active managers critically assess the shape of the yield curve to alter the duration positioning of portfolios. An active manager can quickly react to rapidly changing market opportunities, even

Source: Genter Capital Management

on an intraday basis. For example, if an active manager expects a rising interest rate environment, he may take a defensive stance and construct a barbell approach to lower duration and lessen a portfolio's price sensitivity to rising rates.

2) Professional, active fixed income managers determine an optimal investment location on the yield curve. Because the shape of the yield curve is ever-changing, the optimal point to be positioned on it often shifts. Active management allows for taking nimble advantage of these investment opportunities. Here are two *hypothetical* yield curve examples. An active manager will extend in maturity when there is a perceived reward for doing so and conversely, stay short when there is a lack of reward for extension.





3) Professional, active fixed income managers constantly evaluate relative performance of various investment sectors to determine appropriate weighting and rotation of a portfolio's securities.

Investment performance of specific fixed income sectors is also a dynamic variable. Like individual securities, sector yields tighten and widen depending on a number of factors such as investment outlook and supply and demand. This ebb and flow of sector yields gives active managers an investment opportunity to take advantage of inefficiencies according to their cyclical or secular investment outlook.

For example, during periods in which the economy is expanding, corporate yield spreads tend to narrow due to the perception of a decrease in credit risk. Alternatively, during recessions, corporate spreads tend to widen due to an increase in perceived credit risk. Therefore, if an expansion is forecast, an active manager may purchase corporate bonds and sell treasuries with the anticipation of price appreciation due to spread narrowing.

Source: Genter Capital Management

This graphic exemplifies a 15-year history of the ebb and flow of various sector returns as of February 28, 2021.

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	YTD	2006-2020 Ann.	2006-2020 Vol.
EMD LCL. 15.2%	EMD LCL. 18.1%	Treas. 13.7%	High Yield 58.2%	EMD LCL. 15.7%	TIPS 13.6%	EMD USD 17.4%	High Yield 7.4%	Muni 9.1%	Muni 3.3%	High Yield 17.1%	EMD LCL. 15.2%	ABS 2.7%	EMD USD 15.0%	TIPS 11.0%	Muni 0.7%	High Yield 7.5%	EMD LCL. 11.9%
High Yield 11.8%	TIPS 11.6%	MBS 8.3%	EMD USD 29.8%	High Yield 15.1%	Muni 10.7%	EMD LCL. 16.8%	ABS 1.3%	Corp. 7.5%	MBS 1.5%	EMD USD 10.2%	EMD USD 10.3%	Muni 1.3%	Corp. 14.5%	Corp. 9.9%	High Yield 0.4%	EMD USD 6.9%	High Yield 11.2%
EMD USD 9.9%	Treas. 9.0%	Barclays Agg 5.2%	ABS 24.7%	EMD USD 12.2%	Treas. 9.8%	High Yield 15.8%	MBS -1.4%	EMD USD 7.4%	EMD USD 1.2%	EMD LCL. 9.9%	High Yield 7.5%	MBS 1.0%	High Yield 14.3%	Treas. 8.0%	ABS 0.3%	Corp. 5.8%	EMD USD 8.8%
Asset Alloc. 5.8%	Barclays Agg 7.0%	Asset Alloc. -1.9%	EMD LCL. 22.0%	Corp. 9.0%	Corp. 8.2%	Corp. 9.8%	Corp. -1.5%	MBS 6.1%	Treas. 0.8%	Corp. 6.1%	Corp. 6.4%	Treas. 0.9%	EMD LCL. 13.5%	Barclays Agg 7.5%	TIPS 0.2%	EMD LCL. 5.1%	Corp. 5.9%
MBS 5.2%	MBS 6.9%	TIPS -2.4%	Corp. 18.7%	Asset Alloc. 7.6%	Barclays Agg 7.8%	Asset Alloc. 7.6%	Asset Alloc. -1.7%	Barclays Agg 6.0%	Barclays Agg 0.6%	Asset Alloc. 4.8%	Muni 5.4%	Barclays Agg 0.0%	Asset Alloc. 9.8%	High Yield 7.1%	MBS 0.1%	Asset Alloc. 4.7%	Treas. 4.9%
Muni 4.8%	Asset Alloc. 6.2%	Muni -2.5%	Asset Alloc. 16.5%	Barclays Agg 6.5%	Asset Alloc. 7.7%	TIPS 7.0%	Barclays Agg -2.0%	Asset Alloc. 5.4%	ABS 0.2%	TIPS 4.7%	Asset Alloc. 5.3%	Asset Alloc. -0.6%	Barclays Agg 8.7%	Asset Alloc. 6.6%	Asset Alloc. -0.3%	Barclays Agg 4.5%	TIPS 4.9%
ABS 4.7%	EMD USD 6.2%	Corp. -4.9%	Muni 12.9%	TIPS 6.3%	EMD USD 7.3%	Muni 6.8%	Muni -2.6%	Treas. 5.0%	Asset Alloc. -0.4%	Barclays Agg 2.6%	Barclays Agg 3.5%	TIPS -1.3%	TIPS 8.4%	EMD USD 5.3%	Barclays Agg -0.7%	Muni 4.5%	ABS 4.3%
Barclays Agg 4.3%	Corp. 4.6%	EMD LCL. -5.2%	TIPS 11.4%	Treas. 5.9%	MBS 6.2%	Barclays Agg 4.2%	Treas. -2.8%	TIPS 3.6%	Corp. -0.7%	ABS 2.0%	TIPS 3.0%	High Yield -2.1%	Muni 7.5%	Muni 5.2%	Treas. -0.9%	TIPS 4.3%	Muni 3.8%
Corp. 4.3%	Muni 3.4%	EMD USD -12.0%	Barclays Agg 5.9%	ABS 5.8%	ABS 5.1%	ABS 3.7%	EMD USD -5.2%	High Yield 2.5%	TIPS -1.4%	MBS 1.7%	ABS 3.0%	Corp. -2.5%	Treas. 6.9%	MBS 3.9%	EMD USD -1.0%	MBS 4.1%	Asset Alloc. 3.8%
Treas. 3.1%	ABS 2.2%	ABS -12.7%	MBS 5.9%	MBS 5.4%	High Yield 5.0%	MBS 2.6%	TIPS -8.6%	ABS 1.7%	High Yield -4.5%	Treas. 1.0%	MBS 2.5%	EMD USD -4.3%	MBS 6.4%	ABS 3.4%	Corp. -1.2%	Treas. 4.0%	Barclays Agg 3.2%
TIPS 0.4%	High Yield 1.9%	High Yield -26.2%	Treas. -3.6%	Muni 2.4%	EMD LCL. -1.8%	Treas. 2.0%	EMD LCL. -9.0%	EMD LCL. -5.7%	EMD LCL. -14.9%	Muni 0.2%	Treas. 2.3%	EMD LCL. -6.2%	ABS 3.8%	EMD LCL. 2.7%	EMD LCL. -1.3%	ABS 3.4%	MBS 2.5%

Source: Barclays, Bloomberg, FactSet, J.P. Morgan Global Economic Research, J.P. Morgan Asset Management.

4) Professional, active fixed income managers thoroughly analyze each potential investment to determine relative value among individual bonds within a particular sector. Just as relative sector performance changes, so do those of individual securities. For example, if interest rates are expected to decrease, an active manager that owns callable bonds may sell them and purchase non-callables instead to avoid price depreciation due to potential spread widening.

Additional Benefits of Professional Management

<u>Capital Appreciation</u>

Active management seeks BOTH interest income and capital appreciation. An active manager is sometimes able to benefit from unique market opportunities to capture excess yield and generate capital gains. One method of capturing capital appreciation (with a positive-sloping yield curve) is to take advantage of what occurs when a bond "rolls down the curve."

The graphic on the following page indicates a *hypothetical* example of a bond with a four-year maturity priced at par and yielding 4.2%. As the bond ages and approaches maturity (assuming no change in the yield curve) it becomes a shorter bond with a lower yield and a higher price.

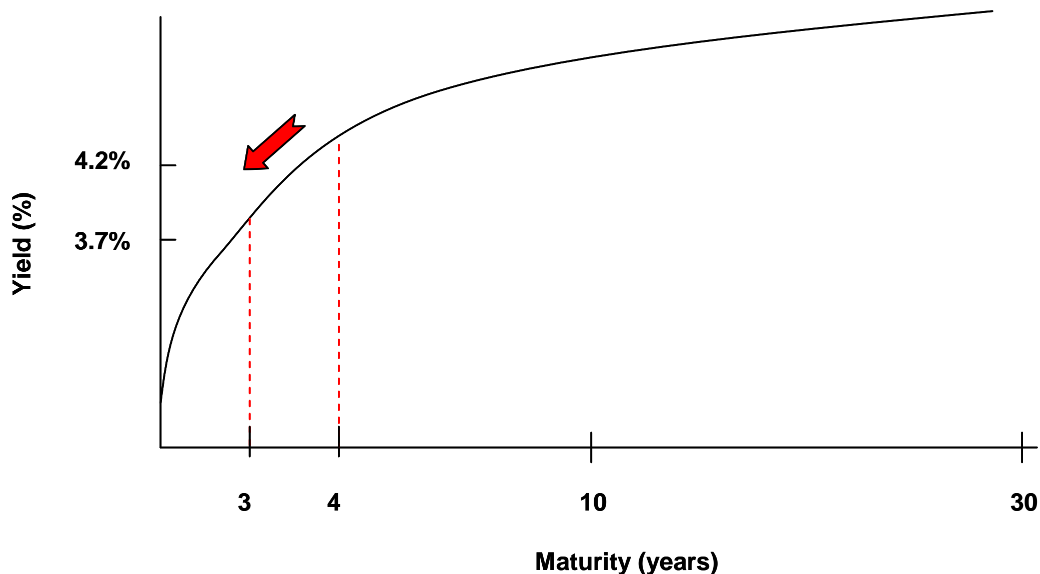
After one year the 4-year bond becomes a 3-year bond yielding 3.7% but the price has increased

Source: Genter Capital Management

to $101.40, which is a 1.4% capital gain on top of the 4.2% coupon yield.

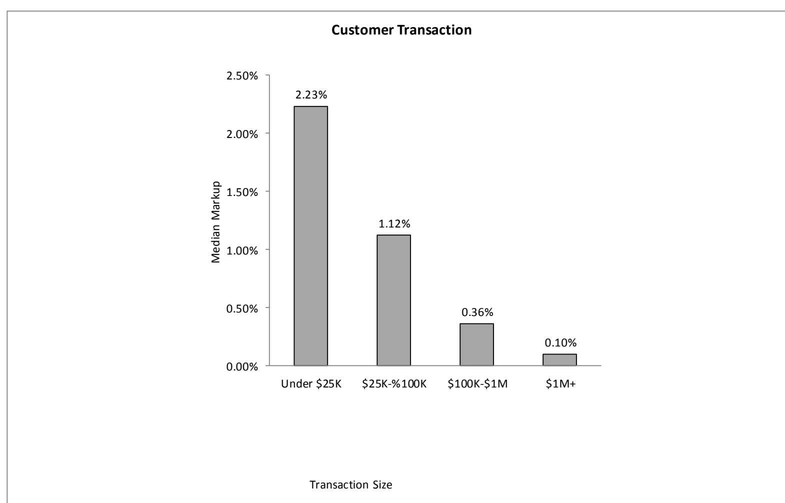
A passive ladder strategy would not be able to take advantage of this price appreciation because the bonds are held until maturity.

"Rolling Down the Curve"



Cost Advantages

Professional, active fixed income managers have the ability to leverage key relationships with an extensive institutional broker/dealer network in order to access a wide variety of fixed income inventories.



Institutional sized transactions ($100k+) have considerably lower markups.

86% of all municipal trades are retail ($5k + $100k), yet account for only 17% of the dollar volumes.

Results from a multi-year SEC study published in July 2004 which extensively analyzed more than 7 million municipal market transactions.

Source: Genter Capital Management

This allows professional managers to utilize economies of scale in trading and actually lower trading costs. Ladders are typically built with individual bonds, which are accompanied by significantly higher retail commissions.

Customization

Professional, active fixed income managers have the ability to manage risk in a more diversified manner than passive ladders. Active portfolios can be customized to a much higher degree than ladders.

To Recapitulate

Again, while there is nothing inherently inappropriate with the implementation of passive ladders, there are often large opportunity costs associated with their use.

Some of these costs include sacrificing potential higher returns, having much less flexibility to manage risk, having a lack of investment diversification, and potentially incurring higher fees.

Professional, active fixed income managers are investment professionals with years of experience garnered from researching, analyzing and making investment decisions within the fast-paced and increasingly sophisticated world of fixed income markets. Active managers utilize a disciplined team of professionals who continually search for the best investment opportunities in an effort to provide higher returns, while responsibly managing the risks sometimes associated with better performance.

Source: Genter Capital Management