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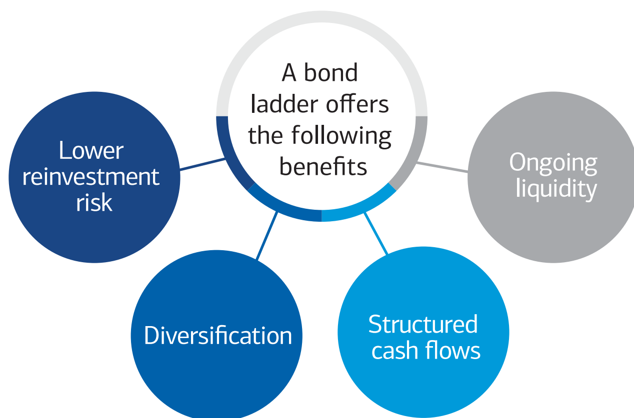
FIXED INCOME

What is a bond ladder?

A bond ladder is often viewed as a defensive investment strategy that manages cash flows while aiming to minimize risks associated with fixed income securities. Generally, a bond ladder is a portfolio of individual bonds that vary in maturity dates, often every year or every quarter, intended to provide structured cash flows. The intention is to hold each bond to maturity and, as bonds mature, the proceeds are reinvested in bonds with longer-dated maturities to maintain the laddered structure.

Potential benefits of bond ladders



Lower reinvestment risk

Bond ladders may reduce reinvestment risk, as compared to holding an individual bond, because investors own a portfolio of bonds with varying maturities allowing for reinvestment at current market rates.

Consider an investor that owns a ten-year ladder with annual maturities. Over time, the investor has the opportunity to reinvest principal as bonds mature at the longer end of the ladder, reducing exposure to changing interest rates. As remaining maturities shorten over time, their price sensitivity is reduced to changes in market yields. Bond ladders generally outperform an individual bond in rising rate environments since investors can reinvest principal payments at higher rates as bonds mature.

On the other hand, an investor that owns a single bond with a ten-year maturity can only reinvest the principal after that bond matures and is subject to the new interest rate environment at that time, which could be higher, lower or the same. In a declining rate environment, allocations to longer-dated securities may perform better as investors will lock in exposure to higher interest rates.

Lower reinvestment risk may also help to reduce the impact of inflation on the portfolio. When inflation is increasing, rates generally rise. Reinvesting maturing securities at higher rates allows the portfolio to mitigate inflation impacts as compared to a single fixed rate security.

Diversification

A bond ladder offers the investor diversification by providing exposure to different parts of the yield curve. Interest rate changes can vary at different maturities, causing bonds at different parts of the curve to perform differently. For example, assume interest rates are rising and five-year bond yields rise by more than ten-year bond yields. A client who only owns a five-year fixed rate bond would most likely underperform a client who owns the ten-year bond. A laddered portfolio can help reduce the impact of interest rate changes in one part of the curve.

A bond ladder can also provide an investor with more diversified credit exposure when created with a variety of issuers when compared to an investment in a single bond. If the bond from a single issuer gets downgraded or defaults, the value of the individual bond would decline. A bond ladder can reduce this risk by investing in different issuers so if a holding is downgraded, the impact on the bond portfolio will be less.

Structured cash flows

A bond ladder also offers more ways to manage cash flow compared to an individual bond. Principal payments can be matched to specific dates that meet an investor's future cash needs. Many bonds pay coupon payments twice a year, once on the month of their maturity and one six months prior. For example, a bond that matures in November will generally pay coupons in May and November. By structuring a bond ladder with maturities from July through December, for example, investors can plan for monthly bond income throughout the calendar year. This can help provide steady income to meet client needs.

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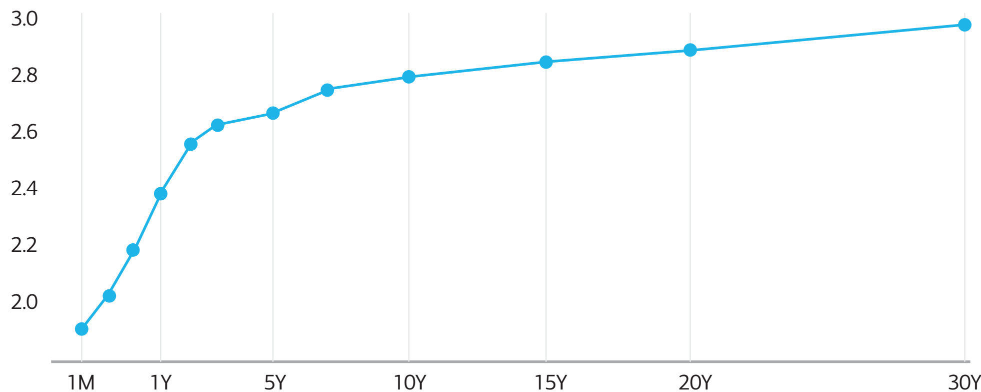
Ongoing liquidity

With a bond ladder, there is one or multiple bonds maturing on defined dates as opposed to owning an individual bond. The principal proceeds can be reinvested at the end of the ladder or redirected toward another spending need. If there is a need for additional cash flow, liquidating bonds with shorter maturities can mitigate the impact on the overall yield of the bond ladder.

Exhibit 1

The yield curve is a line that plots interest rates of the same credit quality or issuer across different maturities. Bond ladders can take advantage of the yield curve to reduce reinvestment risk and offer diversification to different maturities as referenced above. In an environment with a positively sloped yield curve, a ladder enables investors to reinvest maturing proceeds at the higher yields.



Sample comparison of a ladder structure vs an individual bond

Yield is another factor to consider when comparing a bond ladder to an individual bond. However, as discussed above, investing in a bond ladder offers the following benefits compared to an individual bond: lower reinvestment risk, diversification, structured cash flows and ongoing liquidity.

Strategy	5-year ladder			3-year individual bond		
	Bond	Years to maturity	Sample yield	Bond	Years to maturity	Sample yield
	A	1	2.44			
	B	2	2.61			
	C	3	2.68	C	3	2.68
	D	4	2.70			
	E	5	2.73			
Average		**3**	**2.63**		**3**	**2.68**

Bond ladders in practice

Bond ladder portfolio example:

Portfolio at inception	
Bond	**Years to maturity**
A	1
B	2
C	3
D	4
E	5
F	6
G	7
H	8
I	9
J	10

End of year 1
Bond A matures and replaced with a 10-year bond
Bond B now matures in 1 year
Bond J now matures in 9 years

End of year 5
Bond E matures and is replaced with a new 10-year bond
Bond J now matures in 5 years

IMPORTANT INFORMATION

The investment strategies discussed are not appropriate for every investor and should be considered given a person's investment objectives, financial situation and particular needs. Clients should review with their Financial Advisor the terms, conditions and risks involved with specific products and services.

Bond ladders are subject to market risk and are not guaranteed. They do not offer downside protection. A prolonged decline in the bond market can result in a decline in price. Investing in fixed-income securities may involve certain risks, including the credit quality of individual issuers, possible prepayments, market or economic developments and yields and share price fluctuations due to changes in interest rates. When interest rates go up, bond prices typically drop, and vice versa.

Investing involves risk. There is always the potential of losing money when you invest in securities.

Bond portfolio laddering does not reduce market risk, and the principal and yield of investment securities will fluctuate with changes in market conditions.

All asset classes are not in the best interest of all investors. Each investor should select the asset classes for them based on their goals, time horizon and risk tolerance.

Risk management and diversification processes seek to mitigate, but cannot eliminate risk, nor do they imply low risk. Diversification does not ensure a profit or protect against loss in declining markets.

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