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An Inverted Yield Curve and What Does It Mean?

Since March of 2022 U.S. interest rates have been in an "Inverted Yield Curve" situation. This is also about the time that the Federal Reserve started its campaign of raising interest rates to combat inflation. This poses several important questions to people who deal with the U.S. economy, especially those with exposure to the U.S. capital markets. What does it mean when the yield curve is inverted? How is it different than a normal yield curve? What causes the yield curve to become inverted? What does an

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We seek to add value over time through proper planning and rigorous internal research on investments for individual accounts as well as manager selection for advisory accounts, building conviction in investment opportunities through team debate to offer the appropriate reward for the risk we are asking our clients to accept.

inverted yield curve mean for the economy and the markets? Investors need to understand the answers to these questions and position their portfolios in a way to successfully navigate through an inverted yield curve period.

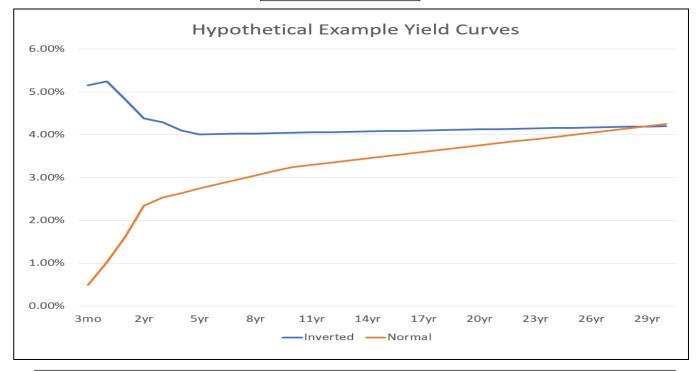
What is an inverted yield curve and how is it different than a normal curve?

First, let us define what the term yield curve means. A yield curve is a line that plots the yields or interest rates of bonds with different maturities and equal credit quality. The yield curve we refer to in this article is the U.S. Treasury yield curve which is generally what is being discussed when the topic is interest rates. A "normal" yield curve is upward sloping with shorter term bonds having lower yields than longer term bonds. Investors should expect to receive higher compensation for committing their money for longer periods of time. An "inverted" yield curve slopes downward with shorter term bonds having higher yields than longer term bonds. It's only a small fraction of the time that the yield curve inverts, and it usually reverts to a normal plot quickly.

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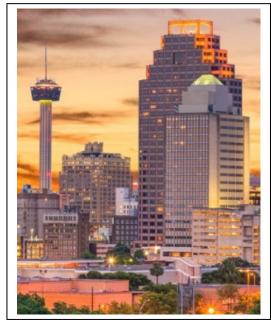
What causes the yield curve to become inverted?

There are multiple forces that can cause the yield curve to invert. These forces can either act alone or in concert

with one another.

Historically yield curves invert when Investors have a negative view on the economy and sell their stocks and corporate bonds to start buying treasury bonds. Treasuries are typically seen as a "safe haven" in times of economic uncertainty or pessimism. This extra demand for Treasuries further out on the curve forces those yields to fall from the forces of supply and demand. The Federal Reserve began its recent rate hike campaign in March of 2022 and as the pace and magnitude of rate hikes increased, many investors predicted that the Federal Reserve would go too far and send the U.S. into recession. A lot of these investors have sought refuge in the Treasury market.

Another potential contributor to an inverted yield curve is how the U.S. Treasury issues new debt. In December of 2023, the U.S. Treasury issued \$672MM in new Bills, Notes, and Bonds (excluding TIPS, Floating Rate, and Savings Bonds). Of that issuance, 60% was with a maturity of 1 year or less. When the



U.S. Treasury issues in such a manner, it helps to keep interest rates lower further out on the curve. There is less supply for the repeat natural buyers of those longer maturities such as insurance companies and pension/401K plans.



Dec 2023 U.S. Treasury Bill, Note, and Bond Issuance				
		Amount		Issue
Issuance	Coupon	Issued (\$B)		Date
Treasury Bills:				_
4-week	5.270%	\$80		12/21/2023
8-week	5.270%	\$80		12/21/2023
17-week	5.220%	\$56		12/20/2023
3-month	5.260%	\$75		12/18/2023
6-month	5.130%	\$68		12/18/2023
52-week	4.940%	\$44		11/28/2023
		\$403	60.0%	
Treasury Notes:				
2-year	4.890%	\$54		11/27/2023
3-year	4.490%	\$50		12/11/2023
5-year	4.420%	\$55		11/27/2023
7-year	4.400%	\$39		11/28/2023
10-year	4.300%	\$37		12/11/2023
		\$235	35.0%	
Treasury Bonds:				
20-year	4.210%	\$13		12/20/2023
30-year	4.340%	\$21		12/12/2023
		\$34	5.0%	
data source: fiscaldata.treasury.gov		\$672		

Lastly monetary policy can help contribute to an inverted yield curve. Perhaps you remember the terms "Quantitative Easing" or "QE" and "Quantitative Tightening" or "QT" from the financial crisis of 2008-2009. Quantitative Easing refers to the Federal Reserve buying Treasuries and Mortgages to lower longer term interest rates. Quantitative Tightening refers to the Federal Reserve selling assets to put upward pressure on longer term rates. When the Federal Reserve is purchasing or selling Treasuries and Mortgages, it is introducing a non-natural market participant and artificially altering the forces of supply and demand. It's possible to have a situation where the Federal Reserve is raising rates on the short end by charging borrowers more (rate hikes) and at the same time purchasing Treasuries further out on the curve.

What does the shape of the yield curve mean for the economy and the market?

One way to think of the yield curve is in terms of investor expectations. A normal yield curve should mean that investors are comfortable investing in riskier assets with higher potential returns. Treasury bonds need to have higher yields to attract and compensate investors for not investing in those riskier assets as well as for the length of time investors are having to commit their capital. Earlier we mentioned that negative investor sentiment or pessimism is most often a cause for yield curve inversion. But it's not just fleeing riskier assets for overnight or short duration Treasuries. Investors typically flee to assets that have a life longer than the negative perception of the economy. In both cases the economic forces of supply and demand are setting the yields (prices) of treasuries at various points along the yield curve. Investor expectations and the shape of the yield curve are why an inverted yield curve is often seen as a signal for the economy to be heading into recession.

Another way to think about the yield curve is in terms of extending credit. At a bank, regular deposits are available to depositors on demand. In other words, a depositor at a bank can withdrawal the money at a moment's notice without penalty. Deposits earn interest based on rates from the front part of the yield curve. At the same time bank deposits are also loaned out to borrowers at an agreed upon interest rate for an agreed



amount of time. Bank loans are priced further out on the yield than where deposits are credited. When the yield curve has normal shape, the bank is lending money at a higher rate than it is crediting deposits. The positive spread between what they collect in interest from debtors and what they credit depositors represents profit for the bank. Banks therefore are incentivized to lend money when the yield curve is normal, meaning credit tends to flow more freely. The opposite is true when the yield curve is inverted. A negative spread exists between what the bank collects in interest from bank loans and what it is having to credit depositors. An inverted yield curve makes banks more reluctant to lend out money and credit is constricted.

Clearly investors can glean some very important information from the shape of the yield curve. This can be valuable when determining portfolio strategy or gauging how much risk they are willing to take at a particular point in time. Yield curve shape is another piece of information in the mosaic that investors put together to try to navigate the markets.

What does our team do with this information?

It's important to understand that our team takes a long-term view of the markets. Portfolio strategy and composition are designed to deliver results over multiple economic cycles. That said, we are keenly aware of what information comes from the shape of the yield curve. We understand that an inverted yield curve can mean potential economic uncertainty or a Federal Reserve that is trying to slow down the economy. It causes us to be much more judicious in sectors affected by borrowing costs and credit extension/availability. It also causes us to look for opportunities that might not have been there before such as higher than normal short term Treasury yields. We also tend to favor investments that have strong secular drivers such as Artificial Intelligence and Cloud Computing. These types of investments have longer horizons than any one economic cycle. Attention to fundamentals continues to drive our investment decisions. Quality is at the center of our process: Low Leverage (debt); High Free-Cash-Flow Margins; and above peer average Return-On-Invested-Capital.

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How much cash should I have on hand?

"How much cash should I have now?" It seems like a simple question, but the answer can be complicated — especially in times of market volatility. Apart from an emergency fund, the amount of cash or liquid assets you need depends on many factors, including the current state of the market and major life events.

"There isn't really a general rule in terms of a number," says Michael Taylor, CFA, Vice President – Investment Strategy Analyst at Wells Fargo Investment Institute. "We do say it shouldn't be more than maybe 10% of your overall portfolio or maybe three to six months' worth of living expenses."

Taylor notes that the number could change depending on what's going on in the economy and markets. "You should make sure your emergency fund and cash reserves can meet your current needs," he says.

Taylor shares five events that should prompt a conversation with your financial advisor

about how much cash to have on hand.

When the market is in flux

The state of the market can have an impact on how much cash you should have on hand, how long you decide to hold an asset as cash, or when to

convert assets to cash. This can be especially true when you foresee a large discretionary purchase such as a vacation home or a luxury vehicle.

"Plan for those purchases or defer them so you don't have to liquidate assets at a loss during market uncertainty," Taylor says.

When your job status may change

If you're contemplating a career move such as starting a business, retiring soon, or facing a possible layoff, consider meeting with your financial advisor. "If you don't have enough cash on hand during those transition periods, you might have to dip into an investment account or sell a stock at an inopportune time," Taylor says. "That means you

could end up losing money when you can least afford it."

When your marital status is about to change

Getting married or paying for a wedding? According to "The Knot 2021 Real Weddings Study," on average in 2021,



couples spent \$34,000 total on their wedding, including ceremony, reception and engagement ring. Note that doesn't include a honeymoon or the expense of setting up a household.

A divorce can set you back as well, thanks to legal fees, asset division, and other costs. That means you need enough cash on hand to weather the transition from being single to getting married or vice versa. Talking to a financial advisor



ahead of time can help you identify how much on-hand cash you need.

When your child is ready for college

According to projections by Wells Fargo Advisors based on the College Board's "Trends in College Pricing and Student Aid," the estimated cost of attending a private college for four years (including tuition, fees, and room and board)

starting in 2023 is more than \$228,000.1

"It's important to plan so that you have enough liquidity to pay those tuition bills when they arrive," Taylor says.

When your child is ready for college

If you receive an inheritance, a large bonus, or a generous financial gift, ask your financial advisor about investment options relative to the amount of cash you should have in your

portfolio. If that money stays in savings or short-term CDs, it won't decrease in value, but it also may not be able to earn to its full potential.

Your long-term goals, risk tolerance, and spending and saving habits also affect how much cash you should have on hand. A financial advisor can help you strike the right balance.

This article was written by/for Wells Fargo Advisors and provided courtesy of San Antonio Wealth Management of Wells Fargo Advisors in San Antonio, TX at 210-404-1120.

CAR: 0723-00604



¹ Total yearly costs for in-state tuition, fees, books, and room and board (transportation and miscellaneous expenses not included). Base is 2022 – 2023 school year. Costs for future years projected by Wells Fargo Advisors in November 2022 assuming a 3.0% national average increase per year for private universities (based on a 10-year historical average)..





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PM-07252025-6295958.1.1

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