

Financial Survival Guide

How Bonds Work



Contents

Key Takeaways	1
How Bonds Work: A Contract, Not A Stock Quote	1
The Types Of Bonds And What Each One Is Really Selling	2
How Are Bond Yields Set?	4
The Bond Risks Every Buyer Has To Evaluate	5
Why The Daily Price Change Is The Wrong Scoreboard.....	6
Where The Bond Bears Are Right	7
Why Own Bonds At All?	8
How Bonds Work To Lower Portfolio Volatility	9
How Bonds Work In A Portfolio: Putting It Together	10

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In addition to leading RIA's investment team, Roberts is the Chief Editor of the [Bull Bear Report](#)—a weekly newsletter with over 100,000 subscribers—and the Editor of the Real Investment Advice website. The newsletter covers economic, political, and market topics related to money and life.

He also hosts The Real Investment Show podcast, where his approachable analysis of market trends reaches a broad audience. Roberts's insights are regularly featured on major media outlets like [CNBC](#), [Fox Business](#), and [Bloomberg](#), and he is frequently quoted in publications such as [The Wall Street Journal](#) and [Business Insider](#).

Known for his common-sense investment philosophy, Roberts uses real-world examples to demystify economic trends. His professional yet approachable style has made him a trusted voice in financial analysis and economic commentary. Lance Roberts continues to guide investors with real investment advice focused on practical strategies for wealth management and market understanding.

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How Bonds Work: Why The Daily Price Is The Wrong Scoreboard

Understanding how bonds work, from the types and risks to how yields get set, shows why owning them is about far more than the daily price change.

Key Takeaways

- A bond is a contract. If you hold an individual bond to maturity and the issuer pays, the price swings along the way never change what you get back.
- Since 1871, the starting 10-year Treasury yield has had a 0.95 correlation with the bond's return over the following decade, and no rolling 10-year period lost money in nominal terms.
- Bonds lower portfolio volatility. Since 1926, a 60/40 mix kept about 81% of the stock market's return with about 62% of its volatility.
- The real enemy of bonds is inflation that is already high and still rising. In that regime, real returns averaged -10.9% a year.
- Treasuries gained in 10 of the 12 stock declines of 15% or more since 1926. Both exceptions, 1968 to 1970 and 2022, came with rising inflation.

Every few years, the financial media decides that bonds are "broken." The headline usually follows a stretch where bond prices fell alongside stocks, and the conclusion is always the same: why own something that loses money when it is supposed to be "safe"? Here's the problem with that argument. It judges a bond by the one number that matters least to the person who owns it. Understanding how bonds work starts with a simple idea most investors have never been taught. The price on your statement is a running estimate of what someone else would pay you today. It is NOT the amount the issuer has promised to pay you.

That distinction sounds academic until you watch what it does to investor behavior. People who see a bond fund down 12% in a year sell it. They usually sell near the low, then swear off bonds for a decade. People who understand the contract they own tend to do the opposite. This article is the long version of that conversation: what bonds are, the types you'll run into, the risks that actually matter, how yields get set and why the job bonds do in a portfolio has very little to do with the daily print.

How Bonds Work: A Contract, Not A Stock Quote

Strip away the jargon and a bond is a loan you make to a government or a company. The borrower agrees in writing to pay a fixed rate of interest (the coupon) on a set schedule. It also agrees to return your principal, the par or face value, on a specific date called the maturity. That's the whole deal. Everything else you'll hear about bonds, from duration and convexity to spreads and the yield curve, is a way of describing what happens to the value of that promise between the day you buy it and the day it ends. A 10-year Treasury with a 4% coupon pays \$40 a year per \$1,000 bond, in two \$20 installments. At the end of year ten, it hands back the \$1,000.

A stock makes none of those promises. There is no maturity date, no contractual payment and no guarantee you ever get your money back. Such is why the two assets behave so differently over time, even when they move together over a few weeks. With a stock, the market price is the only exit. With a bond held to maturity, the market price is one of two exits. The other is written into the contract.

Think of it like owning a rental house with a signed ten-year lease. If rents in the neighborhood jump, the market value of your house (with its below-market lease attached) falls, because a buyer would rather collect today's higher rents. Your tenant, however, keeps paying exactly what the lease says. When the lease ends, you get the house back and can rent it at whatever the going rate is. **A bond's market price is the appraisal of the lease, not the lease itself.** Investors who confuse the two make most of the mistakes that cost them money in fixed income.

You pay \$1,000 for a 10-year Treasury paying 4%. On this hypothetical rate path, its market price falls to about \$910 when rates rise and climbs to about \$1,026 when they fall, then converges back to \$1,000 at maturity. The contract never changes: \$40 a year in interest and the \$1,000 principal at the end, \$1,400 in total.

THE CONTRACT VS. THE QUOTE

You pay \$1,000 for a 10-year Treasury paying 4%. Price path is hypothetical.

What The Market Quotes: Changes Every Day



Calculations: RIA Advisors. Hypothetical rate path, semiannual pricing. Coupon bars not to scale.

You pay \$1,000 for a 10-year Treasury paying 4%. On this hypothetical rate path, its market price falls to about \$910 when rates rise and climbs to about \$1,026 when they fall, then converges back to \$1,000 at maturity. The contract never changes: \$40 a year in interest and the \$1,000 principal at the end, \$1,400 in total.

The Seesaw Between Price And Yield

Once a bond is issued, its coupon is fixed for life. What changes is the yield new buyers demand. Say the going rate on comparable bonds rises from 4% to 5%. Nobody will pay full price for your 4% coupon. Its price has to fall until a buyer earns 5% between the discounted price and the coupons. When rates fall, the reverse happens, and your older, higher coupon becomes worth more than par. That inverse relationship is the seesaw every bond investor rides.

The number that captures this is the yield to maturity. It's the annualized return you lock in by buying at today's price and holding to the end. That assumes you collect every coupon, reinvest each one at the same rate and get par back. In other words, the yield to maturity is the market's price tag stated as a return. That's why bond traders quote yields instead of prices.

How far the price moves depends mostly on time. A bond that matures in two years doesn't have much room to be "wrong" about rates. A 30-year bond does. The measure of that sensitivity is "duration," which, roughly, is the percentage price change for a one-point move in yields. The chart below shows the math for a 4% Treasury when its yield rises from 4% to 5%.

WHAT A 1-POINT RISE IN YIELDS COSTS

Price change for a 4% coupon Treasury when its yield rises from 4% to 5%.



Calculations: RIA Advisors. Standard bond pricing, semiannual coupons. Illustrative, not a forecast.

When yields rise one percentage point, from 4% to 5%, a 4% coupon Treasury loses about 1.9% of its price at a 2-year maturity, 4.4% at 5 years, 7.8% at 10 years and 15.4% at 30 years. A 30-year zero-coupon bond, which pays nothing until maturity, loses 25.4%.

Notice the zero-coupon bond on the far right. It pays nothing until maturity, so all of its value sits at the end of the timeline. Every change in rates hits it with full force. That's the instrument behind most of the dramatic "bonds crashed" headlines. The same math explains why the market treats something like a [100-year corporate bond](#) as a bet on rates as much as on the issuer. Long duration is a volatility choice. It isn't a statement about whether you'll be paid.

The Types Of Bonds And What Each One Is Really Selling

The bond market is enormous, and it is far less uniform than the stock market. A Treasury bill and a junk bond share a name and almost nothing else. The useful way to sort them is by what the buyer is actually being paid to accept. With Treasuries, you're paid almost entirely for time and inflation. With everything else, you're also paid to accept the chance the borrower doesn't pay you back. That second payment changes how the bond behaves when the economy turns.

Bond Type	What You Are Paid For	How It Tends To Behave
Treasury Bills, Notes, Bonds	Time and inflation	Backed by the U.S. government. Bills mature within a year, notes in 2 to 10 years, bonds in 20 or 30. Usually rallies when stocks fall on growth fears.
Tips	Time, with inflation protection	Principal adjusts with CPI. Lower stated yield, but protects purchasing power when inflation surprises.
Zero-Coupon (Strips)	Time, all paid at the end	No coupons, highest duration for a given maturity. The most volatile Treasury there is.
Agency and Mortgage-Backed	Time plus prepayment risk	Homeowners refinance when rates fall, so you get your money back when you least want it.
Municipal Bonds	Time, credit, tax advantage	Interest is often exempt from federal tax. Credit quality varies widely by issuer.
Investment-Grade Corporate	Time plus modest credit risk	Higher yield than Treasuries. Spreads widen in recessions, which cuts into the hedge.
High-Yield (“Junk”)	Mostly credit risk	Trades more like stocks than Treasuries. Tends to fall when stocks fall.
International and EM	Time, credit and currency	Adds currency swings that can swamp the coupon in either direction.

The pattern in that table matters more than any single row. As you move from Treasuries toward high yield, the coupon rises and the bond starts behaving less like a bond and more like a stock. Junk bonds and stocks both depend on corporate cash flow, so they tend to get hit by the same recession. **If the reason you own bonds is to cushion a stock market decline, credit risk works against that job.** That doesn't make corporate bonds bad. It means they're doing a different job than Treasuries, one that pays you more in good times and asks you to share some of the pain when the economy rolls over, and you should know which one you hired.

The Most Misunderstood Difference: Bonds Versus Bond Funds

Most investors own bonds through a mutual fund or an ETF, and that changes the experience in one important way. An individual bond matures. A bond fund never does. The manager keeps selling bonds as they shorten and buying new ones to hold the fund near a target maturity. As a result, the fund's duration stays roughly constant forever. There is no date on which a bond fund promises to hand you back a fixed amount.

A BOND MATURES. A BOND FUND NEVER DOES.

\$1,000 at a 4% yield, value over five years on three rate paths. Hypothetical.



Calculations: RIA Advisors. Fund modeled as a 1- to 10-year Treasury ladder. Income paid out in both.

Two \$1,000 investments at a 4% yield, on three hypothetical rate paths. The individual 5-year bond's price moves with rates, but it returns \$1,000 at maturity whether rates fall to 2%, stay at 4% or rise to 6%. The bond fund never matures, so after five years its value depends on where rates went: about \$1,034 if they fell, \$1,000 if they stayed flat and about \$969 if they rose.

In other words, an individual bond held to maturity is a bet on getting your principal back on a known date. A bond fund or ETF is a bet on the direction of interest rates, because there is no date on which its price has to come back.

That's not a flaw. Over long periods, a fund held through a rate cycle behaves much like a rolling ladder of bonds. As yields rise, the fund reinvests maturing bonds at the higher rates, and its income rises with them. The total return converges toward the higher yield over a span roughly equal to the fund's duration. But the "hold to maturity and get par back" promise belongs to individual bonds. A fund holder only gets the equivalent outcome by staying put for at least that duration. Sell after a bad year and the loss is permanent. That one behavioral difference explains a lot of the damage investors did to themselves in 2022.

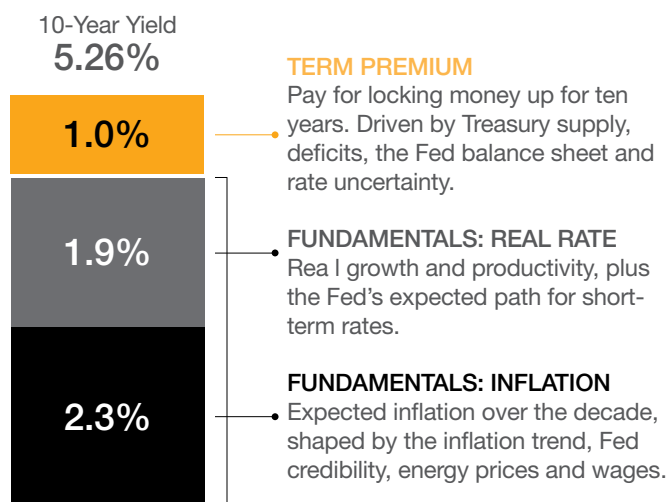
How Are Bond Yields Set?

A question that lands in my inbox whenever rates jump: who actually decides what a bond yields? The short answer is nobody and everybody. Every yield you see quoted is the price at which the last buyer and the last seller agreed to trade, and that agreement reflects what both of them think growth, inflation and the Fed will do over the life of the bond. For new Treasuries, the government holds an auction. Investors submit competitive bids stating the yield they'll accept. The Treasury fills the issue starting with the lowest yields bid, and every winning bidder gets the highest accepted yield, called the "high yield."³ Small investors can buy noncompetitively and simply accept whatever rate the auction clears at. After that, the bond trades in the secondary market. There, its yield moves every second with supply and demand.

What drives that demand? A 10-year Treasury yield can be broken into three rough pieces: the inflation investors expect over the decade, the real rate they want on top of it and a term premium for locking money up that long. I broke a 10-year yield down this way when [asking whether the 10-year Treasury is finally a buy at 5%](#), and the graphic below uses those late September 2026 estimates.⁹

WHAT GOES INTO A 10-YEAR YIELD

Approximate building blocks of a 5.26% yield, late September 2026.



YIELD = INFLATION + REAL RATE + TERM PREMIUM

Corporate and municipal bonds add a credit spread on top.

Source: Kim-Wright via FRED, breakevens via Massive.
Calculations: RIA Advisors.

A 10-year Treasury yield of about 5.26% in late September 2026 broke into roughly 2.3% of expected inflation, measured by the 10-year breakeven rate, a 1.9% real rate and a 1.0% term premium from the Kim-Wright model. Each piece comes from a different model, so the split is an estimate. Corporate and municipal bonds add a credit spread on top.

The first two pieces are fundamentals, set by growth, inflation and where the Fed is expected to take short-term rates. The term premium is the swing factor. It moves with Treasury supply, the Fed's balance sheet and how uncertain investors feel about the path of inflation. Corporate and municipal bonds carry one more layer, a credit spread for the chance the borrower doesn't pay, and that layer is the one that widens when a recession arrives.

The Federal Reserve sets the overnight rate, so it has a firm grip on the front end of the curve. It doesn't directly set the 10-year or 30-year yield. Those are market prices built from expectations about the Fed path, inflation and growth over the next decade or more. The Fed can raise its policy rate and watch long yields fall, because the market reads the hike as a future drag on the economy. It can also cut and watch long yields rise. That's why "the Fed is raising rates" and "bond yields are rising" are two different statements. Investors who treat them as one get surprised constantly. Rate hikes work mainly on demand, which is why [a Fed rate hike won't always fix the inflation it targets](#).

Do Deficits Drive Bond Yields?

There is a long-running debate over how much government debt and deficits move long-term yields. One camp argues that heavy issuance forces “bond vigilantes” to demand higher yields. The other points to long stretches when debt rose and yields fell. That camp argues growth and inflation do most of the work. I’ve laid out the evidence in more detail in [“Bond Vigilantes And The Waiting For Godot”](#) and in [what the data actually says about rising interest rates](#). For the purposes of understanding how bonds work, the point is narrower. **Whatever drives yields, the yield you lock in when you buy is the single best guide to what you’ll earn if you hold.** Over shorter horizons, the market reprices those building blocks constantly. That repricing is the price noise that scares investors out of the asset.

The Bond Risks Every Buyer Has To Evaluate

Knowing how bonds work doesn’t mean bonds are riskless. They carry real risks, and they’re different from the ones stock investors are used to thinking about. The mistake is lumping them all together as “bonds went down.”

Price Risk Versus Inflation Risk

Look at the first two rows together, because the difference between them is the heart of this article. Interest rate risk is a mark-to-market risk. If you hold a Treasury to maturity, a rise in yields after you buy doesn’t change a single payment you receive. Inflation risk is different. It eats the purchasing power of every one of those payments, from the first coupon to the final return of principal, and holding the bond to maturity does nothing at all to stop it. **The price decline everyone panics about is usually temporary, while the inflation risk almost nobody watches is the one that can make a bond a genuinely bad investment.**

Reinvestment risk is the quiet mirror image of interest rate risk. When rates fall, your bond’s price rises, but the coupons you collect get reinvested at lower yields. When rates rise, the price falls, but every coupon goes back to work at a better rate.

Such is the trade-off that makes duration so useful. Over a holding period roughly equal to a bond’s duration, the price effect and the reinvestment effect largely cancel out. The next section shows what that looks like with real numbers.

Risk	What It Is	How It Tends To Behave
Interest Rate (Duration)	Price falls when yields rise. Temporary for a held bond, permanent if you sell.	Long maturities, zero-coupon bonds, long bond funds.
Inflation	Fixed payments buy less. The one risk holding to maturity does not fix.	Long nominal bonds when inflation is high and rising.
Credit And Default	The borrower pays late, pays less or doesn’t pay.	High-yield corporate, weaker municipal and EM issuers.
Reinvestment	Coupons and maturing principal get reinvested at lower rates.	Short maturities and bill holders when rates fall.
Call And Prepayment	The issuer repays early when rates fall, taking away your high coupon.	Callable corporates and munis, mortgage-backed bonds.
Liquidity	Selling before maturity costs a wide bid-ask spread.	Individual corporate and municipal bonds, small issues.
Currency	Exchange rates move the value of foreign bonds.	Unhedged international and emerging market debt.



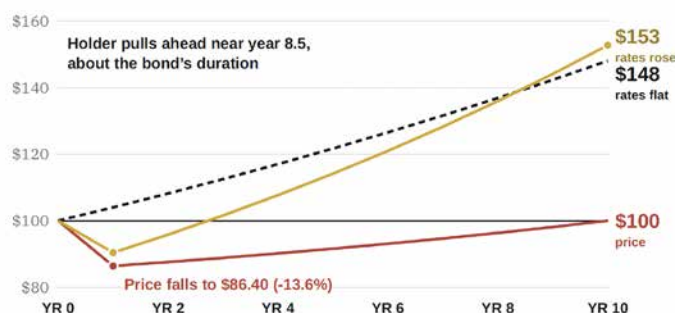
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Why The Daily Price Change Is The Wrong Scoreboard

Here's the scenario that terrifies new bond investors. You put \$100 into a 10-year bond paying 4%. One year later, rates on comparable bonds have jumped to 6% and stay there. Your statement shows a loss of almost 14%. What happened to the "safe" part of your portfolio?

THE PAPER LOSS VS. WHAT THE HOLDER GETS

\$100 in a 10-year, 4% bond. Yields jump to 6% after year one and stay there.



Calculations: RIA Advisors. Annual coupons, reinvested at the prevailing yield. Illustrative only.

A \$100, 10-year, 4% bond whose yield jumps to 6% after one year falls to \$86.40, a 13.6% paper loss. Its price then climbs back to \$100 at maturity. With coupons reinvested at 6%, the holder ends with \$152.72, compared with \$148.02 if rates had stayed at 4%. The crossover arrives near year 8.5, close to the bond's 8.4-year duration.

Notice in the chart above what the red line does after year one. It goes up. A bond's price is pulled toward par as maturity approaches, because the final payment is fixed. The paper loss shrinks every year without rates having to fall at all. That's the "pull to par." Meanwhile, the holder is reinvesting every coupon at 6% instead of 4%. By year ten, the investor who suffered the 13.6% markdown ends up with more money than the one whose bond never lost a dime. The loss was real on paper. It was also temporary, and the higher rates that caused it ended up paying for it.

Will that work for an investor who sells after year one? No. Will it work for one who matches the bond to a time horizon and holds? Every time the issuer pays. That's how bonds work for a buy-and-hold investor. It's also why the useful question is never what the bond did last quarter. The useful question is what yield you're locking in today.

Today's Yield Is Tomorrow's Return

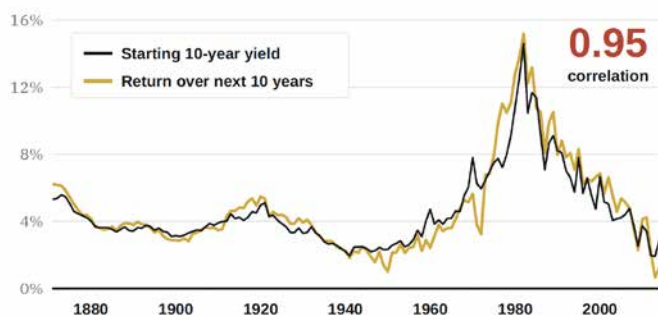
The cleanest evidence comes from more than a century of Treasury data. Using Robert Shiller's monthly series, I measured the yield on the 10-year Treasury at every month from January 1871 through December 2015, then calculated the annualized total return the bond actually delivered over the following ten years.¹ That gives 1,740 overlapping ten-year windows. I've made this point before, in [asking whether the 10-year Treasury is a buy at 5%](#). To wit:

"Since 1881, the starting 10-year yield has explained roughly 91% of the variation in the bond's return over the following decade."

Extending the window back to 1871 doesn't change the answer.

TODAY'S YIELD IS TOMORROW'S RETURN

10-year Treasury: starting yield vs. annualized total return over the next decade



Source: Robert Shiller data. Calculations: RIA Advisors. Start dates Jan. 1871 to Dec. 2015.

For every start date from 1871 through 2015, the starting 10-year Treasury yield and the bond's annualized total return over the next ten years track closely, with a correlation of 0.95. The starting yield explains about 91% of the variation in ten-year returns. The widest gaps came in the 1940s and 1970s, when inflation surprised, and the early 1980s, when falling rates added large price gains.

In 83% of those windows, the ten-year return landed within one percentage point of the starting yield. In 95%, it was within two points. When the starting yield sat between 3% and 4%, the average ten-year return was 3.6%. When it started between 6% and 8%, the average was 7.3%. Above 8%, it was 11.3%, helped by the price gains as rates later fell. **If you want to know what a high-quality bond will earn over the next decade, the starting yield has historically told you most of what you need to know.** No other asset class offers anything close to that kind of visibility.

Now compare that with how often a bond holder actually saw a loss, depending on how long they held.

Holding Period	10-Year Treasury: Periods With A Loss	Stocks: Periods With A Loss
1 Year	11.9%	27.4%
3 Years	4.6%	15.2%
5 Years	2.4%	10.3%
10 Years	0.0%	2.9%

Since 1871, about one in eight rolling one-year periods produced a loss on the 10-year Treasury. Not one rolling ten-year period did. The worst decade in the data still returned about 0.1% a year in nominal terms, and it started from a yield of only about 2%. Stocks, for comparison, lost money in more than a quarter of one-year periods and in about 3% of ten-year periods.¹ The one-year number is what shows up in the headlines. The ten-year number is what the contract was built to deliver.

“The price on your bond statement is someone else’s opinion of your contract. The yield you locked in is the contract.”

Where The Bond Bears Are Right

“Bonds are broken.” The bears have a real point, and it isn’t the one they usually make. Short-term price declines aren’t the problem. The problem is that a nominal bond can keep every promise it made and still leave you poorer, because the promise was written in dollars and dollars can lose value faster than the coupon pays. Such is the risk that deserves the attention the daily price change gets.

To see how much it matters, I rebuilt a test that sorts every rolling three-month window since 1900 by two things: the level of inflation at the start and whether it rose or fell over the following three months. Then I measured the 10-year Treasury’s annualized real return, after inflation, in each bucket.^{1,5}

BOND RETURNS DEPEND ON WHERE INFLATION IS GOING

10-year Treasury real return, annualized, by inflation level and direction.

INFLATION NOW	NEXT THREE MONTHS, INFLATION IS...		
	FALLING	STABLE	RISING
LOW UNDER 2%	+8.1% nominal +3.6% 8% of periods	+3.7% nominal +4.3% 16% of periods	-0.6% nominal +2.7% 16% of periods
MODERATE 2% TO 4%	+10.6% nominal +9.4% 8% of periods	+3.9% nominal +6.8% 16% of periods	-2.5% nominal +3.9% 6% of periods
HIGH OVER 4%	+7.7% nominal +8.8% 13% of periods	+2.6% nominal +8.8% 8% of periods	-10.9% nominal +0.3% 16% of periods

Source: Robert Shiller data. Calculations: RIA Advisors. Rolling 3-month windows, 1900 to 2025.

From 1900 through 2025, the 10-year Treasury earned positive real returns in six of the nine inflation regimes, and every negative bucket was one where inflation was rising. With inflation of 2% to 4% and stable, real returns averaged 3.9% a year, and even high but stable inflation produced 2.6%. When inflation was already above 4% and still rising, real returns averaged -10.9% a year, by far the worst bucket.

The result runs against the popular framing. High inflation by itself has not been the bond killer. With inflation above 4% but falling, Treasuries earned real returns averaging nearly 8% a year, partly because starting yields were high. The damage is concentrated in one corner: inflation that is already high and still accelerating. That bucket shows up about 10% of the time, and when it does, real returns average -10.9% a year. Rising inflation from a low or moderate level costs something too, between half a point and two and a half points a year in real terms, but it’s nothing like the high-and-rising regime. The question that matters for a bond investor is the direction of inflation, more than its level.

The long-run record carries the same warning. In nominal terms, no ten-year holding period lost money. After inflation, about 28% of them did. The worst stretch began in September 1971 and lost 5.4% a year in real terms over the following decade. The 1940s, when rates were held down while inflation ran hot, produced a similar story. Those are the two periods the bears point to, and they're right to.

What Went Wrong In 2022

Then there's 2022. Stocks and bonds fell together, the 10-year Treasury lost 17.8% for the calendar year, its worst in the NYU Stern dataset going back to 1928, and the "bonds always hedge stocks" story broke in front of everyone. It's worth being specific about why. Inflation was already high and rising, the exact regime the chart above flags. Starting yields were also near historic lows, so there was almost no coupon to cushion the price decline. Both conditions were visible in advance. Neither one describes a market where starting yields are well above inflation.

So the bears have the diagnosis partly right. Bonds are vulnerable to accelerating inflation, and they are a poor deal when yields sit below the inflation rate. Where they go wrong is in turning those conditions into a permanent verdict. The same data says high-quality bonds have done their job when starting yields are healthy and inflation is stable or falling.

Why Own Bonds At All?

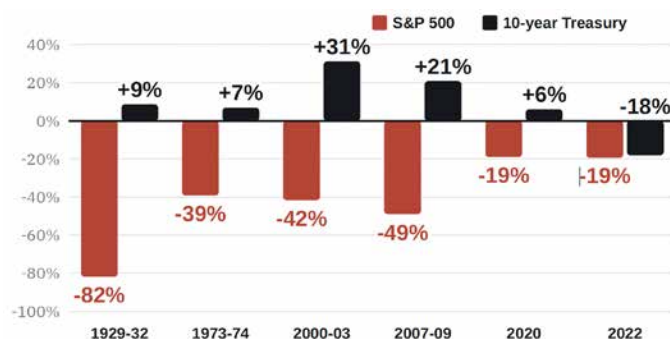
If bonds can lose to inflation and won't keep up with stocks over the long run, why bother? The answer is in how bonds work inside a portfolio. A portfolio isn't a contest to own the single highest-returning asset. It's a plan to get through an unknown future without being forced to sell the wrong thing at the wrong time. High-quality bonds do four jobs that are hard to get anywhere else.

The first job is income you can count on. A Treasury's coupon is set the day you buy it. It doesn't depend on earnings, dividend policy or anyone's mood. The second is a known value at a known date. If you need a specific sum in seven years for a retirement income gap, a tuition bill or a home purchase, a seven-year bond can be matched to it almost exactly. No stock can do that.

The third job is the one that matters most when it matters at all: protection during the economic shocks that hurt stocks the most.

WHAT BONDS DID WHILE STOCKS FELL

Total return, stock market peak to trough.



Source: Robert Shiller data (monthly averages). Calculations: RIA Advisors.

From the stock market peak to its trough, the 10-year Treasury gained 9% in 1929 to 1932 while stocks fell 82%, gained 7% in 1973 to 1974 while stocks fell 39%, gained 31% in 2000 to 2003 while stocks fell 42%, gained 21% in 2007 to 2009 while stocks fell 49%, and gained 6% in 2020 while stocks fell 19%. In 2022, Treasuries lost 18% while stocks fell 19%.

Across the 12 stock market declines of 15% or more since 1926, the 10-year Treasury posted a positive return in 10.^{1,7} Recessions and financial panics push investors toward safety and push the Fed toward lower rates. Both lift Treasury prices. The two exceptions tell you when the hedge fails. In 1968 to 1970, Treasuries slipped about 3% while consumer prices climbed more than 9%, and in 2022 they lost 18% as inflation surged. Look closely at 1973 to 1974, too. The bond gained 7% in nominal terms, but consumer prices rose about 22% over the same stretch. The hedge held against the stock decline and still lost purchasing power. That's the inflation caveat from the previous section showing up again.

The Behavioral Job Nobody Talks About

The fourth job is behavioral, and it's the one investors underrate. Bonds are the dry powder that lets you rebalance into stocks after a decline instead of selling them. They also keep you invested, because a smaller drawdown is a lot easier to sit through, and the next section puts numbers on how much smaller. Joe Wiggins made the point cleanly in a recent post on the "bonds are broken" argument.

"Diversification is about building a portfolio for a range of future paths that are at best uncertain..."

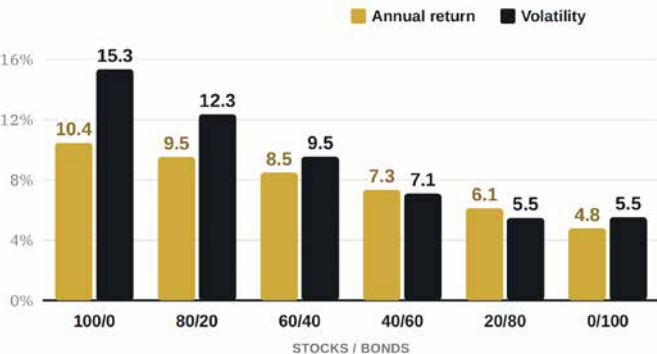
That's the part the price-chart crowd misses. Bob Farrell's Rule #9 reminds us that "when all the experts and forecasts agree, something else is going to happen." The years when everyone agrees bonds are pointless are rarely the years you wish you'd owned fewer of them. Bonds earn their place by doing well in some of the futures you can't predict, and investors who drop them after a bad stretch are usually extrapolating the last few years into all of them.

How Bonds Work To Lower Portfolio Volatility

Owning bonds costs you something over the long run. Stocks have outearned Treasuries by a wide margin, so every dollar moved into bonds lowers the return you should expect. What that dollar buys is a smoother ride, and the trade has historically been far better than most investors assume. The chart below blends the S&P 500 and the 10-year Treasury in different mixes from 1926 through 2025, rebalanced monthly, and compares each mix's annual return with its volatility.^{1,8}

BONDS CUT RISK FASTER THAN RETURN

Annualized return vs. volatility by stock and bond mix, 1926 to 2025.



Source: Robert Shiller data. Calculations: RIA Advisors. Monthly rebalancing, no fees or taxes.

From 1926 through 2025, an all-stock portfolio returned 10.4% a year with 15.3% volatility. A 60/40 stock and bond mix returned 8.5% with 9.5% volatility, and a 40/60 mix returned 7.3% with 7.1%. A 20/80 mix was slightly less volatile than all bonds while earning 6.1% a year against 4.8%.

Notice in the chart above how the two bars shrink at different speeds. Moving from all stocks to 60/40 kept about 81% of the stock market's annual return. It kept only about 62% of the volatility. **Volatility fell roughly twice as fast as return as bonds were added.** The downside numbers are where that shows up in an investor's actual experience.

Why does a modest slice of bonds do so much? Volatility doesn't add up the way returns do. A portfolio's swings depend on how much each piece moves and on how the pieces move relative to each other. Treasuries swung about a third as much as stocks over this period, and the correlation between monthly stock and bond returns since 1926 has been close to zero, about 0.04. When two assets don't move in lockstep, part of each one's swings cancels out instead of stacking up, which is why the 20/80 mix earned more than all bonds and still came out slightly less volatile. That's diversification doing actual work.

When The Volatility Cushion Gets Thinner

The correlation isn't constant, and it follows the inflation story from earlier. From 1966 through 1999, an era dominated by inflation, the monthly correlation between stocks and bonds averaged about +0.28. From 2000 through 2021, when growth scares were the main risk, it was about -0.32, and Treasuries rallied in almost every serious sell-off. Since 2022 it has turned positive again, at roughly +0.36. When inflation is the threat, stocks and bonds tend to fall together. When growth is the threat, they tend to move apart.

Even in the positive-correlation stretches, bonds still lowered portfolio volatility, because their own swings were so much smaller. What changed was the size of the benefit. A 60/40 mix carried about 71% of the stock market's volatility from 1966 to 1999 and about 72% since 2022, compared with 57% from 2000 to 2021. **A bond allocation has dampened the ride in every era, but it hedges best when the economy's problem is growth rather than inflation.** That's one more reason to watch the direction of inflation, and to lean on shorter maturities or TIPS when inflation is the dominant risk.

Stocks / Bonds	Annual Return	Volatility	Worst 12 Months	Largest Decline
100 / 0	10.4%	15.3%	-62.3%	-81.8%
80 / 20	9.5%	12.3%	-53.1%	-73.1%
60 / 40	8.5%	9.5%	-42.2%	-61.0%
40 / 60	7.3%	7.1%	-29.4%	-44.3%
20 / 80	6.1%	5.5%	-16.5%	-21.7%
0 / 100	4.8%	5.5%	-17.0%	-25.2%

How Bonds Work In A Portfolio: Putting It Together

Understanding how bonds work changes how you use them. None of what follows is a recommendation for any individual situation. The right mix depends on your goals, taxes and time horizon. But a few principles fall straight out of the evidence above.

Match duration to your time horizon. If you'll need money in five years, a bond or ladder that matures in about five years removes most of the interest rate risk from your plan, because the price swings in between don't change what you'll receive. With a long horizon and the patience to hold through a full rate cycle, longer duration becomes a deliberate choice instead of an accident. **The investors who get hurt by rate risk are usually the ones holding bonds longer than their own time horizon.**

Match Each Bond To Its Job

Know whether you own bonds or a bond fund. A ladder of individual Treasuries gives you specific dollars on specific dates. A fund gives you diversification and convenience, but its duration never shrinks. Its version of "getting par back" only arrives for holders who stay put for at least the fund's duration. Both are reasonable. Confusing them is not.

Decide which job each bond is doing. Treasuries are the hedge, corporate bonds add income with some equity-like risk and munis can make sense in a taxable account. Mixing them is fine, but expecting junk bonds to protect you in a recession is how the hedge quietly disappears. And watch the direction of inflation MORE than the level. TIPS and shorter maturities exist for the regime where inflation is high and rising. That's the one environment where a heavy allocation to long nominal bonds has historically done real damage.

Finally, use the starting yield as your expectation and judge your bonds on the horizon you bought them for. A bond yielding 4% that drops 8% in a year hasn't broken. Its expected return over the remaining life of the contract just went up.

HOW BONDS WORK, IN FOUR NUMBERS

What 155 years of 10-year Treasury data says about owning bonds.

0.95

Correlation of the starting 10-year yield with the next decade's return

62%

Stock market volatility carried by a 60/40 mix, which kept 81% of return

10 of 12

Stock declines of 15% or more since 1926 when Treasuries made money

-10.9%

Real return when high inflation keeps rising: the regime to fear

Source: Robert Shiller data. Calculations: RIA Advisors. Data through Dec. 2025.

Four numbers from 10-year Treasury data since 1871. The starting yield has a 0.95 correlation with the next decade's return. Since 1926, a 60/40 mix carried 62% of the stock market's volatility while keeping 81% of its return. Treasuries gained in 10 of 12 stock declines of 15% or more since 1926. And when inflation above 4% kept rising, real returns averaged -10.9% a year.

Bottom Line:

A high-quality bond's return is set mostly by the yield you lock in and by inflation, not by the price swings in between, so judge it by the contract and the horizon you bought it for.

The bond market will scare investors out of bonds again. It always does, and it usually does it right after yields have risen enough to make them worth owning.

Questions This Article Answers

How do bonds work in simple terms?

A bond is a loan to a government or company. The borrower pays a fixed interest rate on a schedule and returns your principal on a set maturity date. The bond's market price moves with interest rates, but if you hold an individual bond to maturity and the issuer pays, you receive exactly the coupons and principal the contract promises.

Why do bond prices fall when interest rates rise?

A bond's coupon is fixed. When new bonds offer higher yields, an older bond paying less is only attractive at a lower price, so its price falls until its yield matches the market. In this article's example, a one-point rise in yields costs a 10-year Treasury about 7.8% and a 30-year Treasury about 15.4%.

Can you lose money on a bond held to maturity?

On a high-quality bond held to maturity, the nominal payments are fixed, so rising rates don't change what you receive. You can still lose purchasing power to inflation, and you can lose money if the issuer defaults. Since 1871, no rolling ten-year period produced a nominal loss on the 10-year Treasury, but about 28% produced a loss after inflation.

How are bond yields determined?

New Treasury yields are set at auction, where the highest accepted competitive bid sets the rate. After that, yields move in the market with expectations for the Fed's policy rate, inflation and a term premium for locking money up, plus a credit spread for non-government bonds.

Is the starting yield a good predictor of bond returns?

Historically, yes, for high-quality bonds held for about ten years. Since 1871, the starting 10-year Treasury yield has had a 0.95 correlation with the annualized return over the following decade, and the ten-year return landed within one percentage point of the starting yield 83% of the time.

Do bonds lower portfolio volatility?

Yes. Treasuries swing far less than stocks, and their returns have had almost no correlation with stock returns since 1926, so part of each asset's swings cancels out. From 1926 through 2025, a 60/40 stock and bond mix carried about 62% of the stock market's volatility while keeping about 81% of its return, and Treasuries gained in 10 of the 12 stock declines of 15% or more.

Sources & Notes

1. Robert J. Shiller, U.S. stock market and interest rate data (ie_data.xls). Uses the monthly long-term interest rate (GS10, long-term government yields before 1953), the monthly total bond return series, the S&P Composite total return series and CPI. All study windows end December 2025. Shiller's bond returns are modeled from monthly-average yields, which smooths single-year results (2022 shows -15.0% in this series against -17.8% in the NYU Stern data), so it is used here for multi-year horizons and frequency statistics, not precise annual returns. Stock figures also use monthly averages and understate intra-month extremes. Calculations: RIA Advisors.
2. Aswath Damodaran, NYU Stern, [Historical Returns on Stocks, Bonds and Bills](#). Used for calendar-year 10-year Treasury returns and as an independent cross-check of the Shiller series.
3. U.S. Treasury, [How Auctions Work](#), TreasuryDirect.
4. Joe Wiggins, ["Getting Bonds \(and Diversification\) Wrong."](#) Behavioural Investment, October 6, 2026.
5. Inflation regime method. Rolling three-month windows, January 1900 through September 2025 start dates (1,509 windows). Inflation level is headline CPI year over year at the start of the window: low below 2%, moderate 2% to 4%, high above 4%. Direction is the change in year-over-year CPI over the window: stable within half a point either way. Returns are annualized. Real returns are deflated by realized CPI over the same window.
6. Bond pricing illustrations (price sensitivity and pull-to-par charts) use standard present-value pricing for a 4% coupon bond. They are hypothetical examples, not forecasts, and ignore taxes and transaction costs.
7. Stock decline episodes are peak-to-trough declines of 15% or more in the Shiller S&P total return series since 1926, measured on monthly averages (12 episodes). The 10-year Treasury return is measured over the same months.
8. Stock and bond mixes combine the Shiller S&P total return series and the 10-year Treasury total return series, rebalanced monthly, January 1926 through December 2025, with no fees, taxes or trading costs. Volatility is the annualized standard deviation of monthly returns. Because both series are built from monthly averages, volatility and the worst declines are understated relative to month-end data, roughly equally across mixes. Era correlations use monthly returns.
9. Yield building blocks are approximate, late September 2026: expected inflation from the 10-year breakeven rate, the term premium from the Federal Reserve Board's Kim-Wright model ([FRED: THREEFYTP10](#)) and the real rate as the remainder. The levels are an illustration and will change. The structure is what matters. First published in ["Bonds At 5%: Is The 10-Year Treasury Finally A Buy?"](#)
10. Disclosure. This article is for educational purposes only and is not a recommendation to buy or sell any security. Past performance does not guarantee future results. Bond investments are subject to interest rate, inflation, credit and other risks.

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