

Why do bond prices fall when interest rates rise?

In 2022, bonds, supposedly the safest investment in the world, lost about 16%. The reason: the seesaw between price and yield, which the Fed leans on through QE and QT.

The analysis: a bond is a loan with a fixed coupon

A bond is a loan. You lend 1,000 dollars to the US government for ten years. Three words are enough to describe it:

- **Face value:** the amount you lend, the amount you get back at the end (1,000 dollars).
- **Maturity:** the repayment date (ten years from now).
- **Coupon:** the interest paid every year, say 3%, or 30 dollars.

The key point: that coupon is set once and for all. But the bond itself can be sold on the market at any time.

Now imagine that, right after you buy it, market rates jump to 5%. New bonds pay 50 dollars a year. Yours still pays 30. Who would pay 1,000 dollars for it? Nobody. So its price falls, until the buyer also earns 5% a year.

The math: you bring every future payment back to today's value, using a 5% rate. The ten coupons are worth about 232 dollars, the final repayment about 614. Total: **about 846 dollars**. The return the buyer actually earns is called the **yield to maturity**.

It works the other way too. If rates drop to 1%, your 30-dollar coupon becomes valuable: the bond is then worth **about 1,189 dollars**.

Price and yield sit on a seesaw: when one goes up, the other goes down.

One last detail, and it is a big one: **the longer the maturity, the more violent the seesaw**. If rates go from 3% to 5%, a 2-year bond loses about 4%, a 10-year bond about 15%, a 30-year bond more than 30%. Distant payments are the ones higher rates crush the most.

The historical fact: 2022, the year the "safe" asset fell

In March 2022, the Fed starts raising its policy rate from near zero to fight inflation. It is the fastest pace since the 1980s. The seesaw does the rest: the US aggregate bond index loses **about 16%** over the year.

That same year, the Fed launches **QT**. To understand it, start with its opposite.

QE: the Fed buys

QE stands for quantitative easing. The Fed creates money and uses it to buy Treasuries and mortgage-backed securities. It did so on a massive scale after the 2008 crisis, and again in 2020.

Remember the seesaw: more demand for bonds pushes their prices up, so their yields go down. The goal is to lower long-term rates when the policy rate is already at zero, to revive lending. That liquidity also pushes investors toward riskier assets: stocks rise, real estate too, and the dollar tends to weaken.

The result: the Fed's balance sheet grows from about 900 billion dollars in 2007 to nearly 9 trillion at the 2022 peak.

QT: the Fed steps back

QT, quantitative tightening, is the reverse path. The Fed does not necessarily sell: it lets its bonds mature without replacing them. The Treasury then has to find other buyers. Less demand: prices fall, yields rise, liquidity dries up.

Between 2022 and 2025, the balance sheet shrank from about 8.9 to 6.6 trillion dollars. Then, after a decision in October 2025, QT officially ended on **December 1, 2025**: the tap is no longer being tightened.

KEY FIGURES — THE PRICE/YIELD SEESAW AND THE FED

\$846: price of a \$1,000, 10-year, 3% coupon bond if rates rise to 5%

\$1,189: the same bond if rates fall to 1%

-4%, -15%, more than -30%: loss on a 2, 10 and 30-year bond when rates go from 3% to 5%

About -16%: the US aggregate bond index in 2022

0.9 → 8.9 → 6.6: the Fed's balance sheet in trillions of dollars (2007, 2022 peak, end of 2025)

The story: Silicon Valley Bank, a victim of the seesaw

During the low-rate years, Silicon Valley Bank put a large share of its customers' deposits into long-dated bonds, including Treasuries. No default risk: the US government always pays.

But in 2022, the seesaw kicked in hard. Those bonds lost a big chunk of their market value. As long as the bank could hold them to maturity, the loss stayed on paper. In March 2023, customers pulled their deposits, the bank had to sell and lock in the losses. Panic spread, and SVB failed on March 10, 2023.

The lesson is harsh: **a bond with no default risk is not a bond with no price risk.**

The lesson for your portfolio

Three habits worth keeping:

- **Check the maturity before the coupon.** The longer it is, the more the price reacts to rates, in both directions.
- **Tell a paper loss from a realized loss.** A bond held to maturity repays its face value. A bond fund rides every price swing.
- **Watch the Fed.** QE or QT, buying or stepping back: its behavior weighs directly on demand for Treasuries, and therefore on their price.

This topic is also explained on video in the "Bons du Trésor" (Treasury bonds) series on the Axone-Capital YouTube channel.

Frequently asked questions

Why do bond prices fall when rates rise?

Because the coupon is fixed. When new bonds pay more, an older bond only finds a buyer at a lower price, one that lets the buyer earn the new market rate.

What is the difference between QE and QT?

With QE, the Fed creates money to buy bonds: their prices rise and yields fall. With QT, it lets its bonds mature without replacing them: less demand, higher yields and less liquidity.

Can you lose money on US Treasuries?

Yes, if you sell before maturity after rates have risen. In 2022, the US aggregate bond index lost about 16%. A Treasury held to maturity, however, repays its face value.

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