

Bond Duration, Explained: Why the Same Rate Move Can Hit Some Portfolios Harder Than Others

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LEVEL	TOPIC	READ TIME	SERIES
Beginner – Intermediate	Fixed Income	~5 minutes	Investor Education

If you've read financial commentary lately - including our own CIO notes - you've probably seen the word “duration” thrown around as shorthand for how exposed a bond or bond fund is to interest-rate moves. It's one of the most useful concepts in fixed income investing, and also one of the most consistently misunderstood. This piece breaks it down from first principles: no prior background required.

What Is Duration, Really?

Duration measures how sensitive a bond's price is to changes in interest rates. It's expressed in years, which trips people up — duration is not simply “how long until the bond matures.” A bond's time to maturity is one input into its duration, but duration also accounts for the size and timing of every coupon payment along the way. As a rule of thumb: the longer a bond's maturity and the lower its coupon, the higher its duration - and the more its price will move for a given change in interest rates.

A simple way to think about it: duration tells you roughly how much a bond's price will fall if interest rates rise by one percentage point (and, symmetrically, how much it will rise if rates fall by one percentage point). A bond with a duration of 7 years will lose approximately 7% of its value if rates rise by 1%, all else equal. A bond with a duration of 2 years will lose only about 2% under the same rate move. Same direction of rate move, very different impact - and that difference is entirely explained by duration.

A Quick Example

Imagine two bonds, both currently priced at \$1,000, issued by the same borrower on the same day. One matures in 2 years; the other matures in 20 years. If interest rates across the market rise by 1 percentage point, here is roughly what happens to each:

	2-Year Bond (Low Duration)	20-Year Bond (High Duration)
Approx. duration	~1.9 years	~14 years
Price impact of a +1% rate move	≈ -1.9%	≈ -14%
Dollar impact (on \$1,000 bond)	≈ -\$19	≈ -\$140

Illustrative example for educational purposes; actual price sensitivity depends on a bond's specific coupon, yield, and cash flow schedule.

Both bonds were issued by the same borrower, at the same time, with essentially the same credit risk. The only meaningful difference driving that gap in outcomes is duration. This is exactly the dynamic behind a phrase you'll often hear in our commentary: “we favor below-benchmark duration.” It doesn't mean we think bonds are unattractive - it means that, in an environment where rates could move higher, we would rather hold bonds that behave more like the 2-year example than the 20-year one.

Why It Matters Right Now

Duration risk isn't just a textbook concept - it's live in today's market. When a central bank signals it may hold rates higher for longer, or even raise them further, longer-duration bonds are the first and hardest hit, even though nothing about the borrower's creditworthiness has changed. This is exactly why professional fixed income investors talk about duration constantly: it lets them separate two very different questions - “will I get paid back?” (credit risk) and “how much will this bond's price swing if rates move?” (duration risk) - that are easy to conflate but require very different analysis.

It also explains why two bond funds can have similar credit quality and very different performance in a given month. A short-duration Treasury fund and a long-duration Treasury fund both hold “risk-free” government debt, but they can behave completely differently as rates move, simply because of how far out their cash flows extend.

KEY TAKEAWAYS

Duration measures a bond's price sensitivity to interest-rate changes, expressed in years - it is related to, but not the same as, time to maturity.

Higher duration means bigger price swings (in both directions) when rates move; lower duration means smaller swings.

As a rough estimate, a bond's price will move roughly 1% for every year of duration, for each 1-percentage-point move in rates.

Duration risk is separate from credit risk - two bonds from the same, equally creditworthy borrower can have very different rate sensitivity.

Related Terms

- **Coupon:** The regular interest payment a bond makes, usually expressed as a percentage of its face value.
- **Yield:** The return an investor earns on a bond if held to maturity, accounting for its price, coupon, and time remaining.
- **Price-Yield Relationship:** Bond prices and yields move in opposite directions — when yields (interest rates) rise, existing bond prices fall, and vice versa.
- **Convexity:** A more advanced refinement of duration that also captures how a bond's rate sensitivity itself changes as rates move — useful for larger rate swings but beyond the scope of this introduction.

Where to Go From Here

Duration is one building block among several that make fixed income investing more approachable than it first appears. If this was useful, our Investor Education series covers related building blocks — credit spreads, the yield curve, and how bond funds differ from individual bonds — on an ongoing basis. And if you want to see how we apply concepts like duration to real portfolio decisions in real time, our biweekly CIO Note is the place to look.

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