

INVESTMENT UPDATE

After the worst year for bond returns in modern history (according to one source, the worst since at least 1754), we're breathing a sigh of relief, as January brought strong positive returns for bond investors. Demand for bonds was strong out of the gate last month for reasons that we can only speculate on, but it appears investors were willing to take a chance that, after getting pounded for months on end, the US bond market was due for a bounce.

There is solid reasoning behind this position. While there are plenty of differences between the stock and bond markets, they share some similar characteristics—typically, good years follow bad ones for both markets. Since stock prices generally (not always, as we'll see) go up over time, selloffs provide a chance for buyers to get in at prices they may have missed out on in the previous rally. There's also the element of "relative value," one measure of which is a stock's price—to—earnings ("P/E") ratio; the P/E ratio goes down, all else equal, when prices drop, offering investors the same stream of future earnings at a lower cost.

Historically, a strategy of buy-ing stocks and bonds after a bad year would have produced good results; since 1928, the

	S&P 500	BBB Corporate Bond
Average Annualized Return (1928-2022)	11.75%	6.96%
Average "Down" Year Return	-13.10%	-4.03%
Average Return After Down Year	12.69%	9.69%
# Down Years	25	16
# Year-on-Year Down Years	8	2

S&P 500 Index rose, on average, by more than 12% after a negative year. Back-to-back down years, on the other hand, averaged less than one per decade over this period. Interestingly, when stock market prices fell more than 10% in a calendar year (they were down approximately 18% in 2022), average returns in the following year were well below those following milder losses; this may be due to big selloffs coinciding with major global economic events (e.g., Great Depression, OPEC embargo of 1972) which were associated with prolonged periods of economic pain.

Longer-term historical index information is spotty (at best) for the US bond market (the Bloomberg Indexes only go back to the mid-1970s), but researchers at New York University calculated annual returns for BBB-rated corporate bonds going back to 1928, which provides a useful and complementary benchmark to the S&P 500. The table on this page shows comparative in-

formation on this 95-year history for corporate stock and corporate bond returns. Stocks outperformed bonds over the period, returning 11.8% per year on average, compared to 7.0% for bonds. Stocks were more volatile, however, generating negative returns in 25 years, versus 16 years for bonds, with an average return in down years of –13.1% for stocks and –4.0% for bonds.

So far, nothing particularly surprising. But where things get interesting is when we peel the data back and see what happened in each market following a bad year. As discussed above, bad years are typically followed by good ones, but the chance of two negative back-to-back years is much higher in the stock market than in the bond market. Since 1928, back-to-back negative periods occurred eight times in the stock market, and only twice in the bond market. Perhaps more interesting is the magnitude of the bounce that investors have earned in the bond market compared to the stock market.

While stocks generated an average return of 12.7% after a negative year, that's less than 1% above a "normal" year for stock

returns over this period. By contrast, bonds returned an average of 9.7% after a negative year, which is 2.7% (270 basis

points) above the average year for bonds. In short, when compared to stocks, bonds bounce more consistently, and with a higher amplitude after a year of poor returns.

So while it's true that both stocks and bonds tend to do better after a bad year, the bounce evidenced in the bond market after a negative year is much stronger, statistically speaking, than in the stock market. But why is this? Bonds share the same tendency as stocks to do well after their prices fall and their relative value measures improve (bond investors have comparable measures to the P/E ratios to measure value), but there is one critical difference: a typical bond has a known terminal value. Yes, stock prices tend to rise over time, as companies grow and profits increase, raising the value of the enterprise and the fractional share each stockholder owns. But that increase in enterprise value—and a rising stock price—is dependent on a long list of variables, including growth, man—

agement's expertise, and competitive pressures (just to name a few), each of which has an uncertain outcome. Get it right, and you've got a soaring stock price; failing to do so means negative returns for shareholders, sometimes painfully negative.

It's an entirely different story for bondholders. When the prices of the bonds in our portfolios fall, we can be pretty darn confident that they will eventually rise, not based on a specific set of conditions, but because we will eventually get par value for our bonds when they mature. To be clear, we are not talking about bonds issued by companies with risky credit profiles, whose bonds are much more equity-like, with a reasonable chance of default if their fortunes change. We are talking about actively-managed, well-diversified portfolios of US investment-grade bonds, which have, by historic standards, a near-zero risk of default.

The chart on this page shows the average price of a bond in the US Aggregate Index (which is comprised of dollar-denominated US government, mortgage-backed, and investment-grade corporate credits) going back to

1980. By the early 80s, in response to double-digit inflation, bond prices had fallen well below par value (100), the price at which bonds mature. In retrospect, investors would have been paid handsomely (in the form of both coupon income and capital appreciation) for buying any bond they could get their hands on during

Average Bond Price--Bloomberg Aggregate Index \$120 \$110 \$100 \$90 \$80 \$70 96 80 88 92 00 04 08 12 16 20

this period. Bondholders were treated to a very bumpy ride in this era, and many jumped ship thinking that inflation would continue to eat away at the value of their holdings. But those who held on to their bonds (and those who entered the market at these levels) were rewarded, as bond prices eventually moved back towards, and ultimately, above, par value.

By the mid-80s inflation was brought under control, and over the next three decades, interest rates normalized and bond prices took on a more symmetric path—falling when economic growth picked up and rates rose, and rising during slower economic periods. After the 2008 global financial crisis, bond prices remained somewhat elevated for a prolonged period, boosted (at least in part) by the Fed's multi-trillion dollar program of purchasing US government bonds. But even considering this period, it's clear that from 1985 to 2020 bonds traded close to par, until the recent bout of inflation sent prices tumbling to their current low levels.

While bond prices have proved to be fairly stable over the past few decades, trading on either side of par value, prevailing interest rates continued to decline over this period, as older bonds matured and were replaced by new bonds with lower rates. By 2020, the average coupon of the Barclays Aggregate Index fell below 3%, eventually dropping to below 2.5%, post-Covid. This rock-bottom level of coupon income left investors vulnerable to the falling prices bondholders experienced last year, as there was little income being generated in the average bond portfolio to help offset falling prices, leading to the woeful performance of bonds in 2022. With rates having risen by hundreds of basis points over recent months, the income component-which is vital to the stability of bond returns-is now being replenished; it's a slow process to replace old lowcoupon bonds with newer bonds with fatter coupons, but it's an important development that only strengthens the case for buying bonds.

One last point: Discounted pricing on government and corporate bonds is a decided positive for total return investors look-

ing for capital appreciation, but below-par pricing is even more of a bonus for buyers of mortgage-backed securities (MBS). The US agency-backed MBS that we favor for our clients are, like most bonds in the secondary market, trading from five to fifteen points below par value. The biggest risk with any MBS is not the risk of default (they are backed

by the US government, after all); rather, the major risk for an MBS pass-through bond comes from early redemption of principal for bondholders when homeowners refinance or otherwise pay off their mortgage loans ahead of schedule. This shortens the duration of the bond, and when combined with falling rates (when prepayments are highest), forces the bondholder to reinvest the proceeds at lower rates, limiting the return on investment these bonds provide. But when MBS are trading below par, any prepayment represents an instant capital gain, as principal is returned at 100 cents on the dollar. For a bond that's trading ten or fifteen points below par, high prepayments are like manna from Heaven.

Clearly, 2022 was a terrible year in the bond market, an experience that bond investors will be digging out of for the next few quarters. But the seeds of recovery from this episode have already been planted, and are starting to spring up.