BONDS

Scarsdale Investment Group, Ltd.

All Bond Portfolios

Individual Bonds and Compound Interest: The Antidote to Risk Assets

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Currently, risk assets (stocks, commodities, real estate, etc.) are highly priced and very volatile. In this article we make the case for investing in individual bonds as an antidote to risk assets.

This article is our attempt to explain the power of compound interest as a sound basis for investing in individual bonds. Many financial advisers and the media do not apply compound interest to investing. Instead, they mark to market focusing hopefully on price appreciation and not price depreciation.

Steven Pinker, the Johnstone Family Professor of Psychology at Harvard, in his book *Rationality*[i] suggests that humans tend to have basic flaws in their thinking processes. Here is one example he provides.

> On a field is a patch of weeds. Every day the patch doubles in size. It takes 30 days for the patch to cover the whole field. How long did it take for the patch to cover half the field?[ii]

When an example of this sort was posed to university students, more often than not they got it wrong. This is because we are prone to use snap judgement when the problem appears easy.

Kahneman and Tversky discussed our thinking processes in their 2011 book *Thinking Fast and Slow.* They describe Level One thinking as snap judgments and Level Two thinking means thinking twice.

What was your answer to the question? The correct answer to the problem is 29 days. Is that what you thought? Pinker explains that the question of the weed patch taps into a real “cognitive infirmity.”

> Human intuition does not grasp exponential (geometric) growth, namely something that rises at a rising rate, proportional to how large

> it already is, such as compound interest, economic growth, and the spread of a contagious disease. People mistake it for steady creep or a slight acceleration, and their imaginations don't keep up with the relentless doubling.[iii]

In another example, Pinker gives the example of depositing $400 per month in a retirement account at 10 percent interest for 40 years. How much do you have after that time? Pinker suggests that most people assume around $200,000 or more using simple arithmetic. The real answer which almost no one arrives at is $2.5 million.

Our note: If you use a 5% interest rate the answer would be around $600,000 rather than $2.5 million.

Pinker concludes:

> People with a shaky grasp of exponential growth have been found to save less for retirement and to take on more credit-card debt, two roads to penury.

Bond investing calculations should assume exponential growth if you reinvest your interest payments and then the principal again when a bond comes due.

Risk Assets

When you invest in risk assets, there is an assumption that your assets will appreciate, and then you will sell them in order to realize the gain. However, when these estimates are made, they never take into account the costs of taxes, fees and bad timing – and sometimes catastrophic failure.

There is also the factor currently of great volatility of risk assets. The financial media are constantly alerting you to market fluctuations. Today the stock market rose: elation. Tomorrow the stock market declined: despair. The volatility is constant, taking you on a roller coaster ride.

Unfortunately, bond funds are viewed as an equivalent to individual bonds. However, bond funds are not properly understood. They are essentially quasi-stock investments in which you are betting that interest rates will fall and bond prices rise.

An Alternative Approach: High Quality Fixed Income Bonds

The true bond investor who buys individual bonds, understands that when interest rates rise that is a buying opportunity. Would you rather invest at lower rates? With stocks they call it dollar cost averaging.

The true bond investor looks to hold bonds until they mature or are called, thus eliminating transaction fees and possible capital gains. However, sometimes it is advantageous to sell bonds at a loss to take advantage of the offset to capital gains taken elsewhere. Then the funds can be reinvested at the higher rates in high quality bonds. This is called tax-loss swapping.

A true bond investor is aware of the annual interest the bonds are paying. The investor knows that this contributes to their financial independence – and so do you.

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[i] Steven Pinker. *Rationality: What it is; Why it seems scarce; why it matters.* Viking Press, 2021.
[ii] Pinker, p.9