Alternative Investing

Embracing Downside Risk

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This paper shows that downside risk tends to be the main source of long-run returns in equities and other asset classes, and argues that long-term investors may be better off embracing downside risk in certain cases.

- It is well-known that investors have asymmetric preferences when it comes to bearing downside risk versus participating in the upside.
- Options arguably provide the most direct downside hedge, but at a significant cost reflecting investor preferences. This cost, commonly referred to as the volatility risk premium and measured by the difference between the option's implied volatility and its underlying asset's realized volatility, is paid by option buyers to sellers for bearing undesirable downside risk. Options markets therefore provide a useful and intuitive way to quantify these asymmetric preferences by way of the returns associated with being on the other side.
- We show this using equity index options, and find that most of the empirical equity risk premium reflects compensation for downside risk — in fact, upside participation earned hardly any reward in the long run, reflecting an asymmetry that might be surprising to some investors.
- We extend this analysis to other asset classes (bonds, gold and crude-oil futures, and credit) to show similar (though in some cases weaker) results.
- Data and economic theory suggest that investors who attempt to deal with downside risk by being long options should expect to underperform.

To many, it may sound risky to actively seek out concentrated downside exposure. Yet, for example, the insurance industry is seemingly devoted to accepting the risk of potentially significant loss for profits that are capped at moderately sized insurance premiums. Although it may appear rather unconventional to do so in financial markets, we show that downside exposure has the potential to offer greater rewards than does the highly sought-after upside participation.

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