1. What Is a Spread?

A spread can have several meanings in finance. Generally, the spread refers to the difference or gap that exists between two prices, rates, or yields.

In one of the most common definitions, the spread is the gap between the bid and the ask prices of a security or asset, like a stock, bond, or commodity. This is known as a bid-ask spread. Spreads can also be constructed in financial markets between two or more bonds, stocks, or derivatives contracts, among others.

2. Understanding Spreads

Spreads can also refer to the difference in a trading position – the gap between a short position (that is, selling) in one futures contract or currency and a long position (that is, buying) in another. This is officially known as a spread trade.

In underwriting, the spread can mean the difference between the amount paid to the issuer of a security and the price paid by the investor for that security—that is, the cost an underwriter pays to buy an issue, compared to the price at which the underwriter sells it to the public.

In lending, the spread can also refer to the price a borrower pays above a benchmark yield to get a loan. If the prime interest rate is 3%, for example, and a borrower gets a mortgage charging a 5% rate, the spread is 2%.

The spread trade is also called the relative value trade. Spread trades are the act of purchasing one security and selling another related security as a unit. Usually, spread trades are done with options or futures contracts. These trades are executed to produce an overall net trade with a positive value called the spread.

3. Types of Spreads

Spreads exist in many financial markets and vary depending on the type of security or financial instrument involved.

In many securities that feature a two-sided market, such as most stocks, there is a bid-ask spread that appears as the difference between the highest bid price and the lowest offer. The bid-ask spread is often used to judge a stock's liquidity.

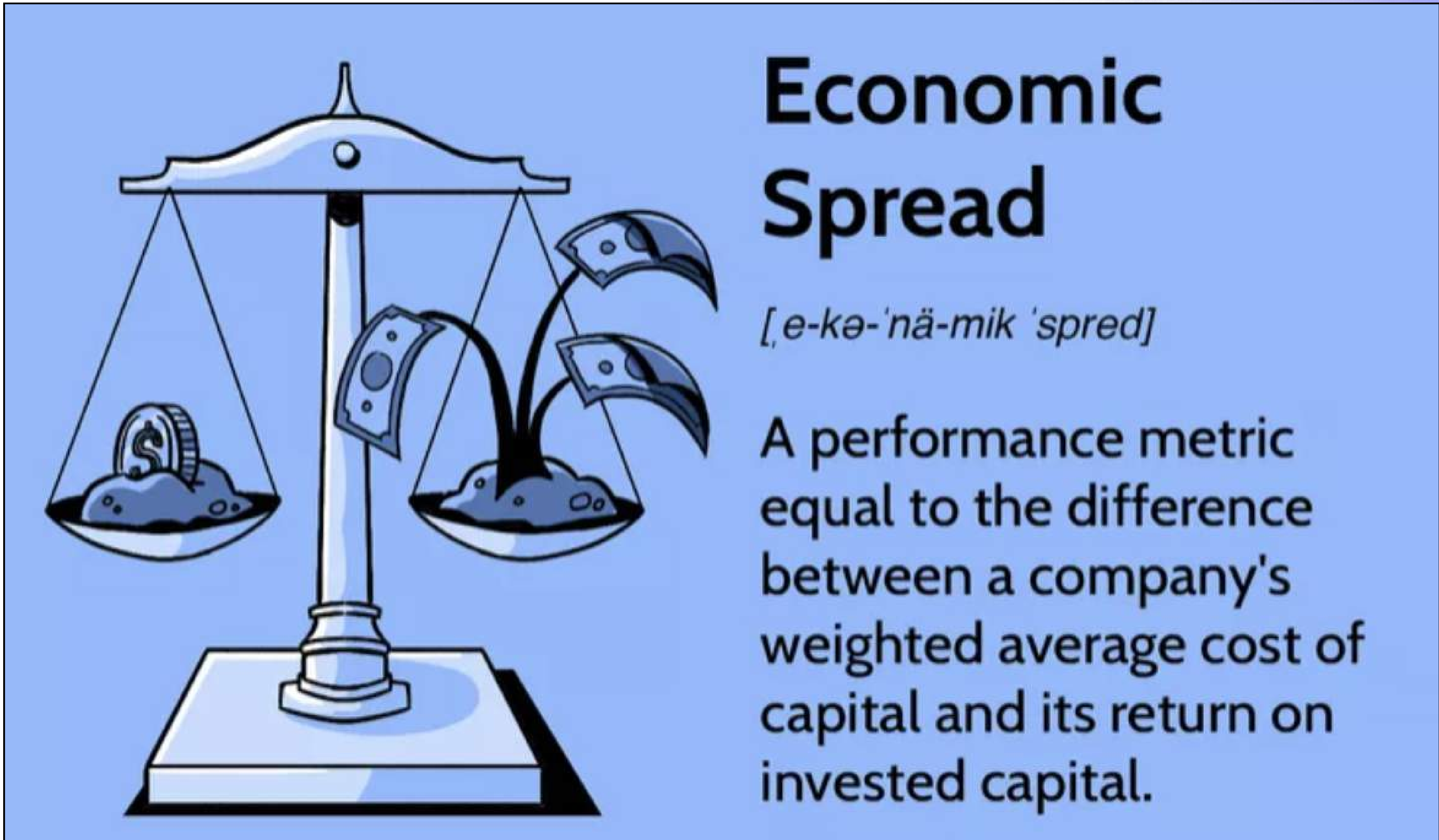
Bid-ask spreads also feature prominently in forex trading, and can vary depending on a number of factors, including the liquidity of the currency pair, market conditions, and the broker's own pricing policies. Some brokers charge fixed spreads, while others charge variable spreads that can fluctuate based on market conditions. It's important for traders to understand the spreads that they are being quoted, as they can have a significant impact on the overall cost of a trade.

Interest Rate Spreads

• A yield spread is the difference between yields on differing debt instruments of varying maturities, credit ratings, issuer, or risk level, calculated by deducting the yield of one instrument from the other. This difference is most often expressed in basis points (bps) or percentage points. Yield spreads are commonly quoted in terms of one yield versus that of U.S. Treasuries, where it is called the credit spread. Some analysts refer to the yield spread as the “yield spread of X over Y.” This is usually the yearly percentage return on investment of one financial instrument minus the annual percentage return on investment of another.

• The option-adjusted spread (OAS) measures the difference in yield between a bond with an embedded option, such as an MBS, with the yield on Treasuries. It is more accurate than simply comparing a bond’s yield to maturity to a benchmark. By separately analyzing the security into a bond and the embedded option, analysts can determine whether the investment is worthwhile at a given price. To discount a security’s price and match it to the current market price, the yield spread must be added to a benchmark yield curve. This adjusted price is called an option-adjusted spread. This is usually used for mortgage-backed securities (MBS), bonds, interest rate derivatives, and options. For securities with cash flows that are separate from future interest rate movements, the option-adjusted spread becomes the same as the Z-spread.

• The zero-volatility spread (Z-spread) is the constant spread that makes the price of a security equal to the present value of its cash flows when added to the yield at each point on the spot rate Treasury curve where cash flow is received. It can tell the investor the bond's current value plus its cash flows at these points. The spread is used by analysts and investors to discover discrepancies in a bond's price. The Z-spread is also called the yield curve spread and zero-volatility spread. The Z-spread is used for mortgage-backed securities. It is the spread that results from zero-coupon treasury yield curves which are needed for discounting pre-determined cash flow schedule to reach its current market price. This kind of spread is also used in credit default swaps (CDS) to measure credit spread.



Interest Rate Spread Example

Suppose an investor is considering two bonds: a corporate bond issued by Company XYZ with a yield of 5%, and a U.S. Treasury bond with a yield of 3%. The yield spread in this case would be 2% (5% - 3%), indicating that the corporate bond is yielding 2% more than the U.S. Treasury bond.

If the investor believes that the risk of default on the corporate bond is low and the company is financially sound, they might decide to buy the corporate bond and sell the U.S. Treasury bond, in order to profit from the yield spread. This would be known as a "yield spread trade."

If the investor's assessment of the credit risk of Company XYZ is correct and the bond performs as expected, they will earn the 5% yield on the corporate bond and realize a profit from the yield spread of 2%. However, if the credit risk of Company XYZ turns out to be higher than expected and the bond defaults, the investor could lose their entire investment in the bond. This is why it is important for investors to carefully consider the credit risk of any bond before entering into a yield spread trade.

4. How Do You Calculate a Spread in Finance?

Most basically, a spread is calculated as the difference in two prices. A bid-ask spread is computed as the offer price less the bid price. An options spread is priced as the price of one option less the other, and so on.

5. Why Would Someone Buy a Spread?

Traders look to profit from spreads by betting that the size of the spread will narrow or widen over time. If you buy a spread, you believe that the spread between two prices will widen. For example, if you believe that interest rates on junk bonds will rise faster than that of Treasuries, you can buy that yield spread.

How Do You Put on a Spread in Trading?

To put on a spread position in the markets, you generally buy one asset or security and simultaneously sell another, related asset or security. The resulting spread price is the difference between the price paid the proceeds received from the sale.

6. The Bottom Line

In finance, a spread refers to the difference or gap between two prices, rates, or yields. One common use of "spread" is the bid-ask spread, which is the gap between the bid (from buyers) and the ask (from sellers) prices of a security or asset. A spread can also refer to the difference in a trading position, such as the gap between a short position (selling) in one futures contract or currency and a long position (buying) in another, known as a spread trade. Spreads can also refer to the difference in the amount paid to the issuer of a security and the price paid by the investor for that security in underwriting, or the price a borrower pays above a benchmark yield to get a loan in lending. There are several different types of spreads, including yield spreads, option-adjusted spreads, and Z-spreads, which are used in different contexts in finance.