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PREFERRED EQUITY IN A RISING INTEREST RATE ENVIRONMENT

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Preferred equity valuation is often influenced by the market-based yield for comparable publicly traded securities. Since the yields of publicly traded equity securities typically correlate with corporate bond yields, the prevailing interest rate environment may have valuation implications on the fair market value of preferred equity interests.

Estate planners may recommend the recapitalization of their client's privately owned company stock into preferred equity interests and common equity interests. Such a recapitalization may allow holders of preferred equity to receive a predictable stream of income, while allowing the holders of common equity to benefit from the appreciation of the privately owned company.

Valuation analysts regularly develop fair market value analyses of preferred stock for gift or estate tax planning and compliance purposes. Valuation analysts also are engaged to determine a reasonable market yield range for a contemplated recapitalization.

For a variety of reasons, the prevailing interest rate environment may have an effect on such preferred equity analyses.

Characteristics of Preferred Stock

Preferred stock (also referred to herein as preferred shares or preferred equity) is a class of equity ownership senior to common stock. Preferred stock is a hybrid security that consists of elements of equity and debt.

Similar to a bond, preferred stock promises a fixed stream of income, in the form of dividends, each year to the holder. Unlike most bonds, which mature at some point, preferred stock typically can be held in perpetuity.

Preferred stock also is similar to bonds in that preferred shares are not always given voting power over a company's management actions.

However, preferred stock is a class of equity ownership, and the company has discretion to make preferred stock dividend distributions each year. Dissimilar to interest payments promised in debt instruments, such as bonds, preferred stock dividends are not guaranteed.

In addition, preferred stock is subject to different risks and liquidation preferences relative to the interest payments promised in bonds.

Revenue Ruling 83-120 Considerations

According to Internal Revenue Service Revenue Ruling 83-120, in general, the most important factors to be considered in determining the value of preferred stock are the stock's (1) dividend yield, (2) dividend coverage, and (3) protection of liquidation preference.

Revenue Ruling 83-120 also states that voting rights, covenants, and redemption privilege should be considered in the valuation of preferred interests.

Finally, Revenue Ruling 83-120 provides guidance related to the effects of preferred stock on common stock valuations.

Preferred Equity Analysis

The following provides general guidance for valuing preferred equity interests while applying the considerations of Revenue Ruling 83-120. Every valuation is unique, and the specific factors applicable to the subject interest always should be considered when determining the appropriate methodology for valuing a preferred equity interest.

The following discussion is intended to provide a general (but not necessarily complete) process for analyzing a preferred equity interest.

In estimating the fair market value of a preferred stock, the analyst may consider the following:

1. The rights and preferences of the subject interest
2. The guidance provided by Revenue Ruling 83-120
3. The generally accepted valuation methods applied in equity security valuation analysis

One simple valuation formula for traditional preferred stock is expressed as follows:

$$\frac{Annual\ Dividend\ Payments}{Required\ Rate\ of\ Return}$$

This is an example of the dividend discount method ("DDM") applicable for perpetual cash flow.

The DDM considers the cash flow (annual dividend payments) distributed to the investor of the preferred stock.

The discount rate (required rate of return) applied in the DDM is a function of market rates of interest. It also contains a risk component arising from the inability to accurately predict future cash flow. The risk may result from such fundamentals as the company's underlying financial condition and earning power.

Consequently, the DDM is used to estimate a market value of the preferred stock by applying a required rate of return to the annual dividend payments.

If the preferred stock is redeemable and not convertible, its value may be expressed as follows:

$$\sum_{t=1}^{n} \frac{C_t}{(1+k)^t}$$

Where:

C_t = Cash flow (including redemption price and dividends) generated in the future periods

t = Period when cash flow is generated

k = Required rate of return at which cash flow is to be discounted back to the present

n = Number of periods until redemption

The required rate of return applied to discount the expected cash flow is based on an assessment of the risk through two specific components:

1. Issue-specific risk (i.e., the risk inherent in the particular class of preferred stock being valued, particularly the specific attributes and characteristics of the stock)
2. Company-specific risk (i.e., the risk relating to the issuer itself)

Whether the market required rate of return (usually expressed as a yield on the preferred stock) supports a valuation of the preferred stock at its stated face value depends partly on the adequacy of the dividend rate.

Required Market Rate of Return

The required rate of return is determined by comparing the subject company dividend rate with that of a publicly traded guideline company's preferred stock.

If the interest rate charged by arm's-length lenders on a company's debt is higher than the rate charged by most creditworthy borrowers, then the required rate of return on the company's preferred stock should be correspondingly higher than the required rate of return on a high-quality guideline preferred stock.

As stated in Revenue Ruling 83-120, such comparable situations frequently do not exist. Therefore, guideline publicly traded securities may be selected for comparison if appropriate adjustments are made for certain differing factors. The direction and degree of such adjustment may depend on the specific rights and preferences of the preferred stock.

Interest Rate Environment

Although preferred stock is not a debt security, interest rates typically correlate with the required rate of return for preferred stock. The general theory is that because preferred stockholders have less of a claim in bankruptcy, preferred stock yields are typically higher than more senior debt instruments.

Preferred stock can be viewed as a premium over its debt counterparts. Holders of preferred stock are less likely to receive payment in a bankruptcy proceeding than holders of debt, so the risk is usually captured in a premium over debt yields in the same company.

Interest rate risk is often present in preferred stock because higher interest payments can:

1. reduce a company's willingness to make optional dividend payments or
2. push a company into bankruptcy because of an inability to make interest payments.

Due to the correlation between interest rates and the market yield of preferred stock, the current and prospective macroeconomic environment may influence the market yield of preferred stock.

Federal Reserve Comments

In a July 26, 2023, meeting, the Federal Open Market Committee advised the Federal Reserve ("FED") to increase the federal funds rate by 25 basis points (to a range of 5.25 to 5.50 percent).[1] This brought interest rates to their highest level since 2007.

Starting in March 2022, the FED increased the federal funds rate in 11 of its next 12 meetings, by 5.25 percent total. We understand this unprecedented rate increase was an effort to curb the inflationary pressures facing the U.S. economy.

The Consumer Price Index ("CPI"), which provoked the FED rate increase, decreased from 9.1 percent in June 2022 to 3.2 percent in July 2023. Although the CPI is trending downward, the FED remains wary of inflation.

Interest rate risk is often present in preferred stock.

At the 46th Jackson Hole Economic Symposium on August 25, 2023, FED Chairman Jerome Powell stated that "although inflation has moved down from its peak—a welcome development—it remains too high. We are prepared to raise rates further if appropriate and intend to hold policy at a restrictive level until we are confident that inflation is moving sustainably down toward our objective."[2]

It is evident that the FED may not ease rate increases until there is clear and obvious evidence that inflation has stabilized.

Implications of the Federal Funds Rate on Preferred Equity Yields

Although the federal funds rate is the interest rate applicable for overnight borrowing between financial institutions, the federal funds rate may correlate with the yield of bonds and preferred equity securities that have longer maturities.

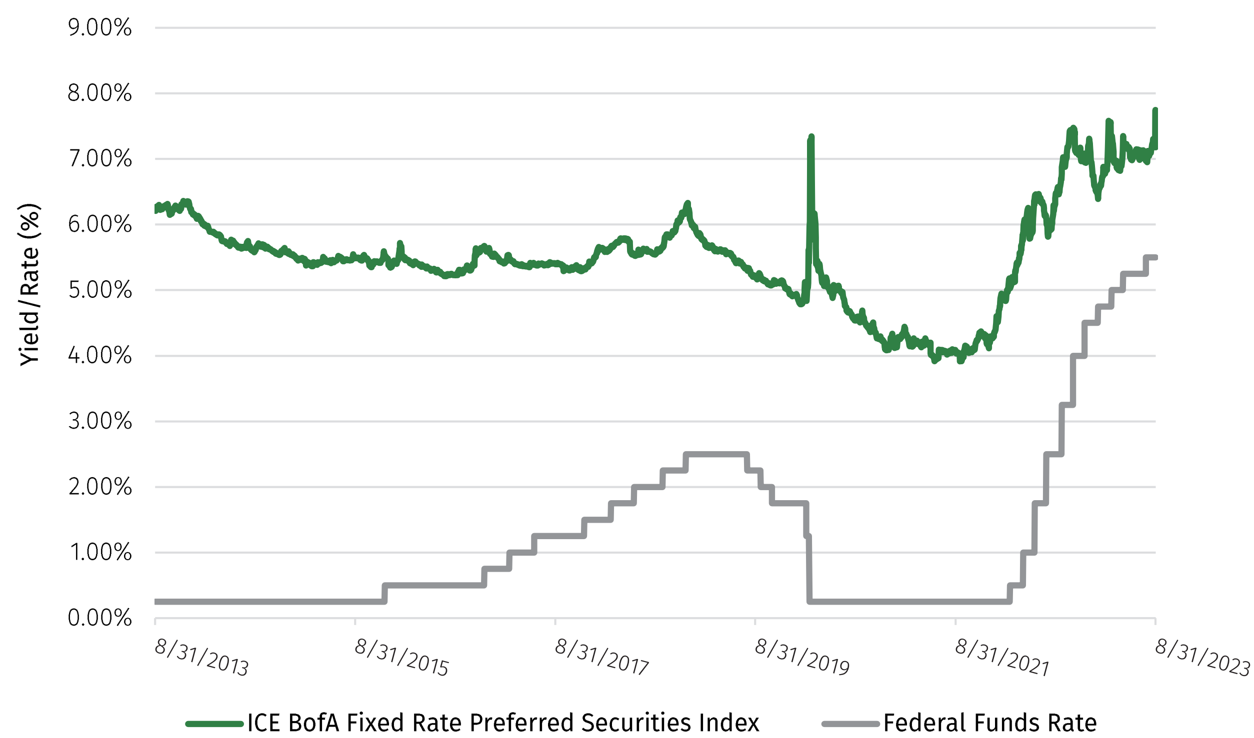
To compare the relationship of preferred securities with the federal funds rate, we compared the ICE BofA Fixed Rate Preferred Securities Index ("Preferred Index") yield with the federal funds rate over a 10-year period.

Figure 1, on the following page, presents the historical yield-to-maturity percentages of the (1) federal funds rate and (2) Preferred Index from August 31, 2013, to August 31, 2023 (the "Analysis Period").[3]

Over the Analysis Period, the correlation coefficient of the federal funds rate to the Preferred Index was 0.675, which indicates a moderate to high correlation.

To estimate the sensitivity of the Preferred Index yield to

Figure 1
Comparison of the Federal Funds Rate and the Yield of the ICE BofA Fixed Rate Preferred Securities Index



changes in the federal funds rate, beta over the Analysis Period for the federal funds rate can be relied on as a benchmark.

Beta is expressed as follows:

$$\beta = \frac{Covariance\ (R_e, R_m)}{Variance(R_m)}$$

Where:

R_e = Return on an individual stock

R_m = Return on the overall market

Covariance = Measure of a stock's relative return to that of the benchmark

Variance = Measure of how the benchmark moves relative to its mean

Based on the formula above, the beta of the Preferred Index yield relative to the benchmark (federal funds rate) was 0.38, which indicates that the Preferred Index yield was less volatile than the federal funds rate over the Analysis Period. However, the beta of the Preferred Index yield relative to the federal funds rate for the two-year period ending August 31, 2023, was 0.51, which indicates that the Preferred Index had increased volatility more recently compared with the Analysis Period.

As the U.S. economy navigates through a period of rising interest rates, it may be helpful to understand the valuation implications of the current market environment on preferred stock.

Using the previously described DDM, we can perform a simple sensitivity analysis for the change in market yield and the market value of preferred stock.

Hypothetically, if one share of preferred stock has a $100 par value and a fixed stated dividend yield of 4 percent, a 1 percent increase in the market yield (5 percent) would contribute to a $20 (or 20 percent) discount relative to the par value.

However, the valuation of the same share of preferred stock may result in a premium above par value if analyzed during a period of low interest rates. If the market yield of the same security was 3 percent, the market value of the hypothetical preferred security would be $133.33 per share, which indicates a 33.3 percent premium to the par value.

Conclusion

Valuation analysts are often engaged to:

1. provide financial consulting services related to the issuance of preferred equity and
2. develop a fair market value valuation of transferred preferred equity interests.

In the valuation of preferred equity interests for gift or estate tax purposes, the analyst may consider (1) the rights and preferences of the subject interest, (2) the guidance provided in Revenue Ruling 59-60, (3) the guidance provided in Revenue Ruling 83-120, and (4) the generally accepted valuation methods applied in equity security valuation analysis.

Although preferred equity shares often have unlimited life, unlike that of bonds, the market value of the preferred equity shares is sensitive to changes in interest rates. Therefore, the prevailing interest rate environment should be considered. Estate planners also may want to consider the advice of valuation professionals when making decisions related to preferred stock transfers or issuances.

References:

1 Federal Open Market Committee notes, www.federalreserve.gov.

2 Jerome Powell, "Inflation: Progress and the Path Ahead" (speech, 46th Jackson Hole Economic Symposium, Jackson Hole, WY, August 25, 2023), www.federalreserve.gov/newsevents/speech.

3 The ICE BofA Fixed Rate Preferred Securities Index tracks the performance of fixed-rate U.S. dollar-denominated preferred securities issued in the U.S. domestic market.

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