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Practical Considerations in Normalizing the Risk-Free Rate

By Ronald D. DiMattia, Corporate Value Partners Inc. (Cleveland, Ohio, USA)

hat It's Worth

Some valuation firms and practitioners have advocated that the risk-free rate of return (Rf) should be normalized when it is believed to be too low as a result of Federal Reserve Bank policies. Recent arguments for doing so have been based on technical economic analyses but have ignored practical aspects of normalizing Rf. While recent comments by some practitioners and current market conditions would seem to suggest that it is no longer necessary to normalize Rf, the distinct possibility remains that the Fed could undertake similar policies in the future, perhaps even the near future. As a result, the practicality of normalizing Rf remains a relevant topic to consider. This article is intended to address practical considerations related to normalizing Rf for valuation purposes.

Overview. Since 2008, the Cost of Capital Navigator (by Kroll) and predecessor publications have recommended the use of a normalized Rf. An annual summary of the recommended Rf is included in the accompanying exhibit.

The exhibit is an annual summary. It does not reflect all changes in the recommended normalized Rf, which can happen over the course of a year. Since 2008, the recommended normalized Rf has ranged from 2.5% to 4.5%, which exceeded the "spot" 20-year constant maturity Treasury bond by roughly 1% on average. In some years, 2013 as an example, the normalization adjustment is rather small. What is 'normal'? Overall, the exhibit raises several important questions. The first being: What is "normal" when it comes to the Rf? Many people interpret the concept of normal as something that has some consistency to it. The above trend seems to indicate that normal is a moving target but tends to exceed the actual market rate of return by about 1% at any given time. Annual summaries of economic conditions are available that explain the data provider's reasoning underlying the selection of the normalized Rf, but, in the end, the selection rests on the data provider's interpretation of market conditions. Importantly, the selection of a normalized Rf is also subject to the data provider's specific analytical biases.

Analytical humility. The second question relates to a concept referred to as analytical humility, which is central to the valuation profession. It is the reason we use more than one approach or method in valuing a business as a built-in check on our assumptions. It is the reason why it is common to round off key assumptions and round off our conclusion of value. As many young valuation analysts learn, it is never good to imply precision that does not exist.

Given the utter and complete complexity of assessing what is normal at any given point in time in financial markets, how can any data provider recommend a normalized Rf with any reliability? When reading the economic summaries supporting the normalized Rf, one is reminded of the Fed's team of economists struggling to determine the "natural" or "neutral" rate of interest, which can only be inferred, not observed. Even

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Fed Chairman Jerome Powell will state that the search for the "neutral" rate is highly complex and that he bases his decisions on more practical matters.¹ In short, it seems that the idea of recommending a normalized Rf lacks analytical humility.

What does normalization represent? Another question relates to what the normalization of Rf represents. In early economic summaries supporting the recommended normalized Rf, the author implies that the adjustment is necessary to reflect the fact that the actual market rate of interest does not adequately capture risk that exists in the market.² But it is important to keep in mind that the Rf is supposed to reflect a rate of return that is free from risk. The "spot" or actual Rf reflects a risk-free rate of return that many qualified investors have realized as a result of their investment decisions. The actual Rf is not a notion; it reflects an actual market rate of return.

The Rf speaks to the term structure of interest rates. The market equity risk premium (Rpm), beta, and size premium (Rps) capture elements of risk, as would any valuation adjustments (discounts) that are applied. The long-term growth rate (g) would capture subdued expectations of future growth that are consistent with low market rates of interest. It is counterintuitive and theoretically incorrect to use market risk as justification to normalize the Rf.

Policy influence. It is also important to keep in mind that central banks and governments

[&]quot;Why the Era of Historically Low Interest Rates Could 1 be Over," The Wall Street Journal online edition, Aug. 20, 2023. Chairman Powell is quoted as saying, "I don't see us as having a really clear and precise understanding of what the neutral rate is and what real rates are."

² As an example, see the 2017 Valuation Handbook, U.S. Guide to Cost of Capital, page 3-23, in which the author notes, "If spot yield-to-maturity were used at these times, without any other adjustments, one would arrive at an overall discount rate that is likely inappropriately low vis-à-vis the risks currently facing investors."

frequently affect market rates of interest. Policymakers have long had influence over market rates of interest and have often used their power to push interest rates up or down to achieve their objectives, be it to respond to perceived imbalances in markets, international conflicts, trade disputes (currency wars), or natural disasters. Political pressure to keep interest rates low is particularly acute in 2023, given the level of the U.S. national debt.³ The national debt is so large that meaningful increases in interest rates could have a highly negative effect on our government's financial stability and the overall financial market's stability. As a result, a strong "political imperative" exists to maintain low interest rates.⁴

Furthermore, policymakers have shown a predisposition to continue backstopping financial markets, even though they are currently reversing their low interest rate policies and ending quantitative easing operations. The backstops were clearly evident during the brief banking crisis that brought down a few large banks in early 2023 (Silicon Valley Bank, Signature Bank, and

4 *The Price of Time* by Edward Chancellor, "Conclusion," pages 290-292.

Annual Summary of the Recommended Rf				
Date	Normalized Rf	20-Yr. Constant Maturity T-Bond	Normalization Incre- ment	
12/31/2022	3.50% or spot	4.14%	n/a	Whichever is higher
12/31/2021	2.50%	1.94%	0.56%	
12/31/2020	2.50%	1.45%	1.05%	
12/31/2019	3.00%	2.25%	0.75%	
12/31/2018	3.50%	2.87%	0.63%	
12/31/2017	3.50%	2.58%	0.92%	
12/31/2016	3.50%	2.79%	0.71%	
12/31/2015	4.00%	2.67%	1.33%	
12/31/2014	4.00%	2.47%	1.53%	
12/31/2013	4.00%	3.72%	0.28%	
12/31/2012	4.00%	2.54%	1.46%	
12/31/2011	4.00%	2.57%	1.43%	
12/31/2010	Spot	4.13%	n/a	
12/31/2009	Spot	4.58%	n/a	
12/31/2008	4.50%	3.05%	1.45%	
			1.01%	Average

³ Since 2000, the national debt has grown at a consistent pace and approximated \$32 trillion as of the date of this writing.

First Republic Bank) and in the Fed's instructions to banks regarding their dealings with troubled commercial real estate borrowers (office buildings). In both instances, policymakers' actions could be viewed as having the ultimate effect of lowering market interest rates.⁵

From a historical perspective, low interest rates are not out of the ordinary. What is out of the ordinary are interest rates that are unusually high. Recent historical trends would indicate that periods of high interest rates are periodic and eventually give way to lower interest rates. As a result, if any argument is to be made that interest rates need to be normalized, it would be during periods of relatively high interest rates, not during periods of relatively low interest rates, which have been fairly common over the past 25 years. Furthermore, the idea of normalization is consistent with brief periods of time. Normalizing interest rates over a lengthy period of time amounts to normalizing away the new normal, which is a frequent complaint related to SEC registrants' presentation of non-GAAP financial measures.

Conclusion. A normalized Rf has been proposed for over 15 years. As described previously, however, a normalized Rf lacks reliability and is subject to numerous practical concerns. There are many ways that an analyst can deal with matters of perceived risk in their valuation assumptions, from the selection of an equity risk premium (Rpm), to the size premium (Rps), to the beta (B), to the long-term growth rate (g), and to valuation adjustments (discounts), all of which are valid in addressing perceived risk. ◆

Ronald D. DiMattia, CPA, ABV, CMA, is president of Cleveland-based Corporate Value Partners Inc. (corporatevaluepartners.com), which specializes in small and midsized businesses, and offers M&A, litigation support, financial restructuring, and valuation services. Ron is also an adjunct instructor at the University of Akron. He can be reached at ron@corporatevaluepartners.com.

⁵ As examples, U.S. Treasury Secretary Yellen indicated that the U.S. Treasury could effectively cover depositors that held deposits in excess of the FDIC maximum at other banks in addition to Silicon Valley Bank and Signature Bank ("The Banking Crisis: A Timeline of Key Events Leading to First Republic Bank's Failure," *The Wall Street Journal* online edition, May 1, 2023). Related to commercial real estate borrowers, the Fed, FDIC, and other regulators provided banks with direction to extend/restructure loans without recognizing losses ("Bank Regulators Urge Flexibility in Commercial Real-Estate Loan Workouts as Defaults Grow," *The Wall Street Journal* online edition, July 24, 2023).