The Electricity Journal 29 (2016) 19–23

Contents lists available at ScienceDirect

The Electricity Journal

journal homepage: www.elsevier.com/locate/electr

Low interest rates and unprecedented stock market volatility: What they mean for your next rate case

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ARTICLE INFO

Article history:
Received 17 November 2015
Accepted 28 December 2015
Available online 17 February 2016

Keywords:
Financial economics
Monetary policy
Regulation and industrial policy
Utilities: General

ABSTRACT

Litigating return on equity disputes exposes public utilities to substantial uncertainty in today's market and regulatory environment. Anomalous capital market conditions have led some regulators to modify their approaches to assessing ROE and to consider alternative metrics.

1. Introduction

Establishing the cost of capital for public utilities in rate cases comprises the application of a well-honed set of analyses – drawing on the groundbreaking work of academic financial economists in the 1960s[1] – to data readily available on asset prices in capital markets. Yet today two factors complicate the otherwise prosaic application of these well-established techniques: the first is the persistence of central bank intervention in capital markets, which has created an interest rate environment that has no precedent in recent history; the second is a series of share price gyrations in stock markets that have kept investors on edge about the fair pricing of volatility and the likelihood of a major correction.

Such anomalous market conditions have led some regulators – the Federal Energy Regulatory Commission (FERC) being the most direct about it – to apply more judgment when determining fair rates of return on equity (ROE). However, for a public utility preparing a rate case, more can be done to tease out the fair return from objective market indicators than simple reliance on judgment. To build a complete record, the utility must present evidence that includes a thorough analysis of the sometimes-conflicting messages from the capital market data. This includes presentation of traditional evidence, together with additional data and analyses that have not previously been emphasized in ROE adjudications or given consideration by regulators in past cases.

In this article, I first explain the anomalous conditions affecting capital markets today. I then describe metrics beyond those traditionally considered, which are helpful in providing perspective on investor preferences and return requirements in the current capital market context.

2. Anomalous capital markets: the effects of central bank intervention and managed interest rates

The current capital market conditions are unique from a historical perspective. Yields on long-term treasury bonds have been suppressed by the Federal Reserve's bond-buying program and have been influenced by its policy of holding short-term interest rates at levels close to zero. The Federal Reserve continues to implement a major monetary stimulus program. It achieves this stimulus by maintaining short-term interest rates at near-zero levels. While the Federal Reserve recently terminated the other component of its monetary stimulus, quantitative easing (QE), the market conditions that prevailed during its third phase (QE3) continue to prevail today.

An important factor explaining the continuation of the low-interest rate trends in global capital markets is the behavior of other central banks. As the Federal Reserve stopped its asset purchases, central banks such as the European Central Bank, the Bank of China, and the Bank of Japan acted to pursue similar policies. These actions of foreign central banks affect the increasingly global and interconnected capital markets and have put continued downward pressure on long-term government bond yields. As of November 2015, analysts reported over $15 trillion in aggregate central bank asset purchases, with the U.S. Federal

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[1] *See*, for example, M. Gordon, *The Investment, Financing and Valuation of the Corporation* (1962).

http://dx.doi.org/10.1016/j.tej.2015.12.007
1040-6190/

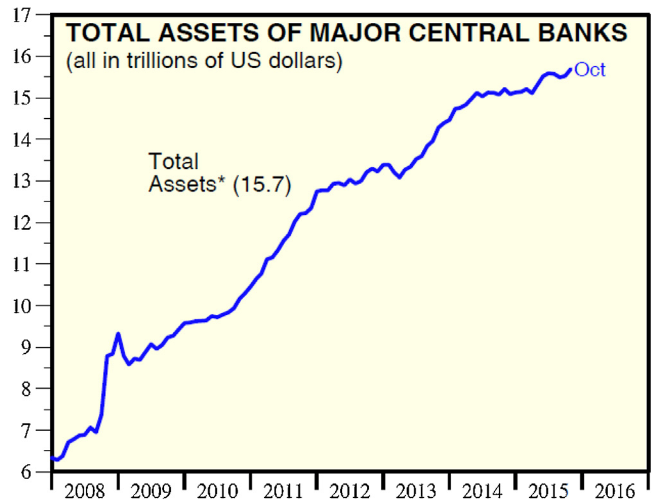

Fig. 1. Total assets of major central banks.

Source: Yardeni Research, Inc.

Reserve's share representing just over $4 trillion.[2] The assets purchased by central banks include long-term U.S. treasuries, corporate bonds, and equities. The aggregate amounts purchased show no signs of slowing down (Fig. 1). Currently, official foreign institutions hold close to 80% of ownership of long-term U.S. Treasury bonds by foreign entities, a figure that has risen substantially since the financial crisis began.[3]

As a result of central bank activity, long-term interest rates – those relied upon by financial analysts to model investor return expectations – remain near all-time lows. At the same time, as demand for stocks has pushed equity prices up, dividend yields have fallen significantly since 2009, both for industrial firms generally and for utilities. From 2009 through early 2015, stock prices for utilities exhibited more volatility than stock prices for industrial firms.

This anomalous environment led the FERC to question the reasonableness of the assumptions and inputs to its formulaic cost of capital estimation using a discounted cash flow (DCF) model. The FERC held: "All methods of estimating the cost of equity are susceptible to error when the assumptions underlying them are anomalous."[4] To address this anomaly, FERC developed an alternative measure of central tendency that focuses on the upper half of the range of estimated ROEs and, in its judgment, resulted in a fair return. FERC noted that supplemental evidence produced by the parties to the proceeding corroborated the use of the alternative central tendency measure.[5]

3. Are anomalous capital markets still affecting roe estimates?

An ongoing debate in rate cases adjudicated at both the state and federal level is whether anomalous capital market conditions continue to distort traditional ROE modeling. This debate has largely focused on activities of the Federal Reserve without consideration for the globally interconnected nature of today's capital markets and without recognition of the important influence foreign central banks have over the yields on long-term bonds.

An examination of monetary policy in the United States indicates that the Federal Reserve's approach to move slowly and cautiously when considering an interest rate hike has at times led the investment community to expect a continuation of stimulus. Some market commentary, and remarks by Federal Reserve officials, even suggest that the Federal Reserve may even pursue a fourth phase of quantitative easing. Its decisions in the fall of 2015 not to raise short-term rates went against the predictions of most economists. As of October 2015, reports in the press suggested the rate hike would not materialize until 2016. However, in December 2015, the Federal Reserve did increase the target federal funds rate by 25 basis points. However, the Open Market Committee has made clear that, even after employment and inflation are near mandate-consistent levels, economic conditions may for some time warrant keeping the target federal funds rate below levels the Committee views as normal in the longer run.[6]

In sum, while the Federal Reserve does intend to normalize monetary policy, it recognizes the need to do so slowly. What does this mean for the equities markets? The stimulus has generally been positive for equities' prices in recent years, thus depressing the dividend yields that go into standard discounted cash flow models used for ROE estimation. However, the market did not respond positively to the Fed's September 2015 decision not to raise rates, confirming that the investment community understands that even the benefits of stimulus face limits.

Debates before the FERC have focused not only on whether the Federal Reserve will raise rates but also on when it will normalize its balance sheet (i.e., sell the securities it has accumulated). Some have argued that normal conditions will only prevail after the Federal Reserve liquidates its portfolio. These debates will inevitably continue. This author holds the opinion that the conditions creating the distortions have been perpetuated by foreign central banks and will not normalize until those banks and the Federal Reserve reduce their direct capital market interventions.

4. Additional tools for assessing ROE in anomalous capital markets

In such a capital market context, it is incumbent upon the financial analyst to consider all indicators of risk and to analyze how these factors affect required returns. Using traditional analyses in conjunction with assessments of additional risk indicators can help to assure that the evidence put forth in a rate case reflects a full

[2] See, for example, *Global Economic Briefing*: *Central Bank Balance Sheets*, Yardeni Research, Inc., Nov. 15, 2015.

[3] Jaime Caruana, General Manager, Bank for International Settlements, BIS Paper No. 66.

[4] FERC Opinion No. 531-B, paragraph 50, *150 FERC 61,165*.

[5] FERC Opinion No. 531, *149 FERC 61,032*.

[6] *See*: http://www.federalreserve.gov/newsevents/press/monetary/20150429a.htm.