WUTC DOCKET: UE-190334
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BEFORE THE WASHINGTON

UTILITIES & TRANSPORTATION COMMISSION

WASHINGTON UTILIITES AND TRANSPORTATION COMMISSION,

Complainant,

v.

AVISTA CORPORATION d/b/a AVISTA UTILITIES,

Respondent.

DOCKET NOS. UE-190334 and UG-190335, UE-190222 (*Consolidated*)

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ON BEHALF OF PUBLIC COUNSEL

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Steven Huntoon: *Nice Work If You Can Get It*

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Let's admit one thing right off the bat. Rate of return is one of the most arcane subjects in utility regulation's ocean of arcania.

But one thing that makes rate of return interesting is the amount of money involved. It's roughly $58 billion each year for electric utilities.[1]

Now you may be thinking, OK, so there's big money involved. But what's in it for me? In the spirit of BLUF, Bottom Line Up Front, let me tackle that question.

There is mounting evidence that investment in utility stocks has outperformed the broader market in the past, and will continue to do so. This is a conundrum. Regulated utilities are less risky than competitive industries, and therefore are supposed to produce a lower total return over time. But instead the opposite is happening.

We'll get into the evidence for this, and then speculate as to how this can be so. But if you want actionable intelligence up front, here it is: invest in regulated utilities.

Vanguard Group gives you low-cost index-fund options for utility investment. The symbol for the mutual fund is VUIAX and for the ETF is VPU. You may now skip the rest of this column if so inclined.

By the way, if your interest is the welfare of utility customers, there is more at stake than just higher than needed equity rates. When allowed equity returns exceed the true cost of equity, utilities have an artificial incentive to expand utility facilities upon which they can earn that extra return, including favoring themselves over others in resource procurement. This is the well-known Averch-Johnson effect first described in 1962.

OK, for those sticking around for the substance here it is. The historical evidence of outperformance comes in three data points:

1. A study released by PJM showing lower-risk regulated generation outperforming higher-risk, market-based generation over a long-term horizon.[2]

2. Broader studies of markets showing lower-beta, lower-risk stocks outperforming higher-beta, higher-risk stocks over a long-term horizon.[3]

3. Utility stocks outperforming the broader market over the last 12 years, the longest period tracked in Google Finance, with the Dow Jones Utility Average at a total return of 161 percent and the Dow Jones Industrial Average at a total return of 133 percent.[4]

These are astounding, counter-intuitive results.

This counter-intuitive past seems destined to continue into the future. Three data points point the way:

1. Jack Bogle, the founder of Vanguard Group and a Wall Street legend, provides rigorous analysis that the long-term total return for the broader market will be around 7 percent going forward.[5] Another Wall Street legend, Professor Burton Malkiel, corroborates that 7 percent in the latest edition of his seminal work, *A Random Walk Down Wall Street*.[6]

2. Institutions like pension funds are validating #1 by piling on risky investments to try and get to a 7.5 percent total return, as reported by the *Wall Street Journal*.[7]

3. Utilities are being granted returns on equity around 10 percent.[8]

Let's reflect on what #3 means relative to #1 and 2.

It means that the less risky utilities are being awarded much higher returns, roughly 40 percent higher, than the broader market is expected to earn. The extra is about $17 billion per year.[9] Not too shabby.

So let's repeat the actionable intelligence. If you're a professional money manager it means you should buy the Vanguard utility index fund (or a comparable fund) and spend the next 10 years in Maui drinking Mai Tai's with those little umbrellas.

The rest of us should make the same investment. But we'll still have to work because we can't drink Mai Tai's in Maui for a living.

Now that we've gotten the practical stuff out of the way, let's think about why this might be so. The efficient market hypothesis says it isn't possible to have an anomaly like lower risk stocks consistently outperforming higher risk stocks. And yet they are.

Why? One thing we know off the bat is that utility stocks are the only stocks where Wall Street analysts actually set earnings, instead of just forecasting earnings. That is because utility regulators use Wall Street analysts' forecasts of earnings and dividend growth to set the "g" factor, and dividend yield plus g becomes the allowed return on equity.

You might observe that there is some circularity to this. If Wall Street analysts set g high, then the allowed return on equity will be high, and then g will be high, etc.

But it's not all circular. There may be some reasons for Wall Street to think g ought to be high. Wall Street forecasts tend to be led by guidance from the companies themselves. Utility companies have decades of experience in maximizing earnings under regulation, and partial deregulation, and they do very well at it.

How exactly? Well, we need to get in the weeds to explore some of the ways, but here goes. Utilities often can take advantage of double leveraging their capital structure. That's pretty esoteric so let's take an example.

Suppose you have an operating utility company with a 50 percent debt, 50 percent equity capital structure, with 5 percent debt cost and 10 percent equity cost. Now, let's suppose a holding company is created that finances the 50 percent operating company equity with 40 percent debt and 60 percent equity. How much does the parent company equity earn on equity? It earns 13.3 percent, not 10 percent, because of the double leverage.[10]

And it also works in reverse. Wall Street forecasts a return of equity of 13.3 percent on the double leveraged parent equity, and that percent is applied to the capital structure of the operating company where the equity cost is only 10 percent. Pretty neat, eh?

Beyond capital structure, the nature of regulation has evolved favorably over time for the regulated. Utilities have been able to enlist regulators in risky endeavors so as to eliminate or mitigate financial losses from failures.

Nuclear and clean coal plants come to mind. New such plants are concentrated in areas of the country where traditional rate regulation for generation has continued. In contrast to areas where generation investment is subject to market conditions and competitive pressures.[11]

Utilities also have exhibited some facility for shifting regulatory paradigms as market conditions change. Ohio and Illinois illustrate this. As part of the deal to allow competition, utilities received stranded cost payments.

Then, rising wholesale prices became a bonus. And now with wholesale prices back down, some of those same utilities are seeking subsidies for their generation. This ability to shift among regulatory paradigms is unique to the utility industry.

Utility rates also tend to be downward sticky. It is easier for a utility to initiate and prosecute rate increases than for consumer advocates to initiate and prosecute rate decreases, with an imbalance in information being one obvious reason why.

And utilities have some ability to influence timing of expenses with, for example, workforce reductions coming a polite period after the resolution of a rate case. And utilities over time have been able to implement automatic pass-through of various types of costs so, for example, some costs can be passed through without comprehensive review of the utility's overall revenues and costs.

All of this is nice work if you can get it.

You may be thinking, is there a risk that regulators look at all this and reduce allowed returns to something closer to what the riskier broader market is expected to earn? So utilities would no longer be an anomalously great investment?

No worries. This is our little secret.

1. According to EEI data, there is $356 billion in electric utility common equity. Assume a 10 percent return on equity plus an income tax allowance of 6.4 percent. The income tax allowance is based on a composite federal or state income tax rate of 39 percent. The 10 percent return is divided by 61 percent (1 minus 39 percent). This gives a pre-tax total return of 16.4 percent, which amounts to $58 billion on the $356 billion in common equity.

2. "... one would expect merchant firms to earn a much higher level of return than the firms that are more tightly regulated. However, the opposite seems to be true as the consistently positive alphas for regulated firms indicates these companies are earning returns higher than what they should be expected to earn given their much lower level of risk." Resource Investment in Competitive Markets, Technical Appendix, May 5, 2016.

3. "In an efficient market, investors earn higher returns only to the extent that they bear higher risk. Despite the intuitive appeal of a positive risk-return relationship, this pattern has been surprisingly hard to find in the data, dating at least to Black (1972). For example, sorting stocks by using measures of market beta or volatility shows just the opposite. Panel A of Figure 1 shows that from 1968 through 2012 in the U.S. equity market, portfolios of low-risk stocks delivered on the promise of lower risk as expected but had surprisingly

higher average returns. A dollar invested in the lowest-risk portfolio grew to $81.66, whereas a dollar invested in the highest-risk portfolio grew to only $9.76." The Low Risk Anomaly: A Decomposition into Micro and Macro Effects, *Financial Analysts Journal,* March/April 2014.

4. These returns are from Google Finance, comparing Dow Jones Utility Average Total Return with Dow Jones Industrial Average Total Return from August 31, 2004, earliest common date, to June 28, 2016.

5. "Thus, the prospective nominal investment return on stocks seems likely to run in the range of 7 percent..." Occam's Razor Redux: Establishing Reasonable Expectations for Financial Market Returns, *Journal of Portfolio Management*. This conclusion is supported by unprecedented lows in the risk-free rate, even negative interest on some sovereign debt. For an excellent summary of the Bogle study see Jason Zweig's column, This Simple Way Is the Best Way to Predict the Market, *Wall Street Journal,* December 24, 2015.

6. "Adding the initial yield and growth rate together, we get a projected total return for the S&P 500 of just under seven percent per year ...." (*A Random Walk*, page 346).

7. "To even come close these days to what is considered a reasonably strong return of 7.5 percent, pension funds and other large endowments are reaching ever further into riskier investments..." *Wall Street Journal,* June 1, 2016.

8. FERC set the base allowed return for New England transmission owners at 10.57 percent in its Opinion Numbers 531, 531-A and 531-B. State commission allowed returns for electric utilities have averaged 9.78 percent according to an analysis of *Public Utilities Fortnightly* data in the PJM Study, earlier referenced.

9. Here's the math: 16.4 percent pretax return on $356 billion equity is $58 billion. If the equity return is 30 percent less, 7 percent versus 10 percent, then the reduction in return is $17 billion.

10. Here's an example of the math. Assume the operating company's equity is $100 million. At a 10 percent allowed return it earns $10 million. Now let's suppose the holding company finances that $100 million with 40 percent debt costing 5 percent and 60 percent equity. The holding company pays $2 million for the debt and thus earns $8 million on the $60 million equity for an actual return on equity of 13.3 percent. The key is the difference between the holding company's consolidated capital structure and the utility operating company's capital structure. Indeed, the leveraging is even more lucrative because the phantom equity also gets a phantom income tax allowance.

11. For more on this see the PJM Study, earlier referenced.

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