Counterflow

Nice Work If You Can Get It
Rate of Return for Fun and Profit
BY STEVE HUNTOON

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.

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

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.

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. 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.

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.

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

Let’s reflect on what #3 means.

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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 intel-
ligence. If you’re a professional money
manager it means you should buy the
Vanguard utility index fund (or a com-
parable 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 mar-
ket 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 com-
panies 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 util-
ity 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

Then, rising wholesale prices became
a bonus. And now with wholesale prices
back down, some of those same utilities
are seeking subsidies for their genera-
tion. This ability to shift among regula-

tory paradigms is unique to the utility
industry.

Utility rates also tend to be down-
ward 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 imbal-
ance in information being one obvious
reason why.

And utilities have some ability to
influence timing of expenses with, for
example, workforce reductions coming

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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 concen-
trated in areas of the country where
traditional rate regulation for genera-
tion 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 para-
digms as market conditions change.
Ohio and Illinois illustrate this. As part
of the deal to allow competition, utili-
ties received stranded cost payments.

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Endnotes:

1. According to EEI data, there is $356 billion in
electric utility common equity. Assume a 10 per-
cent return on equity plus an income tax allow-
ance 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

AUGUST 2016 PUBLIC UTILITIES FORTNIGHTLY 65
Nice Work If You Can Get It
(Cont. from p. 65)

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.


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.

Need for New Regulatory/Business Models
(Cont. from p. 67)

utilities can develop responsible and responsive business plans. Bring academics, consultants, Energy Department Lab staff, consumer advocates, and technology vendors together with legislators and regulators to brainstorm about what can be, what should be, and how do we get there.

5. Develop a culture in which legislators and regulators want to help the utility become more competitive with new generation competitors for customer loyalty and dollars. The telecommunication provider that encourages, for a price, customers to let them manage the customer’s electric load is a competitor to the utility. The third party aggregator that seeks to save customers money, for a price, by marketing demand response management is a utility competitor. The seller of distributed generation technologies is a competitor.

6. Develop a business plan to meet the challenges enumerated above and others. Equally important, develop a political-regulatory plan to change the statutory and regulatory limits on how a utility can compete with these new sector elements, with the ultimate goal being to benefit and protect customer interests.

Legislators and regulators may like you. But if you are not helping protect society by enhancing system reliability, resiliency, and economically, while ensuring affordability, you will lose even more market share because the legislators and regulators will not change the regulatory model.

State legislators are the folks who can change the regulatory model. So electric utilities can more effectively compete with distributed generation, third party aggregators, and technological innovations.

Identify knowledgeable and interested legislators. Provide access to information. Introduce them to scholarly and industry publications. And help them understand that a competitive marketplace benefits consumers and energy providers.