

Taking A WACC At Corporations

“No bucks, no Buck Rogers.” -- Virgil I. “Gus” Grissom in “The Right Stuff”

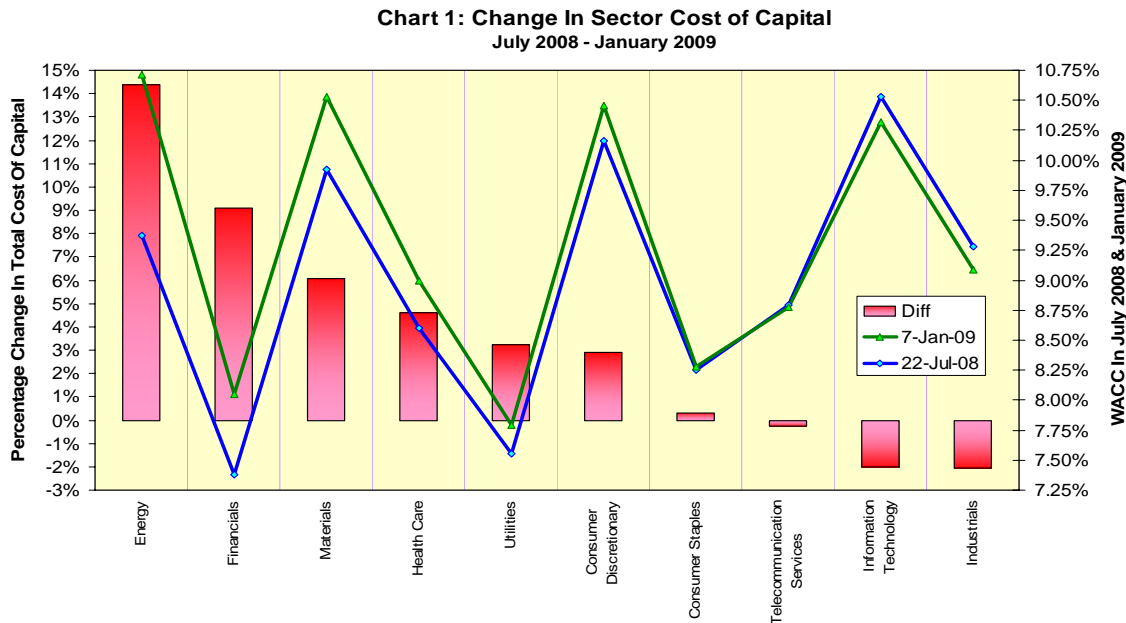
Gus Grissom understood something too many investors do not, which we can paraphrase as “no capital, no capitalism.” Even though we could demonstrate stock prices reflect more than the ability of their underlying companies to add economic value to capital (see “Corporations Are Not Capital Processors,” July 2007) trying to succeed in business without a capital base is well-nigh impossible.

Capital falls into two broad categories, debt and equity. If preferred stock, which gets paid a fixed dividend and stands senior to common stock in the company’s capital structure, into the mix, we can calculate a weighted average cost of capital, or WACC. *Bloomberg’s* estimates of each firm’s cost of equity, debt and preferred stock will be used below. And estimates these are: The cost of equity, for example, involves an estimate of the return implied in an equity index’ price given estimates of growth rates, earnings, dividends and payout ratios and a beta, or relative volatility estimate, between each firm and the index. The cost of debt estimate includes estimates for the default probabilities for each credit rating and spreads to reference debt indices. You might be excused for thinking there is no small amount of guesswork and assumptions involved.

What can we learn by comparing the WACCs, both in total and separately by debt and equity, of each of the ten economic sectors as classified by Standard & Poor’s? In addition, what can we learn by similarly breaking out the financial sector, the cause of so much economic distress in 2007-2008, into its separate industry groups? Finally, how did the various financial earthquakes of late 2008, particularly in the financial sector affect costs of capital?

Sector Comparisons

The S&P 1500 Supercomposite index will be used as the universe. If we weight each firm’s WACC by its weight therein, we can create a capitalization-weighted WACC. We will compare this WACC from January 7, 2009 to a comparable measure made on July 22, 2008, the week following the de facto nationalization of Fannie Mae and Freddie Mac. The costs will be sorted according to their percentage change over this period.



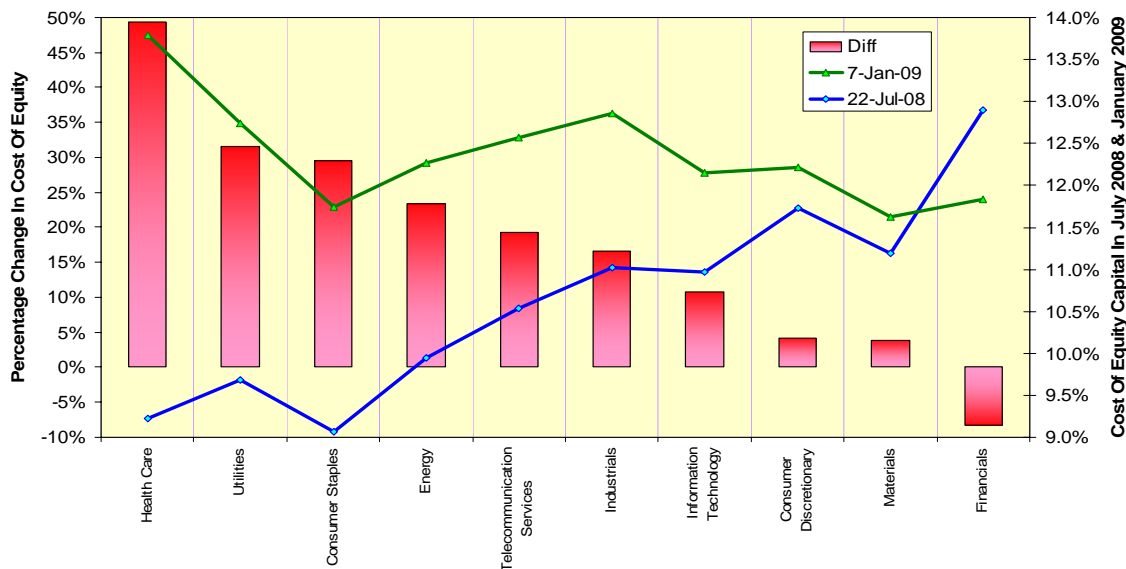
Please note the financial sector had the lowest WACC in July 2008, an odd observation for an industry whose losses were expressed best in scientific notation and whose failures led to a nonstop global crisis. That was not irrational: While the financials may have been able to issue new paper at a low upfront cost up until the crisis really hit a boil, many of these instruments were back-loaded for the investor and often included surrender of corporate control in the form of equity conversions, board seats and other considerations. In addition, as we shall see below, the total WACC for the financial sector masks the very different costs of debt and equity for these firms. Finally, please note how the largest increase in WACC was in the energy sector; this reflects the impact of the more than \$100 per barrel drop in crude oil prices over the period and how it affected investors’ perception of risk in this sector.

Now let's decompose the capitalization-weighted WACC into equity and debt components in Charts 2 and 3, respectively. The preferred stock data are too sparse to be meaningful graphically.

What can we see in the sectoral distribution of equity WACCs? First, the financial sector had the highest equity cost of capital in July 2008, but financials then witnessed the largest decline in equity costs. Prior to the massive government bailouts and numerous bankruptcies in the financial sector over the last half of 2008, financial sector equity was seen, correctly, as a high-risk proposition. That changed along with the financial sector landscape. The sector's survivors are either wards of the state or are in the general category of too-big-too-fail.

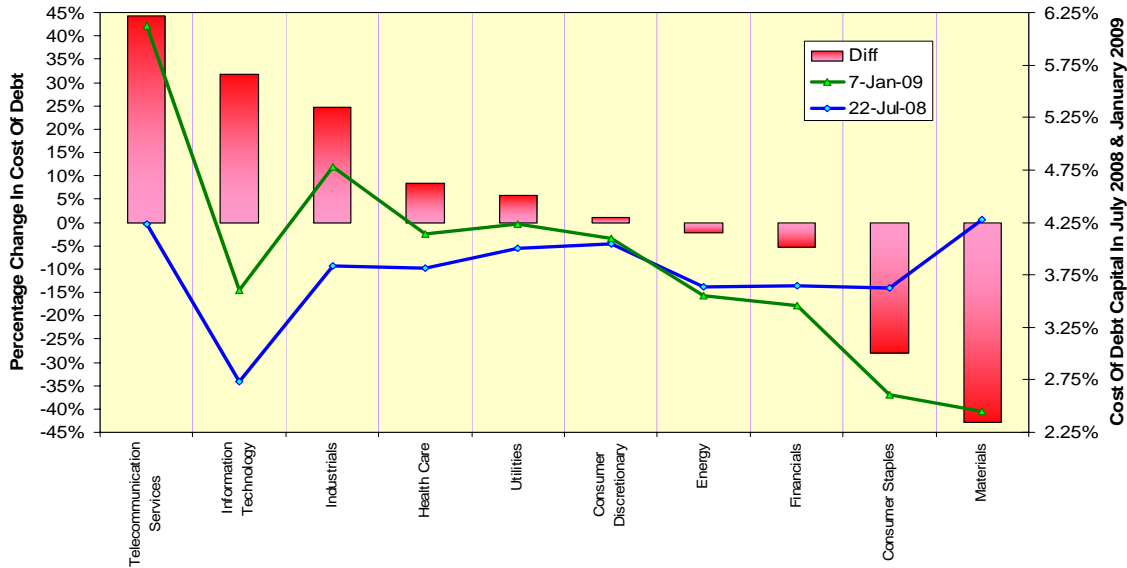
Second, the defensive sectors of consumer staples, health care and utilities all saw their equity costs of capital jump significantly over the period. Should anyone be surprised their stocks became riskier as the economy slid further into recession?

**Chart 2: Change In Sector Cost of Equity Capital
July 2008 - January 2009**



What about capitalization-weighted debt WACC? Here the chart is distorted by the information technology sector; while it had the lowest cost of debt capital, it had one of the highest increases in debt costs over the period. Telecommunications-sector debt also jumped in cost. This is ironic; while these firms can raise debt cheaply, they usually prefer to fund themselves with equity. The reason is simple: These firms like to conserve cash, and while you do not have to pay a dividend on a generally-high-beta stock, you generally have to pay bond interest. Few firms issue zero-coupon bonds unless they are convertible into equity at a later date and strike price.

**Chart 3: Change In Sector Cost of Debt Capital
July 2008 - January 2009**

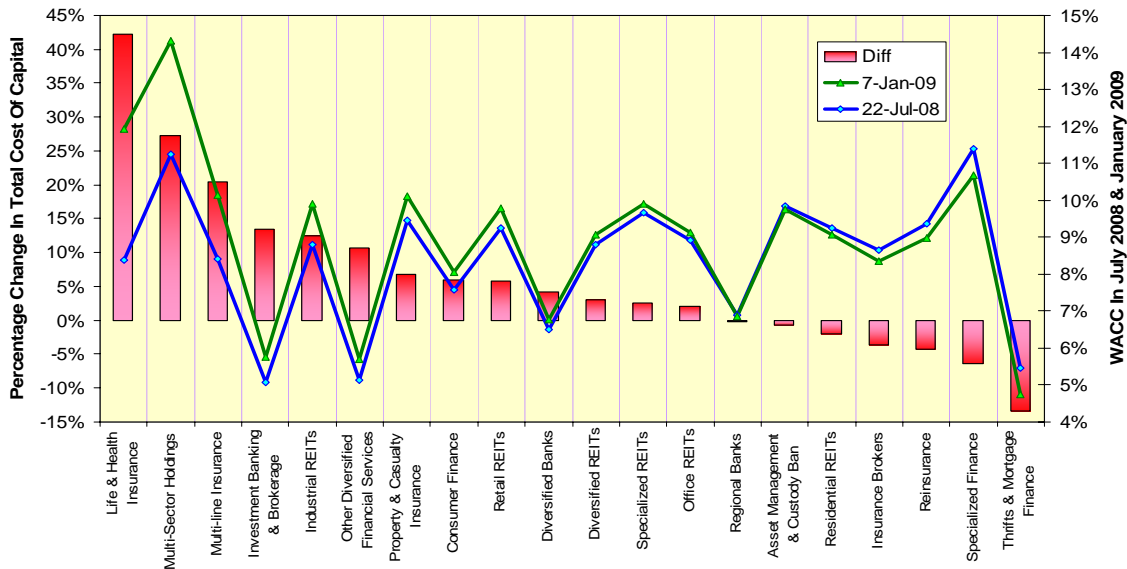


Financial Group Comparisons

The financial sector is divided into 20 different active industry groups, many of which are REITs or various classes of banks. A 21st, real estate management services, became inactive by January 2009. The weighted-average WACC within the sector is 8.05%. The very largest money-center banks, such as Bank of America, Citigroup and J.P. Morgan are in an oddly named group called “other diversified financial services.”

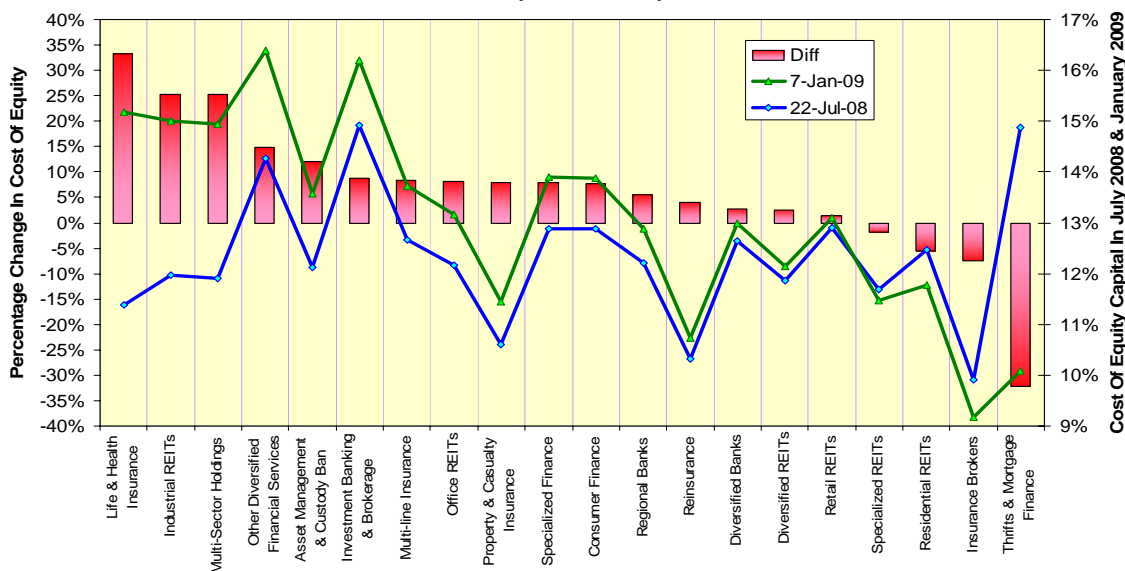
If we look at the total capitalization-weighted WACCs of these groups, we see the lowest WACCs belong to those groups at the epicenter of the 2007-2008 credit crunch, the investment banks, thrifts & mortgages and various classes of banks. This seems as if these firms perversely are being rewarded for the colossal blunders, and this is largely true by virtue of the various bailouts we have witnessed.

**Chart 4: Change In Financial Industry Group Cost of Capital
July 2008 - January 2009**



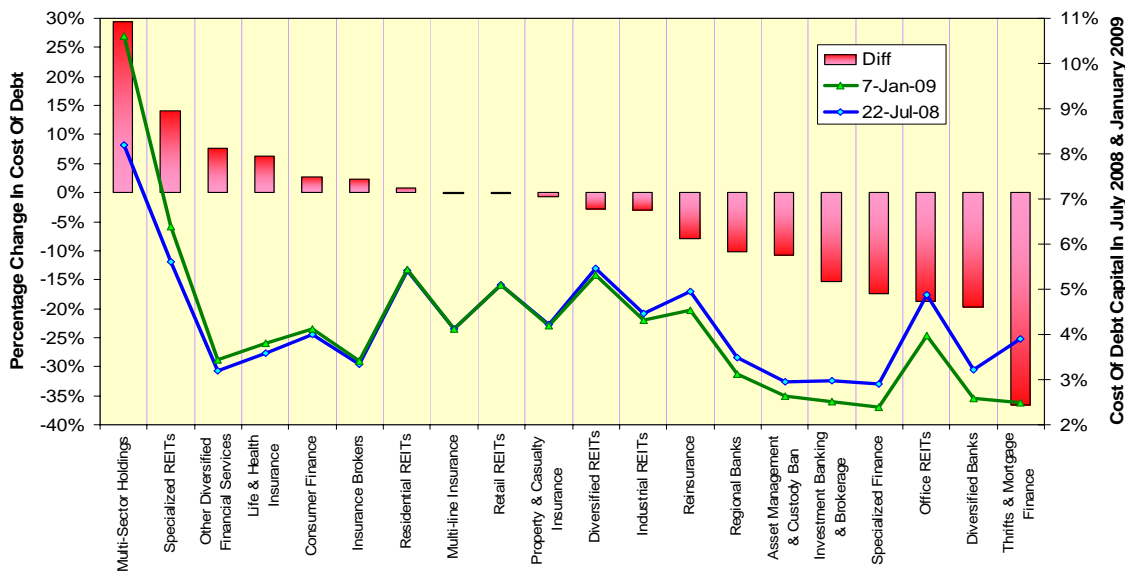
Now let’s look at the equity and debt WACCs, whose capitalization-weighted means are 13.81% and 3.5%, respectively, separately. While insurance brokers have the lowest cost of equity capital, please note how they are joined by thrifts & mortgages. Yes, the survivors of the massacre have emerged with the ability to raise new equity cheaply. If this strikes you as unfair, it is just one more piece of evidence that in American business, nothing succeeds like massive failure.

**Chart 5: Change In Financial Industry Group Cost of Equity Capital
July 2008 - January 2009**



And if we are going to be unfair, we might as well be unfair on both sides of the equation. Both the lowest costs of debt capital and the biggest decreases over the July 2008 – January 2009 period are in groups such as thrifts, investment banks, diversified banks and asset managers. This is diametrically the opposite of what we should expect. You would think firms capable of losing billions of dollars quarter after quarter should have to pay more, not less, for their borrowings. You would be wrong.

**Chart 6: Change In Financial Industry Group Cost of Debt Capital
July 2008 - January 2009**



How can this be? First, while shareholders can get wiped out in bankruptcy as evidenced in the case of Lehman Brothers and others, bondholders tend to get a workout from dissolution of remaining assets, and they stand senior to the shareholders. Second, the Treasury and the Federal Reserve showed willingness on more than one occasion to provide bondholders with a free implied put option.

The late William F. Buckley stated, “The problem with communism is communism. The problem with capitalism is capitalists.” Allegedly capitalistic government officials engaging in state-sponsored socialism; well, that’s getting the worst of both, is it not?