Exhibit No.: _____
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Witness: Frank J. Hanley
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MISSOURI PUBLIC SERVICE COMMISSION

MISSOURI GAS ENERGY

CASE NO. GR-2009-0355

REBUTTAL TESTIMONY OF

FRANK J. HANLEY, PRINCIPAL & DIRECTOR
AUS CONSULTANTS

SEPTEMBER 2009

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I. INTRODUCTION

Q. PLEASE STATE YOUR NAME, OCCUPATION AND BUSINESS ADDRESS.

A. My name is Frank J. Hanley and I am Principal and Director of AUS Consultants. My business address is 155 Gaither Drive, Suite A, Mount. Laurel, New Jersey 08054.

Q. ARE YOU THE SAME FRANK J. HANLEY WHO PREVIOUSLY FILED DIRECT TESTIMONY IN THIS PROCEEDING BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION ("COMMISSION")?

A. Yes, I am.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. The purpose of this testimony is to provide Missouri Gas Energy's ("MGE" or "the Company") cost of common equity on a more contemporaneous basis as there have been significant changes in the capital markets over the nearly seven months since the common equity cost rate described in my direct testimony was determined. I also rebut certain aspects of the direct testimonies of the Office of the Public Counsel ("OPC") Witness Daniel J. Lawton and that portion of the Missouri Public Service Commission Staff ("Staff") Report relating to cost of capital sponsored by Staff Witness David Murray. In this regard, I address the deficiencies in the

recommended common equity cost rates proposed by Messrs. Lawton and Murray. In particular, I explain why both witnesses erred in their conclusions of common equity cost rate and as relates to impact on common equity cost rate attributable to the Company's Straight Fixed Variable ("SFV") rate design. I also explain why Mr. Lawton's reliance on Southern Union Company's ("SUG") capital structure is incorrect and why Mr. Murray's short-term debt cost rate is understated. My rebuttal testimony is organized by witness.

Q. HAVE YOU PREPARED SCHEDULES IN SUPPORT OF THIS TESTIMONY?

A. Yes, I have. I have prepared 10 Schedules which have been marked for identification as Schedules FJH-21 through FJH-30, which is a continuation of the numbering from my direct testimony.

II. SUMMARY

Q. PLEASE SUMMARIZE YOUR REBUTTAL TESTIMONY.

A. Due to the significant changes in the capital markets over the approximately seven months that have elapsed since my original common equity cost rate (ROE) recommendation was formulated, I deemed it appropriate to provide an updated study which is more reflective of current and prospective capital market conditions. As a result of my updated study, I conclude that a proper common equity cost rate

for MGE in this case is 10.50%, which is lower than the 11.25% determined early in 2009. Again, I explain why no downward adjustment to common equity cost rate is warranted attributable to MGE's SFV rate design, namely because the proxy companies overwhelmingly have decoupling mechanisms in place.

Q. PLEASE LIST THE ISSUES YOU WILL ADDRESS CONCERNING MR. LAWTON'S TESTIMONY.

A. My testimony will address the following issues related to OPC Witness Lawton:

- I will explain why Mr. Lawton's suggested downward adjustment to common equity cost rate attributable to the Company's SFV rate design is unfounded and without merit.
- I will explain why Mr. Lawton's inclusion of three companies in his proxy group is incorrect.
- I will explain why Mr. Lawton's sole reliance on the DCF method to determine his recommended common equity cost rate is incorrect even though he utilized, albeit incorrectly, the risk premium and Capital Asset Pricing Model (CAPM) methods as checks.
- I will explain why Mr. Lawton's constant DCF conclusion of common equity cost rate is understated due to the improper and illogical utilization of sustainable growth rates.

- I will point out the logical flaws in Mr. Lawton's application of the risk premium model including his failure to recognize that there exists an inverse relationship between equity risk premia and interest rate levels.
- I will show that a properly calculated equity risk premium common equity cost rate based on his own data results in an average common equity cost rate of 11.24%.
- I will examine certain errors in Mr. Lawton's application of the CAPM, and I will show that properly calculated CAPM and Empirical Capital Asset Pricing Model (ECAPM) cost rates of his proxy companies less three companies inappropriately included are 10.44% and 11.21%, respectively for a cost rate of 10.83%.
- I will explain why Mr. Lawton's adoption of SUG's capital structure is incorrect and how its use results in a significant understatement of MGE's common equity cost rate.
- I will explain why Mr. Lawton's financial metrics test is flawed and does not confirm that his recommended ROE is appropriate.

Q. PLEASE SPEAK TO MR. MURRAY'S TESTIMONY.

A. My testimony will address the following issues related to Staff Witness Murray:

- I will explain why Mr. Murray's sole reliance on the DCF method to determine his recommended common equity cost rate range is incorrect, even though he utilized, albeit incorrectly, the CAPM method, as a check.
- I will explain why Mr. Murray's use of the lower half of his range of recommended ROE is based on an erroneous premise.
- I will explain why Mr. Murray's adoption of a short-term debt cost rate of 0.89% is grossly understated and inappropriate to utilize in this case based upon current market information.
- I will explain why Mr. Murray's use in the CAPM check of geometric mean returns is incorrect.
- I will explain why Mr. Murray's CAPM analyses are incorrect and result in a gross understatement of common equity cost rate; and also why his failure to include the ECAPM exacerbates the understatement. Moreover, I will show that properly calculated CAPM/ECAPM cost rates based on his proxy group of seven companies are 10.44% and 11.21%, respectively, for an average cost rate of 10.83%.
- I will explain why Mr. Murray's review of overall rates of return in order to check the reasonableness of his total cost of capital demonstrates only that his recommended range of common equity cost rate is substantially understated.

III. UPDATED COST OF COMMON EQUITY CAPITAL

Q. YOU PREVIOUSLY REFERRED TO YOUR UPDATED STUDY OF COST OF COMMON EQUITY CAPITAL. ARE YOU NOW PRESENTING THAT UPDATED STUDY AND RECOMMENDATION?

A. Yes, I am. My updated study is contained in Schedule FJH-21 which consists of 55 pages.

Q. PLEASE EXPLAIN SCHEDULE FJH-21.

A. I prepared an updated cost of common equity study in order to reflect the significant passage of time, nearly seven months, and changing capital market conditions since the preparation of my direct testimony. For convenience of presentation within this testimony, I have consolidated the most relevant pages from Schedules FJH-1 through FJH-20, which accompanied my direct testimony. They are all shown within Schedule FJH-21 which, as mentioned previously, includes 55 pages. Each updated page contains a reference to the relevant page within Schedules FJH-1 through FJH-20.

As my updated study utilizes the same methodologies explained in detail in my direct testimony, there is no need to again provide all of the explanations and rationale, but for one exception. When I prepared my direct testimony, the stock market was near the 2008-2009 low and the potential for capital appreciation was

considerable. As a result, in the application of the risk premium and CAPM/ECAPM models I gave only 20% weight to the huge potential market appreciation in order to estimate what I considered to be more of a norm at that time. As discussed *infra*, since early March, the market as measured by the Dow Jones Industrial Average (DJI) increased by 46.71% between March 9 and September 11, 2009. This huge increase means that with the recession ending, the potential for capital market appreciation has declined dramatically. Consequently, in this update I gave more weight (40%) to the capital appreciation potential than I did originally because, in my opinion, it is a better representation of the norm expected by investors. Under more normal conditions, I believe investors would give equal weight to long-term historical market risk premia and expected market risk premia. Under current conditions, I give 60% weight to historical appreciation and 40% weight to the Value Line forecasted appreciation potential.

Q. WHAT IS THE RESULT OF YOUR UPDATE?

A. As a result, as indicated *supra*, my updated recommended common equity cost rate is 10.50%, as shown on page 1 of Schedule FJH-21. Absent the Company's existing SFV rate design common equity cost rate should be no less than 10.75% because the proxy gas distribution companies overwhelmingly have protection from the vagaries of weather and declining usage per customer. Consequently, a common

equity cost rate derived from market data of those gas distribution companies already reflects any risk reducing benefits derived from such rate mechanisms.

Q. HAS THE COMMISSION PREVIOUSLY RECOGNIZED THIS PRINCIPLE?

A. Yes. This Commission has previously recognized the foregoing principle, namely if the proxy companies have similar mechanisms, no downward adjustment to ROE is warranted, but absent such a mechanism, an upward adjustment may be appropriate (see for example, 28-30 of Report and Order issued January 27, 2009, Case No. ER-2008-0318 re: Union Electric Company d/b/a Ameren UE).

Q. DO YOU HAVE ANY OTHER COMMENTS CONCERNING YOUR UPDATE?

A. Yes. I should also point out that at the time of preparation of my original study, 2008 actual results were not available, including those from the *Morningstar* 2009 Valuation Yearbook. Such data are now available and are incorporated in my updated study and recommendation.

IV. OPC WITNESS DANIEL LAWTON

A. Analysis of Mr. Lawton's Proposed ROE

Q. MR. LAWTON UTILIZES A PROXY GROUP OF TWELVE COMPANIES WHEREAS YOU UTILIZE A PROXY GROUP OF NINE COMPANIES. HOW DO YOU CHARACTERIZE THE THREE ADDITIONAL COMPANIES IN MR. LAWTON'S PROXY GROUP?

A. They are not appropriate to use as a proxies in this proceeding.

Q. PLEASE EXPLAIN.

A. As can be seen on Schedule FJH-22, Nicor, Inc. is one of those companies used by Mr. Lawton and it was involved in a pending merger/acquisition. Such a situation places undue pressure on market prices. Companies involved in M&A activities should be eliminated as potential proxies. The other two companies, Nisource, Inc. and UGI Corporation cannot be truly considered primarily gas distribution companies. As can be seen, in 2008, Nisource derived only 36.49% of its operating income from gas distribution operations, while UGI derived even less at 23.51%. Also shown are similarly low percentages of assets attributable to gas distribution operations. Clearly, these three companies should not be included as proxies. Their elimination from Mr. Lawton's group would leave the same nine companies which I utilize for my proxy group.

Q. AT PAGES 11-12 OF HIS DIRECT TESTIMONY, MR. LAWTON SUGGESTS THAT A 50 BASIS POINT REDUCTION IS APPROPRIATE TO ROE DUE TO THE COMPANY'S SFV RATE DESIGN. HOW DO YOU RESPOND?

A. Mr. Lawton is incorrect. His logic is convoluted.

Q. PLEASE EXPLAIN.

A. He chooses to ignore the fact that the proxy gas companies which I utilized to establish a benchmark common equity cost rate (which would also be his proxy companies after exclusion of the three companies he inappropriately included in his proxy group, as discussed *supra*) currently have nearly 85% of their revenues either wholly or partially decoupled as shown on Schedule FJH-3, page 2 of 2. This can be determined by a careful reading of the descriptions in conjunction with the notes to Schedule FJH-3, which accompanied my direct testimony, which reveals that eight of the nine proxy companies have decoupling mechanisms in place to varying degrees and all have protection from the vagaries of weather which is the largest single variant of sales and revenues. Note also that in multi-jurisdictional utilities such as AGL Resources, its largest jurisdiction is Georgia which employs SFV rate design. A decoupling mechanism is in place in New Jersey which is called

Consumer Incentive Program (CIP) for New Jersey Resources and South Jersey Industries. The CIP protects both of those companies against weather and eliminates the disincentive to promote conservation. Laclede has a rate design that mitigates against the impact of weather and recovers fixed costs more evenly during the heating season. Northwest Natural, in its largest jurisdiction (Oregon – 81%) has a WNA and a Customer Utilization Tracker (CUT) which breaks the link between earnings and usage. Piedmont Natural also has a Customer Utilization Tracker (CUT) in its largest jurisdiction, North Carolina, which takes into account weather and usage and has weather normalization in its other jurisdictions. Southwest Gas has a decoupling mechanism in California and has requested one in Nevada which also takes weather and usage into account. WGL Holdings has protection from weather and usage changes in its Maryland jurisdiction and weather protection in Virginia.

Q. WHAT IS THE SIGNIFICANCE OF THIS?

A. While it is difficult to classify the full range of decoupling mechanisms by the degree and effectiveness with which they reduce equity risk, they should not be ignored. Mr. Lawton, however, does just this – he completely disregards the fact that the proxy companies overwhelmingly have decoupling mechanisms which take weather and usage changes into account. Consequently, under the Efficient Market

Hypothesis (EMH) those benefits are reflected by investors in the market prices they pay for securities. Thus, common equity cost rates derived therefrom already reflect their risk-reducing benefits. However, if MGE did not have its SFV rate design, its risk would be greater than the proxy companies and an upward adjustment of 25 basis points would be necessary.

Q. AT PAGE 11 OF HIS DIRECT TESTIMONY, MR. LAWTON MAKES REFERENCE TO REGULATORS THAT HAVE EMPLOYED A FIFTY BASIS POINT REDUCTION TO EQUITY RETURNS FOR SIMILAR DECOUPLING PROPOSALS. DO YOU HAVE ANY COMMENT?

A. Yes. Mr. Lawton does not identify the source of his fifty basis point reference. I am aware of one circumstance where a fifty basis point reduction was taken as a result of decoupling. That was in a case involving Baltimore Gas and Electric Company before the Maryland Public Service Commission. (Case No. 8829, Order No. 76260, dated June 19, 2000) In that case, the cost rate of common equity capital was reduced by fifty basis points for the implementation of Rider 8 (a decoupling mechanism which accounts for changes in weather and other factors which affect gas usage). I should point out that in 1999 and early 2000 no gas distribution proxy companies had decoupling mechanisms in place. However, in Baltimore Gas & Electric Company's next gas distribution rate case in 2005, the Maryland

Commission did away with the equity cost rate reduction because the impact of same was reflected in the proxy companies utilized to establish common equity cost rate (Baltimore Gas & Electric Company, in Case No. 9036, Order No. 80460, Dated December 21, 2005). The Maryland Commission's rationale is analogous to this Commission's rationale regarding fuel adjustment clause as discussed *supra* in re Union Electric in Case No. ER-2008-0318 at pp. 28-30.

The circumstances where the Maryland Public Service Commission declined to make a reduction in the allowed ROE as a result of the decoupling mechanism is also analogous to the instant circumstance where overwhelmingly the proxy companies enjoy the benefits of decoupling. In Case No. 9036 the Maryland Commission Staff Witness testified that no reduction in the Company's return on equity was recommended because "the proxy group data analyzed already incorporates the reduction in risk for weather or conservation mitigation." As a result, the Maryland Commission stated in its Order:

> Based on the reasons provided by Staff and the Company, the Commission declines to order a specific adjustment for Rider 8.

Q. AT PAGE 13 OF HIS DIRECT TESTIMONY, MR. LAWTON DISCUSSES STANDARD & POOR'S (S&P) METHODOLOGY BY WHICH HE CLAIMS HE CAN MEASURE THE IMPACT OF A REDUCED RISK ASSOCIATED WITH DECOUPLING. PLEASE COMMENT.

A. First, the so-called numerical risk profiles which Mr. Lawton utilizes were superseded by an entirely different matrix in November 2007. The exact date of the publication of the matrix that superseded the matrix relied upon by Mr. Lawton is shown at pages 11 through 13 of Schedule FJH-2 and that November 30, 2007 matrix has been superseded by yet a new matrix which expands the November 30, 2007 matrix. The new matrix of May 27, 2009 is shown at pages 15 through 20 of Schedule FJH-21.

Second, Mr. Lawton's financial integrity analysis is a self-serving presentation. As indicated *supra*, on pages 15 through 20 of Schedule FJH-21, I have included S&P's entire write-up from its RatingsDirect dated May 27, 2009 describing its Criteria Methodology: Business Risk/Financial Risk Matrix. Expanded. S&P indicates clearly, as shown on page 16 of Schedule FJH-21, that the old matrix/metrics are not to be used when it states:

> *This article amends and supersedes* the criteria as published in Corporate Ratings Criteria, page 21, and the articles listed in the 'related articles' section at the end of this report.
> (Emphasis added)

Moreover, at pages 18 and 19 of Schedule FJH-21, S&P states:

> Still, *it is essential to realize that the financial benchmarks are guidelines, neither gospel nor guarantees. ...Moreover, our assessment of financial risk is not as simplistic as looking at a few ratios*. It encompasses:
>
> - a view of accounting and disclosure practices;

- a view of corporate governance, financial policies, and risk tolerance;
- the degree of capital intensity, flexibility regarding capital expenditures and other cash needs, including acquisitions and shareholder distributions; and
- various aspects of liquidity – including the risk of refinancing near-term securities

(Emphasis added).

Q. WHAT DO YOU CONCLUDE FROM THIS?

A. In view of the foregoing, especially his inappropriate use of superseded financial metrics and reliance upon the ratios of a single period, Mr. Lawton's financial metrics calculation based upon one unit of a superseded matrix provides no basis of support for his common equity cost rate recommendation.

Q. AT PAGE 14 OF HIS DIRECT TESTIMONY, MR. LAWTON REFERS TO A RECENT DECISION OF THE CONNECTICUT DEPARTMENT OF PUBLIC UTILITY CONTROL (DPUC). HE ALLUDES TO A STATEMENT THAT THE DPUC WOULD REQUIRE A 100 BASIS POINTS REDUCTION IN ROE TO PROVIDE CUSTOMERS WITH WEATHER-ONLY COMPENSATION. HOW DO YOU RESPOND?

A. His depiction is not accurate.

Q. PLEASE EXPLAIN.

A. First of all, Mr. Lawton does not reveal that in Docket No. 08-12-06, Connecticut Natural Gas Corporation, the DPUC denied Connecticut Natural Gas' requested decoupling mechanism. Moreover, the following facts apply: 1) there were only two cost of equity witnesses in the case, i.e., for Connecticut Natural Gas Corp. and the Office of Consumer Counsel (OCC); 2) the Connecticut Natural Gas witness testified that decoupling had no effect on ROE; 3) the OCC witness was not in favor of decoupling but did testify that if the Department approved the decoupling mechanism, it would reflect a 25 basis point reduction in the allowed ROE. However, no attempt was made by the OCC witness to measure the extent to which decoupling mechanisms were recognized by investors in the prices paid for the common stocks of the proxy gas companies he utilized; 4) the reference to 100 basis points was claimed in a brief by the Attorney General who offered no expert witness on the subject of the cost rate of common equity capital. In view of the foregoing, Mr. Lawton's reference to that Connecticut decision is inaccurate and misleading.

Q. DOES MR. LAWTON ARRIVE AT HIS RECOMMENDED ROE BASED SOLELY UPON APPLICATION OF THE DCF METHOD?

A. Yes. I believe it is quite clear that he does. He states at pages 18-19 of his direct testimony that "I employ the Discounted Cash Flow ("DCF") methodology for

estimating the cost of equity...." He refers at lines 5-7 of page 19 to the CAPM and Risk Premium Models and states that they are "often used to check the reasonableness of the DCF results."

Q. IS THE USE OF A SINGLE METHOD TO ESTIMATE THE COST OF COMMON EQUITY CAPITAL CONSISTENT WITH THE FINANCIAL LITERATURE AND THE EMH UPON WHICH THE DCF METHOD IS PREDICATED?

A. No. A review of my direct testimony at pages 26-32 will reveal that the financial literature is quite clear and that the EMH requires the assumption that investors rely upon multiple cost of common equity models. Consequently, rate of return analysts should use multiple cost of common equity models as primary methods in arriving at recommended cost of common equity capital. Mr. Lawton did not do this.

Q. AT THE BOTTOM OF PAGE 24 OF HIS DIRECT TESTIMONY, MR. LAWTON DISCUSSES THE ECONOMIC SLOWDOWN AND SUGGESTS THAT CAPITAL COSTS ARE BACK TO PRE-FINANCIAL CRISIS LEVELS. DOES THAT MEAN THAT THERE IS LITTLE EXPECTATION OF CAPITAL APPRECIATION ON THE PART OF INVESTORS?

A. Not at all. As discussed *supra*, bottom of investment grade long-term debt of utilities, i.e., rated Baa is still more costly than prior to the financial crisis. Moreover, in the past six to seven months, there has been a tremendous increase in capital appreciation which will temper future expectations as discussed *supra*. The rate of increase will decline, but will not be insignificant. For example, during 2009 the Dow Jones Industrial Average (DJI) went from a low of 6,547.05 on March 9th to a close of 9,605.41 on September 11, a 46.71% increase in value in just six months. This is totally consistent with Dr. Roger Ibbotson who indicated that when markets pull out of calamities, they often have their highest returns (page 56 of Hanley direct testimony). Dr. Ibbotson also points out that there is greater risk in the market now due to investor perceptions. Greater risk equals investors' greater expected return for the commitment of capital.

Q. AT PAGE 24 OF HIS DIRECT TESTIMONY, MR. LAWTON STATES THAT BBB RATED BONDS ARE BACK TO THE PRE-CREDIT/LIQUIDITY CRISIS LEVELS. IS HE CORRECT RELATIVE TO BAA OR BBB RATED *PUBLIC UTILITY* BONDS?

A. No. It is true for corporate debt but not for public utility debt as shown in Schedule FJH-23.

Q. PLEASE EXPLAIN SCHEDULE FJH-23.

A. Schedule FJH-23 consists of seven pages. Page 1 graphically shows the yield spread between Moody's A and Baa rated public utility bonds between January 1989 and August 2009. As can be seen, the yield spread has increased dramatically. Although it has receded significantly from the high of nearly 178 basis points in November 2008, in August 2009 it was still about two times greater than the historical average of 33 basis points, or 65 basis points as can be gleaned from page 7 of Schedule FJH-23. The widened spread indicates that the risk associated with Baa/BBB rate public utility bonds is still greater than the historical average.

Q. AT THE BOTTOM OF PAGE 26 OF HIS TESTIMONY, MR. LAWTON STATES THAT IT IS NOT SOUND RATEMAKING TO ESTABLISH REVENUE REQUIREMENTS AND RATES ON ATYPICAL OR ABNORMAL EVENTS. PLEASE COMMENT.

A. I completely agree. That is precisely why, in my direct testimony, I tempered down the relative weight given to potential market appreciation and also, albeit to a lesser extent, for the reason provided *supra* in my update. However, with regard to the yield spread between utility bonds rated A versus Baa, I have utilized a normalized spread of only 54 basis points. Consequently, my cost of equity capital has been normalized.

Q. DO YOU HAVE ANY COMMENTS WITH REGARD TO MR. LAWTON'S UTILIZATION OF THE SUSTAINABLE GROWTH METHOD IN HIS DCF ANALYSIS?

A. Yes. Mr. Lawton discusses the sustainable growth method at the bottom of page 32 and top of page 33 of his testimony. His sustainable growth calculations are shown in Schedule (DJL-7). His sustainable long-term growth rate calculations are based entirely upon historical and projected data from Value Line. Value Line's forecast data go out three to five years. If one believes that three to five year analysts' forecast growth rates in earnings per share (EPS) are not sustainable, how can one rely on an estimate based on those same forecasts as being sustainable for an indefinite period such as 150 years (stage 2 in his two-stage growth DCF as shown on Schedule DJL-9)? In addition to the element of circularity it does not make sense to derive individual estimates of growth in dividends, book values and retention ratios all derived from the analysts' forecasts of growth in EPS. Rather than making numerous calculations based upon derivatives of the analysts' forecasts of EPS, it makes more sense to rely upon the analysts' direct forecasts of the growth rates in EPS, which is the largest single driver of market prices.

Q. IS THERE AUTHORITY FOR YOUR POSITION IN THE FINANCIAL LITERATURE?

A. Yes. Myron Gordon, who first introduced the DCF model adapted for utility ratemaking, came to recognize long after his book, *The Cost of Capital to a Public Utility* was published in 1974, that the growth component of his original "Gordon Model" which relied upon the sustainable growth method had a serious limitation. Dr. Gordon, in a presentation on March 27, 1990 (some 16 years after the publication of his 1974 book), before the Institute for Quantitative Research In Finance, in Palm Beach, Florida, entitled, "*The Pricing of Common Stocks*," stated that analysts' growth rate projections were superior to the sustainable growth method:

> The most serious limitation of the Gordon Model is the assumption that the dividend expectation can be represented with just two parameters, D and br.... We have seen that earnings and growth estimates by security analysts were found by Malkiel and Cragg to be superior to data obtained from financial statements for the explanation of variation in price among common stocks. That is, better estimates are obtained for the coefficient of the various explanatory variables. ...*estimates by security analysts available from sources such as IBES are far superior to the data available to Malkiel and Cragg. Secondly, the estimates by security analysts must be superior to the estimates derived solely from financial statements.*
> (Emphasis added.)

Q. AT PAGES 36-38, AND AS EVIDENT FROM TABLE 6 ON PAGE 38 OF HIS DIRECT TESTIMONY, MR. LAWTON RELIES UPON THE GEOMETRIC

MEAN OF TOTAL RETURNS ON LARGE COMPANY STOCKS FOR THE PERIOD 1926-2008. HOW DO YOU RESPOND?

A. His use of total return on bonds and the geometric mean is not appropriate.

Q. PLEASE EXPLAIN.

A. Pages 43 through 47 of Schedule FJH-21 are five pages from the *Morningstar* 2009 Valuation Yearbook. The discussion on page 44 explains clearly why the income return must be used when estimating equity risk premium. While relying upon *Morningstar*, Mr. Lawton ignored *Morningstar*'s advice to utilize the income return. *Morningstar* states:

> The income return is defined as the portion of the total return that results from the periodic cash flow or, in this case, the bond coupon payment. The capital appreciation return results from the price change of a bond over a specific period... *The income return is thus used in the estimation of the equity risk premium because it represents the truly riskless portion of the return.* (Emphasis added).

Q. IS THERE ANOTHER REASON WHY MR. LAWTON'S USE OF TOTAL RETURN ON BONDS IS INCORRECT?

A. Yes. In the ratemaking paradigm only the income return, that is, yield, is relevant in establishing the cost of capital. The paradigm holds that the bonds are to be

outstanding for their life and any changes in their value are only relevant to the bondholders trading in secondary markets.

In view of the foregoing, Mr. Lawton's use of total return is inappropriate and understates the historical equity risk premium.

Q. WHY IS MR. LAWTON'S USE OF THE GEOMETRIC MEAN NOT APPROPRIATE?

A. Pages 45 and 46 of Schedule FJH-21 contain *Morningstar*'s explanation of why the arithmetic mean is the appropriate mean to utilize when estimating future cash flows, that is, the cost of capital. Simply stated, only the arithmetic mean will appropriately reflect the volatility in the market in a manner meaningful to investors looking forward because both the cost of capital and ratemaking are prospective. In contrast, the geometric mean artificially smoothes out that projected volatility.

Q. PLEASE EXPLAIN.

A. Investors are constantly buying and selling stocks. Potential investors require insight into the degree of risk they will experience before they can determine whether to purchase the common stock of a firm and the price they are willing to pay. Such insight is critical because the degree of risk mandates the rate of return required in

accordance with the basic financial precept of risk and return, i.e., greater risk means a greater required rate of return and vice versa.

The financial literature is clear that business risk is measured by the variability of expected pretax returns, i.e., the probability distribution of returns.[1] Weston & Brigham[2] define the riskiness of an asset thusly:

> The riskiness of an asset is defined in terms of the *likely variability of future returns from the asset.*
> (Emphasis added.)

Jeremy J. Siegel[3] defines risk as follows:

> Figure 2-4 displays the risk defined as the *standard deviation* of *average real annual returns* for stocks, bonds and bills based on the historical sample of nearly 200 years. *This is the measure of risk used in portfolio theory and asset allocation models.*
> (Emphasis added.)

Finally, in a note at the top of Table 1-1 on page 13 of the same text, Siegel further notes that:

> Risk = standard deviation of *arithmetic returns.*
> (Emphasis added.)

Thus, it is clear that the use of the geometric mean is incorrect <u>when estimating the cost of capital</u>.

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1 Eugene F. Brigham, *Fundamentals of Financial Management*, Fifth Edition, The Dryden Press, 1989, p. 639.

2 J. Fred Weston and Eugene F. Brigham, *Essentials of Managerial Finance*, Third Edition, The Dryden Press, 1974, p. 272.

3 Jeremy J. Siegel, *Stocks for the Long Run – The Definitive Guide to Financial Market Returns for Long-Term Investment Strategies*, McGraw-Hill, Third Edition, 2002, p. 32.

Q. HAVE YOU GRAPHICALLY ILLUSTRATED WHY THE ARITHMETIC MEAN IS APPROPRIATE TO USE WHEN ESTIMATING THE COST OF CAPITAL?

A. Yes. I have prepared Schedule FJH-24 which consists of three pages. Page 1 charts the returns on large company stocks for each year, 1926 through 2008 from *Morningstar's* 2009 Valuation Yearbook. It is clear from looking at the distinct bell-shaped pattern that the returns are random. Page 2 shows the returns by year and further confirms that they are random. Only the arithmetic mean of a random distribution of returns considers all of the returns in the distribution. The arithmetic mean takes into account the standard deviation or likely variance which may be experienced in the future when estimating the cost of equity capital based on random historical returns. In contrast, page 3 of Schedule FJH-24 demonstrates that when the geometric mean is calculated, only two of the returns are considered, namely the initial and terminal years, which, in this case, are 1926 and 2008. Based upon only those two years, a *constant* rate of return is calculated, i.e., the geometric average. That *constant* return, when represented graphically, is a flat line over the entire 1926 to 2008 time period which is quite different from the volatile random returns which generate the probability distribution shown on page 1 and the volatility demonstrated on page 2 of Schedule FJH-24.

In view of all the foregoing, it should be clear that only the arithmetic mean of historical risk premia takes the standard deviation of returns, which is critical to risk analysis when estimating the cost of capital, into account. The geometric mean is appropriate only when measuring historical performance and should not be used to estimate the investors' required rate of return.

Q. IS THERE ANOTHER PROBLEM WITH THE RISK PREMIUM ANALYSIS PERFORMED BY MR. LAWTON AS SUMMARIZED IN TABLE 6 ON PAGE 38 OF HIS DIRECT TESTIMONY?

A. Yes. Aside from the incorrect use of the geometric mean and the total return on long-term corporate bonds, Mr. Lawton also incorrectly assumed that a market risk premium of 5.5% is applicable to MGE or the proxy group. It should be 5.6% (11.7% market return minus income return of 6.1% on Aaa and Aa corporate bonds). A logical way to allocate the market equity risk premium is through the use of beta.

Q. DO YOU AGREE WITH THE USE OF THE TIME PERIOD UTILIZED BY MR. LAWTON IN SCHEDULE (DJL-10), THAT IS 1980 THROUGH 2008 TO ESTABLISH AN EQUITY RISK PREMIUM?

A. No. Mr. Lawton incorrectly used the period of 1980 through the first quarter of 2009 over the more appropriate long-term time period 1926-2008. As explained in more

detail below, the use of such a short time period can inadvertently pick up the effects of short-term anomalies and volatilities, and give them greater current weight than appropriate. This is why I employed the use of historical data for the longest time period possible, to 1926.

The use of a short period of time is inconsistent with his argument for long-term, sustainable growth in the DCF model. *Morningstar* states clearly that using shorter periods of time is suspect because all periods contain unusual events.

Morningstar points out how the use of a long period of time is required when they state:

> Furthermore, because an average of the realized equity risk premium is quite volatile when calculated using a short history, using a long series makes it less likely that the analyst can justify any number he or she wants ...Some analysts estimate the expected equity risk premium using a shorter, more recent time period on the basis that recent events are more likely to be repeated in the near future . . . [T]his view is suspect . . .

See, Schedule FJH-21, page 47.

Significantly, Mr. Lawton's shorter time period includes several historical events I noted on page 51 of my direct testimony as potential problematic factors in relying upon a short-term analysis. By choosing the time period 1980 through 2008, Mr. Lawton has encapsulated a period of extraordinary double-digit inflation and bond yields, the 1987 stock market crash, the collapse of the Soviet Union, the two wars with Iraq, the September 11, 2001 terrorist attacks, and other significant events.

Q. THE FOREGOING NOTWITHSTANDING, HAVE YOU PERFORMED A CALCULATION OF A RISK PREMIUM METHOD COMMON EQUITY COST RATE UTILIZING THE DATA SHOWN BY MR. LAWTON ON HIS SCHEDULE (DJL-10)?

A. Yes, I have. That information is contained in Schedule FJH-25.

Q. PLEASE EXPLAIN SCHEDULE FJH-25.

A. In Schedule FJH-25 I have utilized the indicated risk premia over Moody's Public Utility Bond yields shown by Mr. Lawton on his Schedule (DJL-10). I believe that relying upon an average equity risk premium over such a period of time to establish a proper equity risk premium is incorrect for several reasons. First, for the reasons provided by *Morningstar* and referred to *supra*; and secondly, because of a wealth of empirical evidence in the financial literature which confirms an inverse relationship between interest rates and equity risk premia. Because of the inverse relationship between interest rates and equity risk premia, I chose to utilize two different regression analyses based on Mr. Lawton's data shown on his Schedule (DJL-10) which are shown in Schedule FJH-25.

Q. PLEASE EXPLAIN.

A. The first type of regression analysis is shown on pages 1 and 2. It is based upon regressing the trend of equity risk premium in excess of the Moody's public utility bond yields shown by Mr. Lawton over time. The regression results shown on page 2 predict an equity risk premium of 4.78% over an expected Moody's Baa public utility bond yield of 6.86%.

The second type of regression analysis performed was to regress the relationship between the equity risk premia and interest rate levels shown on Mr. Lawton's Schedule (DJL-10). The graphical depiction shown on page 3 clearly confirms the inverse relationship between interest rate levels and equity risk premia. As can be determined by interpolation from the predicted results from the regression analysis on page 4, the indicated risk premium over an expected Moody's Baa Public Utility Bond yield of 6.86% is 4.14%.

In estimating the yield on Moody's Baa rated public utility bonds, I relied upon the forecast average yield of 7.05% on Baa rated corporate bonds during the six quarters ending with the fourth quarter of 2010 from the September 1, 2009 Blue Chip Financial Forecast, which is shown at page 40 of Schedule FJH-21. I then reduced that yield by the 19 basis points yield differential between Baa rated corporate bonds and Baa rated public utility bonds shown by Mr. Lawton on his Schedule (DJL-4). Column H on Schedule (DJL-4) is mislabeled in that it uses BBB but should read Baa. They are Moody's yields from Mergent Bond Record.

Q. WHAT DID YOU THEN DO?

A. I recalculated the indicated risk premium cost rates utilizing the projected average yield on Moody's Baa rated utility bonds of 6.86%. The information is summarized in Schedule FJH-26. As shown, based upon an average expected yield on Moody's Baa rated utility bonds of 6.86% and predicted equity risk premia of 4.78% and 4.14% the indicated risk premium common equity cost rates are 11.64% and 11.00% for an average indicated equity risk premium cost rate of 11.32%. As discussed *supra*, I do not agree with Mr. Lawton's approach but the foregoing is a far better indicator of a risk premium common equity cost rate than his conclusion of 9.99% shown on his Schedule (DJL-10).

Q. DO YOU AGREE WITH MR. LAWTON'S CAPM ANALYSIS AT PAGES 42-44 OF HIS TESTIMONY AND SUMMARIZED IN HIS SCHEDULE (DJL-11)?

A. No. Mr. Lawton utilizes both geometric and arithmetic mean data. As discussed *supra*, the use of geometric mean data when estimating the cost of capital is incorrect. With regard to his long-term arithmetic mean analysis, he incorrectly utilizes the total return on long-term government bonds of 6.1%. The arithmetic mean income return on long-term government bonds of 5.2% over the period 1926-

2008 should be utilized for the reasons discussed *supra*. Based only on arithmetic mean long-term historic data, the indicated market risk premium should be 6.5%, not the 5.6% claimed and utilized by Mr. Lawton. In addition, I have a problem with his use of a three-month average yield of 30-year U.S. Treasury bonds. In view of the recent global financial economic crisis, and investors' flight to quality, it is apparent that the critical levels reached in the fall of 2008 and earlier in 2009 are receding relative to higher quality debt including U.S. Treasuries. Consequently, the yield on U.S. Treasuries has risen. For example, reference to page 40 of Schedule FJH-21 reveals that the consensus forecast of the country's leading economists, as published in the September 1, 2009 Blue Chip Financial Forecast, indicates a continued rising trend so that by the fourth quarter of 2010 the average yield on 30-year U.S. Treasury bonds is expected to be 5.0%. I believe that using an average of the forecasted six quarters ending with the fourth quarter of 2010 is reasonable to utilize in a CAPM analysis. The average of those forecast yields is 4.67%, or 28 basis points higher than the 4.39% utilized by Mr. Lawton. In addition, his use of the three-month average for the yield on U.S. Treasury bonds is inconsistent with his long-term expectation by virtue of the use of sustainable growth in his application of the DCF model.

Finally, because of investor expectations and the forecast of future potential capital appreciation, a significant part of expected total market return, has not been taken into account. Such a forecast is available from Value Line.

Q. HAVE YOU CALCULATED A TOTAL MARKET RETURN THAT INVESTORS WOULD EXPECT BASED ON VALUE LINE DATA FORECAST DATA FOR THE TWO MONTHS ENDED AUGUST 2009 AND AT SEPTEMBER 11, 2009?

A. Yes. The average annual forecast over a three-to-five year period for total market return is 14.68% and when added to the forecast annual dividend yield of 2.41% a forecast total average return of 17.09% is indicated as shown in Note 2, page 51 of Schedule FJH-21. I believe investors would temper that forecast, but give it reasonable weight at this time, such as 40%, given the recession of the flight to quality mentality and rising yields on long-term government bonds as well as the recent substantial increase in the DJI as discussed *supra*.

Q. IS IT THEN FAIR TO SAY THAT ALL YOU AGREE WITH FROM MR. LAWTON'S CAPM ANALYSIS IS HIS USE OF THE VALUE LINE BETAS?

A. Yes. I believe that properly calculated CAPM and ECAPM models would yield an average cost rate of 10.83% for MGE based upon my proxy group of nine gas

distribution companies as summarized on Line no. 3, page 2 and detailed in pages 49 through 51 of Schedule FJH-21.

Q. HAVE YOU SUMMARIZED MR. LAWTON'S CONSTANT GROWTH DCF COST RATE AS WELL AS THE PROPERLY CALCULATED COMMON EQUITY COST RATES FOR THE RISK PREMIUM AND CAPM MODELS YOU DISCUSSED *SUPRA*?

A. Yes. Those cost rates, including the updated necessary adjustments to reflect MGE's greater risk vis-à-vis the proxy group of nine gas distribution companies to reflect its smaller size is reflected in the following table:

TABLE A

1. Constant Growth DCF (Median) (1)	9.82%
Adjustment for MGE's Smaller Size (2)	.19
	10.01
2. Corrected Risk Premium Analysis (3)	11.32
Adjustment for MGE's Smaller Size (2)	0.19
	11.51
3. Corrected CAPM (ECAPM)(4)	10.83
Adjustment for MGE's Smaller Size	0.19
	11.02
Average	10.85%

(1) From Schedule (DJL-8).
(2) From Schedule FJH-21, page 2, line 6.
(3) From Schedule FJH-26.
(4) From Schedule FJH-21, page 49.

Q. HOW DO YOU CHARACTERIZE MR. LAWTON'S USE OF SUG'S CAPITAL STRUCTURE, WHICH INCLUDES A 38.66% COMMON EQUITY RATIO, FOR USE IN A DETERMINATION OF COMMON EQUITY COST RATE FOR MGE IN THIS PROCEEDING?

A. It is inappropriate for the reasons set forth by me at pages 15-17 of my direct testimony. Staff Witness Murray also recognizes that the use of SUG's capital structure in this proceeding is inappropriate as explained by him at pages 7 and 20-27 of the Staff's Report. My reasoning, as well as Mr. Murray's, is self-explanatory

and need not be repeated here. Moreover, there is an additional conceptual error which exacerbates Mr. Lawton's erroneous use of SUG's capital structure.

Q. WHAT IS THE ADDITIONAL ERROR MADE BY MR. LAWTON IN CONJUNCTION WITH HIS ERRONEOUS ADOPTION OF SUG'S CAPITAL STRUCTURE?

A. It is quite clear from Mr. Lawton's testimony and supporting schedules that he relied upon his proxy group of gas distribution companies (see my disagreement with his inclusion of three companies *supra*) in formulating his recommended common equity cost rate of 10.00%. At page 49 of his direct testimony, Mr. Lawton confirms that MGE's proposed capital structure compares "quite favorably to the equity ratios in the natural gas utility industry." Mr. Lawton, despite the foregoing, erroneously applies a common equity cost rate (albeit unduly low) not to a 48% common equity ratio, but to SUG's 38.66% common equity ratio without making a financial risk adjustment. Such an adjustment would substantially increase the required ROE relative to SUG's much lower common equity ratio. His failure to do so exacerbates his already understated recommended ROE, and hence his recommended ROR.

Q. AT THE BOTTOM OF PAGE 49 OF HIS DIRECT TESTIMONY, MR. LAWTON SUGGESTS THAT MGE'S BUSINESS RISK HAS BEEN

REDUCED BY VIRTUE OF THE BENEFITS ASSOCIATED WITH DECOUPLING. PLEASE COMMENT.

A. Again, Mr. Lawton disregards the fact that most of the gas distribution companies have substantial decoupling, as set forth in detail in Schedule FJH-3 accompanying my direct testimony and explained *supra*. Moreover, as also explained *supra*, this Commission has recognized that when proxy companies substantially utilize similar-type mechanisms, no downward adjustment to ROE is warranted, while on the other hand, if a similar mechanism was not utilized by the company in question, that an upward adjustment to ROE would be warranted.[4]

Q. AT PAGES 52-53 OF HIS DIRECT TESTIMONY, MR. LAWTON DISCUSSES THE FINANCIAL RATIOS OR FINANCIAL METRICS THAT THE COMMISSION SHOULD CONSIDER. HE PURPORTS TO UTILIZE S&P METRICS AND SHOWS HIS CALCULATIONS ON HIS SCHEDULE (DJL-13). PLEASE COMMENT.

A. As discussed *supra*, Mr. Lawton utilizes metrics from a matrix that was superseded in November 2007 and again superseded by a newer matrix, the latter of which is shown at pages 15 through 20 of Schedule FJH-21.

[4] Report and Order issued January 27, 2009 re: AmerenUE in Case No. ER-2008-0318 at pp. 28-30.

In view of the foregoing, especially his inappropriate use of superseded financial metrics and reliance upon the ratios of a single period, Mr. Lawton's financial metrics analysis provides no basis for justifying his common equity cost rate recommendation.

V. STAFF WITNESS DAVID MURRAY

A. ANALYSIS OF MR. MURRAY'S PROPOSED SHORT-TERM DEBT COST RATE

Q. AT PAGE 31 OF HIS DIRECT TESTIMONY, MR. MURRAY DISCUSSES THE RATIONALE FOR HIS USE OF A SHORT-TERM DEBT COST RATE OF 0.89%. DO YOU AGREE WITH HIS RATIONALE AND COST RATE RECOMMENDED?

A. I do not. As discussed *supra* in this testimony, the flight to quality mentality attributable to the global financial crisis has receded significantly since late 2008 and early 2009. As such, the yields on government securities, including U.S. Treasuries have increased considerably. Moreover, I do not believe it appropriate for Mr. Murray to utilize a spot cost rate, which is understated for the foregoing reasons, based upon only two companies.

Q. WHAT APPROACH SHOULD BE UTILIZED?

A. A review of more recent market data for 364-day revolving credit facilities, indicates that a more appropriate short-term debt cost rate based upon a utility with a similar

credit rating to the proxy group would consist of three-month LIBOR rate plus 300 basis points plus a commitment fee of 50 basis points. This was based upon recent capital market information presented to SUG by Calyon Credit Agricole CIB. The appropriate excerpt from that report which is dated August 20, 2009, is presented as Schedule FJH-27. Since short-term debt cost rates fluctuate and because ratemaking is prospective, the use of a three-month prospective average LIBOR rate is appropriate. The Blue Chip Financial Forecast Consensus three month LIBOR rate for the six quarters ending with the fourth quarter 2010 is shown on page 40 of Schedule FJH-21. As of September 1, 2009, the six quarter average forecast three-month LIBOR rate is 0.8667%. When added to the market-required margin over the LIBOR rate of 300 basis points and a 50-basis point commitment fee, a 4.367% prospective short-term debt cost rate is indicated for a gas distribution company with a credit rating of Moody's A3.

Q. WHAT DOES ALL OF THIS DEMONSTRATE?

A. It shows that Mr. Murray's short-term debt cost rate is grossly understated.

B. ANALYSIS OF MR. MURRAY'S PROPOSED ROE

Q. MR. MURRAY INDICATES AT PAGE 6 OF THE STAFF REPORT THAT HIS RECOMMENDED RANGE OF COMMON EQUITY COST RATE WAS DERIVED BY APPLYING A SINGLE-STAGE, CONSTANT-GROWTH DCF

MODEL TO A GROUP OF COMPARABLE COMPANIES. PLEASE COMMENT.

A. As discussed *supra* with regard to OPC Witness Lawton, exclusive reliance upon any single method, including the DCF, as a primary tool in arriving at a recommendation of common equity cost rate is inconsistent with the Efficient Market Hypothesis ("EMH"). Multiple models should be used consistent with the EMH. My prior discussion need not be repeated here.

Q. AT PAGE 36 OF THE STAFF REPORT, MR. MURRAY RELIES UPON THE LOWER HALF OF HIS COST OF EQUITY RANGE BASED UPON HIS PROXY GROUP OF SEVEN COMPANIES. HOW DO YOU RESPOND?

A. His reasoning lacks merit.

Q. PLEASE EXPLAIN.

A. Mr. Murray acknowledges on page 36, at lines 11-12 that "Staff's comparable companies also have varying decoupled rate designs", yet he adopts the lower half of his range of common equity cost rate because "all have at least some degree of non-regulated operations." Mr. Murray's reasoning is specious. I have prepared Schedule FJH-28 which shows that all seven of Mr. Murray's proxy companies are included in the Edward Jones gas distribution companies group and also that all

seven are included in the Value Line natural gas utility group. As such, it is clear that investors consider these companies gas distribution utilities. Moreover, as also shown on Schedule FJH-28, the average of the seven companies in 2008 had 73.45% of its net operating income derived from gas distribution operations and 82.87% of its total assets were devoted to gas distribution operations. The median data for the same two indicators are 67.99% of net operating income derived from gas distribution operations and 79.44% of total assets devoted to gas distribution operations.

Q. HAS THIS COMMISSION LOOKED AT THIS CONCEPTUAL ISSUE PREVIOUSLY?

A. Yes. This Commission stated in the AmerenUE Report and Order issued January 27, 2009, at pp. 29-30:

> As indicated, most of the companies included in the proxy groups used by the analysts to estimate an appropriate return on equity for Ameren UE already operate under a fuel adjustment clause. That means the analysts are measuring and evaluating Ameren UE against companies with a level of risk that takes into account their use of a fuel adjustment clause. Therefore, while an upward adjustment may have been appropriate if a fuel adjustment clause were not allowed, no corresponding reduction is necessary because a fuel adjustment clause will be in place.

Q. HOW DOES THE COMMISSION'S RATIONALE IN THE AMERENUE CASE RELATE TO THE MGE CASE?

A. Since Mr. Murray acknowledges that his comparable companies have varying decoupled rate designs, supported by my Schedule FJH-3 and as described *supra* in this testimony, it is clear that the current situation for MGE is analogous to the Ameren UE and the fuel adjustment clause situation. In view of the foregoing, Mr. Murray's reaching to the lower half of his substandard range of common equity cost rate exacerbates his understated recommendation, is inappropriate and should be rejected by this Commission.

Q. PLEASE COMMENT UPON MR. MURRAY'S APPLICATION OF THE CAPM.

A. As with OPC Witness Lawton, about the only thing I agree with Mr. Murray's application of the CAPM is his use of the Value Line betas.

Q. DO YOU DISAGREE WITH MR. MURRAY'S UTILIZATION OF A RISK-FREE RATE OF 4.41%?

A. Yes.

Q. PLEASE EXPLAIN.

A. Ratemaking is prospective, as is the cost of capital. As discussed *supra*, with the decline in the impact of the flight to quality attributable to the global financial crisis, yields on U.S. government securities have been increasing. As contained in my updated CAPM analyses and discussed *supra* with regard to Mr. Lawton's CAPM analysis, the use of the average expected yield on long-term U.S. Treasury Bonds for the six quarters ending with the fourth quarter of 2010 is 4.67%, a full 26 basis points higher than the risk-free rate utilized by Mr. Murray.

Q. MR. MURRAY UTILIZED AN ARITHMETIC AVERAGE MARKET RISK PREMIUM FROM MORNINGSTAR OVER THE PERIOD 1926-2008 OF 5.60%. HOW DO YOU CHARACTERIZE HIS USE OF A 5.60% MARKET RISK PREMIUM?

A. It is not appropriate

Q. WHY?

A. It is based upon the total return upon long-term government bonds. In other words, he derives his 5.60% by subtracting from total market returns of 11.7% the total returns on long-term government bonds of 6.1%. For the reasons described in my direct testimony and *supra* in this testimony and explained fully by Morningstar at page 44 of Schedule FJH-21, the use of only the income return is appropriate when

estimating the cost of capital. The income return on long-term government bonds over the period 1926-2008 was 5.2% which means that the arithmetic mean equity risk premium utilized by Mr. Murray is understated by 90 basis points (or 0.9%). It should be 6.50% (11.7% - 5.2%).

Q. MR. MURRAY ALSO UTILIZED THE GEOMETRIC AVERAGE RISK PREMIUM FROM THE MORNINGSTAR DATA IN HIS CAPM ANALYSIS. HOW DO YOU DESCRIBE THE USE OF THE GEOMETRIC MEAN WHEN ESTIMATING THE COST OF CAPITAL?

A. It is not appropriate. I have discussed the inappropriate use of the geometric mean in my direct testimony and *supra* in this testimony. That discussion need not be repeated here.

Q. MR. MURRAY FAILED TO TAKE INTO ACCOUNT ANTICIPATED MARKET APPRECIATION IN CALCULATING RISK PREMIUM. PLEASE RESPOND.

A. It is not appropriate to exclude consideration of expected capital appreciation.

Q. WHY?

A. Mr. Murray relies upon the DCF method. The DCF method is expectational and reflects investors' expectation of growth in market price. As discussed at pages 56-57 of my direct testimony and *supra* in this testimony, investors have reason to expect high returns coming off of the adverse impact of the global financial crisis. Dr. Roger Ibbotson affirms this (pp. 56-57 of my direct testimony) and actual market performance in 2009 to date from the low reached in early March 2009 also affirms this to be true. In addition, as discussed *supra*, it is reasonable to give substantial weight to expected market appreciation and I have currently given 40% weight to such in contrast to only 20% weight when my direct testimony was prepared.

Q. ARE THERE OTHER ISSUES WITH REGARD TO MR. MURRAY'S APPLICATION OF A CAPM ANALYSIS?

A. Yes. Mr. Murray failed to also take into account the ECAPM. The ECAPM is discussed at pages 61-63 of my direct testimony. It is supported by an abundance of empirical studies. Mr. Murray failed to take a proper calculation of the ECAPM into account.

Q. HAVE YOU PREPARED AN ANALYSIS OF PROPERLY-COMPUTED CAPM/ECAPM COST RATES BASED UPON MR. MURRAY'S PROXY GROUP OF SEVEN COMPANIES?

A. Yes, I have. That information is shown on Schedule FJH-29, which consists of two pages. The analysis remedies the flaws in Mr. Murray's analysis discussed *supra*. As shown on page 1 of Schedule FJH-29, the median CAPM result is 10.44%, while the median ECAPM result is 11.21%, resulting in an average of the traditional and ECAPM models of 10.83%.

Q. YOU PREVIOUSLY DISCUSSED WHY MR. MURRAY'S REACHING TO THE LOW HALF OF HIS DCF RANGE OF COMMON EQUITY COST RATE IS INAPPROPRIATE. WHAT IS THE MIDPOINT OF HIS RANGE?

A. It is 9.75%. I also notice that in arriving at his range, as shown on Schedule 15 of Appendix 2 of the Staff Report, that if Mr. Murray had utilized the range of growth rates indicated in Schedules 11-1 through 11-3 as well as 12 and 13 of Appendix 2, his range of growth rate would be from 4.62% to 6.48% with a midpoint of 5.55%. If 5.55% growth is added to Mr. Murray's actual projected dividend yield of 4.52% as shown on Schedule 15, the indicated DCF cost rate would be 10.07%.

Q. WHAT WOULD THE INDICATED COMMON EQUITY COST RATE BE WITH A DCF COST RATE OF 10.07% AS DISCUSSED ABOVE AND A PROPERLY-COMPUTED CAPM/ECAPM COST RATE OF 10.83%?

A. It would be 10.45% which is very close to my updated 10.50% common equity cost rate based upon my proxy group of nine gas distribution companies.

Q. AT PAGE 40 OF THE STAFF REPORT, MR. MURRAY DISCUSSES THE MISSOURI STATE EMPLOYEES' RETIREMENT SYSTEM (MOSER). HE SUGGESTS BECAUSE MOSER'S EXPECTED RETURNS FOR LARGE CAPITALIZATION DOMESTIC EQUITIES IS ONLY 8.50% THIS JUSTIFIES HIS RECOMMENDED ROE. DOES IT?

A. No. The use of an expected return on pension fund assets has no relevance to the establishment of a common equity cost rate relative to a single asset, such as MGE's rate base. The projected return on pension fund assets reflects the risk-reducing benefits of a diverse portfolio. Also, the fiduciary responsibility of maintaining a pension fund requires a level of conservatism in portfolio management. In addition, while not indicated in the response to MGE's DR0274 to Mr. Murray, I suspect that the MOSER fund investment horizon is of relatively short duration as opposed to the infinite investment horizon implicit in the standard DCF model. Of course, MGE's rate base represents a very small number compared to large capitalization domestic equities. Consequently, a very substantial size premium would be required. Moreover, the 8.50% is undoubtedly a projected geometric mean, whereas when estimating the cost of capital only the arithmetic mean is appropriate. For the

foregoing reasons, no reliance should be placed upon MOSER's expected return on large capitalization domestic equities.

Q. AT PAGES 41-42 OF THE STAFF REPORT, MR. MURRAY DISCUSSES THE SIGNIFICANCE OF ALLOWED ROE AND ALLOWED OVERALL RATES OF RETURN (ROR). DO THEY SUPPORT HIS RECOMMENDED RANGE OF ROE AND ROR?

A. No. All of the allowed ROEs are greater, ranging from 10.11% to 10.49% as shown at lines 6 through 12 on page 41 of the Staff Report. As to ROR, I have prepared Schedule FJH-30 in order to demonstrate that even the high end of Mr. Murray's recommended range does not support his recommendation. For example, shown at the top of Schedule FJH-30 is Mr. Murray's recommended overall rate of return of 7.45% based upon the high end of his range of 9.75% ROE. In the three "reasonableness checks" below that calculation I have utilized Mr. Murray's recommended hypothetical capital structure ratios, long- and short-term debt cost rates. Based upon the low ROR of 8.01% shown on page 42 of the Staff Report, a 10.83% common equity cost rate is indicated relative to a common equity ratio of 51.06%. Based on the high ROR shown of 8.78%, a 12.34% common equity cost rate is indicated relative to a 51.06% common equity ratio. Similarly, based on the average of all quarterly awarded RORs shown on the same page 42 of 8.32%, an

indicated common equity cost rate of 11.44% relative to a common equity ratio of 51.06% is indicated.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Missouri Gas Energy's Tariff Sheets Designed to Increase Rates for Gas Service in the Company's Missouri Service Area	))))	Case No. GR-2009-0355

AFFIDAVIT OF FRANK J. HANLEY

STATE OF NEW JERSEY)
) ss.
COUNTY OF BURLINGTON)

Frank J. Hanley, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Rebuttal Testimony in question and answer form, to be presented in the above case; that the answers in the foregoing Rebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of his knowledge and belief.

Frank J. Hanley
FRANK J. HANLEY

Subscribed and sworn to before me this 24th day of September 2009.

Sharon M Keefe
Notary Public

SHARON M. KEEFE
NOTARY PUBLIC OF NEW JERSEY
MY COMMISSION EXPIRES JULY 9, 2011

Missouri Gas Energy
Table of Contents
to the Financial Supporting Schedules
of Frank J. Hanley

Missouri Gas Energy
Summary of Cost of Capital and Fair Rate of Return
Based on a Hypothetical Capital Structure

Type of Capital	Ratios (1)	Cost Rate	Weighted Cost Rate
Long-Term Debt	41.06%	6.080% (2)	2.496%
Short-Term Debt	10.94%	4.367% (3)	0.478%
Total Debt	52.00%		
Common Equity	48.00%	10.500% (4)	5.040%
Total	100.00%		8.014%

Based on the Actual Capital Structure of Southern Union Company at December 31, 2008

Type of Capital	Ratios (5)	Cost Rate	Weighted Cost Rate
Long-Term Debt	56.16%	6.258% (5)	3.514%
Short-Term Debt	3.26%	6.117% (6)	0.199%
Preferred Equity	1.92%	7.758% (5)	0.149%
Common Equity	38.66%	13.900% (4)	5.374%
Total	100.00%		9.236%

(1) The 52.00% total debt ratio has been allocated between the long-term and short-term debt based upon the average long-term and short-term debt ratios of the proxy group of nine Value Line natural gas distribution companies for the five quarters ended December 31, 2008 as shown on Page 4 of Schedule FJH-5. The allocation is derived as follows:

	Average for the Five Quarters ended December 31, 2008	Proxy Group of Nine Value Line Natural Gas Distribution Companies	Percent of Total Debt
Long-Term Debt	40.84 %		78.96 %
Short-Term Debt	10.88 %		21.04 %
Total Debt	51.73 %		100.00 %

Therefore, the hypothetical long-term debt ratio of 41.06% is derived as 78.96% * 52.00%, and the short-term debt ratio of 10.94% is derived as 21.04% * 52.00%.

(2) Derived on Schedule FJH-9.
(3) Based on 300 basis points plus an 50 basis points upfront cost above the Blue Chip six-quarter projected average beginning with the third quarter of 2009 and ending with the fourth quarter of 2010 of the 3-month LIBOR rate of 0.8667% (from Page 40 of this Schedule). The fee schedule is based on a Calyon report to SUG on August 20, 2009, an excerpt from which is provided as Schedule FJH-27.
(4) Based upon informed judgment from the entire study, the principal results of which are summarized on Page 2 of this Schedule.
(5) Provided by Southern Union Company.
(6) Based on 425 basis points plus an 100 basis points upfront cost above the six-quarter projected average beginning with the third quarter of 2009 and ending with the fourth quarter of 2010 of the 3-month LIBOR rate of 0.8667% (from Page 40 of this Schedule). The fee schedule is based on a Calyon report to SUG on August 20, 2009, an excerpt of which is provided as Schedule FJH-27.

Missouri Gas Energy
Brief Summary of Common Equity Cost Rate

No.	Principal Methods	Proxy Group of Nine Value Line Natural Gas Distribution Companies	Southern Union Company
1.	Discounted Cash Flow Model (DCF) (1)	9.20 %	10.67 %
2.	Risk Premium Model (RPM) (2)	10.94	12.63
3.	Capital Asset Pricing Model (CAPM) (3)	10.83	13.93
4.	Comparable Earnings Model (CEM) (4)	NMF	16.50
5.	Indicated Common Equity Cost Rate before Adjustment for Business Risk	10.32 % (5)	13.59 % (6)
6.	Business Risk Adjustment (7)	0.19	0.32
7.	Indicated Common Equity Cost Rate	10.51 %	13.90 %
8.	Recommended Common Equity Cost Rate	**10.50 %**	**13.90 %**

Notes:
(1) From Page 21 of this Schedule.
(2) From page 34 of this Schedule.
(3) From page 49 of this Schedule.
(4) The CEM results are on Pages 52 and 53 of this Schedule. Mr. Hanley considers the 21.00% cost rate for the proxy group of nine Value Line natural gas distribution companies aberrant relative to the other cost of equity models shown on lines 1, 2, and 3 and as such it is a not meaningful figure (NMF) in this particular study.
(5) Equals the average of the three reasonable cost of common equity models. Since the range of the results is considerably less and the cost rates from the risk premium and CAPM modelas are much closer to each other than in Mr. Hanley's original analysis, he decided that it was necessary to give all models equal weight in this instance.
(6) Mid-point of the range of common equity cost rates produced by the cost of common equity models. For example, the indicated common equity cost rate for Southern Union Company, 13.59, is the mid-point of the range of its cost of common equity results which is 10.67% - 16.50%. If the results of the cost of common equity models were averaged instead of taking the midpoint, the indicated common equity cost rate would be 13.49%.
(7) Business risk adjustment to reflect Missouri Gas Energy's greater business risk due to its small size relative to the proxy group as explained in Mr. Hanley's direct testimony at pages 9-13 inclusive. Adjustments are equal to only one-fourth of the quantified differences shown on Page 3, Column 4, Lines 2 and 3 respectively.

Missouri Gas Energy
Derivation of Investment Risk Adjustment Based upon
Ibbotson Associates' Size Premia for the Decile Portfolios of the NYSE/AMEX/NASDAQ

Line No.		1 Market Capitalization on September 9, 2009 (1) (millions)	(times larger)	2 Applicable Decile of the NYSE/AMEX/ NASDAQ (2)	3 Applicable Size Premium (3)	4 Spread from Applicable Size Premium for (4)
1.	Missouri Gas Energy					
a.	Based Upon the Proxy Group of Nine Value Line Natural Gas Distribution Companies	$ 659.811		8	2.35%	
b.	Based on Southern Union Company	$ 436.533		8 - 9	2.53%	
2.	Proxy Group of Nine Value Line Natural Gas Distribution Companies	$ 1,555.729	2.4 x	5 - 6	1.59%	0.76%
3.	Southern Union Company	$ 2,456.145	5.6	4 - 5	1.26%	1.27%

(A) Decile	(B) Number of Companies (millions)	(C) Recent Total Market Capitalization * (millions)	(D) Recent Average Market Capitalization (millions)	(E) Size Premium (Return in Excess of CAPM)*
1 - Largest	165	$ 8,530,554.000	$51,700.327	-0.36%
2	175	1,682,132.000	$ 9,612.183	0.62%
3	183	804,806.000	$ 4,397.847	0.74%
4	189	540,900.000	$ 2,861.905	0.97%
5	211	409,557.000	$ 1,941.028	1.54%
6	243	342,820.000	$ 1,410.782	1.63%
7	319	283,476.000	$ 888.639	1.62%
8	393	241,137.000	$ 613.580	2.35%
9	603	181,013.000	$ 300.187	2.71%
10 - Smallest	1626	12,878.000	$ 7.920	5.81%

*From pages 7 and 11 of this Schedule

Notes:
(1) From Page 4 of this Schedule.
(2) Gleaned from Column (D) below on this page. The appropriate decile (Column (A)) corresponds to the market capitalization of the proxy group, which is found in Column 1.
(3) Corresponding risk premium to the decile is provided on Column (E) on the bottom of this page.
(4) Line No. 1a Column 3 – Line No. 2 Column 3 and Line No. 1b, Column 3 – Line No. 3 of Column 3 etc. For example, the 0.76% in Column 4, Line No. 2 is derived as follows 0.76% = 2.35% - 1.59%.

Missouri Gas Energy
Market Capitalization of Missouri Gas Energy
the Proxy Group of Nine Value Line Natural Gas Distribution Companies,
and Southern Union Company

		1	2	3	4	5	6
Company	Exchange	Common Stock Shares Outstanding at 2008 Fiscal Year End (millions)	Book Value per Share at 2008 Fiscal Year End (1)	Total Common Equity at 2008 Fiscal Year End (millions)	Closing Stock Market Price on September 9, 2009	Market-to-Book Ratio on September 9, 2009 (2)	Market Capitalization on September 9, 2009 (3) (millions)
Missouri Gas Energy		NA	NA	$ 402.324 (4)	NA		
Based Upon the Proxy Group of Nine Value Line Natural Gas Distribution Companies						164.0 % (5)	$ 659.811 (6)
Based on Southern Union Company						109.0 %(7)	$ 438.533 (8)
Proxy Group of Nine Value Line Natural Gas Distribution Companies							
AGL Resources Inc.	NYSE	$ 76.900	$ 21.482	$ 1,652.000	$ 33.820	157.4 %	$ 2,600.758
Atmos Energy Corp.	NYSE	90.815	22.601	2,052.492	27.670	122.4	2,512.842
The Laclede Group, Inc.	NYSE	21.993	22.119	486.479	32.910	148.8	723.605
New Jersey Resources Corp.	NYSE	43.439	16.735	726.956	36.320	217.0	1,577.716
Northwest Natural Gas Co.	NYSE	26.594	23.628	628.373	42.100	178.2	1,119.607
Piedmont Natural Gas Co., Inc.	NYSE	73.248	12.113	887.244	23.600	194.8	1,728.606
South Jersey Industries, Inc.	NYSE	29.729	17.332	515.254	33.840	195.2	1,006.018
Southwest Gas Corporation	NYSE	44.192	23.485	1,037.841	24.280	103.4	1,072.970
WGL Holdings, Inc.	NYSE	49.917	20.986	1,047.564	33.240	158.4	1,659.237
Average		50.758	$ 20.053	$ 1,003.801	$ 31.978	164.0 %	$ 1,555.729
Southern Union Company	NYSE	125.122	$ 18.008	$ 2,252.952	$ 19.530	109.0 %	$ 2,456.145

NA = Not Available

Notes:
(1) Column 3 / Column 1.
(2) Column 4 / Column 2.
(3) Column 5 * Column 3.
(4) From MGE's 2008 Annual Report to the Public Service Commission of Missouri.
(5) The market-to-book ratio of Missouri Gas Energy on September 9, 2009 is assumed to be equal to the average market-to-book ratio at September 9, 2009 of the Proxy Group of Nine Value Line Natural Gas Distribution Companies.
(6) Missouri Gas Energy's common stock, if traded, would trade at a market-to-book ratio equal to the average market-to-book ratio at September 9, 2009 of the Proxy Group of Nine Value Line Natural Gas Distribution Companies, 164.0%, and Missouri Gas Energy's market capitalization on September 9, 2009 would thisefore have been $659.811 million. ($659.811 = $402.324 * 164.0%).
(7) The market-to-book ratio of Missouri Gas Energy on September 9, 2009 is assumed to be equal to the average market-to-book ratio at September 9, 2009 of Southern Union Company.
(8) Missouri Gas Energy's common stock, if traded, would trade at a market-to-book ratio equal to the average market-to-book ratio at September 9, 2009 of Southern Union Company, 109.0%, and Missouri Gas Energy's market capitalization on September 9, 2009 would thisefore have been $438.533 million. ($438.533 = $402.324 * 109.0%).

Source of Information: 2008 Annual Forms 10K
yahoo.finance.com

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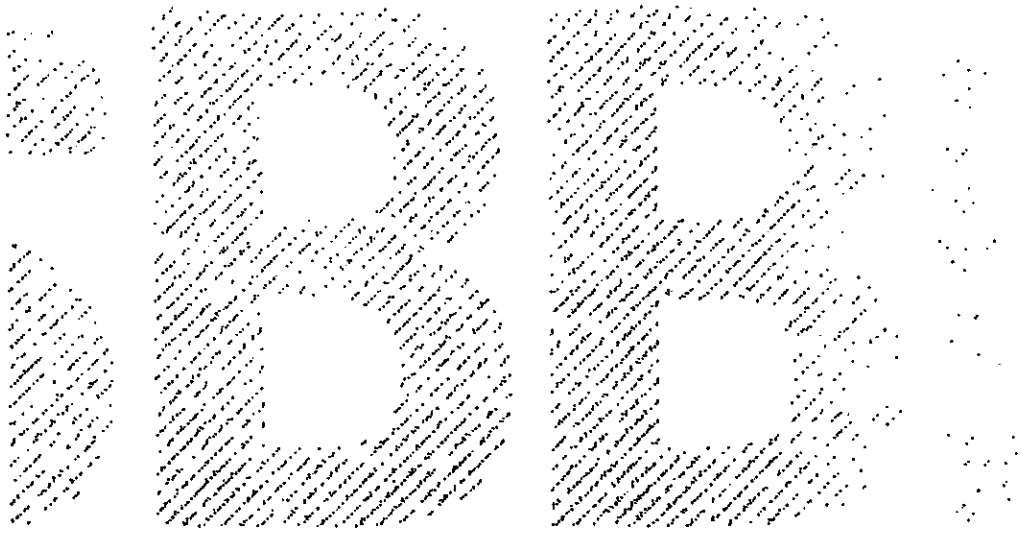
Market Results for
Stocks, Bonds, Bills, and Inflation
1926–2008



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Chapter 7
Firm Size and Return

The Firm Size Phenomenon

One of the most remarkable discoveries of modern finance is that of a relationship between firm size and return. The relationship cuts across the entire size spectrum but is most evident among smaller companies, which have higher returns on average than larger ones. Many studies have looked at the effect of firm size on return.[1] In this chapter, the returns across the entire range of firm size are examined.

Size and Liquidity

Capitalization is not necessarily the underlying cause of the higher returns for smaller companies. While smaller companies are usually less liquid, with fewer shares traded on any given day, not all companies of the same size have the same liquidity. Stocks that are more liquid have higher valuations for the same cash flows because they have a lower cost of capital and commensurately lower returns on average. Stocks that are less liquid have a higher cost of capital and higher returns on average.[2]

While it would be very useful to estimate the equity cost of capital of companies that are not publicly traded, there is not a direct measure of liquidity for these companies because there are no public trades. Thus, there is usually no share turnover, no bid/ask spreads, etc. in which to measure liquidity. Even though liquidity is not directly observable, capitalization is; thus the size premium can serve as a partial measure of the increased cost of capital of a less liquid stock.

Size premiums presented in this book are measured from publicly traded companies of various sizes and therefore do not represent the full cost of capital for non-traded companies. The valuation for a non-publicly traded company should also reflect a discount for the very fact that it is not traded. This would be an illiquidity discount and could be applied to the valuation directly, or alternatively reflected as an illiquidity premium in the cost of capital.

This chapter does not tell you how to estimate this incremental illiquidity valuation discount (or cost of capital illiquidity premium) that is not covered by the size premium. At the end of this chapter, we show some empirical results on the impact of liquidity on stock returns.

Construction of the Decile Portfolios

The portfolios used in this chapter are those created by the Center for Research in Security Prices (CRSP) at the University of Chicago's Graduate School of Business. CRSP has refined the methodology of creating size-based portfolios and has applied this methodology to the entire universe of NYSE/AMEX/NASDAQ-listed securities going back to 1926.

The New York Stock Exchange universe excludes closed-end mutual funds, preferred stocks, real estate investment trusts, foreign stocks, American Depository Receipts, unit investment trusts, and Americus Trusts. All companies on the NYSE are ranked by the combined market capitalization of their eligible equity securities. The companies are then split into 10 equally populated groups, or deciles. Eligible companies traded on the American Stock Exchange (AMEX) and the Nasdaq National Market (NASDAQ) are then assigned to the appropriate deciles according to their capitalization in relation to the NYSE breakpoints. The portfolios are rebalanced, using closing prices for the last trading day of March, June, September, and December. Securities added during the quarter are assigned to the appropriate portfolio when two consecutive month-end prices are available. If the final NYSE price of a security that becomes delisted is a month-end price, then that month's return is included in the quarterly return of the security's portfolio. When a month-end NYSE price is missing, the month-end value of the security is derived from merger terms, quotations on regional exchanges, and other sources. If a month-end value still is not determined, the last available daily price is used.

Base security returns are monthly holding period returns. All distributions are added to the month-end prices, and appropriate price adjustments are made to account for stock splits and dividends. The return on a portfolio for one month is calculated as the weighted average of the returns for its individual stocks. Annual portfolio returns are calculated by compounding the monthly portfolio returns.

Table 7-1: Size-Decile Portfolios of the NYSE/AMEX/NASDAQ Bounds, Size, and Composition

Decile	Historical Average Percentage of Total Capitalization	Recent Number of Companies	Recent Decile Market Capitalization (In Thousands)	Recent Percentage of Total Capitalization
1-Largest	63.22	165	$8,530,554	64.69
2	13.96	175	1,682,132	12.80
3	7.56	183	804,806	6.12
4	4.72	189	540,900	4.11
5	3.24	211	409,557	3.12
6	2.39	243	342,820	2.61
7	1.75	319	283,476	2.16
8	1.30	393	241,137	1.83
9	1.02	609	181,013	1.38
10-Smallest	0.83	1626	128,780	0.98
Mid-Cap 3–5	15.52	583	1,755,263	13.35
Low-Cap 6–8	5.44	955	867,434	6.60
Micro-Cap 9–10	1.85	2229	309,793	2.36

Data from 1926–2008. Source: Calculated (or Derived) based on data from CRSP US Stock Database and CRSP US Indices Database ©2009 Center for Research in Security Prices (CRSP®), The University of Chicago Booth School of Business. Used with permission.

Historical average percentage of total capitalization shows the average, over the last 83 years, of the decile market values as a percentage of the total NYSE/AMEX/NASDAQ calculated each month. Number of companies in deciles, recent market capitalization of deciles and recent percentage of total capitalization are as of September 30, 2008.

Table 7-2: Size-Decile Portfolios of the NYSE/AMEX/NASDAQ, Largest Company and Its Market Capitalization by Decile

Decile	Recent Market Capitalization (In Thousands)	Company Name
1-Largest	465,651,938	Exxon Mobil Corp.
2	18,503,467	Waste Management Inc. Del
3	7,360,271	Reliant Energy Inc.
4	4,225,152	IMS Health Inc.
5	2,785,538	Family Dollar Stores Inc.
6	1,848,961	Bally Technologies Inc.
7	1,197,133	Temple Inland Inc.
8	753,448	Kronos Worldwide Inc.
9	453,254	SWS Group Inc.
10-Smallest	218,533	Beazer Homes USA Inc.

Source: Calculated (or Derived) based on data from CRSP US Stock Database and CRSP US Indices Database ©2009 Center for Research in Security Prices (CRSP®), The University of Chicago Booth School of Business. Used with permission.
Market capitalization and name of largest company in each decile as of September 30, 2008.

Size of the Deciles

Table 7-1 reveals that the top three deciles of the NYSE/AMEX/NASDAQ account for most of the total market value of its stocks. Nearly two-thirds of the market value is represented by the first decile, which currently consists of 165 stocks, while the smallest decile accounts for just over one percent of the market value. The data in the second column of Table 7-1 are averages across all 83 years. Of course, the proportion of market value represented by the various deciles varies from year to year.

Columns three and four give recent figures on the number of companies and their market capitalization, presenting a snapshot of the structure of the deciles near the end of 2008.

Table 7-2 gives the current breakpoints that define the composition of the NYSE/AMEX/NASDAQ size deciles. The largest company and its market capitalization are presented for each decile. Table 7-3 shows the historical breakpoints for each of the three size groupings presented throughout this chapter. Mid-cap stocks are defined here as the aggregate of deciles 3–5. Based on the most recent data (Table 7-2), companies within this mid-cap range have market capitalizations at or below $7,360,271,000 but greater than $1,848,961,000. Low-cap stocks include deciles 6–8 and currently include all companies in the NYSE/AMEX/NASDAQ with market capitalizations at or below $1,848,961,000 but greater than $453,254,000. Micro-cap stocks include deciles 9–10 and include companies with market capitalizations at or below $453,254,000. The market capitalization of the smallest company included in the micro-capitalization group is currently $1,575,000.

Presentation of the Decile Data

Summary statistics of annual returns of the 10 deciles over 1926–2008 are presented in Table 7-4. Note from this exhibit that both the average return and the total risk, or standard deviation of annual returns, tend to increase as one moves from the largest decile to the smallest. Furthermore, the serial correlations of returns are near zero for all but the smallest deciles. Serial correlations and their significance will be discussed in detail later in this chapter.

Table 7-3
Size-Decile Portfolios of the NYSE/AMEX/NASDAQ
Largest and Smallest Company by Size Group

1926–1965

Date (Sept 30)	Capitalization of Largest Company (in Thousands) Mid-Cap 3-5	Low-Cap 6-8	Micro-Cap 9-10	Capitalization of Smallest Company (in Thousands) Mid-Cap 3-5	Low-Cap 6-8	Micro-Cap 9-10
1926	$60,103	$13,795	$4,213	$13,800	$4,263	$43
1927	64,820	14,491	4,415	14,522	4,450	65
1928	80,910	18,761	5,074	18,788	5,119	135
1929	103,054	24,328	5,862	24,480	5,873	118
1930	66,750	12,918	3,359	13,060	3,369	30
1931	42,607	8,142	1,927	8,222	1,944	15
1932	12,212	2,208	468	2,223	469	19
1933	40,298	7,210	1,830	7,280	1,875	120
1934	38,019	6,638	1,673	6,669	1,691	69
1935	37,631	6,549	1,350	6,605	1,383	38
1936	46,963	11,505	2,754	11,526	2,800	98
1937	51,750	13,635	3,539	13,793	3,563	68
1938	35,019	8,372	2,195	8,400	2,200	60
1939	35,409	7,478	1,819	7,500	1,854	75
1940	29,903	7,990	1,861	8,007	1,872	51
1941	30,362	8,316	2,086	8,336	2,087	72
1942	26,037	6,868	1,770	6,870	1,779	82
1943	42,721	11,403	3,847	11,475	3,903	395
1944	46,221	13,066	4,812	13,068	4,820	309
1945	65,125	17,325	6,413	17,575	6,428	225
1946	77,784	24,192	10,149	24,199	10,168	829
1947	57,830	17,719	6,373	17,735	6,380	508
1948	67,238	19,632	7,329	19,651	7,348	693
1949	56,082	14,549	5,037	14,577	5,108	379
1950	66,143	18,675	6,225	18,700	6,243	303
1951	82,617	22,750	7,598	22,860	7,600	668
1952	95,636	25,405	8,428	25,452	8,480	480
1953	98,218	25,340	8,156	25,374	8,168	459
1954	125,834	29,707	8,488	29,781	8,502	463
1955	170,829	41,445	12,366	41,681	12,444	553
1956	183,792	46,805	13,524	46,866	13,623	1,122
1957	194,300	47,858	13,844	48,609	13,848	925
1958	195,536	46,774	13,789	46,871	13,816	550
1959	256,283	64,110	19,548	64,221	19,701	1,804
1960	252,292	61,465	19,293	61,528	19,344	831
1961	296,261	77,983	23,562	77,896	23,613	2,455
1962	250,786	58,785	18,952	58,866	18,968	1,018
1963	306,903	71,846	23,827	71,971	24,056	296
1964	349,675	79,508	25,595	79,937	25,607	223
1965	385,675	84,600	26,463	85,065	26,543	250

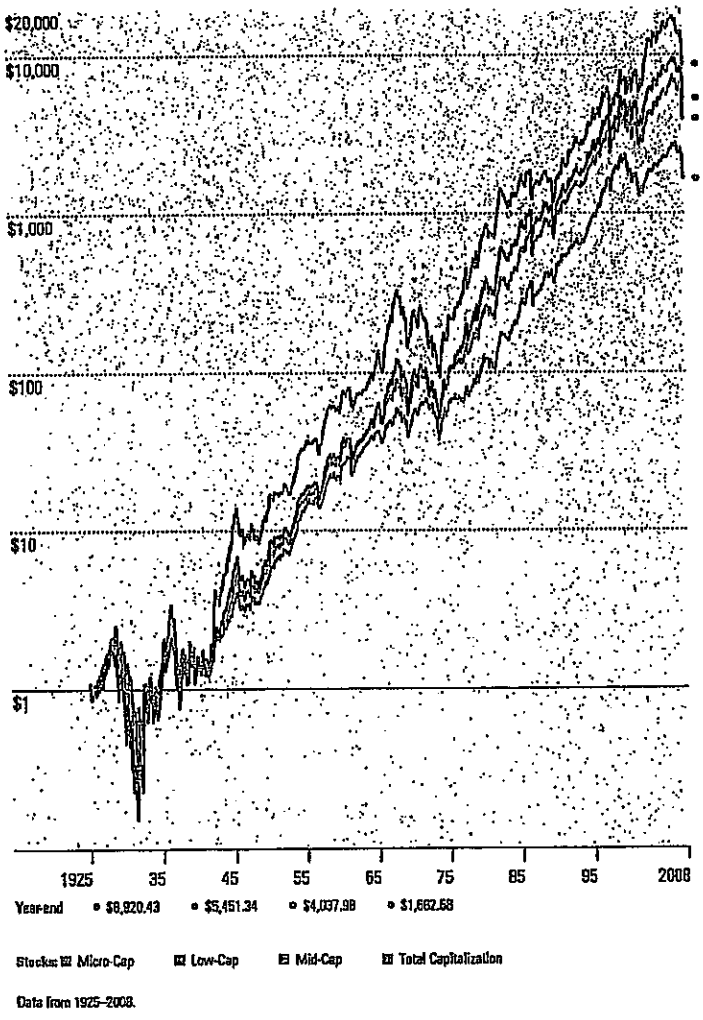
Table 7-3 (Continued)
Size-Decile Portfolios of the NYSE/AMEX/NASDAQ
Largest and Smallest Company by Size Group

1966–2008

Date (Sept 30)	Capitalization of Largest Company (in Thousands) Mid-Cap 3–5	Low-Cap 6–8	Micro-Cap 9–10	Capitalization of Smallest Company (in Thousands) Mid-Cap 3–5	Low-Cap 6–8	Micro-Cap 9–10
1966	$403,137	$99,960	$34,884	$100,107	$34,966	$381
1967	459,438	118,988	42,188	119,635	42,237	381
1968	631,306	150,893	60,543	151,260	60,719	592
1969	618,485	146,792	54,353	147,311	54,503	2,119
1970	382,884	94,754	29,916	94,845	29,932	822
1971	551,690	147,426	45,570	147,810	45,571	865
1972	557,181	143,835	46,728	144,263	46,757	1,031
1973	431,354	96,699	29,352	96,710	29,430	561
1974	356,876	79,878	23,355	80,280	23,400	444
1975	477,054	102,313	30,353	103,283	30,394	640
1976	566,296	121,717	34,864	121,992	34,901	564
1977	584,577	139,196	40,700	139,620	40,765	513
1978	580,881	164,093	47,927	164,455	48,038	830
1979	665,019	177,378	51,197	177,769	51,274	949
1980	762,195	199,312	50,496	199,315	50,544	549
1981	962,397	264,690	72,104	264,783	72,450	1,446
1982	770,517	210,301	55,336	210,630	55,423	1,060
1983	1,209,911	353,889	104,382	356,238	104,588	2,025
1984	1,075,436	315,965	91,004	316,103	91,195	2,093
1985	1,440,436	370,224	94,975	370,729	94,887	760
1986	1,857,621	449,015	110,617	449,462	110,953	706
1987	2,059,143	468,948	113,419	470,662	113,430	1,277
1988	1,957,926	421,340	94,449	421,675	94,573	695
1989	2,145,947	480,975	100,285	483,623	100,384	95
1990	2,171,217	474,065	93,750	474,477	93,790	132
1991	2,129,863	457,958	87,566	468,853	87,733	278
1992	2,428,671	600,327	103,352	500,346	103,500	510
1993	2,705,192	603,588	137,105	607,449	137,137	602
1994	2,470,244	598,059	148,104	597,975	148,216	598
1995	2,789,938	647,210	155,386	647,253	155,532	69
1996	3,142,657	751,316	193,001	751,690	193,016	1,043
1997	3,484,440	813,923	228,900	814,355	229,058	585
1998	4,216,707	925,688	252,653	926,215	253,031	1,671
1999	4,251,741	875,309	220,397	875,582	220,456	1,502
2000	4,143,902	840,000	192,083	840,730	192,439	1,393
2001	6,156,315	1,108,224	265,734	1,108,969	265,736	443
2002	4,930,326	1,116,525	308,980	1,124,331	309,245	501
2003	4,744,580	1,163,369	329,060	1,163,423	329,529	332
2004	6,241,953	1,607,854	505,437	1,607,931	506,410	1,393
2005	7,187,244	1,728,888	586,393	1,729,364	587,243	1,079
2006	7,777,183	1,946,588	626,955	1,947,240	627,017	2,247
2007	9,206,713	2,411,794	723,258	2,413,583	725,267	1,922
2008	7,360,271	1,848,961	453,254	1,849,950	453,398	1,575

Source: Calculated (or Derived) based on data from CRSP US Stock Database and CRSP US Indices Database ©2009 Center for Research in Security Prices (CRSP®), The University of Chicago Booth School of Business. Used with permission.

Graph 7-1: Size-Decile Portfolios of the NYSE/AMEX/NASDAQ
Wealth Indices of Investments in Mid-, Low-, Micro-, and Total Capitalization Stocks
Index (Year-End 1925 = $1.00)



Data from 1925–2008.

Graph 7-1 depicts the growth of one dollar invested in each of three NYSE/AMEX/NASDAQ groups broken down into mid-cap, low-cap, and micro-cap stocks. The index value of the entire NYSE/AMEX/NASDAQ is also included. All returns presented are value-weighted based on the market capitalizations of the deciles contained in each subgroup. The sheer magnitude of the size effect in some years is noteworthy. While the largest stocks actually declined 9 percent in 1977, the smallest stocks rose more than 20 percent. A more extreme case occurred in the depression-recovery year of 1933, when the difference between the first and tenth decile returns was far more substantial, with the largest stocks rising 46 percent, and the smallest stocks rising 218 percent. This divergence in the performance of small and large company stocks is a common occurrence.

Table 7-4: Size-Decile Portfolios of the NYSE/AMEX/NASDAQ
Summary Statistics of Annual Returns

Decile	Geometric Mean	Arithmetic Mean	Standard Deviation	Serial Correlation
1-Largest	8.9	10.8	19.48	0.09
2	10.1	12.5	22.33	0.04
3	10.4	13.1	23.89	-0.01
4	10.4	13.4	26.13	0.00
5	10.9	14.2	26.90	-0.02
6	10.9	14.5	27.59	0.04
7	10.8	14.8	29.62	0.02
8	11.0	16.0	34.44	0.06
9	11.1	16.6	36.70	0.05
10-Smallest	12.5	20.1	44.85	0.17
Mid Cap	10.5	13.4	24.93	-0.01
Low Cap	10.8	14.9	29.41	0.04
Micro	11.6	17.7	39.16	0.09
NYSE/AMEX/ NASDAQ Total Value Weighted Index	9.4	11.4	20.53	0.04

Data from 1925–2008. Source: Calculated (or Derived) based on data from CRSP US Stock Database and CRSP US Indices Database ©2009 Center for Research in Security Prices (CRSP®), The University of Chicago Booth School of Business. Used with permission.

Results are for quarterly re-ranking for the deciles. The small company stock summary statistics presented in earlier chapters comprise a re-ranking of the portfolios every five years prior to 1982.

Aspects of the Firm Size Effect

The firm size phenomenon is remarkable in several ways. First, the greater risk of small stocks does not, in the context of the capital asset pricing model (CAPM), fully account for their higher returns over the long term. In the CAPM only systematic, or beta risk, is rewarded; small company stocks have had returns in excess of those implied by their betas.

Second, the calendar annual return differences between small and large companies are serially correlated. This suggests that past annual returns may be of some value in predicting future annual returns. Such serial correlation, or autocorrelation, is practically unknown in the market for large stocks and in most other equity markets but is evident in the size premia.

Table 7-5: Size-Decile Portfolios of the NYSE/AMEX/NASDAQ Long-Term Returns In Excess of CAPM

Decile	Beta*	Arith-metic Mean Return (%)	Actual Return In Excess of Riskless Rate** (%)	CAPM Return In Excess of Riskless Rate† (%)	Size Premium (Return in Excess of CAPM) (%)
1-Largest	0.91	10.75	6.56	5.91	-0.36
2	1.03	12.51	7.31	6.69	0.62
3	1.10	13.06	7.87	7.13	0.74
4	1.12	13.45	8.25	7.28	0.97
5	1.16	14.23	9.03	7.49	1.54
6	1.18	14.48	9.28	7.65	1.63
7	1.24	14.84	9.65	8.03	1.62
8	1.30	15.95	10.76	8.41	2.35
9	1.35	16.62	11.42	8.71	2.71
10-Smallest	1.41	20.13	14.93	9.12	5.81
Mid-Cap, 3–5	1.12	13.37	8.18	7.24	0.94
Low-Cap, 6–8	1.22	14.86	9.66	7.92	1.74
Micro-Cap, 9–10	1.36	17.72	12.52	8.79	3.74

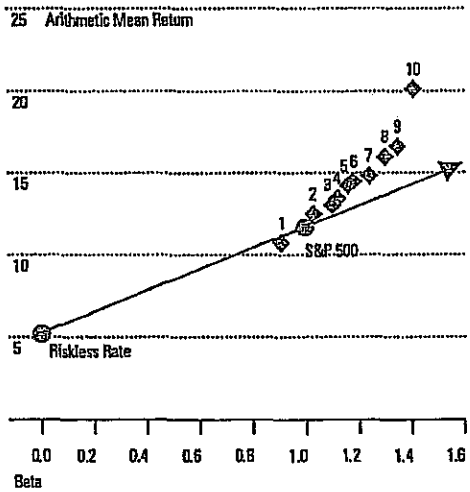
Data from 1926–2008.

*Betas are estimated from monthly returns in excess of the 30-day U.S. Treasury bill total return, January 1926–December 2008.

**Historical riskless rate measured by the 83-year arithmetic mean income return component of 20-year government bonds (5.20).

†Calculated in the context of the CAPM by multiplying the equity risk premium by beta. The equity risk premium is estimated by the arithmetic mean total return of the S&P 500 (11.67 percent) minus the arithmetic mean income return component of 20-year government bonds (5.20 percent) from 1926–2008.

Graph 7-2: Security Market Line Versus Size-Decile Portfolios of the NYSE/AMEX/NASDAQ‡



Data from 1926–2008.

‡Source: Calculated (or Derived) based on data from CRSP US Stock Database and CRSP US Indices Database ©2009 Center for Research in Security Prices (CRSP®), The University of Chicago Booth School of Business. Used with permission.

Third, the firm size effect is seasonal. For example, small company stocks outperformed large company stocks in the month of January in a large majority of the years. Such predictability is surprising and suspicious in light of modern capital market theory. These three aspects of the firm size effect—long-term returns in excess of systematic risk, serial correlation, and seasonality—will be analyzed thoroughly in the following sections.

Long-Term Returns in Excess of Systematic Risk

The capital asset pricing model (CAPM) does not fully account for the higher returns of small company stocks. Table 7-5 shows the returns in excess of systematic risk over the past 83 years for each decile of the NYSE/AMEX/NASDAQ. Recall that the CAPM is expressed as follows:

$$k_s = r_f + (\beta_s \times ERP)$$

Table 7-5 uses the CAPM to estimate the return in excess of the riskless rate and compares this estimate to historical performance. According to the CAPM, the expected return on a security should consist of the riskless rate plus an additional return to compensate for the systematic risk of the security. The return in excess of the riskless rate is estimated in the context of the CAPM by multiplying the equity risk premium by β (beta). The equity risk premium is the return that compensates investors for taking on risk equal to the risk of the market as a whole (systematic risk).[3] Beta measures the extent to which a security or portfolio is exposed to systematic risk.[4] The beta of each decile indicates the degree to which the decile's return moves with that of the overall market.

A beta greater than one indicates that the security or portfolio has greater systematic risk than the market; according to the CAPM equation, investors are compensated for taking on this additional risk. Yet, Table 7-5 illustrates that the smaller deciles have had returns that are not fully explained by their higher betas. This return in excess of that predicted by CAPM increases as one moves from the largest companies in decile 1 to the smallest in decile 10. The excess return is especially pronounced for micro-cap stocks (deciles 9–10). This size-related phenomenon has prompted a revision to the CAPM, which includes a size premium. Chapter 4 presents this modified CAPM theory and its application in more detail.

Table 7-6: Size-Decile Portfolios 10a and 10b of the NYSE/AMEX/NASDAQ

Decile	Recent Number of Companies	Recent Decile Market Capitalization (in Thousands)	Market Capitalization of Largest Company (in Thousands)	Company Name
10a	409	$77,980,249	$218,533,000	Beazer Homes U.S.A. Inc.
10b	1182	75,412,545	136,500,000	Great Northern Iron Ore

Note: These numbers may not aggregate to equal decile 10 figures.

Source: Calculated (or Derived) based on data from CRSP US Stock Database and CRSP US Indices Database ©2009 Center for Research in Security Prices (CRSP®), The University of Chicago Booth School of Business. Used with permission.

Market capitalization and name of largest company in each decile as of September 30, 2008.

This phenomenon can also be viewed graphically, as depicted in the Graph 7-2. The security market line is based on the pure CAPM without adjustment for the size premium. Based on the risk (or beta) of a security, the expected return lies on the security market line. However, the actual historic returns for the smaller deciles of the NYSE/AMEX/NASDAQ lie above the line, indicating that these deciles have had returns in excess of that which is appropriate for their systematic risk.

Further Analysis of the 10th Decile

The size premia presented thus far do a great deal to explain the return due solely to size in publicly traded companies. However, by splitting the 10th decile into two size groupings we can get a closer look at the smallest companies. This magnification of the smallest companies will demonstrate whether the company size to size premia relationship continues to hold true.

As previously discussed, the method for determining the size groupings for size premia analysis was to take the stocks traded on the NYSE and break them up into 10 deciles, after which stocks traded on the AMEX and NASDAQ were allocated into the same size groupings. This same methodology was used to split the 10th decile into two parts: 10a and 10b, with 10b being the smaller of the two. This is equivalent to breaking the stocks down into 20 size groupings, with portfolios 19 and 20 representing 10a and 10b.

Table 7-7 shows that the pattern continues; as companies get smaller their size premium increases. There is a noticeable increase in size premium from 10a to 10b, which can also be demonstrated visually in Graph 7-3. This can be useful in valuing companies that are extremely small. Table 7-6 presents the size, composition, and breakpoints of deciles 10a and 10b.

First, the recent number of companies and total decile market capitalization are presented. Then the largest company and its market capitalization are presented.

Breaking the smallest decile down lowers the significance of the results compared to results for the 10th decile taken as a whole, however. The same holds true for comparing the 10th decile with the Micro-Cap aggregation of the 9th and 10th deciles. The more stocks included in a sample the more significance can be placed on the results. While this is not as much of a factor with the recent years of data, these size premia are constructed with data back to 1926. By breaking the 10th decile down into smaller components we have cut the number of stocks included in each grouping. The change over time of the number of stocks included in the 10th decile for the NYSE/AMEX/NASDAQ is presented in Table 7-8. With fewer stocks included in the analysis early on, there is a strong possibility that just a few stocks can dominate the returns for those early years.

While the number of companies included in the 10th decile for the early years of our analysis is low, it is not too low to still draw meaningful results even when broken down into subdivisions 10a and 10b. All things considered, size premia developed for deciles 10a and 10b are significant and can be used in cost of capital analysis. These size premia should greatly enhance the development of cost of capital analysis for very small companies.

Table 7-7: Long-Term Returns in Excess of CAPM Estimation for Decile Portfolios of the NYSE/AMEX/NASDAQ, with 10th Decile Split

	Beta*	Arith-matic Mean Return (%)	Realized Return in Excess of Riskless Rate** (%)	Estimated Return in Excess of Riskless Rate† (%)	Size Premium (Return in Excess of CAPM) (%)
1-Largest	0.91	10.75	5.56	5.91	-0.36
2	1.03	12.51	7.31	6.69	0.62
3	1.10	13.06	7.87	7.13	0.74
4	1.12	13.45	8.25	7.28	0.97
5	1.16	14.23	9.03	7.49	1.54
6	1.18	14.48	9.28	7.65	1.63
7	1.24	14.84	9.65	8.03	1.62
8	1.30	15.95	10.76	8.41	2.35
9	1.35	16.62	11.42	8.71	2.71
10a	1.42	16.49	13.29	9.19	4.11
10b-Smallest	1.38	23.68	18.48	8.95	9.53
Mid-Cap, 3–5	1.12	13.37	8.18	7.24	0.94
Low-Cap, 6–8	1.22	14.88	9.66	7.92	1.74
Micro-Cap, 9–10	1.36	17.72	12.52	8.79	3.74

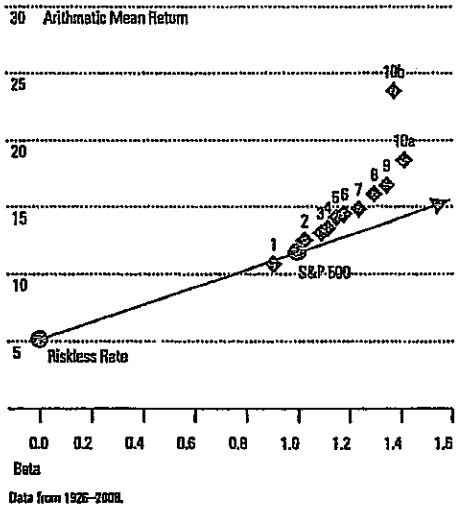
Data from 1926–2008. Source: Calculated (or Derived) based on data from CRSP US Stock Database and CRSP US Indices Database ©2009 Center for Research in Security Prices (CRSP®), The University of Chicago Booth School of Business. Used with permission.

*Betas are estimated from monthly portfolio total returns in excess of the 30-day U.S. Treasury bill total return versus the S&P 500 total returns in excess of the 30-day U.S. Treasury bill, January 1926–December 2008 .

**Historical riskless rate is measured by the 83-year arithmetic mean income return component of 20-year government bonds (5.20 percent).

†Calculated in the context of the CAPM by multiplying the equity risk premium by beta. The equity risk premium is estimated by the arithmetic mean total return of the S&P 500 (11.67 percent) minus the arithmetic mean income return component of 20-year government bonds (5.20 percent) from 1926–2008.

Graph 7-3: Security Market Line versus Size-Decile Portfolios of the NYSE/AMEX/NASDAQ, with 10th Decile Split‡



Data from 1926–2008.

‡Source: Calculated (or Derived) based on data from CRSP US Stock Database and CRSP US Indices Database ©2009 Center for Research in Security Prices (CRSP®), The University of Chicago Booth School of Business. Used with permission.

Table 7-8: Historical Number of Companies for NYSE/AMEX/NASDAQ Decile 10

Sept.	Number of Companies
1926	52*
1930	72
1940	78
1950	100
1960	109
1970	865
1980	685
1990	1,814
2000	1,827
2005	1,746
2006	1,744
2007	1,775
2008	1,626

Source: Calculated (or Derived) based on data from CRSP US Stock Database and CRSP US Indices Database ©2009 Center for Research in Security Prices (CRSP®), The University of Chicago Booth School of Business. Used with permission.

*The fewest number of companies was 49 in March, 1926

Alternative Methods of Calculating the Size Premia

The size premia estimation method presented above makes several assumptions with respect to the market benchmark and the measurement of beta. The impact of these assumptions can best be examined by looking at some alternatives. In this section we will examine the impact on the size premia of using a different market benchmark for estimating the equity risk premia and beta. We will also examine the effect on the size premia study of using sum beta or an annual beta.[5]

Changing the Market Benchmark

In the original size premia study, the S&P 500 is used as the market benchmark in the calculation of the realized historical equity risk premium and of each size group's beta. The NYSE total value-weighted index is a common alternative market benchmark used to calculate beta. Table 7-9 uses this market benchmark in the calculation of beta. In order to isolate the size effect, we require an equity risk premium based on a large company stock benchmark. The NYSE deciles 1–2 large company index offers a mutually exclusive set of portfolios for the analysis of the smaller company groups: mid-cap deciles 3–5, low-cap deciles 6–8, and micro-cap deciles 9–10. The size premia analyses using these benchmarks are summarized in Table 7-9 and depicted graphically in Graph 7-4.

Table 7-9: Long-Term Returns in Excess of CAPM Estimation for Decile Portfolios of the NYSE/AMEX/NASDAQ, with NYSE Market Benchmarks

	Beta*	Arithmetic Mean Return (%)	Realized Return in Excess of Riskless Rate** (%)	Estimated Return in Excess of Riskless Rate† (%)	Size Premium (Return in Excess of CAPM) (%)
1-Largest	0.99	10.75	5.66	5.72	-0.16
2	1.11	12.51	7.31	6.45	0.86
3	1.18	13.06	7.87	6.81	1.05
4	1.20	13.45	8.25	6.97	1.28
5	1.23	14.23	9.03	7.14	1.89
6	1.26	14.48	9.28	7.28	2.00
7	1.32	14.84	9.65	7.63	2.01
8	1.38	15.95	10.76	8.00	2.76
9	1.42	16.62	11.42	8.25	3.17
10-Smallest	1.48	20.13	14.93	8.60	6.33
Mid-Cap, 3–5	1.19	13.37	8.18	6.92	1.26
Low-Cap, 6–8	1.30	14.86	9.66	7.54	2.12
Micro-Cap, 9–10	1.43	17.72	12.52	8.32	4.21

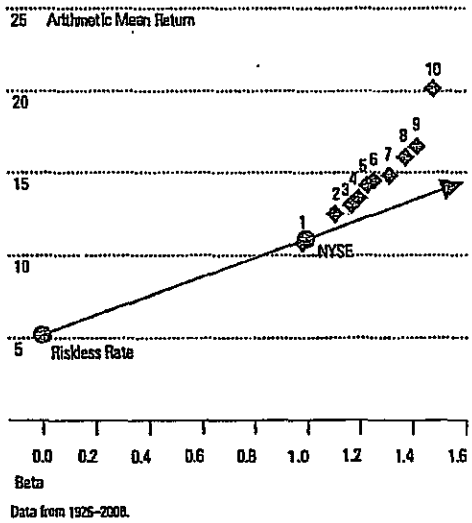
Data from 1926–2008. Source: Calculated (or Derived) based on data from CRSP US Stock Database and CRSP US Indices Database ©2009 Center for Research in Security Prices (CRSP®). The University of Chicago Booth School of Business. Used with permission.

*Betas are estimated from monthly portfolio total returns in excess of the 30-day U.S. Treasury bill total return versus the S&P 500 total returns in excess of the 30-day U.S. Treasury bill, January 1926–December 2008.

**Historical riskless rate is measured by the 83-year arithmetic mean income return component of 20-year government bonds (5.20 percent).

†Calculated in the context of the CAPM by multiplying the equity risk premium by beta. The equity risk premium is estimated by the arithmetic mean total return of the S&P 500 (11.67 percent) minus the arithmetic mean income return component of 20-year government bonds (5.20 percent) from 1926–2008.

Graph 7-4: Security Market Line versus Size-Decile Portfolios of the NYSE/AMEX/NASDAQ, with NYSE Market Benchmarks*



Data from 1926–2008.

For the entire period analyzed, 1926–2008, the betas obtained using the NYSE total value-weighted index are higher than those obtained using the S&P 500. Since smaller companies had higher betas using the NYSE benchmark, one would expect the size premia to shrink. However, as was illustrated in Chapter 5, the equity risk premium calculated using the NYSE deciles 1–2 benchmark results in a value of 5.80, as opposed to 6.47 when using the S&P 500. The effect of the higher betas and lower equity risk premium cancel each other out, and the resulting size premia in Table 7-9 are slightly higher than those resulting from the original study.

Measuring Beta with Sum Beta

The sum beta method attempts to provide a better measure of beta for small stocks by taking into account their lagged price reaction to movements in the market. [See Chapter 6.] Table 7-10 shows that using this method of beta estimation results in larger betas for the smaller size deciles of the NYSE/AMEX/NASDAQ while those of the larger size deciles remain relatively stable. From these results, it appears that the sum beta method corrects for possible errors that are made when estimating small company betas without adjusting for the lagged price reaction of small stocks. However, the sum beta, when applied to the CAPM, still does not account for all of the returns in excess of the riskless rate historically found for small stocks. Table 7-10 demonstrates that a size premium is still necessary to estimate the expected returns using sum beta in conjunction with the CAPM, though the premium is smaller than that needed when using the typical calculation of beta.

Graph 7-5 compares the 10 deciles of the NYSE/AMEX/NASDAQ to the security market line. There are two sets of decile portfolios—one set is plotted using the single variable regression method of calculating beta, as in Graph 7-2, and the second set uses the sum beta method. The portfolios plotted using sum beta more closely resemble the security market line. Again, this demonstrates that the sum beta method results in the desired effect: a higher estimate of returns for small companies. Yet the smaller portfolios still lie above the security market line, indicating that an additional premium may be required.

STANDARD &POOR'S

RATINGSDIRECT®

May 27, 2009

Criteria | Corporates | General:

Criteria Methodology: Business Risk/Financial Risk Matrix Expanded

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Table Of Contents

Criteria | Corporates | General:

Criteria Methodology: Business Risk/Financial Risk Matrix Expanded

(Editor's Note: In the previous version of this article published on May 26, certain of the rating outcomes in the table 1 matrix were missated. A corrected version follows.)

Standard & Poor's Ratings Services is refining its methodology for corporate ratings related to its business risk/financial risk matrix, which we published as part of 2008 Corporate Ratings Criteria on April 15, 2008, on RatingsDirect at www.ratingsdirect.com and Standard & Poor's Web site at www.standardandpoors.com.

This article amends and supersedes the criteria as published in Corporate Ratings Criteria, page 21, and the articles listed in the "Related Articles" section at the end of this report.

This article is part of a broad series of measures announced last year to enhance our governance, analytics, dissemination of information, and investor education initiatives. These initiatives are aimed at augmenting our independence, strengthening the rating process, and increasing our transparency to better serve the global markets.

We introduced the business risk/financial risk matrix four years ago. The relationships depicted in the matrix represent an essential element of our corporate analytical methodology.

We are now expanding the matrix, by adding one category to both business and financial risks (see table 1). As a result, the matrix allows for greater differentiation regarding companies rated lower than investment grade (i.e., 'BB' and below).

Table 1

Business And Financial Risk Profile Matrix

Business Risk Profile	Financial Risk Profile					
	Minimal	Modest	Intermediate	Significant	Aggressive	Highly Leveraged
Excellent	AAA	AA	A	A-	BBB	--
Strong	AA	A	A-	BBB	BB	BB-
Satisfactory	A-	BBB+	BBB	BB+	BB-	B+
Fair	--	BBB-	BB+	BB	BB-	B
Weak	--	--	BB	BB-	B+	B-
Vulnerable	--	--	--	B+	B	CCC+

These rating outcomes are shown for guidance purposes only. Actual rating should be within one notch of indicated rating outcomes.

The rating outcomes refer to issuer credit ratings. The ratings indicated in each cell of the matrix are the midpoints of a range of likely rating possibilities. This range would ordinarily span one notch above and below the indicated rating.

Business Risk/Financial Risk Framework

Our corporate analytical methodology organizes the analytical process according to a common framework, and it divides the task into several categories so that all salient issues are considered. The first categories involve fundamental business analysis; the financial analysis categories follow.

Our ratings analysis starts with the assessment of the business and competitive profile of the company. Two companies with identical financial metrics can be rated very differently, to the extent that their business challenges and prospects differ. The categories underlying our business and financial risk assessments are:

Business risk
- Country risk
- Industry risk
- Competitive position
- Profitability/Peer group comparisons

Financial risk
- Accounting
- Financial governance and policies/risk tolerance
- Cash flow adequacy
- Capital structure/asset protection
- Liquidity/short-term factors

We do not have any predetermined weights for these categories. The significance of specific factors varies from situation to situation.

Updated Matrix

We developed the matrix to make explicit the rating outcomes that are typical for various business risk/financial risk combinations. It illustrates the relationship of business and financial risk profiles to the issuer credit rating.

We tend to weight business risk slightly more than financial risk when differentiating among investment-grade ratings. Conversely, we place slightly more weight on financial risk for speculative-grade issuers (see table 1, again). There also is a subtle compounding effect when both business risk and financial risk are aligned at extremes (i.e., excellent/minimal and vulnerable/highly leveraged.)

The new, more granular version of the matrix represents a refinement--not any change in rating criteria or standards--and, consequently, holds no implications for any changes to existing ratings. However, the expanded matrix should enhance the transparency of the analytical process.

Financial Benchmarks

Table 2

Financial Risk Indicative Ratios (Corporates)

	FFO/Debt (%)	Debt/EBITDA (x)	Debt/Capital (%)
Minimal	greater than 60	less than 1.5	less than 25
Modest	45-60	1.5-2	25-35
Intermediate	30-45	2-3	35-45
Significant	20-30	3-4	45-50
Aggressive	12-20	4-5	50-60
Highly Leveraged	less than 12	greater than 5	greater than 60

How To Use The Matrix--And Its Limitations

The rating matrix indicative outcomes are what we typically observe--but are not meant to be precise indications or guarantees of future rating opinions. Positive and negative nuances in our analysis may lead to a notch higher or lower than the outcomes indicated in the various cells of the matrix.

In certain situations there may be specific, overarching risks that are outside the standard framework, e.g., a liquidity crisis, major litigation, or large acquisition. This often is the case regarding credits at the lowest end of the credit spectrum--i.e., the 'CCC' category and lower. These ratings, by definition, reflect some impending crisis or acute vulnerability, and the balanced approach that underlies the matrix framework just does not lend itself to such situations.

Similarly, some matrix cells are blank because the underlying combinations are highly unusual--and presumably would involve complicated factors and analysis.

The following hypothetical example illustrates how the tables can be used to better understand our rating process (see tables 1 and 2).

We believe that Company ABC has a satisfactory business risk profile, typical of a low investment-grade industrial issuer. If we believed its financial risk were intermediate, the expected rating outcome should be within one notch of 'BBB'. ABC's ratios of cash flow to debt (35%) and debt leverage (total debt to EBITDA of 2.5x) are indeed characteristic of intermediate financial risk.

It might be possible for Company ABC to be upgraded to the 'A' category by, for example, reducing its debt burden to the point that financial risk is viewed as minimal. Funds from operations (FFO) to debt of more than 60% and debt to EBITDA of only 1.5x would, in most cases, indicate minimal.

Conversely, ABC may choose to become more financially aggressive--perhaps it decides to reward shareholders by borrowing to repurchase its stock. It is possible that the company may fall into the 'BB' category if we view its financial risk as significant. FFO to debt of 20% and debt to EBITDA 4x would, in our view, typify the significant financial risk category.

Still, it is essential to realize that the financial benchmarks are guidelines, neither gospel nor guarantees. They can vary in nonstandard cases: For example, if a company's financial measures exhibit very little volatility, benchmarks may be somewhat more relaxed.

Moreover, our assessment of financial risk is not as simplistic as looking at a few ratios. It encompasses:

- a view of accounting and disclosure practices;
- a view of corporate governance, financial policies, and risk tolerance;
- the degree of capital intensity, flexibility regarding capital expenditures and other cash needs, including acquisitions and shareholder distributions; and
- various aspects of liquidity--including the risk of refinancing near-term maturities.

The matrix addresses a company's standalone credit profile, and does not take account of external influences, which would pertain in the case of government-related entities or subsidiaries that in our view may benefit or suffer from affiliation with a stronger or weaker group. The matrix refers only to local-currency ratings, rather than foreign-currency ratings, which incorporate additional transfer and convertibility risks. Finally, the matrix does not apply to project finance or corporate securitizations.

Related Articles

Industrials' Business Risk/Financial Risk Matrix--A Fundamental Perspective On Corporate Ratings, published April 7, 2005, on RatingsDirect.

Missouri Gas Energy
Indicated Common Equity Cost Rate Through Use of the
Single Stage Discounted Cash Flow Model for the
Proxy Group of Nine Value Line Natural Gas Distribution Companies

Based upon Projected Growth in EPS

	1	2	3	4	5
	Average Dividend Yield (1)	Dividend Growth Component (2)	Adjusted Dividend Yield (3)	Growth Rate (4)	Indicated Common Equity Cost Rate (5)
Proxy Group of Nine Value Line Natural Gas Distribution Companies					
AGL Resources Inc.	5.10 %	0.11 %	5.21 %	4.35 %	9.56 %
Atmos Energy Corp.	4.81	0.11	4.92	4.40	9.32
The Laclede Group, Inc.	4.67	0.08	4.75	3.25	8.00
New Jersey Resources Corp.	3.35	0.10	3.45	5.75	9.20
Northwest Natural Gas Co.	3.70	0.09	3.79	5.10	8.89
Piedmont Natural Gas Co., Inc.	4.51	0.13	4.64	5.90	10.54
South Jersey Industries, Inc.	3.43	0.13	3.56	7.85	11.41
Southwest Gas Corporation	3.92	0.09	4.01	4.75	8.76
WGL Holdings, Inc.	4.44	0.09	4.53	4.25	8.78
Average	4.21 %	0.10 %	4.32 %	5.07 %	9.38 %
Median	4.44 %	0.10 %	4.53 %	4.75 %	9.20 %
Southern Union Company	3.06 %	0.11 %	3.17 %	7.50 %	10.67 %

Notes:
(1) From Page 22 of this Schedule.
(2) This reflects a growth rate component equal to one-half the conclusion of growth rate (from page 23 of this Schedule) x Column 1 to reflect the periodic payment of dividends (Gordon Model) as opposed to the continuous payment. Thus, for AGL Resources Inc., 5.10% x (1/2 x 4.35%) = 0.11%.
(3) Column 1 + Column 2.
(4) From Page 23 of this Schedule.
(5) Column 3 + Column 4.

Missouri Gas Energy
Derivation of Dividend Yield for Use in the
Discounted Cash Flow Model

	Dividend Yield		
	Spot (9/9/2009)(1)	Average of Last 2 Months (2)	Average Dividend Yield (3)
Proxy Group of Nine Value Line Natural Gas Distribution Companies			
AGL Resources Inc.	5.09 %	5.12 %	5.10 %
Atmos Energy Corp.	4.77	4.85	4.81
The Laclede Group, Inc.	4.68	4.66	4.67
New Jersey Resources Corp.	3.41	3.29	3.35
Northwest Natural Gas Co.	3.75	3.65	3.70
Piedmont Natural Gas Co., Inc.	4.58	4.44	4.51
South Jersey Industries, Inc.	3.52	3.34	3.43
Southwest Gas Corporation	3.92	3.92	3.92
WGL Holdings, Inc.	4.43	4.45	4.44
Average	4.24 %	4.19 %	4.21 %
Median	4.43 %	4.44 %	4.44 %
Southern Union Company	3.06 %	3.06 %	3.06 %

Notes:

(1) The spot dividend yield is the current annualized dividend per share divided by the spot market price on 9/9/2009.

(2) The average 2-month dividend yield was computed by relating the indicated annualized dividend rate and market price on the last trading day of each of the two months ended 8/31/2009.

(3) Equal weight has been given to the 2-month average and spot dividend yield. This provides recognition of current conditions, but does not place undue emphasis thereon.

Source of Information: yahoo.finance.com

Missouri Gas Energy
Historical and Projected Growth

	1	2		3
	Value Line Projected Growth 2012-2014 (1)	Reuters Mean Consensus Projected Five Year Growth Rate		Average Projected Five Year Growth Rate in EPS (2)
	EPS	EPS	No. of Est.	
Proxy Group of Nine Value Line Natural Gas Distribution Companies				
AGL Resources Inc.	3.50 %	5.20 %	[3]	4.35 %
Atmos Energy Corp.	4.00	4.80	[6]	4.40
The Laclede Group, Inc.	3.50	3.00	[1]	3.25
New Jersey Resources Corp.	5.50	6.00	[3]	5.75
Northwest Natural Gas Co.	5.00	5.20	[3]	5.10
Piedmont Natural Gas Co., Inc.	5.50	6.30	[4]	5.90
South Jersey Industries, Inc.	5.50	10.20	[3]	7.85
Southwest Gas Corporation	4.50	5.00	[4]	4.75
WGL Holdings, Inc.	4.00	4.50	[2]	4.25
Average	4.56 %	5.58 %		5.07 %
Median	4.50 %	5.20 %		4.75 %
Southern Union Company	5.00 %	10.00 %	[1]	7.50 %

NA= Not Applicable

Notes: (1) As shown on Pages 24 through 33 of this Schedule.

(2) Average of Columns 1 and 2.

Source of Information: Value Line Investment Survey Standard Edition September 11, 2009.

Reuters Company Research September 8, 2009

AGL RESOURCES NYSE-AGL

RECENT PRICE 33.35 | P/E RATIO 13.1 (Trailing: 10.9 / Median: 14.0) | RELATIVE P/E RATIO 0.81 | DIV'D YLD 5.2% | VALUE LINE

TIMELINESS 3 Lowered 6/12/09
SAFETY 2 New 7/27/90
TECHNICAL 5 Lowered 9/11/09
BETA .75 (1.00 = Market)

2012-14 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	55	(+65%)	17%
Low	40	(+20%)	10%

Insider Decisions

	O	N	D	J	F	M	A	M	J
to Buy	0	0	0	0	0	0	0	0	0
Options	0	2	1	0	2	0	0	1	0
to Sell	0	3	1	0	1	0	0	2	0

Institutional Decisions

	4Q2008	1Q2009	2Q2009
to Buy	107	110	124
to Sell	111	107	96
Hld's(000)	46113	45714	45662

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	© VALUE LINE PUB., INC.	12-14
	22.73	23.59	19.32	21.91	22.75	23.36	18.71	11.25	19.04	15.32	15.25	23.89	34.98	33.73	32.64	36.41	32.20	34.50	Revenues per sh A	38.80
	2.25	2.24	2.33	2.49	2.42	2.65	2.29	2.86	3.31	3.39	3.47	3.29	4.20	4.50	4.65	4.68	4.70	4.95	"Cash Flow" per sh	5.40
	1.08	1.17	1.33	1.37	1.37	1.41	.91	1.29	1.50	1.82	2.08	2.26	2.48	2.72	2.72	2.71	2.70	2.90	Earnings per sh A B	3.30
	1.04	1.04	1.04	1.06	1.08	1.08	1.08	1.08	1.08	1.08	1.11	1.15	1.30	1.48	1.64	1.68	1.72	1.76	Div'ds Decl'd per sh C	1.88
	2.49	2.37	2.17	2.37	2.59	2.05	2.51	2.92	2.83	3.30	2.46	3.44	3.44	3.26	3.39	4.84	5.15	5.30	Cap'l Spending per sh	5.60
	9.90	10.19	10.12	10.56	10.99	11.42	11.59	11.50	12.19	12.52	14.66	18.06	19.29	20.71	21.74	21.48	23.10	23.40	Book Value per sh D	23.65
	49.72	50.86	55.02	55.70	56.60	57.30	57.10	54.00	55.10	56.70	64.50	76.70	77.70	77.70	76.40	76.90	78.00	79.00	Common Shs Outst'g E	85.00
	17.9	15.1	12.6	13.8	14.7	13.9	21.4	13.6	14.6	12.5	12.5	13.1	14.3	13.5	14.7	12.3	Bold figures are Value Line estimates		Avg Ann'l P/E Ratio	15.0
	1.06	.99	.84	.86	.85	.72	1.22	.88	.75	.68	.71	.69	.76	.73	.78	.74			Relative P/E Ratio	1.00
	5.4%	5.9%	6.2%	5.6%	5.4%	5.5%	5.5%	6.2%	4.9%	4.7%	4.3%	3.9%	3.7%	4.0%	4.1%	5.0%			Avg Ann'l Div'd Yield	3.8%
							1068.6	607.4	1049.3	868.9	983.7	1832.0	2718.0	2621.0	2494.0	2800.0	2510	2725	Revenues ($mill) A	3300
							52.1	71.1	82.3	103.0	132.4	153.0	193.0	212.0	211.0	207.6	155	160	Net Profit ($mill)	180
							33.1%	34.3%	40.7%	36.0%	35.9%	37.0%	37.7%	37.8%	37.6%	40.5%	35.0%	38.0%	Income Tax Rate	38.0%
							4.9%	11.7%	7.8%	11.9%	13.5%	8.4%	7.1%	8.1%	8.5%	7.4%	8.4%	8.4%	Net Profit Margin	8.5%
							45.3%	45.9%	61.3%	58.3%	50.3%	54.0%	51.9%	50.2%	50.2%	50.3%	48.0%	45.0%	Long-Term Debt Ratio	43.0%
							49.2%	48.3%	38.7%	41.7%	49.7%	46.0%	48.1%	49.8%	49.8%	49.7%	52.0%	55.0%	Common Equity Ratio	57.0%
							1345.8	1286.2	1736.3	1704.3	1901.4	3008.0	3114.0	3231.0	3335.0	3327.0	3475	3350	Total Capital ($mill)	3500
							1598.9	1637.5	2058.9	2194.2	2352.4	3178.0	3271.0	3436.0	3566.0	3816.0	4000	4150	Net Plant ($mill)	4400
							6.7%	7.4%	6.5%	8.1%	8.9%	6.3%	7.9%	8.0%	7.7%	7.4%	7.5%	8.0%	Return on Total Cap'l	9.0%
							7.1%	10.2%	12.3%	14.5%	14.0%	11.0%	12.9%	13.2%	12.7%	12.6%	11.5%	12.5%	Return on Shr. Equity	14.0%
							7.9%	11.5%	12.3%	14.5%	14.0%	11.0%	12.9%	13.2%	12.7%	12.6%	11.5%	12.5%	Return on Com Equity	14.0%
							NMF	3.2%	4.2%	7.0%	6.6%	5.6%	6.2%	6.3%	5.3%	5.1%	4.0%	5.0%	Retained to Com Eq	6.0%
							101%	72%	65%	52%	53%	49%	52%	52%	58%	60%	64%	60%	All Div'ds to Net Prof	57%

CAPITAL STRUCTURE as of 6/30/09
Total Debt $2093.0 mill. Due in 5 Yrs $962.0 mill.
LT Debt $1675.0 mill. LT Interest $90.0 mill.
(Total interest coverage: 3.9x)

Leases, Uncapitalized Annual rentals $30.0 mill.
Pension Assets-12/08 $242.0 mill. Oblig. $442.0 mill.

Pfd Stock None

Common Stock 77,275,942 shs.
as of 7/24/09
MARKET CAP: $2.6 billion (Mid Cap)

CURRENT POSITION ($MILL.)

	2007	2008	6/30/09
Cash Assets	21.0	16.0	12.0
Other	1780.0	2026.0	1304.0
Current Assets	1811.0	2042.0	1316.0
Accts Payable	172.0	202.0	167.0
Debt Due	580.0	866.0	418.0
Other	893.0	915.0	696.0
Current Liab.	1645.0	1983.0	1281.0
Fix. Chg. Cov.	391%	416%	527%

ANNUAL RATES of change (per sh)

	Past 10 Yrs.	Past 5 Yrs.	Est'd '06-'08 to '12-'14
Revenues	4.0%	15.5%	2.0%
"Cash Flow"	6.0%	6.5%	2.5%
Earnings	7.0%	8.5%	3.5%
Dividends	4.0%	8.0%	2.5%
Book Value	7.0%	10.0%	1.5%

QUARTERLY REVENUES ($ mill.)

Calendar	Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	1044	436	434	707	2621
2007	973	467	369	685	2494
2008	1012	444	539	805	2800
2009	995	377	440	698	2510
2010	1020	450	480	775	2725

EARNINGS PER SHARE B

Calendar	Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	1.41	.25	.46	.60	2.72
2007	1.29	.40	.17	.86	2.72
2008	1.16	.30	.28	.97	2.71
2009	1.55	.26	.20	.69	2.70
2010	1.40	.30	.30	.90	2.90

QUARTERLY DIVIDENDS PAID C

Calendar	Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	.31	.31	.31	.37	1.30
2006	.37	.37	.37	.37	1.48
2007	.41	.41	.41	.41	1.64
2008	.42	.42	.42	.42	1.68
2009	.43	.43	.43		

(A) Fiscal year ends December 31st. Ended September 30th prior to 2002.
(B) Diluted earnings per share. Excl. nonrecurring gains (losses): '95, ($0.83); '99, $0.39; '00, $0.13; '01, $0.13; '03, ($0.07); '08, $0.13. Next earnings report due late October. (C) Dividends historically paid early March, June, Sept., and Dec. ■ Div'd reinvest. plan available. (D) Includes intangibles. In 2008: $418 million, $5.44/share. (E) In millions.

BUSINESS: AGL Resources Inc. is a public utility holding company. Its distribution subsidiaries include Atlanta Gas Light, Chattanooga Gas, Elizabethtown Gas and Virginia Natural Gas. The utilities have more than 2.2 million customers in Georgia, Virginia, Tennessee, New Jersey, Florida, and Maryland. Engaged in nonregulated natural gas marketing and other allied services. Deregulated subsidiaries: Georgia Natural Gas markets natural gas at retail. Sold Utilipro, 3/01. Acquired Compass Energy Services, 10/07. Franklin Resources owns 7.7% of common stock; off./dir., less than 1.0% (3/09 Proxy). Pres. & CEO: John W. Somerhalder II. Inc.: GA. Addr.: Ten Peachtree Place N.E., Atlanta, GA 30309. Telephone: 404-584-4000. Internet: www.aglresources.com.

We do not expect 2009 to be a banner year for AGL Resources. The company reported healthy results in the first quarter. However, performance was less favorable in the recent interim. The Wholesale services business posted an operating loss of $11 million, while the Retail Energy Operations and Energy Investments units reported lower earnings. On the bright side, the Distribution Operations business posted moderate growth in operating earnings. This was primarily due to higher fees to marketers in Georgia for the storage of natural gas inventory and greater pipeline replacement revenues at Atlanta Gas Light. Overall, revenues and share earnings declined in the June period. Looking forward, comparisons will likely also prove unfavorable for the second half of the year. Thus, we anticipate lower revenues and relatively flat share earnings for full-year 2009.

Subsidiary Atlanta Gas Light has announced a system infrastructure investment project. This $400 million program will be completed over a 10-year period. Infrastructure improvements include upgrading the utility's distribution system and its liquefied natural gas facilities. This project will improve system reliability, increase operational flexibility, and allow Atlanta Gas Light to meet its forecasted growth objectives.

Elizabethtown Gas has modified its rate case filing. It had originally requested a $25 million rate hike, but has since lowered this amount to $17 million. The proposed increase would become effective at the beginning of 2010. Meanwhile, Atlanta Gas Light has requested to postpone a rate case filing, which had originally been scheduled for November 1st of this year. However, it does plan to file sometime after that (June 1, 2010 at the latest). Virginia Natural Gas and Chattanooga Gas also intend to file rate cases in 2010.

We anticipate higher revenues and share earnings at the company by 2012-2014, on better operating conditions. Moreover, AGL has a healthy dividend yield and earns high marks for Safety, Price Stability, and Earnings Predictability. **From the present quotation, this issue features decent risk-adjusted total return potential.**

Michael Napoli, CPA *September 11, 2009*

Company's Financial Strength	B++
Stock's Price Stability	100
Price Growth Persistence	75
Earnings Predictability	90

ATMOS ENERGY CORP. NYSE-ATO

RECENT PRICE 27.06 | P/E RATIO 12.1 (Trailing: 11.9 Median: 16.0) | RELATIVE P/E RATIO 0.75 | DIV'D YLD 5.0% | VALUE LINE

TIMELINESS 3 Lowered 9/11/09
SAFETY 2 Raised 12/16/05
TECHNICAL 4 Lowered 9/4/09
BETA .55 (1.00 = Market)

2012-14 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	40	(+50%)	14%
Low	30	(+10%)	7%

Insider Decisions

	O	N	D	J	F	M	A	M	J
to Buy	0	1	0	0	0	1	0	0	0
Options	0	0	0	0	1	0	0	0	0
to Sell	0	1	1	0	1	0	0	0	0

Institutional Decisions

	4Q2008	1Q2009	2Q2009
to Buy	141	108	107
to Sell	103	122	115
Hld's(000)	53678	53874	54285

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	© VALUE LINE PUB., INC.	12-14
High:	32.3	33.0	26.3	25.8	24.5	25.5	27.6	30.0	33.1	33.5	29.3	28.6		
Low:	24.8	19.6	14.3	19.5	17.6	20.8	23.4	25.0	25.5	23.9	19.7	20.1		
	22.09	26.61	35.36	22.82	54.39	46.50	61.75	75.27	66.03	79.52	*54.25*	*68.45*	Revenues per sh [A]	*86.35*
	2.62	3.01	3.03	3.39	3.23	2.91	3.90	4.26	4.14	4.19	*4.40*	*4.55*	"Cash Flow" per sh	*4.80*
	.81	1.03	1.47	1.45	1.71	1.58	1.72	2.00	1.94	2.00	*2.10*	*2.20*	Earnings per sh [A B]	*2.50*
	1.10	1.14	1.16	1.18	1.20	1.22	1.24	1.26	1.28	1.30	*1.32*	*1.34*	Div'ds Decl'd per sh [C▪]	*1.40*
	3.53	2.36	2.77	3.17	3.10	3.03	4.14	5.20	4.39	5.20	*5.50*	*5.75*	Cap'l Spending per sh	*6.60*
	12.09	12.28	14.31	13.75	16.66	18.05	19.90	20.16	22.01	22.60	*24.10*	*24.40*	Book Value per sh	*26.90*
	31.25	31.95	40.79	41.68	51.48	62.80	80.54	81.74	89.33	90.81	*92.50*	*93.50*	Common Shs Outst'g [D]	*110.00*
	33.0	18.9	15.6	15.2	13.4	15.9	16.1	13.5	15.9	13.6	*Bold figures are*		Avg Ann'l P/E Ratio	*14.0*
	1.88	1.23	.89	.83	.76	.84	.86	.73	.84	.84	*Value Line*		Relative P/E Ratio	*.95*
	4.1%	5.9%	5.1%	5.4%	5.2%	4.9%	4.5%	4.7%	4.2%	4.8%	*estimates*		Avg Ann'l Div'd Yield	*4.0%*
	690.2	850.2	1442.3	950.8	2799.9	2920.0	4973.3	6152.4	5898.4	7221.3	*5020*	*6400*	Revenues ($mill) [A]	*9500*
	25.0	32.2	56.1	59.7	79.5	86.2	135.8	162.3	170.5	180.3	*195*	*205*	Net Profit ($mill)	*275*
	35.0%	36.1%	37.3%	37.1%	37.1%	37.4%	37.7%	37.6%	35.8%	38.4%	*35.0%*	*37.0%*	Income Tax Rate	*40.5%*
	3.6%	3.8%	3.9%	6.3%	2.8%	3.0%	2.7%	2.6%	2.9%	2.5%	*3.9%*	*3.2%*	Net Profit Margin	*3.0%*
	50.6%	48.1%	54.3%	53.9%	50.2%	43.2%	57.7%	57.0%	52.0%	50.8%	*50.0%*	*50.5%*	Long-Term Debt Ratio	*49.0%*
	50.0%	51.9%	45.7%	46.1%	49.8%	56.8%	42.3%	43.0%	48.0%	49.2%	*50.0%*	*49.5%*	Common Equity Ratio	*51.0%*
	755.1	755.7	1276.3	1243.7	1721.4	1984.8	3785.5	3828.5	4092.1	4172.3	*4430*	*4580*	Total Capital ($mill)	*5800*
	965.8	982.3	1335.4	1300.3	1516.0	1722.5	3374.4	3629.2	3836.8	4136.9	*4365*	*4575*	Net Plant ($mill)	*5850*
	5.1%	6.5%	5.9%	6.8%	6.2%	5.8%	5.3%	6.1%	5.9%	5.9%	*6.0%*	*6.0%*	Return on Total Cap'l	*6.0%*
	6.6%	8.2%	9.6%	10.4%	9.3%	7.6%	8.5%	9.8%	8.7%	8.6%	*9.0%*	*9.0%*	Return on Shr. Equity	*9.5%*
	6.6%	8.2%	9.6%	10.4%	9.3%	7.6%	8.5%	9.8%	8.7%	8.6%	*9.0%*	*9.0%*	Return on Com Equity	*9.5%*
	NMF	NMF	2.1%	1.9%	2.8%	1.7%	2.3%	3.6%	3.0%	3.1%	*3.5%*	*3.5%*	Retained to Com Eq	*4.0%*
	NMF	112%	79%	82%	70%	77%	73%	63%	65%	65%	*63%*	*61%*	All Div'ds to Net Prof	*56%*

% TOT. RETURN 8/09

	THIS STOCK	VL ARITH. INDEX
1 yr.	4.3	-4.4
3 yr.	8.1	0.4
5 yr.	36.1	32.3

Target Price Range 2012 | 2013 | 2014

Atmos Energy's history dates back to 1906 in the Texas Panhandle. Over the years, through various mergers, it became part of Pioneer Corporation, and, in 1981, Pioneer named its gas distribution division Energas. In 1983, Pioneer organized Energas as a separate subsidiary and distributed the outstanding shares of Energas to Pioneer shareholders. Energas changed its name to Atmos in 1988. Atmos acquired Trans Louisiana Gas in 1986, Western Kentucky Gas Utility in 1987, Greeley Gas in 1993, United Cities Gas in 1997, and others.

CAPITAL STRUCTURE as of 6/30/09
Total Debt $2169.5 mill. Due in 5 Yrs $1360.0 mill.
LT Debt $2169.4 mill. LT Interest $115.0 mill.
(LT Interest earned: 2.9x; total interest coverage: 2.6x)
Leases, Uncapitalized Annual rentals $18.4 mill.
Pfd Stock None
Pension Assets-9/08 $341.4 mill.
Oblig. $337.6 mill.
Common Stock 92,272,478 shs.
as of 7/31/09
MARKET CAP: $2.5 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2007	2008	6/30/09
Cash Assets	60.7	46.7	125.7
Other	1008.2	1238.4	670.3
Current Assets	1068.9	1285.1	796.0
Accts Payable	355.3	395.4	222.0
Debt Due	154.4	351.3	.1
Other	410.0	460.4	422.2
Current Liab.	919.7	1207.1	644.3
Fix. Chg. Cov.	405%	450%	446%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '06-'08 to '12-'14
Revenues	9.5%	14.5%	*3.0%*
"Cash Flow"	3.5%	6.5%	*2.5%*
Earnings	2.5%	5.0%	*4.0%*
Dividends	2.5%	1.5%	*1.5%*
Book Value	6.5%	7.5%	*4.0%*

Fiscal Year Ends	QUARTERLY REVENUES ($ mill) [A] Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2006	2283.8	2033.8	863.2	971.6	6152.4
2007	2602.6	2075.6	1218.2	1002.0	5898.4
2008	1657.5	2484.0	1639.1	1440.7	7221.3
2009	1716.3	1821.4	780.8	*701.5*	*5020*
2010	*1465*	*2435*	*1345*	*1155*	*6400*

Fiscal Year Ends	EARNINGS PER SHARE [A B E] Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2006	.68	1.10	d.22	.25	2.00
2007	.97	1.20	d.15	d.05	1.94
2008	.82	1.24	d.07	.02	2.00
2009	.83	1.29	.02	*d.04*	*2.10*
2010	*.90*	*1.35*	*d.04*	*d.01*	*2.20*

Cal-endar	QUARTERLY DIVIDENDS PAID [C▪] Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	.31	.31	.31	.315	1.25
2006	.315	.315	.315	.32	1.27
2007	.32	.32	.32	.325	1.29
2008	.325	.325	.325	.33	1.31
2009	.33	.33	.33		

BUSINESS: Atmos Energy Corporation is engaged primarily in the distribution and sale of natural gas to 3.2 million customers via six regulated natural gas utility operations: Louisiana Division, West Texas Division, Mid-Tex Division, Mississippi Division, Colorado-Kansas Division, and Kentucky/Mid-States Division. Combined 2008 gas volumes: 293 MMcf. Breakdown: 56%, residential; 32%, commercial; 7%, industrial; and 5% other. 2008 depreciation rate 3.5%. Has around 4,560 employees. Officers and directors own approximately 1.9% of common stock (12/08 Proxy). Chairman and Chief Executive Officer: Robert W. Best. Incorporated: Texas. Address: P.O. Box 650205, Dallas, Texas 75265. Telephone: 972-934-9227. Internet: www.atmosenergy.com.

Atmos Energy's core natural gas utility has generated healthy earnings of late. That is largely because of an increase in rates, primarily for the Mid-Tex, Louisiana, and West Texas divisions. But throughput is being constrained some by diminished consumption from residential and commercial customers (reflecting difficult economic conditions).

The pipeline and storage, and regulated transmission and storage units are performing nicely, as well. The former segment is enjoying expanded margins arising from gains from the settlement of financial positions associated with storage and trading activities. Meanwhile, results for the regulated transmission and storage operation are being boosted by higher transportation fees on through-system deliveries, due to favorable market conditions.

It appears that consolidated share net will advance around 5%, to $2.10, in fiscal 2009 (which ends September 30th). Assuming further expansion in operating margins, the bottom line may increase at a similar rate, to $2.20 a share, the following fiscal year.

Finances are in order. An acquisition caused a mid-decade rise in the debt ratio. But the company has whittled that figure back to normal, if at the cost of some dilution from stock issuances. A reduced level of uncollectible accounts, owing to lower gas prices, is another plus these days.

We believe that more steady, though unexciting, profit growth is in store for the company over the next 3 to 5 years. The utility is one of the country's biggest natural gas-only distributors, currently serving customers across 12 states. What is more, the unregulated segments, especially pipelines, possess healthy overall prospects. Excluding future acquisitions, annual share-net gains may be in the mid-single-digit range over 2012-2014.

On a risk-adjusted basis, these good-quality shares offer decent total return potential. The dividend yield is appealing, compared to others in the *Value Line* Natural Gas Utility universe. Future hikes in the payout, though likely to be gradual, as in previous years, should be well covered by earnings. Meanwhile, the stock is ranked 3 (Average) for Timeliness.

Frederick L. Harris, III September 11, 2009

(A) Fiscal year ends Sept. 30th. (B) Diluted shrs. Excl. nonrec. items: '99, d23¢; '00, 12¢; '03, d17¢; '06, d18¢; '07, d2¢; Q2 '09, 12¢. Next egs. rpt. due early Nov. (C) Dividends historically paid in early March, June, Sept., and Dec. ▪ Div. reinvestment plan. Direct stock purchase plan avail. (D) In millions. (E) Qtrs may not add due to change in shrs outstanding.

Company's Financial Strength	B+
Stock's Price Stability	100
Price Growth Persistence	50
Earnings Predictability	85

LACLEDE GROUP NYSE-LG

RECENT PRICE 32.61 | P/E RATIO 13.8 (Trailing: 10.9 Median: 15.0) | RELATIVE P/E RATIO 0.86 | DIV'D YLD 4.8% | VALUE LINE

TIMELINESS 3 Lowered 5/22/09
SAFETY 2 Raised 6/20/03
TECHNICAL 5 Lowered 9/4/09
BETA .60 (1.00 = Market)

2012-14 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	60	(+85%)	19%
Low	45	(+40%)	12%

Insider Decisions

	O	N	D	J	F	M	A	M	J
to Buy	0	0	0	0	0	0	0	2	1
Options	0	0	0	0	0	0	0	0	0
to Sell	0	0	0	0	0	0	0	1	0

Institutional Decisions

	4Q2008	1Q2009	2Q2009
to Buy	73	70	71
to Sell	86	81	81
Hld's(000)	11494	11043	10569

Percent shares traded 7.5 5 2.5

LEGENDS
1.00 = Dividends p sh divided by Interest Rate
.... Relative Price Strength
Options: Yes
Shaded area: prior recession
Latest recession began 12/07

High: 27.9 27.0 24.8 25.5 25.0 30.0 32.5 34.3 37.5 36.0 55.8 48.3
Low: 22.4 20.0 17.5 21.3 19.0 21.8 26.0 26.9 29.1 28.8 31.9 29.3

Target Price Range 2012 | 2013 | 2014

128 96 80 64 48 40 32 24 16 12

% TOT. RETURN 8/09

	THIS STOCK	VL ARITH. INDEX
1 yr.	-24.7	-4.4
3 yr.	13.4	0.4
5 yr.	40.0	32.3

1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	© VALUE LINE PUB., INC.	12-14
32.33	33.43	24.79	31.03	34.33	31.04	26.04	29.99	53.08	39.84	54.95	59.59	75.43	93.51	93.40	100.44	88.90	91.30	Revenues per sh	111.55
2.81	2.65	2.55	3.29	3.32	3.02	2.56	2.68	3.00	2.56	3.15	2.79	2.98	3.81	3.67	4.22	4.90	4.50	"Cash Flow" per sh	5.40
1.61	1.42	1.27	1.87	1.84	1.58	1.47	1.37	1.61	1.18	1.82	1.82	1.90	2.37	2.31	2.64	2.95	2.60	Earnings per sh A B	3.00
1.22	1.22	1.24	1.26	1.30	1.32	1.34	1.34	1.34	1.34	1.34	1.35	1.37	1.40	1.45	1.49	1.53	1.57	Div'ds Decl'd per sh C ■	1.70
2.62	2.50	2.63	2.35	2.44	2.68	2.58	2.77	2.51	2.60	2.67	2.45	2.84	2.97	2.72	2.57	2.55	2.60	Cap'l Spending per sh	3.40
12.19	12.44	13.05	13.72	14.26	14.57	14.96	14.99	15.26	15.07	15.65	16.96	17.31	18.85	19.79	22.12	23.65	23.65	Book Value per sh D	28.05
15.59	15.67	17.42	17.56	17.56	17.63	18.88	18.88	18.88	18.96	19.11	20.98	21.17	21.36	21.65	21.99	22.50	23.00	Common Shs Outst'g E	26.00
13.5	16.4	15.5	11.9	12.5	15.5	15.8	14.9	14.5	20.0	13.6	15.7	16.2	13.6	14.2	14.3	Bold figures are Value Line estimates		Avg Ann'l P/E Ratio	17.5
.80	1.08	1.04	.75	.72	.81	.90	.97	.74	1.09	.78	.83	.86	.73	.75	.89			Relative P/E Ratio	1.15
5.6%	5.3%	6.3%	5.6%	5.6%	5.4%	5.8%	6.6%	5.7%	5.7%	5.4%	4.7%	4.4%	4.3%	4.4%	3.9%			Avg Ann'l Div'd Yield	3.2%
						491.6	566.1	1002.1	755.2	1050.3	1250.3	1597.0	1997.6	2021.6	2209.0	2000	2100	Revenues ($mill) A	2900
						26.9	26.0	30.5	22.4	34.6	36.1	40.1	50.5	49.8	57.6	65.0	60.0	Net Profit ($mill)	80.0
						35.5%	35.2%	32.7%	35.4%	35.0%	34.8%	34.1%	32.5%	33.4%	31.3%	35.5%	35.0%	Income Tax Rate	35.0%
						5.5%	4.6%	3.0%	3.0%	3.3%	2.9%	2.5%	2.5%	2.5%	2.6%	3.3%	2.9%	Net Profit Margin	2.8%
						41.8%	45.2%	49.5%	47.5%	50.4%	51.6%	48.1%	49.5%	45.3%	44.4%	42.5%	45.0%	Long-Term Debt Ratio	47.0%
						57.8%	54.5%	50.2%	52.3%	49.4%	48.3%	51.8%	50.4%	54.6%	55.5%	57.5%	55.0%	Common Equity Ratio	53.0%
						488.6	519.2	574.1	546.6	605.0	737.4	707.9	798.9	784.5	876.1	925	985	Total Capital ($mill)	1375
						519.4	575.4	602.5	594.4	621.2	646.9	679.5	763.8	793.8	823.2	865	915	Net Plant ($mill)	1250
						7.1%	6.7%	6.9%	6.0%	7.4%	6.6%	7.6%	8.4%	8.5%	8.1%	8.5%	7.5%	Return on Total Cap'l	7.0%
						9.5%	9.1%	10.5%	7.8%	11.5%	10.1%	10.9%	12.5%	11.6%	11.8%	12.0%	11.0%	Return on Shr. Equity	11.0%
						9.5%	9.1%	10.5%	7.8%	11.6%	10.1%	10.9%	12.5%	11.6%	11.8%	12.0%	11.0%	Return on Com Equity	11.0%
						1.0%	.2%	1.8%	NMF	3.1%	2.7%	3.1%	5.1%	4.3%	5.2%	6.0%	4.5%	Retained to Com Eq	5.0%
						89%	98%	83%	113%	74%	73%	72%	59%	63%	56%	53%	60%	All Div'ds to Net Prof	55%

CAPITAL STRUCTURE as of 6/30/09
Total Debt $522.2 mill. Due in 5 Yrs $90.0 mill.
LT Debt $389.2 mill. LT Interest $25.0 mill.
(Total interest coverage: 3.0x)

Leases, Uncapitalized Annual rentals $.9 mill.
Pension Assets-9/08 $248.3 mill. Oblig. $308.7 mill.

Pfd Stock None
Common Stock 22,167,303 shs. as of 7/31/09

MARKET CAP: $725 million (Small Cap)

CURRENT POSITION ($MILL.)	2007	2008	6/30/09
Cash Assets	52.7	14.9	89.1
Other	414.6	547.0	283.6
Current Assets	467.3	561.9	372.7
Accts Payable	106.8	159.6	79.3
Debt Due	251.6	216.1	133.0
Other	115.3	103.5	87.8
Current Liab.	473.7	479.2	300.1
Fix. Chg. Cov.	282%	377%	370%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '06-'08 to '12-'14
Revenues	11.5%	14.0%	2.5%
"Cash Flow"	2.0%	6.5%	5.5%
Earnings	3.5%	9.5%	3.5%
Dividends	1.0%	1.5%	2.5%
Book Value	3.5%	5.5%	5.5%

Fiscal Year Ends	QUARTERLY REVENUES ($ mill.) A Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2006	689.2	708.8	330.6	269.0	1997.6
2007	539.6	700.8	457.9	323.3	2021.6
2008	504.0	747.7	505.5	451.8	2209.0
2009	674.3	659.1	309.9	356.7	2000
2010	530	570	520	480	2100

Fiscal Year Ends	EARNINGS PER SHARE A B F Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2006	1.23	1.05	.13	d.04	2.37
2007	.89	.97	.43	.03	2.31
2008	.99	1.39	.41	d.14	2.64
2009	1.42	1.40	.31	d.18	2.95
2010	1.03	1.21	.38	d.02	2.60

Calendar	QUARTERLY DIVIDENDS PAID C ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	.34	.345	.345	.345	1.38
2006	.345	.355	.355	.355	1.41
2007	.365	.365	.365	.365	1.46
2008	.375	.375	.375	.375	1.50
2009	.385	.385	.385		

BUSINESS: Laclede Group, Inc., is a holding company for Laclede Gas, which distributes natural gas in eastern Missouri, including the city of St. Louis, St. Louis County, and parts of 10 other counties. Has roughly 630,000 customers. Purchased SM&P Utility Resources, 1/02; divested, 3/08. Therms sold and transported in fiscal 2008: 1.08 mill. Revenue mix for regulated operations: residential, 62%; commercial and industrial, 24%; transportation, 1%; other, 13%. Has around 1,807 employees. Officers and directors own approximately 7.2% of common shares (1/09 proxy). Chairman, Chief Executive Officer, and President: Douglas H. Yaeger. Incorporated: Missouri. Address: 720 Olive Street, St. Louis, Missouri 63101. Telephone: 314-342-0500. Internet: www.thelacledegroup.com.

It appears that Laclede Group will generate record earnings in fiscal 2009, which ends on September 30th. The non-regulated gas marketing unit, Laclede Energy Resources, is enjoying a healthy rise in volumes. That has been brought about by significantly increased pipeline capacity and expanded margins on sales of natural gas (reflecting a drop in natural gas prices). Unfortunately, the utility, Laclede Gas, has not performed up to par of late, stemming partly from a rise in operational expenses. Furthermore, last year's results included certain previously unrecognized tax benefits (which amounted to about $0.07 a share). Nevertheless, consolidated share net may well advance about 12%, to $2.95 a share, in fiscal 2009.

But fiscal 2010 may be a down year, when measured against the strong profits we anticipate for this year. Moreover, the benefit of sharply lower natural gas prices may not be repeatable.

The company's 3- to 5-year prospects look unspectacular. Annual customer growth for the natural gas distribution unit has been only around 1% for some time, and it appears that trend will continue. This is because the service territory, based in eastern Missouri, is in a mature phase. Laclede Energy Resources has promising expansion possibilities, given its proximity to existing and planned pipelines, as well as opportunities from shale development. But that segment has contributed just a small portion to total profits on a historical basis. A major acquisition could help to offset this, but it appears that such plans are not on management's agenda at this juncture. Consequently, annual earnings-per-share growth could range only between 4% and 5% out to 2012-2014.

Income-oriented accounts may find the dividend yield modestly appealing. Further increases in the payout will probably be gradual, however. That is largely because of Laclede Gas' unexciting expansion prospects.

Total return potential over the 3- to 5-year horizon looks unexciting, based on the stock's current quotation and assuming minimal growth in the distribution.

Frederick L. Harris, III September 11, 2009

(A) Fiscal year ends Sept. 30th.
(B) Based on average shares outstanding thru. '97, then diluted. Excludes nonrecurring loss: '06, 7¢. Excludes gain from discontinued operations: '08, 94¢. Next earnings report due late Oct. (C) Dividends historically paid in early January, April, July, and October. ■ Dividend reinvestment plan available. (D) Incl. deferred charges. In '08: $340.4 mill., $15.48/sh. (E) In millions. (F) Qtly. egs. may not sum due to rounding or change in shares outstanding.

Company's Financial Strength	B+
Stock's Price Stability	100
Price Growth Persistence	60
Earnings Predictability	85

NEW JERSEY RES. NYSE-NJR

RECENT PRICE 36.60 | P/E RATIO 14.2 (Trailing: 17.3 Median: 15.0) | RELATIVE P/E RATIO 0.88 | DIV'D YLD 3.4% | VALUE LINE

TIMELINESS 3 Lowered 5/22/09
SAFETY 1 Raised 9/15/06
TECHNICAL 5 Lowered 9/11/09
BETA .65 (1.00 = Market)

2012-14 PROJECTIONS

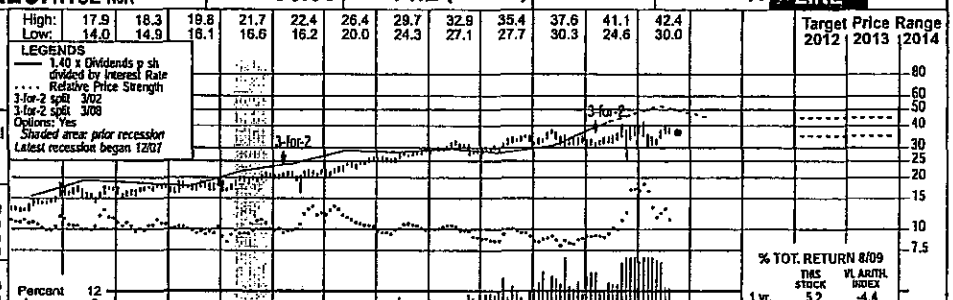
	Price	Gain	Ann'l Total Return
High	45	(+25%)	8%
Low	35	(-5%)	2%

Insider Decisions

	O	N	D	J	F	M	A	M	J
to Buy	0	0	0	0	0	0	0	1	0
Options	1	2	3	0	0	1	0	0	0
to Sell	0	1	4	0	1	0	0	0	0

Institutional Decisions

	4Q2008	1Q2009	2Q2009
to Buy	93	87	89
to Sell	73	88	88
Hld's(000)	24319	23324	24695



1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	© VALUE LINE PUB., INC.	12-14
12.02	12.81	11.36	13.48	17.31	17.73	22.65	29.42	51.22	44.11	62.29	60.89	76.19	79.63	72.62	90.74	65.90	81.40	Revenues per sh A	85.00
1.42	1.54	1.42	1.48	1.63	1.74	1.86	1.99	2.12	2.14	2.38	2.50	2.62	2.73	2.44	3.62	3.35	3.60	"Cash Flow" per sh	3.70
.76	.84	.86	.92	.99	1.04	1.11	1.20	1.30	1.39	1.59	1.70	1.77	1.87	1.55	2.70	2.45	2.70	Earnings per sh B	2.80
.68	.68	.68	.69	.71	.73	.75	.76	.78	.80	.83	.87	.91	.96	1.01	1.11	1.24	1.28	Div'ds Decl'd per sh C=	1.40
1.54	1.40	1.18	1.19	1.15	1.07	1.21	1.23	1.10	1.02	1.14	1.45	1.28	1.28	1.46	1.72	1.75	1.75	Cap'l Spending per sh	1.80
6.54	6.43	6.47	6.73	6.92	7.26	7.57	8.29	8.60	8.71	10.26	11.25	10.60	15.00	15.50	17.28	18.80	20.75	Book Value per sh D	27.45
37.84	38.93	40.03	40.69	40.23	40.07	39.92	39.59	40.00	41.60	40.85	41.61	41.32	41.44	41.61	42.06	42.50	43.00	Common Shs Outst'g E	45.00
15.1	13.0	11.8	13.6	13.5	15.3	15.2	14.7	14.2	14.7	14.0	15.3	16.8	15.1	21.6	12.3	Bold figures are Value Line estimates		Avg Ann'l P/E Ratio	14.0
.89	.85	.78	.85	.78	.80	.87	.96	.73	.80	.80	.91	.89	.87	1.15	.77			Relative P/E Ratio	.95
5.8%	6.2%	6.7%	5.6%	5.3%	4.6%	4.5%	4.4%	4.2%	3.8%	3.7%	3.3%	3.1%	3.2%	3.0%	3.3%			Avg Ann'l Div'd Yield	3.6%
						934.3	1164.5	2048.4	1830.8	2544.4	2533.6	3148.3	3299.6	3021.8	3816.2	2800	3500	Revenues ($mill) A	3825
						44.9	47.9	52.3	56.8	65.4	71.6	74.4	78.5	65.3	113.9	80.0	105	Net Profit ($mill)	125
						36.2%	37.8%	38.0%	38.7%	39.4%	39.1%	39.1%	38.9%	38.8%	37.8%	39.0%	39.0%	Income Tax Rate	40.0%
						5.0%	4.1%	2.6%	3.1%	2.6%	2.8%	2.4%	2.4%	2.2%	3.0%	3.7%	3.3%	Net Profit Margin	3.3%
						46.7%	47.0%	50.1%	50.6%	38.1%	40.3%	42.0%	34.8%	37.3%	38.5%	38.5%	37.0%	Long-Term Debt Ratio	32.0%
						51.2%	52.9%	49.9%	49.4%	61.9%	59.7%	58.0%	65.2%	62.7%	61.5%	61.5%	63.0%	Common Equity Ratio	68.0%
						590.4	620.1	706.2	732.4	676.8	783.8	755.3	954.0	1028.0	1182.1	1300	1415	Total Capital ($mill)	1815
						705.4	730.6	743.9	756.4	852.6	880.4	905.1	934.9	970.9	1017.3	1040	1060	Net Plant ($mill)	1125
						9.0%	9.0%	8.5%	8.7%	10.7%	10.1%	11.2%	9.6%	7.7%	10.7%	9.0%	9.0%	Return on Total Cap'l	8.0%
						14.8%	14.6%	14.8%	15.7%	15.6%	15.3%	17.0%	12.6%	10.1%	15.7%	13.0%	13.0%	Return on Shr. Equity	10.0%
						14.8%	14.6%	14.9%	15.7%	15.6%	15.3%	17.0%	12.6%	10.1%	15.7%	13.0%	13.0%	Return on Com Equity	10.0%
						5.0%	5.4%	6.1%	6.9%	7.7%	7.8%	8.5%	6.3%	3.6%	9.5%	6.5%	7.0%	Retained to Com Eq	5.0%
						67%	63%	59%	56%	51%	49%	50%	50%	64%	40%	50%	47%	All Div'ds to Net Prof	50

CAPITAL STRUCTURE as of 6/30/09
Total Debt $512.3 mill. Due in 5 Yrs $175.6 mill.
LT Debt $457.7 mill. LT Interest $16.9 mill.
Incl. $8.8 mill. capitalized leases.
(LT Interest earned: 4.8x; total interest coverage: 4.8x)
Pension Assets-9/08 $80.6 mill.
Oblig. $102.4 mill.
Pfd Stock None

Common Stock 42,014,773 shs.
as of 8/4/09
MARKET CAP: $1.5 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2007	2008	6/30/09
Cash Assets	5.1	42.6	77.0
Other	794.8	1067.1	636.5
Current Assets	799.9	1109.7	713.5
Accts Payable	64.4	61.7	49.2
Debt Due	260.8	238.3	54.6
Other	378.1	594.0	475.9
Current Liab.	703.3	894.0	579.7
Fix. Chg. Cov.	461%	450%	450%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '05-'08 to '12-'14
Revenues	17.5%	9.0%	1.0%
"Cash Flow"	6.0%	6.0%	4.0%
Earnings	7.5%	7.5%	5.5%
Dividends	4.0%	5.0%	5.5%
Book Value	8.5%	11.5%	9.5%

Fiscal Year Ends	QUARTERLY REVENUES ($ mill.) A Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2006	1164	1064	536.1	535.5	3299.6
2007	737.4	1029	662.2	593.2	3021.8
2008	811.1	1178	1000	827.1	3816.2
2009	801.3	937.5	441.1	620.1	2800
2010	845	985	790	880	3500

Fiscal Year Ends	EARNINGS PER SHARE A B Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2006	.82	1.43	d.09	d.29	1.87
2007	.70	.19	.60	.06	1.55F
2008	1.31	1.86	d.10	d.39	2.70
2009	.77	1.71	.03	d.06	2.45
2010	.85	1.75	d.05	.15	2.70

Cal-endar	QUARTERLY DIVIDENDS PAID C E= Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	.227	.227	.227	.227	.91
2006	.24	.24	.24	.24	.96
2007	.253	.253	.253	.253	1.01
2008	.267	.28	.28	.28	1.11
2009	.31	.31	.31		

BUSINESS: New Jersey Resources Corp. is a holding company, providing retail/wholesale energy svcs. to customers in New Jersey, and in states from the Gulf Coast to New England, and Canada. New Jersey Natural Gas had about 484,000 customers at 9/30/08 in Monmouth and Ocean Counties, and other N.J. Counties. Fiscal 2008 volume: 99.6 bill. cu. ft. (59% firm, 6% interruptible industrial and electric utility, 35% off-system and capacity release). N.J. Natural Energy subsidiary provides unregulated retail/wholesale natural gas and related energy svcs. 2008 dep. rate: 2.8%. Has 854 empls. Off./dir. own about 1.7% of common (12/09 Proxy). Chmn., CEO, & Pres.: Laurence M. Downes, Inc.; NJ Addr.: 1415 Wyckoff Road, Wall, NJ 07719. Tel.: 732-938-1480. Web: www.njresources.com.

New Jersey Resources' bottom line has been improving despite weaker top-line results. All of the company's operating segments registered lower volumes during the June period. The NJR Energy Services unit, which typically contributes the lion's share of revenues, was hit the hardest on both a dollar-value and percentage basis. Meantime, the Natural Gas Distribution and Retail segments also registered declines well into the double digits. The bulk of that downturn can be attributed to the lower commodity prices compared to last year, and conservation efforts, as consumers continue to real in spending. Still, the customer base continues to widen. The New Jersey Natural Gas division has added almost 4,200 new customer accounts thus far in 2009 and completed more than 450 natural gas heat conversions. All told, the company registered higher-than-expected earnings for the June interim. But,

We do look for September's share net to fall into negative territory. The anticipated loss during the fiscal fourth quarter is related to the seasonal nature of the natural gas business. Nonetheless, economic headwinds have prompted us to trim a nickel off our 2009 earnings estimate to $2.45 a share. This would represent a decline of about 9%. However, we view this largely as a technicality, due to last year's difficult comparison and the fact that NJR continues to improve the fundamentals of its business through the expansion of its mid-stream assets and an ever-widening customer base.

Capital projects and infrastructure programs augur well for longer-term prospects. The Steckman Ridge storage facility has begun accumulating natural gas inventories in preparation for the coming winter. That facility is expected to start making meaningful earnings contributions next year. And the other programs should provide needed jobs, while simultaneously boosting the safety and reliability of the distribution system.

These high-quality shares may appeal to income-oriented accounts. They don't stand out for appreciation potential for the pull to 2012-2014, compared to most utilities. The main appeal here comes from solid dividend growth prospects.

Bryan J. Fong *September 11, 2009*

(A) Fiscal year ends Sept. 30th.
(B) Diluted earnings. Qtly egs may not sum to total due to change in shares outstanding. Next earnings report due late Oct.
(C) Dividends historically paid in early January, April, July, and October. ■ Dividend reinvestment plan available.
(D) Includes regulatory assets in 2008: $340.7 million, $8.09/share.
(E) In millions, adjusted for splits.
(F) Restated.

Company's Financial Strength	A
Stock's Price Stability	100
Price Growth Persistence	65
Earnings Predictability	45

N.W. NAT'L GAS NYSE-NWN

RECENT PRICE 41.94 | P/E RATIO 14.7 (Trailing: 15.5 Median: 16.0) | RELATIVE P/E RATIO 0.91 | DIV'D YLD 4.0% | VALUE LINE

TIMELINESS 3 Lowered 7/24/09
SAFETY 1 Raised 3/18/05
TECHNICAL 4 Lowered 9/4/09
BETA .60 (1.00 = Market)

2012-14 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	70	(+65%)	16%
Low	55	(+30%)	10%

Insider Decisions

	D	N	D	J	F	M	A	M	J
to Buy	0	0	0	0	0	2	0	0	0
Options	0	1	0	0	0	0	0	0	0
to Sell	0	2	0	1	0	0	0	1	1

Institutional Decisions

	4Q2008	1Q2009	2Q2009
to Buy	82	67	76
to Sell	83	93	69
Hld's(000)	14907	15126	15387

High: 30.8 27.9 27.5 26.8 30.7 31.3 34.1 39.6 43.7 52.8 55.2 46.1
Low: 24.3 19.5 17.8 21.7 23.5 24.0 27.5 32.4 32.8 39.8 37.7 37.7

LEGENDS
1.10 x Dividends p sh divided by Interest Rate
Relative Price Strength
3-for-2 split 9/96
Options: Yes
Shaded area: prior recession
Latest recession began 12/07

Target Price Range 2012 | 2013 | 2014

% TOT. RETURN 8/09

	THIS STOCK	VL ARITH. INDEX
1 yr.	-10.5	-4.4
3 yr.	21.8	0.4
5 yr.	63.1	32.3

1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	© VALUE LINE PUB., INC.	12-14
16.15	16.30	16.02	16.86	15.82	16.77	18.17	21.09	25.78	25.07	23.57	25.69	33.01	37.20	39.13	39.16	*39.50*	*41.50*	Revenues per sh	*48.20*
3.74	3.50	3.41	3.86	3.72	3.24	3.72	3.68	3.86	3.65	3.85	3.92	4.34	4.76	5.41	5.31	*5.60*	*5.85*	"Cash Flow" per sh	*6.75*
1.74	1.63	1.61	1.97	1.76	1.02	1.70	1.79	1.88	1.52	1.76	1.86	2.11	2.35	2.76	2.57	*2.85*	*2.85*	Earnings per sh A	*3.45*
1.17	1.17	1.18	1.20	1.21	1.22	1.23	1.24	1.25	1.26	1.27	1.30	1.32	1.39	1.44	1.52	*1.60*	*1.68*	Div'ds Decl'd per sh B■	*2.00*
3.61	4.23	3.02	3.70	5.07	4.02	4.78	3.46	3.23	3.11	4.90	5.52	3.48	3.56	4.48	3.92	*4.50*	*4.50*	Cap'l Spending per sh	*4.50*
13.08	13.63	14.55	15.37	16.02	16.59	17.12	17.93	18.56	18.88	19.52	20.64	21.28	22.01	22.52	23.71	*24.90*	*26.10*	Book Value per sh	*30.50*
19.77	20.13	22.24	22.56	22.86	24.85	25.09	25.23	25.23	25.23	25.59	26.94	27.55	27.58	27.24	26.41	*26.50*	*26.50*	Common Shs Outst'g C	*28.00*
12.9	13.0	12.9	11.7	14.4	26.7	14.5	12.4	12.9	17.2	15.8	16.7	17.0	15.9	16.7	18.1	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*18.0*
.76	.65	.86	.73	.83	1.39	.83	.81	.66	.94	.90	.88	.91	.86	.89	1.11			Relative P/E Ratio	*1.20*
5.2%	5.5%	5.7%	5.2%	4.8%	4.5%	5.0%	5.6%	5.1%	4.5%	4.6%	4.2%	3.7%	3.7%	3.1%	3.3%			Avg Ann'l Div'd Yield	*3.2%*
455.8	532.1	650.3	644.4	611.3	707.6	910.5	1013.2	1033.2	1037.9	*1025*	*1125*	Revenues ($mill)	*1350*
44.9	47.8	50.2	43.8	46.0	50.6	58.1	65.2	74.5	68.5	*75.5*	*75.5*	Net Profit ($mill)	*96.5*
35.4%	35.9%	35.4%	34.9%	33.7%	34.4%	36.0%	36.3%	37.2%	36.9%	*37.0%*	*37.0%*	Income Tax Rate	*37.0%*
9.9%	9.0%	7.7%	6.8%	7.5%	7.1%	6.4%	6.4%	7.2%	6.6%	*7.3%*	*6.7%*	Net Profit Margin	*7.2%*
46.0%	45.1%	43.0%	47.6%	49.7%	46.0%	47.0%	46.3%	46.3%	44.9%	*47%*	*47%*	Long-Term Debt Ratio	*47%*
49.8%	50.9%	53.2%	51.5%	50.3%	54.0%	53.0%	53.7%	53.7%	55.1%	*53%*	*53%*	Common Equity Ratio	*53%*
861.5	887.8	880.5	937.3	1006.6	1052.5	1108.4	1116.5	1105.8	1140.4	*1180*	*1225*	Total Capital ($mill)	*1400*
895.9	934.0	965.0	995.6	1205.9	1318.4	1373.4	1425.1	1495.9	1549.1	*1600*	*1650*	Net Plant ($mill)	*1900*
6.8%	6.7%	6.9%	5.9%	5.7%	5.9%	6.5%	7.1%	6.5%	7.7%	*8.0%*	*8.0%*	Return on Total Cap'l	*8.0%*
9.7%	9.6%	10.0%	8.9%	9.1%	8.9%	9.9%	10.9%	12.5%	10.9%	*11.0%*	*11.0%*	Return on Shr. Equity	*11.0%*
9.9%	10.0%	10.2%	8.5%	9.0%	8.9%	9.9%	10.9%	12.5%	10.9%	*11.0%*	*11.0%*	Return on Com Equity	*11.0%*
2.8%	3.1%	3.5%	1.9%	2.6%	2.7%	3.7%	4.5%	6.0%	4.5%	*4.5%*	*4.5%*	Retained to Com Eq	*4.5%*
74%	70%	67%	79%	72%	69%	63%	59%	52%	59%	*56%*	*59%*	All Div'ds to Net Prof	*58%*

% TOT. RETURN 8/09 — Percent shares traded: 15, 10, 5

CAPITAL STRUCTURE as of 6/30/09
Total Debt $677.6 mill. Due in 5 Yrs $173.8 mill.
LT Debt $587.0 mill. LT Interest $37.0 mill.

(Total interest coverage: 4.0x)

Pension Assets-12/08 $163 mill.
Oblig. $281 mill.
Pfd Stock None

Common Stock 26,513,188 shares as of 7/31/09
MARKET CAP $1.1 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2007	2008	6/30/09
Cash Assets	6.1	6.9	31.1
Other	268.8	474.1	241.3
Current Assets	274.9	481.0	272.4
Accts Payable	119.7	94.4	50.1
Debt Due	148.1	248.9	90.6
Other	122.1	208.9	148.8
Current Liab.	389.9	551.3	289.5
Fx. Chg. Cov.	408%	393%	NMF

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '06-'08 to '12-'14
Revenues	9.0%	9.0%	*4.0%*
"Cash Flow"	3.5%	6.5%	*4.5%*
Earnings	5.0%	8.0%	*5.0%*
Dividends	2.0%	3.0%	*5.5%*
Book Value	3.5%	3.5%	*5.0%*

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	390.4	171.0	114.9	336.9	1013.2
2007	394.1	183.2	124.2	331.7	1033.2
2008	387.7	191.3	109.7	349.2	1037.9
2009	437.4	149.4	*100*	*338.2*	*1025*
2010	*420*	*215*	*125*	*365*	*1125*

Calendar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	1.48	.07	d.35	1.15	2.35
2007	1.77	.10	d.22	1.11	2.76
2008	1.62	.08	d.38	1.25	2.57
2009	1.72	.12	*d.31*	*1.32*	*2.85*
2010	*1.72*	*.11*	*d.33*	*1.35*	*2.85*

Calendar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	.325	.325	.325	.345	1.32
2006	.345	.345	.345	.355	1.39
2007	.355	.355	.355	.375	1.44
2008	.375	.375	.375	.395	1.52
2009	.395	.395	.395		

BUSINESS: Northwest Natural Gas Co. distributes natural gas to 90 communities, 662,000 customers, in Oregon (90% of customers) and in southwest Washington state. Principal cities served: Portland and Eugene, OR; Vancouver, WA. Service area population: 2.5 mill. (77% in OR). Company buys gas supply from Canadian and U.S. producers; has transportation rights on Northwest Pipeline system. Owns local underground storage. Rev. breakdown: residential, 55%; commercial, 28%; industrial, gas transportation, and other, 17%. Employs 1,105. Barclays Global owns 6.6% of shares; officers and directors, 1.4% (4/09 proxy). CEO: Gregg S. Kantor. Inc.: Oregon. Address: 220 NW 2nd Ave., Portland, OR 97209. Telephone: 503-226-4211. Internet: www.nwnatural.com.

Northwest Natural's normal-looking first-half results contained some unusual elements. The company shares in either 20% or 10% of the difference between forecast natural gas costs and the actual outlays in Oregon. In this year's first half, very low gas prices led to an $11 million profit from the cost-sharing mechanism, versus a $6 million loss in the prior-year period. The profit, however, was partially offset by considerably higher operating and maintenance expenses, due partly to higher pension expense related to the decline in the stock market and bonuses due to the earnings gain. Meanwhile, the recession cost Northwest 3,000 customers in the June period, dropping its year-to-year customer increase to 0.8%.

Thus, we look for little earnings change through 2010. With natural gas prices likely to rise at least a bit next year, Northwest has opted to share in 10% of the difference between forecast and actual gas costs, likely reducing commodity cost effects. As gas prices are down, however, the company expects that residential rates will drop 15%-20% next year, raising the incentive to convert to gas heat. Moreover, the company plans to pare 50 to 100 jobs, adding to the 175 it eliminated in the last two years.

Northwest should benefit from a new union contract. Under the new five-year agreement, union members (about 60% of the workforce) received a 2.3% raise but will get just 1% more per year for years two through five, plus up to 2% for inflation. The company gains extra flexibility, and new hires will not be eligible for the defined benefit pension plan.

New projects could significantly boost earnings by the end of our time horizon. Northwest owns 75% of the Gill Ranch, CA gas storage project and will invest about $160 million in the project; it should contribute to the bottom line by 2011. The proposed Palomar pipeline would bring a second source of gas to the Portland area; its eastern section could come on line by 2013. NWN's investment would be around $200 million, plus an equal sum if the western half is built.

These top-quality shares offer decent total-return potential, suitable for conservative accounts.

Sigourney B. Romaine *September 11, 2009*

(A) Diluted earnings per share. Excludes nonrecurring items: '98, $0.15; '00, $0.11; '06, ($0.06); '08, ($0.03); 1Q '09, 6¢. Next earnings report due early November.

(B) Dividends historically paid in mid-February, May, August, and November.
■ Dividend reinvestment plan available.

(C) In millions, adjusted for stock split.

Company's Financial Strength	A
Stock's Price Stability	100
Price Growth Persistence	70
Earnings Predictability	90

PIEDMONT NAT'L. GAS NYSE-PNY

RECENT PRICE 24.24 | P/E RATIO 14.8 (Trailing: 15.6 Median: 18.0) | RELATIVE P/E RATIO 0.92 | DIV'D YLD 4.5% | VALUE LINE

TIMELINESS 3 Raised 6/15/07
SAFETY 2 New 7/27/90
TECHNICAL 4 Raised 7/17/09
BETA .65 (1.00 = Market)

2012-14 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	40	(+65%)	17%
Low	30	(+25%)	10%

Insider Decisions

	O	N	D	J	F	M	A	M	J
to Buy	0	1	0	1	0	0	0	0	0
Options	0	0	0	0	0	0	0	0	0
to Sell	0	0	1	1	0	0	0	0	0

Institutional Decisions

	4Q2008	1Q2009	2Q2009
to Buy	112	75	78
to Sell	93	123	96
Hld's(000)	33160	34611	33587

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	© VALUE LINE PUB., INC	12-14
High:					18.1	18.3	19.7	19.0	19.0	22.0	24.3	25.8	28.4	28.0	35.3	32.0			Target Price Range	2012 | 2013 | 2014
Low:					13.9	14.3	11.8	14.6	13.7	16.6	19.2	21.3	23.2	22.0	21.7	20.7				
	10.57	10.82	8.76	11.59	12.84	12.45	10.97	13.01	17.06	12.57	18.14	19.95	22.96	25.80	23.37	28.52	26.45	27.25	Revenues per sh [A]	30.00
	1.14	1.13	1.25	1.49	1.62	1.72	1.70	1.77	1.81	1.81	2.04	2.31	2.43	2.51	2.64	2.77	2.85	2.95	"Cash Flow" per sh	3.15
	.73	.68	.73	.84	.93	.98	.93	1.01	1.01	.95	1.11	1.27	1.32	1.27	1.40	1.49	1.60	1.70	Earnings per sh [B]	1.90
	.48	.51	.54	.57	.61	.64	.58	.72	.76	.80	.82	.85	.91	.95	.99	1.03	1.07	1.11	Div'ds Decl'd per sh [C▪]	1.23
	1.58	1.95	1.72	1.64	1.52	1.48	1.58	1.85	1.29	1.21	1.16	1.85	2.50	2.74	1.85	2.47	2.40	2.10	Cap'l Spending per sh	2.25
	5.45	5.68	6.16	6.53	6.95	7.45	7.86	8.26	8.63	8.91	9.36	11.15	11.53	11.83	11.99	12.11	12.70	13.25	Book Value per sh [D]	15.05
	52.30	53.15	57.67	59.10	60.39	61.48	62.59	63.83	64.93	66.18	67.31	76.67	76.70	74.61	73.23	73.26	73.50	73.50	Common Shs Outst'g [E]	73.00
	15.4	15.7	13.8	13.9	13.6	16.3	17.7	14.3	16.7	18.4	16.7	16.6	17.9	19.2	18.7	18.2	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	18.0
	.91	1.03	.92	.87	.78	.85	1.01	.93	.86	1.01	.95	.88	.95	1.04	.89	1.15			Relative P/E Ratio	1.50
	4.3%	4.8%	5.4%	4.9%	4.6%	4.0%	4.1%	5.0%	4.5%	4.6%	4.4%	4.1%	3.8%	3.9%	3.8%	3.8%			Avg Ann'l Div'd Yield	3.6%
							686.5	830.4	1107.9	832.0	1220.8	1529.7	1761.1	1924.7	1711.3	2089.1	1945	2005	Revenues ($mill) [A]	2190
							58.2	64.0	65.5	62.2	74.4	95.2	101.3	97.2	104.4	110.0	115	125	Net Profit ($mill)	140
							39.7%	34.7%	34.6%	33.1%	34.8%	35.1%	33.7%	34.2%	33.0%	36.4%	35.0%	35.0%	Income Tax Rate	35.0%
							8.5%	7.7%	5.9%	7.5%	6.1%	6.2%	5.8%	5.0%	6.1%	5.3%	6.1%	6.3%	Net Profit Margin	6.4%
							46.2%	46.1%	47.6%	43.9%	42.2%	43.6%	41.4%	48.3%	48.4%	47.2%	47.5%	48.0%	Long-Term Debt Ratio	47.0%
							53.8%	53.9%	52.4%	56.1%	57.8%	56.4%	58.6%	51.7%	51.6%	52.8%	52.5%	52.0%	Common Equity Ratio	53.0%
							914.7	978.4	1069.4	1051.6	1090.2	1514.9	1509.2	1707.9	1703.3	1681.5	1775	1875	Total Capital ($mill)	2075
							1047.0	1072.0	1114.7	1158.5	1812.3	1849.8	1939.1	2075.3	2141.5	2240.8	2250	2300	Net Plant ($mill)	2450
							8.1%	8.3%	7.9%	7.8%	8.6%	7.8%	8.2%	7.2%	7.8%	8.2%	8.0%	8.0%	Return on Total Cap'l	8.0%
							11.8%	12.1%	11.7%	10.6%	11.8%	11.1%	11.5%	11.0%	11.9%	12.4%	12.5%	13.0%	Return on Shr. Equity	12.5%
							11.8%	12.1%	11.7%	10.6%	11.8%	11.1%	11.5%	11.0%	11.9%	12.4%	12.5%	13.0%	Return on Com Equity	12.5%
							3.3%	3.5%	3.0%	1.7%	3.1%	3.7%	3.5%	2.8%	3.5%	3.9%	4.0%	4.5%	Retained to Com Eq	4.5%
							72%	71%	75%	83%	74%	66%	68%	74%	70%	69%	67%	65%	All Div'ds to Net Prof	65%

% TOT. RETURN 8/09

	THIS STOCK	VL ARITH. INDEX
1 yr.	-13.5	-4.4
3 yr.	3.2	0.4
5 yr.	34.0	32.3

CAPITAL STRUCTURE as of 4/30/09
Total Debt $1029.0 mill. Due in 5 Yrs $150.0 mill.
LT Debt $793.5 mill. LT Interest $55.5 mill.
(LT interest earned: 4.0x; total interest coverage: 3.7x)

Pension Assets-10/08 $150.3 mill.
Oblig. $143.5 mill.

Pfd Stock None

Common Stock 72,959,779 shs.
as of 6/2/09
MARKET CAP: $1.8 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2007	2008	4/30/09
Cash Assets	7.5	7.0	20.7
Other	427.8	593.8	528.0
Current Assets	435.3	600.8	548.7
Accts Payable	143.6	132.3	94.0
Debt Due	195.0	436.5	235.5
Other	75.9	112.7	182.3
Current Liab.	424.5	681.5	511.8
Fix. Chg. Cov.	309%	341%	350%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '06-'08 to '12-'14
Revenues	7.5%	10.0%	2.5%
"Cash Flow"	5.0%	7.0%	3.0%
Earnings	4.5%	6.5%	5.5%
Dividends	5.0%	4.5%	3.5%
Book Value	5.5%	6.0%	4.0%

Fiscal Year Ends	QUARTERLY REVENUES ($ mill.) [A] Jan.31	Apr.30	Jul.31	Oct.31	Full Fiscal Year
2006	921.4	483.2	237.9	282.2	1924.7
2007	677.2	531.5	224.4	278.2	1711.3
2008	788.5	634.2	354.7	311.7	2089.1
2009	779.6	455.4	*372*	*338*	*1945*
2010	*790*	*470*	*390*	*355*	*2005*

Fiscal Year Ends	EARNINGS PER SHARE [A B] Jan.31	Apr.30	Jul.31	Oct.31	Full Fiscal Year
2006	.94	.57	d.16	d.08	1.27
2007	.94	.69	d.12	d.11	1.40
2008	1.12	.66	d.10	d.18	1.49
2009	1.10	.73	*d.10*	*d.13*	*1.60*
2010	*1.12*	*.75*	*d.08*	*d.09*	*1.70*

Calendar	QUARTERLY DIVIDENDS PAID [C▪] Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	.215	.23	.23	.23	.91
2006	.23	.24	.24	.24	.95
2007	.24	.25	.25	.25	.99
2008	.25	.26	.26	.26	1.03
2009	.26	.27	.27		

BUSINESS: Piedmont Natural Gas Company is primarily a regulated natural gas distributor, serving over 935,724 customers in North Carolina, South Carolina, and Tennessee. 2008 revenue mix: residential (39%), commercial (24%), industrial (12%), other (25%). Principal suppliers: Transco and Tennessee Pipeline. Gas costs: 73.5% of revenues. '08 deprec. rate: 3.2%. Estimated plant age: 8.7 years. Non-regulated operations: sale of gas-powered heating equipment; natural gas brokering; propane sales. Has about 1,833 employees. Officers & directors own about 1.1% of common stock (1/09 proxy). Chairman, CEO, & President: Thomas E. Skains. Inc.: NC. Address: 4720 Piedmont Row Drive, Charlotte, NC 28210. Telephone: 704-364-3120. Internet: www.piedmontng.com.

Piedmont Natural Gas has posted a mixed bag of financial results thus far in 2009. Quarterly sales in the first half declined, year over year, as the weakened economy continued to weigh on both residential and commercial new construction activities. As a result, PNY's regulated utility segment has been experiencing declining customer growth compounded by rising conservation practices at existing accounts. Nonetheless, margins have been widening, thanks largely to lower natural gas costs, which have more than offset the rise in operating expenses. These trends resulted in a 10.6% hike in the April-period bottom line.

Meantime, slumping demand has put the brakes on many of the company's capital projects. Management has opted to defer its pipeline infrastructure enhancement plans that were scheduled to serve the new gas-fired power generation markets of North Carolina. Moreover, construction of the liquid natural gas storage facility in Robeson County, NC has also been put off. Current customer growth projections in that region indicate this facility may not be necessary for a few more years. As a result, PNY is holding off on construction until 2012, with a potential in-service date of 2015. These moves ought to help the company conserve cash at a time when rising accounts receivable and higher delinquencies are a distinct possibility.

Still, we have raised our earnings estimates for this year and next by a nickel. The main culprit for the dissapointing 2009 revenues can be attributed to the slumping commodity prices. This trend masks Piedmont's continued customer growth, a figure that should register at about 1%-1.5% this year. Meantime, lower gas costs should continue to offset the margin tightening associated with diminished volumes. Consequently, annual earnings gains should persist.

These neutrally ranked shares have some appeal as an income vehicle. Recovery potential for the pull to 2012-2014 is about average for a utility. But the recent dividend hike, and relative stability provided by an ever-increasing customer base, shines a positive light on this good-quality stock.

Bryan J. Fong *September 11, 2009*

(A) Fiscal year ends October 31st.
(B) Diluted earnings. Excl. extraordinary item: '00, 8¢. Excl. nonrecurring charge: '97, 2¢. Next earnings report due early Nov. Quarters may not add to total due to change in shares outstanding.
(C) Dividends historically paid mid-January, April, July, October.
▪ = Div'd reinvest. plan available; 5% discount.
(D) Includes deferred charges. In 2008: $16.3 million, 22¢/share.
(E) In millions, adjusted for stock split.

Company's Financial Strength	B++
Stock's Price Stability	100
Price Growth Persistence	60
Earnings Predictability	80

SOUTH JERSEY INDS. NYSE-SJI

RECENT PRICE 34.29 | P/E RATIO 14.3 (Trailing: 14.8 / Median: 14.8) | RELATIVE P/E RATIO 0.89 | DIV'D YLD 3.6% | VALUE LINE

TIMELINESS 3 Lowered 8/14/09
SAFETY 2 Lowered 1/4/91
TECHNICAL 5 Lowered 9/11/09
BETA .65 (1.00 = Market)

2012-14 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	50	(+45%)	13%
Low	35	(Nil)	5%

Insider Decisions

	O	N	D	J	F	M	A	M	J
to Buy	0	0	1	0	0	1	0	0	0
Options	0	0	0	0	0	0	0	0	0
to Sell	0	2	0	0	0	4	0	1	2

Institutional Decisions

	4Q2008	1Q2009	2Q2009
to Buy	75	73	70
to Sell	69	70	78
Hld's(000)	16545	16545	15858

	High:	15.4	15.4	15.1	17.0	16.3	20.3	26.5	32.4	34.3	41.3	40.6	40.8		Target Price Range 2012 | 2013 | 2014
	Low:	11.0	10.8	12.3	13.8	14.1	15.3	19.7	24.9	25.6	31.2	25.2	32.0		

LEGENDS
1.40 x Dividends p sh divided by Interest Rate
Relative Price Strength
2-for-1 split 7/05
Options: Yes
Shaded area: prior recession
Latest recession began 12/07

2-for-

80 60 50 40 30 25 20 15 10 7.5

Percent shares traded 15 10 5

% TOT. RETURN 8/09

	THIS STOCK	VL ARITH. INDEX
1 yr.	0.4	-4.4
3 yr.	31.1	0.4
5 yr.	79.3	32.3

1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	© VALUE LINE PUB., INC.	12-14
17.03	17.45	16.50	16.52	16.18	20.89	17.60	22.43	35.30	20.69	26.34	29.51	31.78	31.76	32.30	32.36	30.85	31.60	Revenues per sh	36.35
1.54	1.35	1.65	1.54	1.60	1.44	1.84	1.95	1.90	2.12	2.24	2.44	2.51	3.51	3.20	3.48	3.35	3.60	"Cash Flow" per sh	4.20
.78	.61	.83	.85	.86	.64	1.01	1.08	1.15	1.22	1.37	1.58	1.71	2.46	2.09	2.27	2.40	2.65	Earnings per sh A	3.10
.72	.72	.72	.72	.72	.72	.72	.73	.74	.75	.78	.82	.86	.92	1.01	1.11	1.20	1.28	Div'ds Decl'd per sh B ■	1.50
1.87	1.93	2.08	2.01	2.30	3.06	2.19	2.21	2.82	3.47	2.36	2.67	3.21	2.51	1.88	2.08	2.35	2.40	Cap'l Spending per sh	2.90
7.17	7.23	7.34	8.03	6.43	6.23	6.74	7.25	7.81	9.67	11.26	12.41	13.50	15.11	16.25	17.33	18.65	19.35	Book Value per sh C	22.75
19.61	21.43	21.44	21.51	21.54	21.56	22.30	23.00	23.72	24.41	26.46	27.76	28.98	29.33	29.61	29.73	30.00	31.00	Common Shs Outst'g D	33.00
15.8	16.1	12.2	13.3	13.8	21.2	13.3	13.0	13.6	13.5	13.3	14.1	16.6	11.9	17.2	15.9	Bold figures are Value Line estimates		Avg Ann'l P/E Ratio	14.0
.93	1.06	.82	.83	.80	1.10	.76	.85	.70	.74	.76	.74	.88	.64	.91	.95			Relative P/E Ratio	.95
5.9%	7.4%	7.2%	6.4%	6.1%	5.3%	5.4%	5.2%	4.7%	4.6%	4.3%	3.7%	3.0%	3.2%	2.8%	3.1%			Avg Ann'l Div'd Yield	3.5%
						392.5	515.9	837.3	505.1	696.8	819.1	921.0	931.4	956.4	962.0	925	980	Revenues ($mill)	1200
						22.0	24.7	26.8	29.4	34.6	43.0	48.6	72.0	61.8	67.7	70.0	80.0	Net Profit ($mill)	100
						42.8%	43.1%	42.2%	41.4%	40.6%	40.9%	41.5%	41.3%	41.9%	47.7%	38.0%	40.0%	Income Tax Rate	40.0%
						5.6%	4.8%	3.2%	5.8%	5.0%	5.2%	5.3%	7.7%	6.5%	7.0%	7.6%	8.2%	Net Profit Margin	8.3%
						53.8%	54.1%	57.0%	53.6%	50.8%	48.7%	44.9%	44.7%	42.7%	39.2%	38.5%	40.0%	Long-Term Debt Ratio	38.0%
						37.0%	37.6%	35.9%	46.1%	49.0%	51.0%	55.1%	55.3%	57.3%	60.8%	61.5%	60.0%	Common Equity Ratio	62.0%
						405.9	443.5	516.2	612.5	608.4	675.0	710.3	801.1	839.0	846.0	910	1000	Total Capital ($mill)	1210
						533.3	562.2	607.0	666.6	748.3	799.9	877.3	920.0	948.9	982.6	1030	1075	Net Plant ($mill)	1250
						7.4%	7.4%	6.9%	7.6%	7.3%	7.9%	8.3%	10.1%	8.6%	8.5%	8.5%	9.0%	Return on Total Cap'l	9.0%
						11.7%	12.1%	12.1%	12.4%	11.5%	12.4%	12.4%	16.3%	12.8%	13.1%	12.5%	13.5%	Return on Shr. Equity	13.5%
						14.6%	14.8%	12.8%	12.5%	11.6%	12.5%	12.4%	16.3%	12.8%	13.1%	12.5%	13.5%	Return on Com Equity	13.5%
						4.2%	4.8%	3.5%	4.7%	5.0%	5.9%	6.2%	10.2%	6.7%	6.7%	6.0%	6.5%	Retained to Com Eq	6.5%
						72%	67%	76%	62%	57%	52%	50%	37%	48%	49%	51%	50%	All Div'ds to Net Prof	50%

CAPITAL STRUCTURE as of 6/30/09
Total Debt $496.4 mill. Due in 5 Yrs $228.8 mill.
LT Debt $332.7 mill. LT Interest $16.0 mill.
(Total interest coverage: 8.4x)

Pension Assets-12/08 $88.3 mill. Oblig. $142.7 mill.

Pfd Stock none

Common Stock 29,796,232 common shs. as of 8/3/09

MARKET CAP: $1.0 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2007	2008	6/30/09
Cash Assets	11.7	5.8	6.0
Other	316.6	429.3	351.4
Current Assets	328.3	435.1	357.4
Accts Payable	101.2	120.2	87.9
Debt Due	118.4	237.6	163.7
Other	108.7	142.1	135.7
Current Liab.	328.3	499.9	387.3
Fix. Chg. Cov.	476%	598%	834%

BUSINESS: South Jersey Industries, Inc. is a holding company. Its subsidiary, South Jersey Gas Co., distributes natural gas to 340,136 customers in New Jersey's southern counties, which covers about 2,500 square miles and includes Atlantic City. Gas revenue mix '08: residential, 46%; commercial, 23%; cogeneration and electric generation, 6%; industrial, 25%. Non-utility operations include: South Jersey Energy, South Jersey Resources Group, Marina Energy, and South Jersey Energy Service Plus. Has 602 employees. Off./dir. control 1.0% of com. shares; Barclays, 7.5%; Keeley Asset Management, 5.6% (3/09 proxy). Chmn. & CEO: Edward Graham. Incorp.: NJ. Address: 1 South Jersey Plaza, Folsom, NJ 08037. Tel.: 609-561-9000. Internet: www.sjindustries.com.

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '06-'08 to '12-'14
Revenues	6.0%	3.0%	2.0%
"Cash Flow"	8.5%	10.0%	3.5%
Earnings	11.5%	13.0%	5.5%
Dividends	3.6%	6.0%	7.0%
Book Value	9.0%	11.0%	6.0%

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	372.6	153.8	154.7	250.3	931.4
2007	368.4	171.7	156.2	260.1	956.4
2008	348.1	135.8	210.4	267.7	962.0
2009	362.2	134.5	*150*	*278.3*	*925*
2010	*365*	*160*	*170*	*285*	*980*

Calendar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	1.06	.20	.51	.69	2.46
2007	1.30	.21	d.05	.63	2.09
2008	1.32	.26	.04	.67	2.27
2009	1.46	.15	*.05*	*.74*	*2.40*
2010	*1.45*	*.25*	*.10*	*.85*	*2.65*

Calendar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	--	.213	.213	.438	.86
2006	--	.225	.225	.470	.92
2007	--	.245	.245	.515	1.01
2008	--	.270	.270	.568	1.11
2009	--	.298	.298		

South Jersey Industries posted a flat top-line comparison and lower share earnings for the second quarter. Earnings declined moderately at subsidiary South Jersey Gas in the recent interim. Lower interest payments were more than offset by higher pension expense and an increase in other operating costs at this business. Meanwhile, significantly cooler temperatures during the period resulted in lower air conditioning demand and reduced earnings at the on-site energy production business, Marina Energy. The Asset Management and Marketing business also posted an earnings decline for the quarter.

The company has attractive prospects for the coming years. Customer growth at South Jersey Gas has continued at a steady clip, despite weakness in the broader economy. Natural gas remains the fuel of choice in the markets served by the utility, and SJG continues to see significant interest in conversions from other fuel sources to natural gas. Its recent gas main extension project, along with aggressive marketing efforts, should benefit the utility going forward. We anticipate solid results from the nonutility operations, as well.

South Jersey Gas has filed with the New Jersey Board of Public Utilities to reduce rates by 20.2%. The approval of the Basic Gas Supply Service (BGSS) petition would allow customers to realize significant savings, and provide an incentive for homeowners to switch from oil to natural gas. The BGSS clause allows South Jersey to pass along increases and decreases in gas costs directly to consumers. The company's ability to secure lower-priced gas has allowed it to provide customers with the lower rates.

Shares of South Jersey Industries have slipped one notch in Timeliness, and are now neutrally ranked for year-ahead performance. Looking further out, we anticipate higher revenues and share earnings at the company by 2012-2014. Moreover, SJI scores high marks for Safety, Price Stability, and Earnings Predictability. But from the present quotation, this issue has below-average, though reasonably well-defined, total return potential for the coming years.

Michael Napoli, CPA *September 11, 2009*

(A) Based on GAAP EPS through 2008, economic earnings thereafter. GAAP EPS: '07, $2.10; '08, $2.58. Excl. nonrecur. gain (loss): '01, $0.13; '08, $0.31. Excl gain (losses) from discont. ops.: '99, ($0.02); '00, ($0.04); '01, ($0.02); '02, ($0.04); '03, ($0.09); '05, ($0.02); '06, ($0.02); '07, $0.01. Earnings may not sum due to rounding. Next egs. report due in November. (B) Div'ds paid early Apr., Jul., Oct., and late Dec. ■ Div. reinvest. plan avail. (C) Incl. regulatory assets. In 2008: $270.4 mill., $9.10 per shr. (D) In millions, adj. for split.

Company's Financial Strength	B++
Stock's Price Stability	100
Price Growth Persistence	90
Earnings Predictability	80

SOUTHWEST GAS NYSE-SWX

RECENT PRICE 23.98 | P/E RATIO 13.5 (Trailing: 16.3 / Median: 19.0) | RELATIVE P/E RATIO 0.84 | DIV'D YLD 4.1% | VALUE LINE

TIMELINESS 3 Raised 5/23/08
SAFETY 3 Lowered 1/4/91
TECHNICAL 4 Lowered 7/24/09
BETA .75 (1.00 = Market)

2012-14 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	40	(+65%)	17%
Low	30	(+25%)	10%

Insider Decisions

	O	N	D	J	F	M	A	M	J
to Buy	1	1	0	0	0	3	0	0	0
Options	0	0	0	0	0	0	0	0	0
to Sell	0	0	0	0	0	0	0	0	1

Institutional Decisions

	4Q2008	1Q2009	2Q2009
to Buy	83	83	86
to Sell	75	71	71
Hld's(000)	32362	32859	32802

	High:	26.9	29.5	23.0	24.7	25.3	23.6	26.2	26.1	39.4	39.9	33.3	26.4	17.1
	Low:	17.3	20.4	16.9	18.6	18.1	19.3	21.5	23.5	26.0	26.5	21.1	17.1	

LEGENDS
— 1.50 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
Options: Yes
Shaded area: prior recession
Latest recession began 12/07

Target Price Range 2012 | 2013 | 2014

% TOT. RETURN 8/09

	THIS STOCK	VL ARITH. INDEX
1 yr.	-16.6	-4.4
3 yr.	-20.7	0.4
5 yr.	20.3	32.3

1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	© VALUE LINE PUB., INC.	12-14
25.68	28.16	23.03	24.09	26.73	30.17	30.24	32.61	42.98	39.68	35.96	40.14	43.59	48.47	50.28	48.53	*39.55*	*41.60*	Revenues per sh	*52.00*
3.24	5.09	2.65	3.00	3.85	4.48	4.45	4.57	4.79	5.07	5.11	5.57	5.20	5.97	6.21	5.75	*5.95*	*6.15*	"Cash Flow" per sh	*7.30*
.63	1.22	.10	.25	.77	1.65	1.27	1.21	1.15	1.16	1.13	1.66	1.25	1.98	1.95	1.39	*1.75*	*1.90*	Earnings per sh [A]	*2.30*
.74	.80	.82	.82	.82	.82	.82	.82	.82	.82	.82	.82	.82	.82	.86	.90	*.95*	*1.00*	Div'ds Decl'd per sh [B]†	*1.15*
5.43	6.64	6.79	8.19	6.19	6.40	7.41	7.04	8.17	8.50	7.03	8.23	7.49	8.27	7.96	6.79	*5.50*	*5.95*	Cap'l Spending per sh	*7.20*
15.96	16.38	14.55	14.20	14.09	15.67	16.31	16.82	17.27	17.91	18.42	19.18	19.10	21.58	22.98	23.49	*25.25*	*26.05*	Book Value per sh	*28.00*
21.00	21.28	24.47	26.73	27.39	30.41	30.99	31.71	32.49	33.29	34.23	35.79	39.33	41.77	42.81	44.19	*45.50*	*47.00*	Common Shs Outst'g [C]	*50.00*
26.5	14.0	NMF	69.3	24.1	13.2	21.1	16.0	19.0	19.9	19.2	14.3	20.6	15.9	17.3	20.3	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*15.0*
1.57	.92	NMF	4.34	1.39	.69	1.20	1.04	.97	1.09	1.09	.76	1.10	.85	.92	1.22			Relative P/E Ratio	*1.00*
4.4%	4.7%	5.4%	4.7%	4.4%	3.8%	3.1%	4.2%	3.8%	3.6%	3.8%	3.5%	3.2%	2.6%	2.6%	3.2%			Avg Ann'l Div'd Yield	*3.3%*
						936.9	1034.1	1396.7	1320.9	1231.0	1477.1	1714.3	2024.7	2152.1	2144.7	*1800*	*1950*	Revenues ($mill)	*2600*
						39.3	38.3	37.2	38.6	38.5	58.9	48.1	80.5	83.2	61.0	*80.0*	*90.0*	Net Profit ($mill)	*115*
						35.5%	26.2%	34.5%	32.8%	30.5%	34.8%	29.7%	37.3%	36.5%	40.1%	*38.0%*	*38.0%*	Income Tax Rate	*35.0%*
						4.2%	3.7%	2.7%	2.9%	3.1%	4.0%	2.8%	4.0%	3.9%	2.8%	*4.4%*	*4.6%*	Net Profit Margin	*4.4%*
						60.3%	60.2%	56.2%	62.5%	66.0%	64.2%	63.8%	60.6%	58.1%	55.3%	*51.0%*	*50.5%*	Long-Term Debt Ratio	*49.0%*
						35.5%	35.8%	39.6%	34.1%	34.0%	35.8%	36.2%	39.4%	41.9%	44.7%	*49.0%*	*49.5%*	Common Equity Ratio	*51.0%*
						1424.7	1489.9	1417.6	1748.3	1851.6	1968.6	2076.0	2287.8	2349.7	2323.3	*2350*	*2475*	Total Capital ($mill)	*2750*
						1581.1	1666.1	1825.6	1979.5	2175.7	2336.0	2489.1	2668.1	2845.3	2983.3	*3050*	*3150*	Net Plant ($mill)	*3600*
						4.8%	4.6%	5.1%	4.3%	4.2%	5.0%	4.3%	5.5%	5.5%	4.5%	*5.0%*	*5.5%*	Return on Total Cap'l	*6.0%*
						7.0%	6.5%	6.0%	5.8%	6.1%	8.3%	6.4%	8.9%	8.5%	5.9%	*7.0%*	*7.5%*	Return on Shr. Equity	*8.0%*
						7.8%	7.2%	6.6%	6.5%	6.1%	8.3%	6.4%	8.9%	8.5%	5.9%	*7.0%*	*7.5%*	Return on Com Equity	*8.0%*
						2.8%	2.4%	1.9%	1.9%	1.7%	4.3%	2.2%	5.2%	4.8%	2.1%	*3.0%*	*3.5%*	Retained to Com Eq	*4.0%*
						64%	67%	71%	70%	72%	49%	65%	42%	44%	63%	*64%*	*52%*	All Div'ds to Net Prof	*50%*

CAPITAL STRUCTURE as of 6/30/09

Total Debt $1228.0 mill. Due in 5 Yrs $566.1 mill.
LT Debt $1222.9 mill. LT Interest $85.0 mill.
(Total interest coverage: 2.2x)
Leases, Uncapitalized Annual rentals $6.0 mill.
Pension Assets-12/08 $342.9 mill. Oblig. $558.9 mill.

Pfd Stock None

Common Stock 44,822,466 shs.
as of 7/30/09

MARKET CAP: $1.1 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2007	2008	6/30/09
Cash Assets	32.0	26.4	26.8
Other	470.5	411.7	232.5
Current Assets	502.5	438.1	259.3
Accts Payable	220.7	191.4	68.0
Debt Due	47.1	62.6	5.1
Other	260.1	255.7	303.0
Current Liab.	527.9	509.9	376.1
Fix. Chg. Cov.	229%	224%	233%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '06-'08 to '12-'14
Revenues	6.0%	4.5%	*1.0%*
"Cash Flow"	4.5%	3.5%	*3.5%*
Earnings	7.0%	9.0%	*4.5%*
Dividends	0.5%	1.0%	*5.0%*
Book Value	4.5%	5.0%	*3.5%*

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	676.9	430.9	351.8	565.1	2024.7
2007	793.7	426.6	371.5	560.3	2152.1
2008	813.6	447.3	374.4	509.4	2144.7
2009	589.9	387.6	*275*	*447.5*	*1800*
2010	*730*	*410*	*310*	*500*	*1950*

Calendar	EARNINGS PER SHARE [A] Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	1.11	.02	d.26	1.11	1.98
2007	1.17	d.01	d.22	1.01	1.95
2008	1.14	d.06	d.38	.71	1.39
2009	1.12	d.01	*d.35*	*.99*	*1.75*
2010	*1.15*	*Nil*	*d.30*	*1.05*	*1.90*

Calendar	QUARTERLY DIVIDENDS PAID [B]■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	.205	.205	.205	.205	.82
2006	.205	.205	.205	.205	.82
2007	.205	.215	.215	.215	.85
2008	.215	.225	.225	.225	.89
2009	.225	.238	.238		

BUSINESS: Southwest Gas Corporation is a regulated gas distributor serving approximately 1.8 million customers in sections of Arizona, Nevada, and California. Comprised of two business segments: natural gas operations and construction services. 2008 margin mix: residential and small commercial, 66%; large commercial and industrial, 5%; transportation, 9%. Total throughput: 2.4 billion therms. Sold PriMerit Bank, 7/96. Has 4,732 employees. Off. & Dir. own 2.0% of common stock; T. Rowe Price Associates, Inc., 7.0%; Barclays Global Investors, 6.8%; GAMCO Investors, Inc., 6.4% (3/09 Proxy). Chairman: James J. Kropid. CEO: Jeffrey W. Shaw. Inc.: CA. Address: 5241 Spring Mountain Road, Las Vegas, Nevada 89146. Telephone: 702-876-7237. Internet: www.swgas.com.

Southwest Gas reported unfavorable top-line performance for the second quarter. The recent recession stymied customer growth and resulted in lower usage. On the bright side, rate relief in Arizona and California (discussed below) supported results. Consequently, the company's share loss of $0.01 compared favorably with the prior-year tally. Losses are common during the second and third quarters, owing to the seasonal nature of the business. Looking forward, we expect lower revenue and a normal-sized share loss for the third quarter. Earnings comparisons ought to improve in the fourth quarter, assuming a better operating environment and greater cost control. Overall, we anticipate lower revenue and higher share earnings for Southwest in full-year 2009. Bottom-line growth may well continue next year.

The company is awaiting a rate case decision from the state of Nevada. Southwest is seeking a $30.5 million rate increase to compensate it for higher operating costs in that state. The request asks that the new rates take effect at the beginning of November. The company is also seeking an improvement in rate design. Specifically, SWX wants to implement a decoupled rate structure that would allow it more freedom in pursuing customer conservation opportunities. This follows recent prior rate case settlements in California and Arizona.

Investors should be mindful of several caveats. Warmer-than-normal temperatures during the winter months can hurt performance at Southwest Gas. In addition, the company will probably incur greater operating costs as it continues to expand, and profitability may suffer if rate relief cannot keep up with rising expenses.

The pace of customer growth should pick up in the future. That's assuming economic conditions in Southwest's service areas improve in the coming years. As a result, we anticipate higher revenues and share earnings at the company by 2012-2014. Moreover, income-oriented investors may find the stock's prospects for dividend growth attractive. But from the present quotation, this neutrally ranked equity features about-average total return potential for a utility.

Michael Napoli, CPA *September 11, 2009*

(A) Based on avg. shares outstand. thru. '96, then diluted. Excl. nonrec. gains (losses): '93, 8¢; '97, 16¢; '02, (10¢); '05, (11¢); '06, 7¢. Incl. asset writedown: '93, 44¢. Excl. loss from disc. ops.: '95, 75¢. Totals may not sum due to rounding. Next egs. report due early November. (B) Dividends historically paid early March, June, September, December. ■† Div'd reinvestment and stock purchase plan avail. (C) In millions.

Company's Financial Strength	B
Stock's Price Stability	100
Price Growth Persistence	65
Earnings Predictability	70

WGL HOLDINGS NYSE-WGL

RECENT PRICE 33.30 | P/E RATIO 13.2 (Trailing: 13.1 Median: 15.0) | RELATIVE P/E RATIO 0.82 | DIV'D YLD 4.4% | VALUE LINE

TIMELINESS 3 Lowered 6/5/09
SAFETY 1 Raised 4/2/93
TECHNICAL 5 Lowered 9/11/09
BETA .65 (1.00 = Market)

2012-14 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	45	(+35%)	12%
Low	35	(+5%)	6%

Insider Decisions

	O	N	D	J	F	M	A	M	J
to Buy	0	0	0	0	0	0	0	0	0
Options	0	4	0	0	1	0	0	0	0
to Sell	0	4	0	0	4	1	0	2	0

Institutional Decisions

	4Q2008	1Q2009	2Q2009
to Buy	94	97	85
to Sell	95	96	98
Hld's(000)	31580	30919	31333

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	© VALUE LINE PUB., INC	'12-14
	21.55	21.69	19.30	22.19	24.16	23.74	20.92	22.19	29.60	32.63	42.45	42.93	44.94	53.96	53.51	52.65	53.20	54.25	Revenues per sh [A]	57.60
	2.25	2.43	2.51	2.93	3.02	2.79	2.74	3.20	3.24	2.63	4.00	3.87	3.97	3.89	3.89	4.34	4.40	4.45	"Cash Flow" per sh	4.70
	1.31	1.42	1.45	1.85	1.85	1.54	1.47	1.79	1.88	1.14	2.30	1.98	2.13	1.94	2.10	2.44	2.50	2.55	Earnings per sh [B]	2.70
	1.09	1.11	1.12	1.14	1.17	1.20	1.22	1.24	1.26	1.27	1.28	1.30	1.32	1.35	1.37	1.41	1.47	1.51	Div'ds Decl'd per sh [C] [E]	1.63
	2.43	2.84	2.63	2.85	3.20	3.62	3.42	2.67	2.68	3.34	2.85	2.33	2.32	3.27	3.33	2.70	3.00	3.00	Cap'l Spending per sh	2.50
	11.04	11.51	11.95	12.79	13.48	13.86	14.72	15.31	16.24	15.78	16.25	16.95	17.80	18.86	19.63	20.99	22.00	23.05	Book Value per sh [D]	26.20
	41.50	42.19	42.93	43.70	43.70	43.84	46.47	46.47	46.54	48.56	48.63	48.67	48.65	48.89	49.45	49.92	50.00	50.00	Common Shs Outst'g [E]	50.00
	15.6	14.0	12.7	11.5	12.7	17.2	17.3	14.6	14.7	23.1	11.1	14.2	14.7	15.5	15.6	13.7	Bold figures are Value Line estimates		Avg Ann'l P/E Ratio	15.0
	.92	.92	.65	.72	.73	.89	.99	.95	.75	1.26	.63	.75	.78	.84	.82	.85			Relative P/E Ratio	1.00
	5.3%	5.6%	6.1%	5.4%	5.0%	4.5%	4.8%	4.8%	4.6%	4.8%	5.0%	4.6%	4.2%	4.5%	4.2%	4.2%			Avg Ann'l Div'd Yield	4.0%
							972.1	1031.1	1446.5	1584.8	2064.2	2089.6	2186.3	2637.9	2646.0	2628.2	2660	2715	Revenues ($mill) [A]	2880
							68.8	84.6	89.9	65.7	112.3	98.0	104.8	96.0	102.9	122.9	125	130	Net Profit ($mill)	135
							36.0%	36.1%	39.6%	34.0%	38.0%	38.2%	37.4%	39.6%	39.1%	37.1%	37.0%	37.0%	Income Tax Rate	38.0%
							7.1%	8.2%	6.2%	3.5%	5.4%	4.7%	4.8%	3.6%	3.9%	4.7%	4.7%	4.8%	Net Profit Margin	4.7%
							41.5%	43.1%	41.7%	45.7%	43.8%	40.9%	39.5%	37.8%	37.9%	35.9%	36.5%	35.5%	Long-Term Debt Ratio	34.0%
							56.1%	54.8%	56.3%	52.4%	54.3%	57.2%	58.6%	60.4%	60.3%	62.4%	62.0%	63.0%	Common Equity Ratio	64.5%
							1218.5	1299.2	1400.8	1462.5	1454.9	1443.6	1478.1	1526.1	1625.4	1679.5	1780	1830	Total Capital ($mill)	2040
							1402.7	1460.3	1519.7	1606.8	1874.9	1916.6	1969.7	2067.9	2150.4	2208.3	2325	2420	Net Plant ($mill)	2720
							7.1%	7.9%	7.9%	5.3%	9.1%	8.2%	8.5%	7.6%	7.6%	8.5%	8.0%	8.0%	Return on Total Cap'l	8.0%
							9.7%	11.4%	11.0%	7.0%	13.7%	11.5%	11.7%	10.1%	10.2%	11.4%	11.5%	11.0%	Return on Shr. Equity	10.5%
							9.9%	11.7%	11.2%	7.2%	14.0%	11.7%	12.0%	10.3%	10.4%	11.6%	12.0%	11.5%	Return on Com Equity	11.0%
							1.8%	3.7%	3.8%	NMF	6.2%	4.1%	4.6%	3.2%	3.5%	5.0%	4.5%	4.5%	Retained to Com Eq	4.0%
							82%	69%	67%	112%	56%	65%	62%	69%	65%	57%	59%	59%	All Div'ds to Net Prof	60%

LEGENDS
1.30 x Dividends p sh divided by Interest Rate
Relative Price Strength
Options: Yes
Shaded area: prior recession
Latest recession began 12/07

Target Price Range 2012 | 2013 | 2014

% TOT. RETURN 8/09

	THIS STOCK	VL ARITH. INDEX
1 yr.	7.4	-4.4
3 yr.	21.1	0.4
5 yr.	43.4	32.3

CAPITAL STRUCTURE as of 6/30/09
Total Debt $728.7 mill. Due in 5 Yrs $264.5 mill.
LT Debt $624.1 mill. LT Interest $37.4 mill.
(LT interest earned: 5.9x; total interest coverage: 5.2x)
Pension Assets-9/08 $588.2 mill.
Oblig. $590.5 mill.
Preferred Stock $28.2 mill. Pfd. Div'd $1.9 mill.

Common Stock 50,141,229 shs.
as of 7/31/09

MARKET CAP: $1.7 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2007	2008	6/30/09
Cash Assets	4.9	6.2	41.6
Other	568.8	736.1	553.2
Current Assets	573.7	742.3	594.8
Accts Payable	216.9	243.1	202.8
Debt Due	205.4	347.0	104.6
Other	134.8	158.4	202.1
Current Liab.	557.1	748.5	509.5
Fix. Chg. Cov.	432%	490%	500%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '06-'08 to '12-'14
Revenues	6.5%	9.0%	1.5%
"Cash Flow"	3.5%	4.0%	2.5%
Earnings	2.0%	4.0%	4.0%
Dividends	1.5%	1.5%	3.0%
Book Value	4.0%	4.5%	4.5%

Fiscal Year Ends	QUARTERLY REVENUES ($ mill.) [A] Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2006	902.9	1064.5	346.9	323.6	2637.9
2007	732.9	1119.9	467.5	325.7	2646.0
2008	751.6	1020.0	464.7	391.9	2628.2
2009	821.5	1040.9	427.0	370.6	2660
2010	830	1050	445	390	2715

Fiscal Year Ends	EARNINGS PER SHARE [A] [B] Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2006	.93	1.17	d.01	d.15	1.94
2007	.92	1.27	.22	d.31	2.10
2008	.96	1.66	.06	d.24	2.44
2009	1.03	1.65	.11	d.29	2.50
2010	1.04	1.66	.12	d.27	2.55

Calendar	QUARTERLY DIVIDENDS PAID [C] [E] Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	.325	.333	.333	.333	1.32
2006	.333	.338	.338	.338	1.34
2007	.34	.34	.34	.34	1.36
2008	.34	.36	.36	.36	1.42
2009	.36	.37	.37		

BUSINESS: WGL Holdings, Inc. is the parent of Washington Gas Light, a natural gas distributor in Washington, D.C. and adjacent areas of VA and MD to resident'l and comm'l users (1,053,032 meters). Hampshire Gas, a federally regulated sub., operates an underground gas-storage facility in WV. Non-regulated subs.: Wash. Gas Energy Svcs. sells and delivers natural gas and provides energy related products in the D.C. metro area; Wash. Gas Energy Sys. designs/installs comm'l heating, ventilating, and air cond. systems. American Century Inv. own 7.1% of common stock; Off./dir. less than 1% (1/09 proxy). Chmn. & CEO: J.H. DeGraffenreidt. Inc.: D.C. and VA. Addr.: 1100 H St., N.W., Washington, D.C. 20080. Tel.: 202-624-6410. Internet: www.wglholdings.com.

WGL Holdings posted a mixed bag of financial results for the off-peak June period. Top-line volumes fell approximately 8% over that time frame. This stemmed from weakness at the regulated utility segment, which has been dealing with lower natural gas consumption and some equipment cost issues. On a brighter note, the retail energy marketing division got a boost to its revenues and earnings contributions from higher natural gas and electricity margins. On the efficiency front, management has been performing well. Operating expenses declined 90 basis points versus the year-ago period. This stemmed from lower labor and benefits expenses. All told, the bottom line advanced nicely.

We look for the company to register a mid-single-digit earnings hike this year. The decent gains experienced earlier in 2009 will probably be offset by a larger share deficit in the fiscal fourth quarter. Despite the widening margins and solid performance from the retail energy and design build segments, demand at the mainstay regulated utility business may be soft. Also, the September period is historically and seasonally slow for WGL. Nonetheless, considering all that happened in the past year, the company appears to be in solid shape.

The LNG peaking facility is going to take longer than expected to be completed and put into service. That project will be used to support customer growth and maintain the pressure requirements of the distribution system in Chillum, MD. It was planned to be in service by the 2012-2013 winter heating season, but due to regulatory and legal issues, the following year is more likely.

These top-quality shares may appeal to income-oriented accounts, as they offer an attractive dividend yield. Typically, too, they proved much less volatile than the broader market during the recent turmoil. This partly stems from WGL's large government business in the DC metro area, which has been less affected by the economic downturn. These benefits are evident in the equity's top-notch Safety rank, and high mark for Price Stability. But appreciation potential is subpar for the pull to 2012-2014.

Bryan J. Fong *September 11, 2009*

(A) Fiscal years end Sept. 30th.
(B) Based on diluted shares. Excludes nonrecurring losses: '01, (13¢); '02, (34¢); '07, (4¢) discontinued operations: '06, (15¢). Qtly egs. may not sum to total, due to change in shares outstanding. Next earnings report due late Oct.
(C) Dividends historically paid early February, May, August, and November. ■ Dividend reinvestment plan available.
(D) Includes deferred charges and intangibles. '08: $291.3 million, $5.81/sh.
(E) In millions, adjusted for stock split.

Company's Financial Strength	A
Stock's Price Stability	100
Price Growth Persistence	80
Earnings Predictability	80

SOUTHERN UNION NYSE-SUG

RECENT PRICE 19.30 | P/E RATIO 10.5 (Trailing: 11.4 Median: 20.0) | RELATIVE P/E RATIO 0.65 | DIV'D YLD 3.1% | VALUE LINE

TIMELINESS 3 Lowered 9/14/07
SAFETY 3 New 3/24/00
TECHNICAL 3 Lowered 8/28/09
BETA 1.05 (1.00 = Market)

2012-14 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	35	(+80%)	19%
Low	25	(+30%)	10%

Insider Decisions

	O	N	D	J	F	M	A	M	J
to Buy	2	2	0	1	0	0	2	0	0
Options	0	0	0	0	0	0	0	0	0
to Sell	0	0	0	0	0	0	0	0	0

Institutional Decisions

	4Q2008	1Q2009	2Q2009
to Buy	118	110	122
to Sell	114	109	97
Hld's(000)	94196	92994	90904

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	© VALUE LINE PUB., INC.	12-14
	5.66	10.12	12.89	16.51	19.04	16.99	14.73	15.88	29.77	20.30	14.75	22.22	17.95	19.54	21.14	24.15	20.00	21.25	Revenues per sh [A]	23.25
	.58	.82	1.30	1.43	1.43	1.29	1.27	1.26	1.54	1.79	1.29	2.77	2.71	2.96	3.15	3.27	3.35	3.70	"Cash Flow" per sh	4.10
	.26	.26	.43	.54	.49	.31	.26	.20	.19	.56	.67	1.24	1.58	1.33	1.75	1.81	1.75	2.00	Earnings per sh [A B]	2.15
	--	--	--	--	--	--	--	--	--	--	--	--	--	.40	.45	.60	.64	.68	Div'ds Decl'd per sh [D ■]	.80
	.50	1.03	1.61	1.58	1.71	1.96	1.78	1.92	1.91	1.47	.99	2.79	2.49	2.80	4.98	4.75	3.60	3.15	Cap'l Spending per sh	3.40
	5.47	5.65	3.37	3.88	7.10	7.54	7.33	14.05	11.12	10.78	11.42	12.74	14.43	15.20	15.96	18.17	19.40	20.55	Book Value per sh [E]	24.35
	36.94	37.01	37.24	37.59	37.65	39.38	41.09	62.39	64.93	63.57	80.56	81.00	112.53	119.77	123.77	124.00	125.00	127.00	Common Shs Outst'g [C]	132.00
	15.9	20.3	12.5	14.1	21.2	37.5	59.8	71.1	87.5	29.5	17.9	13.4	15.0	15.3	17.5	12.6	Bold figures are Value Line estimates		Avg Ann'l P/E Ratio	14.0
	.94	1.33	.84	.88	1.22	1.95	3.41	4.62	4.48	1.61	1.02	.71	.60	.83	.93	.77			Relative P/E Ratio	.93
	--	--	--	--	--	--	--	--	--	--	--	--	--	1.5%	1.5%	2.6%			Avg Ann'l Div'd Yield	2.1%
							605.2	831.7	1932.8	1290.6	1188.5	1800.0	2019.4	2340.2	2616.7	2994.3	2500	2700	Revenues ($mill) [A]	3065
							10.4	11.1	12.9	36.6	43.7	114.0	195.7	217.1	228.7	223.8	235	275	Net Profit ($mill)	305
							40.5%	49.0%	35.3%	29.2%	35.7%	37.7%	26.6%	33.5%	29.4%	33.0%	33.0%	33.0%	Income Tax Rate	33.0%
							1.7%	1.3%	.7%	2.8%	3.7%	6.3%	9.7%	9.3%	8.7%	7.5%	9.4%	10.2%	Net Profit Margin	10.0%
							62.0%	53.1%	66.4%	63.3%	65.0%	63.1%	52.5%	56.7%	57.3%	57.9%	57.5%	58.5%	Long-Term Debt Ratio	57.5%
							38.0%	46.9%	33.6%	36.7%	35.0%	36.2%	47.5%	43.3%	42.7%	42.1%	42.5%	41.5%	Common Equity Ratio	42.5%
							792.0	1569.6	2151.5	1867.6	2632.1	3416.6	3993.2	4740.1	5166.1	5625.4	5920	6525	Total Capital ($mill)	7835
							678.3	1487.2	1456.3	1456.4	3144.8	3207.5	3485.9	4584.4	5102.3	5457.0	5750	6000	Net Plant ($mill)	6750
							3.6%	2.3%	2.9%	4.3%	3.3%	4.8%	6.5%	6.5%	6.1%	6.0%	6.0%	6.0%	Return on Total Cap'l	6.0%
							3.5%	1.5%	1.8%	5.3%	4.7%	8.0%	10.6%	10.6%	10.4%	9.9%	10.0%	10.5%	Return on Shr. Equity	9.5%
							3.5%	1.5%	1.8%	5.3%	4.7%	10.2%	11.0%	11.0%	10.7%	10.4%	10.5%	11.0%	Return on Com Equity	10.0%
							3.5%	1.5%	1.8%	5.3%	4.7%	10.2%	11.0%	9.1%	8.3%	5.9%	5.5%	6.5%	Retained to Com Eq	5.5%
							--	--	--	--	--	7%	9%	24%	29%	33%	34%	32%	All Div'ds to Net Prof	34%

% TOT. RETURN 8/09

	THIS STOCK	VL ARITH. INDEX
1 yr.	-21.0	-4.4
3 yr.	-22.9	0.4
5 yr.	20.7	32.3

Target Price Range 2012 | 2013 | 2014

CAPITAL STRUCTURE as of 6/30/09
Total Debt $3619.0 mill. Due in 5 Yrs $1270 mill.
LT Debt $3267.9 mill. LT Interest $181 mill.
(Est'd LT interest earned: 2.9x; total interest coverage: 2.6x)
(58% of Cap'l)
Leases, Uncapitalized: Annual rentals $21.4 mill.
Pension Assets-12/08 $102.4 mill. Oblig. $172.1 mill.
Pfd. Stock $115.0 mill. Pfd. Div'd. $12.2 mill. (2% of Cap'l)
Common Stock 124,056,552 shs. as of 7/31/09
MARKET CAP: $2.4 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2007	2008	6/30/09
Cash Assets	5.7	4.3	15.2
Receivables	358.5	327.4	207.3
Inventory (Avg Cst)	263.6	337.9	254.1
Other	180.5	362.8	249.5
Current Assets	808.3	1032.4	726.1
Accts Payable	335.3	246.9	186.4
Debt Due	558.3	462.1	351.1
Other	430.1	642.9	561.0
Current Liab.	1323.7	1351.9	1098.5

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '06-'08 to '12-'14
Revenues	2.0%	-2.5%	1.0%
"Cash Flow"	8.0%	14.0%	4.5%
Earnings	13.0%	39.5%	5.0%
Dividends	--	--	11.0%
Book Value	12.0%	5.0%	7.0%

Calendar	QUARTERLY REVENUES ($ mill.) [A] Mar.31	Jun.31	Sep.30	Dec.31	Full Year
2006	547.2	552.4	564.4	676.2	2340.2
2007	780.2	588.1	525.5	722.9	2616.7
2008	952.7	711.0	657.3	673.3	2994.3
2009	683.7	453.0	650	713.3	2500
2010	720	505	700	775	2700

Calendar	EARNINGS PER SHARE [A B] Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	.60	.10	.06	.57	1.33
2007	.53	.39	.34	.49	1.75
2008	.64	.43	.29	.47	1.81
2009	.52	.35	.35	.53	1.75
2010	.60	.48	.37	.55	2.00

Calendar	QUARTERLY DIVIDENDS PAID [D ■] Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2005	--	--	--	--	--
2006	--	.10	.10	.10	.30
2007	.10	.10	.10	.10	.40
2008	.15	.15	.15	.15	.60
2009	.15	.15	.15		

BUSINESS: Southern Union Co. owns and operates assets in the regulated and unregulated natural gas industry and is primarily engaged in the transportation, storage, and distribution of natural gas. Serves about 560,000 residential, commercial, and industrial customers through its Missouri Gas Energy and New England Gas Company. Acq. Panhandle Energy 6/03; Sid Richardson Energy Services 3/06. Sold Rhode Island operations 2/06; PG Energy 1/06. Owns 100% interest in CCE Holdings. Has 2,413 employees. Officers & directors own 10.3% of stock (4/09 proxy). Chairman, President & Chief Executive Officer: George L. Lindemann. Inc.: Delaware. Address: 5444 Westheimer Road, Houston, TX 77056. Telephone: 713-989-2000. Internet: www.southernunionco.com.

Southern Union continues to operate in a difficult business environment. Top-line volumes declined more than 38% during the June interim. This stemmed from a substantial downturn at the Gathering and Processing segment (G&P), as that unit dealt with lower realized commodity pricing for both natural gas and natural gas liquid. Meanwhile, the Transportation and Storage unit (T&S) revenues eked a bit higher, registering a 2.5% increase. But that division is still feeling the effects of damages incurred to its Sea Robin pipeline system as a result of last year's Hurricane Ike. Consequently, T&S' volumes have been slow to advance, and maintenance costs were higher than anticipated. Still, the company has been successful in its cost-cutting initiatives. Despite the slumping volumes, margins have been widening, which has helped to moderate the erosion of earnings. Nonetheless, share net fell more than 18% during that time frame. Thus,

We trimmed this year's earnings estimate by about 5%, to $1.75 a share. This stems from customer conservation and slumping commodity prices that will likely continue to impact results throughout the remainder of 2009. Meantime, higher expenses associated with repairs needed as a result of last year's hurricane season, and capital expenditures related to projects not yet put into service, will probably continue to offset a portion of the cost-cutting efforts, at least for the time being. But reduced competition and lower pricing will eventually begin to equalize, bringing supply and demand back into balance. Thus, SUG's top and bottom lines will probably begin to recover next year.

Multiple infrastructure enhancement projects augur well for the bottom line. The Trunkline LNG facility was likye in service by the time this report went to press. And the Florida Gas Transmission Phase VIII expansion ought to follow suit, sometime in the spring of 2011.

These neutrally ranked shares have some appeal. Even after advancing almost 15% since our June review, the equity offers respectable 3- to 5-year recovery potential for a utility company. Meantime, the solid dividend yield may appeal to income-seeking accounts.

Bryan J. Fong *September 11, 2009*

Company's Financial Strength	B+
Stock's Price Stability	85
Price Growth Persistence	85
Earnings Predictability	60

To subscribe call 1-800-833-0046.

A) Fiscal year ends June 30th through 2004; December 31st beg. in 2005. (B) Based on diluted shares. Excludes non-recurring per share gain (loss): '01, 81¢; '03, 65¢; '06, (1.30¢), '08, 45¢. Next egs. report due late Oct. Qtly egs. may not sum due to change in shares count. (C) In millions, adj. for splits. (D) Annual 5% common stock dividend suspended end of 2005. Cash dividend started April 2006. Qtly div'ds paid January, April, July, and October. ■ Dividend Reinvestment plan available. (E) Incl. intang. In 2008: $89.2 mill., $0.72/sh.

Missouri Gas Energy
Indicated Common Equity Cost Rate
Through Use of a Risk Premium Model
Using an Adjusted Total Market Approach

Line No.		Proxy Group of Nine Value Line Natural Gas Distribution Companies	Southern Union Company
1.	Prospective Yield on Aaa Rated Corporate Bonds (1)	5.60 %	5.60 %
2.	Adjustment to Reflect Yield Spread Between Aaa Rated Corporate Bonds and A Rated Public Utility Bonds	0.50 (2)	0.50 (2)
3.	Adjusted Prospective Yield on A Rated Public Utility Bonds	6.10 %*	6.10 %*
4.	Adjustment to Reflect Bond Rating Difference of Proxy Group	0.18 (3)	0.54 (4)
5.	Adjusted Prospective Bond Yield	6.28	6.64
6.	Equity Risk Premium (5)	4.66	5.99
7.	Risk Premium Derived Common Equity Cost Rate	10.94 %	12.63 %

* Actual Moody's A Rated Public Utility Bond Yield for August 2009 is 5.71%.

Notes: (1) Derived in Note (3) on Page 39 of this Schedule.

(2) The average yield spread of A rated public utility bonds over Aaa rated corporate bonds of 0.50% from Page 37 of this Schedule.

(3) Adjustment to reflect the A3 Moody's Bond Rating of the Proxy Group of Nine Value Line Natural Gas Distribution Companies as shown on Page 35 of this Schedule. Normally, Mr. Hanley would take 1/3 of the spread between Baa and A2 Public Utility Bonds (1/3 * 0.78% = 0.26%) to reflect the risk of the proxy group. However Mr. Hanley believes that the current spread between A2 and Baa2 rated public utility bonds are not representitive of the long-term and will utilize a normalized spread of 0.54% between A2 and Baa2 rated public utility bonds based upon a weighting shown on page 37 of this Schedule and explained in Mr. Hanley's rebuttal testimony. A spread of 0.18%, or 1/3 of the normalized spread will be applied to the prospective yield on A rated public utility bonds relative to the proxy group of nine Value Line natural gas distribution companies as shown above.

(4) Adjustment to reflect the Baa3 Moody's Bond Rating of Southern Union Company as shown on page 35 of this Schedule. Normally, Mr. Hanley would take the full spread between A2 and Baa2 yields (0.78%) and add it to prospective A yield to reflect the risk of Southern Union Company. However Mr. Hanley believes that the current spread between A2 and Baa2 rated public utility bonds are not representitive of the long-term and will utilize a normalized spread of 0.54% between A2 and Baa2 rated public utility bonds based upon a weighting shown on Page 37 of this Schedule and explained in Mr. Hanley's rebuttal testimony. The full spread of 0.54% will be applied to the prospective yield on A rated public utility bonds relative to Southern Union Company as shown above.

(5) From Page 38 of this Schedule.

Comparison of Bond Ratings, Business Risk and Financial Risk Profiles for the
Proxy Group of Nine Value Line Natural Gas Distribution Companies
and Southern Union Company

		Moody's Bond Rating August 2009		Standard & Poor's Bond Rating August 2009							
		Bond Rating	Numerical Weighting (1)	Bond Rating	Numerical Weighting (1)	Credit Rating	Numerical Weighting (1)	Business Risk Profile (2)	Numerical Weighting (1)	Financial Risk Profile (2)	Numerical Weighting (1)
	Proxy Group of Nine Value Line Natural Gas Distribution Companies										
ATG	AGL Resources Inc. (3)	A3	7.0	A-	7.0	A-	7.0	Excellent	1.0	Significant	4.0
ATO	Atmos Energy Corp.	Baa2	9.0	BBB+	8.0	BBB+	8.0	Excellent	1.0	Significant	4.0
LG	The Laclede Group, Inc. (4)	A3	7.0	A	6.0	A	6.0	Excellent	1.0	Intermediate	3.0
NJR	New Jersey Resources Corp. (5)	NR	--	NR	--	A	6.0	Excellent	1.0	Intermediate	3.0
NWN	Northwest Natural Gas Co.	A2	6.0	AA-	4.0	AA-	4.0	Excellent	1.0	Intermediate	3.0
PNY	Piedmont Natural Gas Co., Inc.	A3	7.0	A	6.0	A	6.0	Excellent	1.0	Intermediate	3.0
SJI	South Jersey Industries, Inc. (6)	A3	7.0	A	6.0	BBB+	8.0	Excellent	1.0	Significant	4.0
SWX	Southwest Gas Corporation	Baa3	10.0	BBB	9.0	BBB	9.0	Excellent	1.0	Aggressive	5.0
WGL	WGL Holdings, Inc. (7)	A2	6.0	AA-	4.0	AA-	4.0	Excellent	1.0	Intermediate	3.0
	AVERAGE	A3	7.4	A	6.3	A	6.0	Excellent	1.0	Significant	3.6
	Southern Union Company	Baa3	10.0	BBB-	10.0	BBB-	10.0	Strong	2.0	Significant	4.0

Notes: (1) From Page 36 of this Schedule.
(2) From Standard & Poor's Issuer Ranking: U.S. Natural Gas Distribution and Integrated Gas Companies, Strongest to Weakest and U.S. Midstream Energy Companies, Strongest to Weakest September 2, 2009.
(3) Ratings, business risk and financial risk profiles are those of Atlanta Gas Light Company.
(4) Ratings, business risk and financial risk are those of Laclede Gas Company.
(5) Ratings, business risk and financial risk profiles are those of New Jersey Natural Gas Company.
(6) Ratings, business risk and financial risk profiles are those of South Jersey Gas.
(7) Ratings, business risk and financial risk profiles are those of Washington Gas Light Company.

Source Information: Moody's Investors Service
Standard & Poor's Global Utilities Rating Service

Missouri Gas Energy
Numerical Assignment for
Moody's and Standard & Poor's Bond Ratings,
Standard & Poor's Credit Ratings, and
Standard & Poor's Business and Financial Risk Profiles

Moody's Bond Rating	Numerical Bond Weighting	Standard & Poor's Bond / Credit Rating
Aaa	1	AAA
Aa1	2	AA+
Aa2	3	AA
Aa3	4	AA-
A1	5	A+
A2	6	A
A3	7	A-
Baa1	8	BBB+
Baa2	9	BBB
Baa3	10	BBB-
Ba1	11	BB+
Ba2	12	BB
Ba3	13	BB-

Standard & Poor's

Business Risk Profile	Numerical Weighting	Financial Risk Profile	Numerical Weighting
Excellent	1	Minimal	1
Strong	2	Modest	2
Satisfactory	3	Intermediate	3
Fair	4	Significant	4
Weak	5	Aggressive	5
Vulnerable	6	Highly Leveraged	6

Moody's
Comparison of Interest Rate Trends
for the Two Months Ending August 2009 (1)

Years	Corporate Bonds Aaa Rated	Public Utility Bonds Aa Rated	Public Utility Bonds A Rated	Public Utility Bonds Baa Rated	Spread - Corporate v. Public Utility Bonds: Aa (Pub. Util.) over Aaa (Corp.)	Spread - Corporate v. Public Utility Bonds: A (Pub. Util.) over Aaa (Corp.)	Spread - Corporate v. Public Utility Bonds: Baa (Pub. Util.) over Aaa (Corp.)	Spread - Public Utility Bonds: A over Aa	Spread - Public Utility Bonds: Baa over A
July-09	5.41	5.63	5.97	6.87 %	0.22 %	0.56 %	1.46 %	0.34 %	0.90 %
August-09	5.26	5.33	5.71	6.36	0.07	0.45	1.10	0.38	0.65
Average of Last 2 Months	5.34 %	5.48 %	5.84 %	6.62 %	0.14 %	0.50 %	1.28 %	0.36 %	0.78 %

Average 5 yr Spread Between Moody's A and Baa Rated Public Utility Bonds (2)	0.46% 60% Weight
August 2009 Spread Between Moody's A and Baa Rated Public Utility Bonds (2)	0.65% 40% Weight
5 yr Normalized Spread Between Moody's A and Baa Rated Public Utility Bonds	0.54%

Notes: (1) All yields are distributed yields.
(2) From Page 48 of this Schedule.

Missouri Gas Energy
Judgment of Equity Risk Premium for
the Proxy Group of Nine Value Line Natural Gas Distribution Companies

Line No.		Proxy Group of Nine Value Line Natural Gas Distribution Companies	Southern Union Company
1.	Calculated equity risk premium based on the total market using the beta approach (1)	5.17 %	8.35 %
2.	Mean equity risk premium based on a study using the holding period returns of public utilities with Baa rated bonds (2)	4.15	3.63
3.	Average equity risk premium	4.66 %	5.99 %

Notes:
(1) From Page 39 of this Schedule.
(2) From Page 41 of this Schedule.

Missouri Gas Energy
Derivation of Equity Risk Premium Based on the Total Market Approach
Using the Beta for
the Proxy Group of Nine Value Line Natural Gas Distribution Companies

Line No.		Proxy Group of Nine Value Line Natural Gas Distribution Companies	Southern Union Company
1.	Arithmetic mean total return rate on the Standard & Poor's 500 Composite Index - 1926-2007 (1)	11.70 %	11.70 %
2.	Arithmetic mean yield on Aaa and Aa Corporate Bonds 1926-2007 (2)	(6.10)	(6.10)
3.	Historical Equity Risk Premium	5.60 %	5.60 %
4.	Forecasted 3-5 year Total Annual Market Return (3)	17.09 %	17.09 %
5.	Prospective Yield an Aaa Rated Corporate Bonds (4)	(5.60)	(5.60)
6.	Forecasted Equity Risk Premium	11.49 %	11.49 %
7.	Conclusion of Equity Risk Premium (5)	7.96 %	7.96 %
8.	Adjusted Value Line Beta (6)	0.65	1.05
9.	Beta Adjusted Equity Risk Premium	5.17 %	8.35 %

Notes:

(1) From Ibbotson SBBI - 2009 Valuation Yearbook - Market Results for Stocks Bonds Bills and Inflation for 1926-2008, Morningstar, Inc., 2009 Chicago, IL.

(2) From Moody's Industrial Manual and Mergent Bond Record Monthly Update.

(3) From Page 51 of this Schedule.

(4) Average forecast based upon six quarterly estimates of Aaa rated corporate bonds per the consensus of nearly 50 economists reported in Blue Chip Financial Forecasts dated September 1, 2009 (see Page 40 of this Schedule). The estimates are detailed below.

Third Quarter 2009	5.40 %
Fourth Quarter 2009	5.50
First Quarter 2010	5.60
Second Quarter 2010	5.60
Third Quarter 2010	5.70
Fourth Quarter 2010	5.80
Average	5.60 %

(5) The average of the Historical Equity Risk Premium of 6.20% from Line No. 3 and the Forecasted Equity Risk Premium of 11.49% from Line No. 6 ((6.20% + 11.49%) / 2 = 8.84%. Normally, Mr. Hanley would use this average in his Risk Premium Analysis. However, in Mr. Hanley's opinion, the current and recent substantial volatility in the stock market is extraordinary and not representative of the expected long-term. In view of the recent substantial increase in the market over the last five to six months, the potential for market appreciation has declined significantly. Thus, in Mr. Hanley's opinion, more weight should now be given to the market appreciation potential. Consequently, a 40% weight to the forecasted risk premium of 11.49% and a 60% weight to the historical risk premium if 5.60% is appropriate to reflect the current economic climate. The result of the weighting indicates a 7.96% risk premium.

(6) From Page 42 of this Schedule.

Consensus Forecasts Of U.S. Interest Rates And Key Assumptions[1]

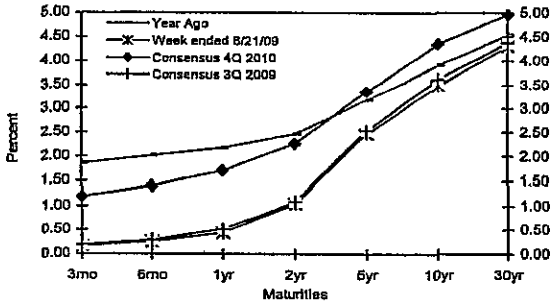
	History								Consensus Forecasts-Quarterly Avg.					
	Average For Week End				Average For Month			Latest Q	3Q	4Q	1Q	2Q	3Q	4Q
Interest Rates	Aug. 21	Aug. 14	Aug. 7	July 31	July	June	May	2Q 2009	2009	2009	2010	2010	2010	2010
Federal Funds Rate	0.16	0.17	0.18	0.15	0.16	0.21	0.18	0.18	0.2	0.2	0.2	0.4	0.7	1.1
Prime Rate	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.2	3.2	3.3	3.4	3.8	4.2
LIBOR, 3-mo.	0.44	0.45	0.47	0.49	0.52	0.62	0.82	0.85	0.6	0.6	0.6	0.8	1.1	1.5
Commercial Paper, 1-mo.	0.17	0.19	0.17	0.19	0.18	0.18	0.22	0.21	0.3	0.3	0.3	0.5	0.9	1.2
Treasury bill, 3-mo.	0.17	0.18	0.18	0.19	0.18	0.18	0.18	0.19	0.2	0.2	0.3	0.5	0.8	1.2
Treasury bill, 6-mo.	0.26	0.28	0.29	0.26	0.28	0.31	0.30	0.36	0.3	0.4	0.5	0.7	1.0	1.4
Treasury bill, 1 yr.	0.44	0.47	0.49	0.49	0.48	0.51	0.50	0.57	0.5	0.6	0.8	1.0	1.3	1.7
Treasury note, 2 yr.	1.05	1.16	1.23	1.14	1.02	1.18	0.93	1.01	1.1	1.2	1.4	1.6	1.9	2.3
Treasury note, 5 yr.	2.47	2.65	2.73	2.63	2.46	2.71	2.13	2.13	2.5	2.6	2.8	2.9	3.1	3.4
Treasury note, 10 yr.	3.48	3.67	3.77	3.67	3.56	3.72	3.29	3.16	3.6	3.7	3.9	4.0	4.2	4.4
Treasury note, 30 yr.	4.31	4.47	4.52	4.49	4.41	4.52	4.23	3.97	4.4	4.5	4.6	4.7	4.8	5.0
Corporate Aaa bond	5.24	5.34	5.34	5.40	5.41	5.61	5.54	5.50	5.4	5.5	5.6	5.6	5.7	5.8
Corporate Baa bond	6.56	6.62	6.71	6.91	7.09	7.50	8.06	8.10	7.0	7.0	7.0	7.0	7.1	7.2
State & Local bonds	4.58	4.65	4.65	4.69	4.72	4.81	4.56	4.85	4.7	4.8	4.8	4.8	4.9	5.0
Home mortgage rate	5.12	5.29	5.22	5.25	5.22	5.42	4.86	5.08	5.3	5.3	5.4	5.6	5.7	5.9

	History								Consensus Forecasts-Quarterly Avg.					
	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Key Assumptions	2007	2007	2008	2008	2008	2008	2009	2009	2009	2009	2010	2010	2010	2010
Major Currency Index	77.0	73.3	72.0	70.9	73.5	81.3	82.7	79.4	76.4	76.1	76.2	76.4	76.6	76.6
Real GDP	3.6	2.1	-0.7	1.5	-2.7	-5.4	-6.4	-1.0	2.3	2.3	2.4	2.8	2.7	2.8
GDP Price Index	1.6	2.3	1.9	1.8	4.0	0.1	1.9	0.0	1.5	1.4	1.4	1.5	1.6	1.7
Consumer Price Index	2.4	5.8	4.5	4.5	6.2	-8.3	-2.4	1.3	2.6	1.8	1.7	1.6	2.1	2.1

Individual panel members' forecasts are on pages 4 through 9. Historical data for interest rates except LIBOR is from Federal Reserve Release (FRSR) H.15. LIBOR quotes available from *The Wall Street Journal*. Definitions reported here are same as those in FRSR H.15. Treasury yields are reported on a constant maturity basis. Historical data for the U.S. Federal Reserve Board's Major Currency Index is from FRSR H.10 and G.5. Historical data for Real GDP and GDP Chained Price Index are from the Bureau of Economic Analysis (BEA). Consumer Price Index (CPI) history is from the Department of Labor's Bureau of Labor Statistics (BLS).

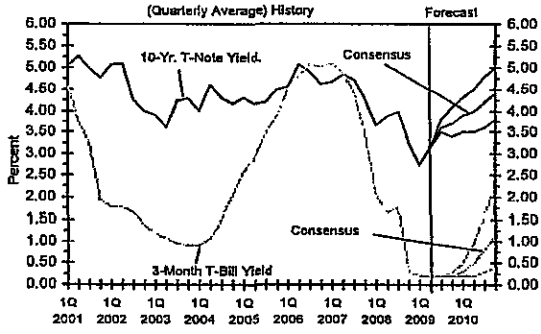
U.S. Treasury Yield Curve

Week ended August 21, 2009 and Year Ago vs.
3Q 2009 and 4Q 2010 Consensus Forecasts



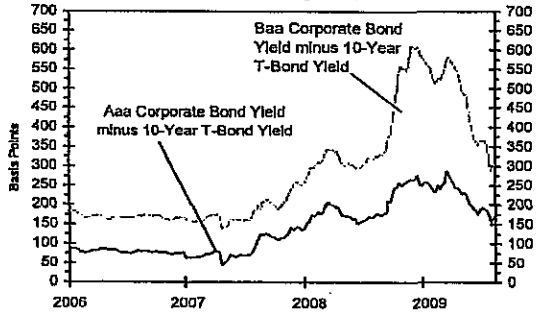
U.S. 3-Mo. T-Bills & 10-Yr. T-Note Yield

(Quarterly Average) History
Forecast



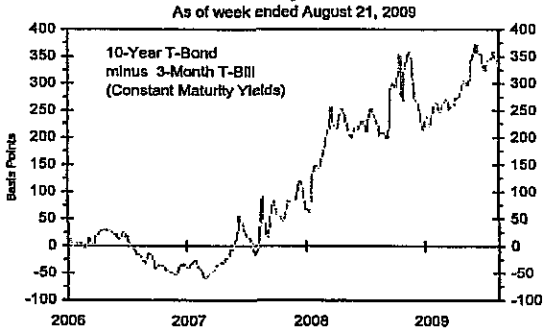
Corporate Bond Spreads

As of week ended August 21, 2009



U.S. Treasury Yield Curve

As of week ended August 21, 2009



Missouri Gas Energy
Derivation of Mean Equity Risk Premium Based on a Study
Using Holding Period Returns of Public Utilities

Line No.		Over A Rated Public Utility Bonds AUS Consultants - Utility Services Study (1)	Over Baa Rated Public Utility Bonds AUS Consultants - Utility Services Study (1)
		1928-2008	1928-2008
1.	Arithmetic Mean Holding Period Returns (2): Standard & Poor's Public Utility Index	10.74 %	10.74 %
2.	Arithmetic Mean Yield on: Moody's A Rated Public Utility Bonds	(6.59)	
3.	Arithmetic Mean Yield on: Moody's Baa Rated Public Utility Bonds		(7.11)
4.	Equity Risk Premium	4.15 %	3.63 %

Notes: (1) S&P Public Utility Index and Moody's Public Utility Bond Average Annual Yields 1928-2008, (AUS Consultants - Utility Services, 2009).

(2) Holding period returns are calculated based upon income received (dividends and interest) plus the relative change in the market value of a security over a one-year holding period.

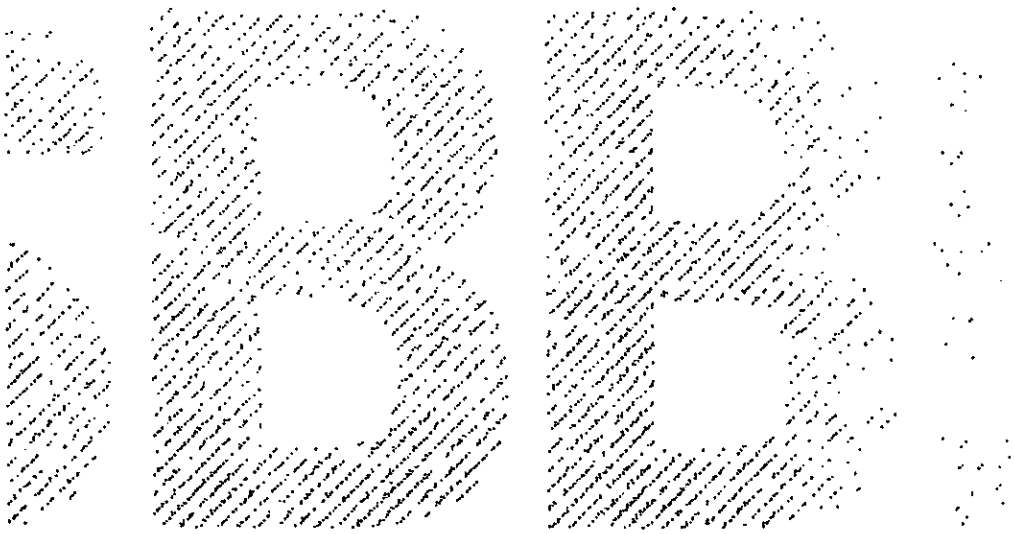
Missouri Gas Energy
Value Line Adjusted Betas for
the Proxy Group of Nine Value Line Natural Gas Distribution Companies
and Southern Union Company

	Value Line Adjusted Beta
Proxy Group of Nine Value Line Natural Gas Distribution Companies	
AGL Resources Inc.	0.75
Atmos Energy Corp.	0.65
The Laclede Group, Inc.	0.60
New Jersey Resources Corp.	0.65
Northwest Natural Gas Co.	0.60
Piedmont Natural Gas Co., Inc.	0.65
South Jersey Industries, Inc.	0.65
Southwest Gas Corporation	0.75
WGL Holdings, Inc.	0.65
Average	0.66
Median	0.65
Southern Union Company	1.05

Source of Information: Value Line Investment Survey (Standard Edition) September 11, 2009.

Ibbotson® SBBI®
2009 Valuation Yearbook

Market Results for
Stocks, Bonds, Bills, and Inflation
1926–2008



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Treasury bond; however, the Treasury currently does not issue a 20-year bond. The 30-year bond that the Treasury recently began issuing again is theoretically more correct due to the long-term nature of business valuation, yet Ibbotson Associates instead creates a series of returns using bonds on the market with approximately 20 years to maturity. The reason for the use of a 20-year maturity bond is that 30-year Treasury securities have only been issued over the relatively recent past, starting in February of 1977, and were not issued at all through the early 2000s.

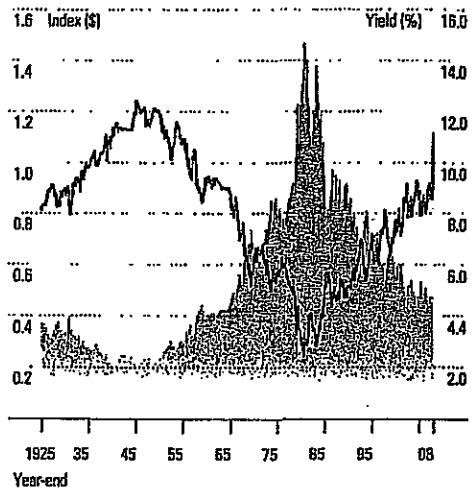
The same reason exists for why we do not use the 10-year Treasury bond—a long history of market data is not available for 10-year bonds. We have persisted in using a 20-year bond to keep the basis of the time series consistent.

Income Return

Another point to keep in mind when calculating the equity risk premium is that the income return on the appropriate-horizon Treasury security, rather than the total return, is used in the calculation. The total return is comprised of three return components: the income return, the capital appreciation return, and the reinvestment return. The income return is defined as the portion of the total return that results from a periodic cash flow or, in this case, the bond coupon payment. The capital appreciation return results from the price change of a bond over a specific period. Bond prices generally change in reaction to unexpected fluctuations in yields. Reinvestment return is the return on a given month's investment income when reinvested into the same asset class in the subsequent months of the year. The income return is thus used in the estimation of the equity risk premium because it represents the truly riskless portion of the return.[2]

Yields have generally risen on the long-term bond over the 1926–2008 period, so it has experienced negative capital appreciation over much of this time. This trend has turned around since the 1980s, however. Graph 5-2 illustrates the yields on the long-term government bond series compared to an index of the long-term government bond capital appreciation. In general, as yields rose, the capital appreciation index fell, and vice versa. Had an investor held the long-term bond to maturity, he would have realized the yield on the bond as the total return. However, in a constant maturity portfolio, such as those used to measure bond returns in this publication, bonds are sold before maturity (at a capital loss if the market yield has risen since the time of purchase). This negative return is associated with the risk of unanticipated yield changes.

Graph 5-2: Long-term Government Bond Yields versus Capital Appreciation Index



Data from 1925–2008.

For example, if bond yields rise unexpectedly, investors can receive a higher coupon payment from a newly issued bond than from the purchase of an outstanding bond with the former lower-coupon payment. The outstanding lower-coupon bond will thus fail to attract buyers, and its price will decrease, causing its yield to increase correspondingly, as its coupon payment remains the same. The newly priced outstanding bond will subsequently attract purchasers who will benefit from the shift in price and yield; however, those investors who already held the bond will suffer a capital loss due to the fall in price.

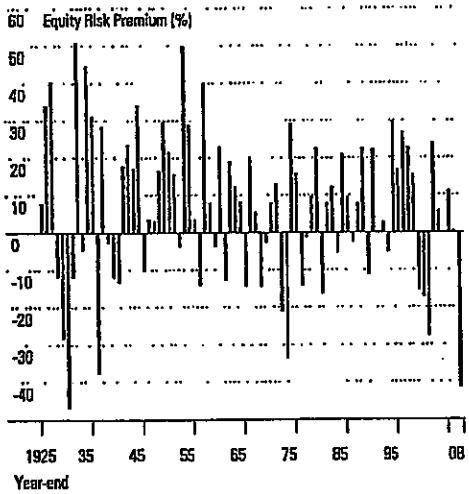
Anticipated changes in yields are assessed by the market and figured into the price of a bond. Future changes in yields that are not anticipated will cause the price of the bond to adjust accordingly. Price changes in bonds due to unanticipated changes in yields introduce price risk into the total return. Therefore, the total return on the bond series does not represent the riskless rate of return.The income return better represents the unbiased estimate of the purely riskless rate of return, since an investor can hold a bond to maturity and be entitled to the income return with no capital loss.

Arithmetic versus Geometric Means

The equity risk premium data presented in this book are arithmetic average risk premia as opposed to geometric average risk premia. The arithmetic average equity risk premium can be demonstrated to be most appropriate when discounting future cash flows. For use as the expected equity risk premium in either the CAPM or the building block approach, the arithmetic mean or the simple difference of the arithmetic means of stock market returns and riskless rates is the relevant number. This is because both the CAPM and the building block approach are additive models, in which the cost of capital is the sum of its parts. The geometric average is more appropriate for reporting past performance, since it represents the compound average return.

The argument for using the arithmetic average is quite straightforward. In looking at projected cash flows, the equity risk premium that should be employed is the equity risk premium that is expected to actually be incurred over the future time periods. Graph 5-3 shows the realized equity risk premium for each year based on the returns of the S&P 500 and the income return on long-term government bonds. (The actual, observed difference between the return on the stock market and the riskless rate is known as the realized equity risk premium.) There is considerable volatility in the year-by-year statistics. At times the realized equity risk premium is even negative.

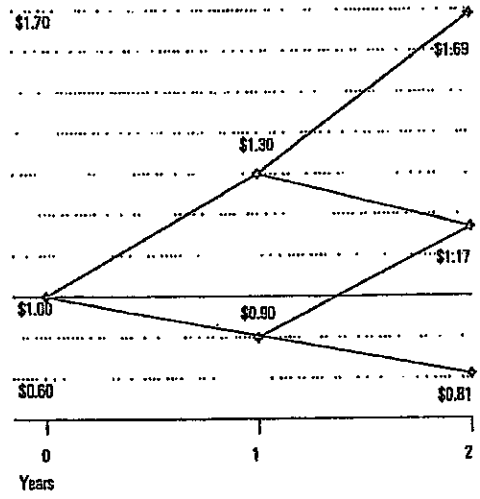
Graph 5-3: Realized Equity Risk Premium Per Year



Data from 1925–2008.

To illustrate how the arithmetic mean is more appropriate than the geometric mean in discounting cash flows, suppose the expected return on a stock is 10 percent per year with a standard deviation of 20 percent. Also assume that only two outcomes are possible each year: +30 percent and –10 percent (i.e., the mean plus or minus one standard deviation). The probability of occurrence for each outcome is equal. The growth of wealth over a two-year period is illustrated in Graph 5-4.

Graph 5-4: Growth of Wealth Example



The most common outcome of $1.17 is given by the geometric mean of 8.2 percent. Compounding the possible outcomes as follows derives the geometric mean:

$$\left[(1+0.30)\times(1-0.10)\right]^{1/2}-1=0.082$$

However, the expected value is predicted by compounding the arithmetic, not the geometric, mean. To illustrate this, we need to look at the probability-weighted average of all possible outcomes:

(0.25 × $1.69)	= $0.4225
+ (0.50 × $1.17)	= $0.5850
+ (0.25 × $0.81)	= $0.2025
Total	$1.2100

Therefore, $1.21 is the probability-weighted expected value. The rate that must be compounded to achieve the terminal value of $1.21 after 2 years is 10 percent, the arithmetic mean:

$$\$1\times(1+0.10)^2=\$1.21$$

The geometric mean, when compounded, results in the median of the distribution:

$$\$1\times(1+0.082)^2=\$1.17$$

The arithmetic mean equates the expected future value with the present value; it is therefore the appropriate discount rate.

Appropriate Historical Time Period

The equity risk premium can be estimated using any historical time period. For the U.S., market data exists at least as far back as the late 1800s. Therefore, it is possible to estimate the equity risk premium using data that covers roughly the past 100 years.

Our equity risk premium covers the time period from 1926 to the present. The original data source for the time series comprising the equity risk premium is the Center for Research in Security Prices. CRSP chose to begin their analysis of market returns with 1926 for two main reasons. CRSP determined that the time period around 1926 was approximately when quality financial data became available. They also made a conscious effort to include the period of extreme market volatility from the late twenties and early thirties; 1926 was chosen because it includes one full business cycle of data before the market crash of 1929. These are the most basic reasons why our equity risk premium calculation window starts in 1926.

Implicit in using history to forecast the future is the assumption that investors' expectations for future outcomes conform to past results. This method assumes that the price of taking on risk changes only slowly, if at all, over time. This "future equals the past" assumption is most applicable to a random time-series variable. A time-series variable is random if its value in one period is independent of its value in other periods.

Does the Equity Risk Premium Revert to Its Mean Over Time?

Some have argued that the estimate of the equity risk premium is upwardly biased since the stock market is currently priced high. In other words, since there have been several years with extraordinarily high market returns and realized equity risk premia, the expectation is that returns and realized equity risk premia will be lower in the future, bringing the average back to a normalized level. This argument relies on several studies that have tried to determine whether reversion to the mean exists in stock market prices and the equity risk premium.[3] Several academics contradict each other on this topic; moreover, the evidence supporting this argument is neither conclusive nor compelling enough to make such a strong assumption.

Our own empirical evidence suggests that the yearly difference between the stock market total return and the U.S. Treasury bond income return in any particular year is random. Graph 5-3, presented earlier, illustrates the randomness of the realized equity risk premium.

A statistical measure of the randomness of a return series is its serial correlation. Serial correlation (or autocorrelation) is defined as the degree to which the return of a given series is related from period to period. A serial correlation near positive one indicates that returns are predictable from one period to the next period and are positively related. That is, the returns of one period are a good predictor of the returns in the next period. Conversely, a serial correlation near negative one indicates that the returns in one period are inversely related to those of the next period. A serial correlation near zero indicates that the returns are random or unpredictable from one period to the next. Table 5-3 contains the serial correlation of the market total returns, the realized long-horizon equity risk premium, and inflation.

Table 5-3: Interpretation of Annual Serial Correlations

Series	Serial Correlation	Interpretation
Large Company Stock Total Returns	0.04	Random
Equity Risk Premium	0.04	Random
Inflation Rates	0.64	Trend

Data from 1926–2008

The significance of this evidence is that the realized equity risk premium next year will not be dependent on the realized equity risk premium from this year. That is, there is no discernable pattern in the realized equity risk premium—it is virtually impossible to forecast next year's realized risk premium based on the premium of the previous year. For example, if this year's difference between the riskless rate and the return on the stock market is higher than last year's, that does not imply that next year's will be higher than this year's. It is as likely to be higher as it is lower. The best estimate of the expected value of a variable that has behaved randomly in the past is the average (or arithmetic mean) of its past values.

Table 5-4 also indicates that the equity risk premium varies considerably by decade. The complete decades ranged from a high of 17.9 percent in the 1950s to a low of 0.3 percent in the 1970s, however, thus far the 2000s have shown a -6.7 percent equity risk premium. This look at historical equity risk premium reveals no observable pattern.

Table 5-4: Long-Horizon Equity Risk Premium by Decade (%)

1920s*	1930s	1940s	1950s	1960s	1970s	1980s	1990s	2000s**	1999-2008
17.6	2.3	8.0	17.9	4.2	0.3	7.9	12.1	-6.7	-4.5

Data from 1926–2008.
*Based on the period 1926–1929.
**Based on the period 2000–2008.

Finnerty and Leistikow perform more econometrically sophisticated tests of mean reversion in the equity risk premium. Their tests demonstrate that—as we suspected from our simpler tests—the equity risk premium that was realized over 1926 to the present was almost perfectly free of mean reversion and had no statistically identifiable time trends.[4] Lo and MacKinlay conclude, "the rejection of the random walk for weekly returns does not support a mean-reverting model of asset prices."

Choosing an Appropriate Historical Period

The estimate of the equity risk premium depends on the length of the data series studied. A proper estimate of the equity risk premium requires a data series long enough to give a reliable average without being unduly influenced by very good and very poor short-term returns. When calculated using a long data series, the historical equity risk premium is relatively stable.[5] Furthermore, because an average of the realized equity risk premium is quite volatile when calculated using a short history, using a long series makes it less likely that the analyst can justify any number he or she wants. The magnitude of how shorter periods can affect the result will be explored later in this chapter.

Some analysts estimate the expected equity risk premium using a shorter, more recent time period on the basis that recent events are more likely to be repeated in the near future; furthermore, they believe that the 1920s, 1930s, and 1940s contain too many unusual events. This view is suspect because all periods contain "unusual" events. Some of the most unusual events of the last hundred years took place quite recently, including the inflation of the late 1970s and early 1980s, the October 1987 stock market crash, the collapse of the high-yield bond market, the major contraction and consolidation of the thrift industry, the collapse of the Soviet Union, the development of the European Economic Community, and the attacks of September 11, 2001.

It is even difficult for economists to predict the economic environment of the future. For example, if one were analyzing the stock market in 1987 before the crash, it would be statistically improbable to predict the impending short-term volatility without considering the stock market crash and market volatility of the 1929–1931 period.

Without an appreciation of the 1920s and 1930s, no one would believe that such events could happen. The 83-year period starting with 1926 is representative of what can happen: it includes high and low returns, volatile and quiet markets, war and peace, inflation and deflation, and prosperity and depression. Restricting attention to a shorter historical period underestimates the amount of change that could occur in a long future period. Finally, because historical event-types (not specific events) tend to repeat themselves, long-run capital market return studies can reveal a great deal about the future. Investors probably expect "unusual" events to occur from time to time, and their return expectations reflect this.

A Look at the Historical Results

It is interesting to take a look at the realized returns and realized equity risk premium in the context of the above discussion. Table 5-5 shows the average stock market return and the average (arithmetic mean) realized long-horizon equity risk premium over various historical time periods. Similarly, Graph 5-5 shows the average (arithmetic mean) realized equity risk premium calculated through 2008 for different starting dates. The table and the graph both show

Missouri Gas Energy
Spreads Between Moody's A and Baa Rated Public Utility Bond Yields
for Five Years Eight Months Ending August 2009

DATE	Moody's A Rated Public Utility Bond Yields	Moody's Baa Rated Public Utility Bond Yields	Spread Between A and Baa Rated Bond Yields
Jan-04	6.15%	6.47%	0.32%
Feb-04	6.15%	6.28%	0.13%
Mar-04	5.97%	6.12%	0.15%
Apr-04	6.35%	6.46%	0.11%
May-04	6.62%	6.75%	0.13%
Jun-04	6.46%	6.84%	0.38%
Jul-04	6.27%	6.67%	0.40%
Aug-04	6.14%	6.45%	0.31%
Sep-04	5.98%	6.27%	0.29%
Oct-04	5.94%	6.17%	0.23%
Nov-04	5.97%	6.16%	0.19%
Dec-04	5.92%	6.10%	0.18%
Jan-05	5.78%	5.95%	0.17%
Feb-05	5.61%	5.76%	0.15%
Mar-05	5.83%	6.01%	0.18%
Apr-05	5.64%	5.95%	0.31%
May-05	5.53%	5.88%	0.35%
Jun-05	5.40%	5.70%	0.30%
Jul-05	5.51%	5.80%	0.29%
Aug-05	5.50%	5.81%	0.31%
Sep-05	5.52%	5.83%	0.31%
Oct-05	5.79%	6.08%	0.29%
Nov-05	5.88%	6.19%	0.31%
Dec-05	5.80%	6.14%	0.34%
Jan-06	5.75%	6.06%	0.31%
Feb-06	5.82%	6.11%	0.29%
Mar-06	5.98%	6.26%	0.28%
Apr-06	6.29%	6.54%	0.25%
May-06	6.42%	6.59%	0.17%
Jun-06	6.40%	6.61%	0.21%
Jul-06	6.37%	6.61%	0.24%
Aug-06	6.20%	6.43%	0.23%
Sep-06	6.00%	6.26%	0.26%
Oct-06	5.98%	6.24%	0.26%
Nov-06	5.80%	6.04%	0.24%
Dec-06	5.81%	6.05%	0.24%
Jan-07	5.96%	6.16%	0.20%
Feb-07	5.90%	6.10%	0.20%
Mar-07	5.85%	6.10%	0.25%
Apr-07	5.97%	6.24%	0.27%
May-07	5.99%	6.23%	0.24%
Jun-07	6.30%	6.54%	0.24%
Jul-07	6.25%	6.49%	0.24%
Aug-07	6.24%	6.51%	0.27%
Sep-07	6.18%	6.45%	0.27%
Oct-07	6.11%	6.36%	0.25%
Nov-07	5.97%	6.27%	0.30%
Dec-07	6.16%	6.51%	0.35%
Jan-08	6.02%	6.35%	0.33%
Feb-08	6.21%	6.60%	0.39%
Mar-08	6.21%	6.68%	0.47%
Apr-08	6.29%	6.81%	0.52%
May-08	6.27%	6.79%	0.52%
Jun-08	6.38%	6.93%	0.55%
Jul-08	6.40%	6.97%	0.57%
Aug-08	6.37%	6.98%	0.61%
Sep-08	6.49%	7.15%	0.66%
Oct-08	7.56%	8.58%	1.02%
Nov-08	7.20%	8.98%	1.78%
Dec-08	6.54%	8.13%	1.59%
Jan-09	6.39%	7.90%	1.51%
Feb-09	6.30%	7.74%	1.44%
Mar-09	6.42%	8.00%	1.58%
Apr-09	6.48%	8.03%	1.55%
May-09	6.49%	7.76%	1.27%
Jun-09	6.20%	7.30%	1.10%
Jul-09	5.97%	6.87%	0.90%
Aug-09	5.71%	6.36%	0.65%
Average	6.11%	6.57%	0.46%

Source of Information:
Mergent Bond Record, September 2009, Volume 76, No. 9.

Missouri Gas Energy
Indicated Common Equity Cost Rate Through Use
of the Capital Asset Pricing Model
for the Proxy Group of Nine Value Line Natural Gas Distribution Companies
and Southern Union Company

Line No.		Proxy Group of Nine Value Line Natural Gas Distribution Companies	Southern Union Company
1.	Traditional Capital Asset Pricing Model (1)	10.44 %	13.98 %
2.	Empirical Capital Asset Pricing Model (1)	11.21 %	13.87 %
3.	Conclusion	10.83 %	13.93 %

Notes:
(1) From Page 50 of this Schedule.

Missouri Gas Energy
Indicated Common Equity Cost Rate Through Use
of the Capital Asset Pricing Model

	1	2	3
	Value Line Adjusted Beta	Company-Specific Risk Premium Based on Market Premium of 8.87% (1)	CAPM Result Including Risk-Free Rate of 4.67% (2)
		Traditional Capital Asset Pricing Model (3)	
Proxy Group of Nine Value Line Natural Gas Distribution Companies			
AGL Resources Inc.	0.75	6.65 %	11.32 %
Atmos Energy Corp.	0.65	5.77	10.44
The Laclede Group, Inc.	0.60	5.32	9.99
New Jersey Resources Corp.	0.65	5.77	10.44
Northwest Natural Gas Co.	0.60	5.32	9.99
Piedmont Natural Gas Co., Inc.	0.65	5.77	10.44
South Jersey Industries, Inc.	0.65	5.77	10.44
Southwest Gas Corporation	0.75	6.65	11.32
WGL Holdings, Inc.	0.65	5.77	10.44
Average	0.66	5.87 %	10.54 %
Median	0.65	5.77 %	10.44 %
Southern Union Company	1.05	9.31 %	13.98 %
		Empirical Capital Asset Pricing Model (4)	
Proxy Group of Nine Value Line Natural Gas Distribution Companies			
AGL Resources Inc.	0.75	7.21 %	11.88 %
Atmos Energy Corp.	0.65	6.54	11.21
The Laclede Group, Inc.	0.60	6.21	10.88
New Jersey Resources Corp.	0.65	6.54	11.21
Northwest Natural Gas Co.	0.60	6.21	10.88
Piedmont Natural Gas Co., Inc.	0.65	6.54	11.21
South Jersey Industries, Inc.	0.65	6.54	11.21
Southwest Gas Corporation	0.75	7.21	11.88
WGL Holdings, Inc.	0.65	6.54	11.21
Average	0.66	6.62 %	11.29 %
Median	0.65	6.54 %	11.21 %
Southern Union Company	1.05	9.20 %	13.87 %

See Page 51 for notes.

Missouri Gas Energy
Development of the Market-Required Rate of Return on Common Equity Using
the Capital Asset Pricing Model
Adjusted to Reflect a Forecasted Risk-Free Rate and Market Return

Notes:

(1) For reasons explained in Mr. Hanley's direct testimony, from the two previous month-end (July 2009 – August 2009), as well as a recently available (September 11, 2009), Value Line Summary & Index, a forecasted 3-5 year total annual market return of 17.09% can be derived by averaging the 2-month and spot forecasted total 3-5 year total appreciation, converting it into an annual market appreciation and adding the Value Line average forecasted annual dividend yield.

The 3-5 year average total market appreciation of 73% produces a four-year average annual return of 14.68% ($(1.73^{.25}) - 1$). When the average annual forecasted dividend yield of 2.41% is added, a total average market return of 17.09% (2.41% + 14.68%) is derived.

The 2-month and spot forecasted total market return of 17.09% minus the risk-free rate of 4.67% (developed in Note 2) is 12.42% (17.09% - 4.67%). The Morningstar, Inc. (Ibbotson Associates) calculated market premium of 6.50% for the period 1926-2008 results from a total market return of 11.70% less the average income return on long-term U.S. Government Securities of 5.20% (11.70% - 5.20% = 6.50%). This is then averaged with the 12.42% Value Line market premium resulting in a 9.46% market premium. In Mr. Hanley's opinion, the current and recent substantial volatility in the stock market is extraordinary and not representative of the expected long-term. In view of the recent substantial increase in the market from when Mr. Hanley's original analysis was performed, the potential for market appreciation has declined significantly. Thus, a greater weight must be given to the market appreciation potential. Consequently, a 40% weight will be applied to the projected risk premium of 12.42% and a 60% weight will be applied to the historical market premium. The product of this weighting is 8.87% ((.40 * 12.42%) + (.60 * 6.50%)) which will be then multiplied by the beta in column 1 of Page 50 of this Schedule.

(2) For reasons explained previously in Mr. Hanley's direct testimony, the risk-free rate that Mr. Hanley relies upon for his CAPM analysis is the average forecast based upon six quarterly estimates of 30-year Treasury Note yields per the consensus of nearly 50 economists reported in the Blue Chip Financial Forecasts. The most recent is from September 1, 2009 (see Page 40 of this Schedule).The estimates are detailed below:

	30-Year Treasury Note Yield
Third Quarter 2009	4.40%
Fourth Quarter 2009	4.50
First Quarter 2010	4.60
Second Quarter 2010	4.70
Third Quarter 2010	4.80
Fourth Quarter 2010	5.00
Average	4.67%

(3) The traditional Capital Asset Pricing Model (CAPM) is applied using the following formula:

$R_S = R_F + \beta (R_M - R_F)$

Where R_S = Return rate of common stock
R_F = Risk Free Rate
β = Value Line Adjusted Beta
R_M = Return on the market as a whole

(4) The empirical CAPM is applied using the following formula:

$R_S = R_F + .25 (R_M - R_F) + .75 \beta (R_M - R_F)$

Where R_S = Return rate of common stock
R_F = Risk-Free Rate
β = Value Line Adjusted Beta
R_M = Return on the market as a whole

Source of Information: Value Line Summary & Index
Blue Chip Financial Forecasts, September 1, 2009
Value Line Investment Survey, (Standard Edition)
Ibbotson SBBI – 2009 Valuation Yearbook – Market Results for Stocks, Bonds, Bills, and Inflation for 1926-2008, Morningstar, Inc., 2009, Chicago,

Missouri Gas Energy
Comparable Earnings Analysis
for a Proxy Group of Nine Non-Utility Companies Comparable to the
Proxy Group of Nine Value Line Natural Gas Distribution Companies (1)

Proxy Group of Nine Non-Utility Companies Comparable to the Proxy Group of Nine Value Line Natural Gas Distribution Companies (1)	Adj Beta	Unadj Beta	Standard Error of the Regression	Standard Deviation of Beta	Rate of Return on Book Common Equity, Net Worth, or Partner's Capital 5-Year Projected (2) Percent	Student's Statistic
Automatic Data Proc.	0.75	0.58	2.2033	0.0635	16.00 %	(0.65)
Gallagher (Arthur J.)	0.70	0.51	2.2842	0.0658	24.00	0.86
Erie Indemnity Co.	0.70	0.51	2.0646	0.0595	21.00	0.29
Intl Flavors & Frag.	0.70	0.53	2.2368	0.0644	24.00	0.86
Kraft Foods	0.65	0.44	2.2521	0.0649	10.50	(1.69)
Northrop Grumman	0.75	0.56	2.2626	0.0652	15.50	(0.74)
Raytheon Co.	0.75	0.59	2.1222	0.0611	15.00	(0.84)
Sara Lee Corp.	0.70	0.50	2.2565	0.0650	23.50	0.77
Exxon Mobil Corp.	0.80	0.62	2.2771	0.0656	25.50	1.15
Average	0.72	0.54	2.2177	0.0639		
Average for the Proxy Group of Nine Value Line Natural Gas Distribution Companies	0.70	0.52	2.1000 (3)	0.0605		
Median (4)					21.00%	

See Page 54 for notes.

Missouri Gas Energy
Comparable Earnings Analysis
for a Proxy Group of Twenty Non-Utility Companies Comparable to
Southern Union Company (5)

Proxy Group of Twenty Non-Utility Companies Comparable to Southern Union Company (5)	Adj Beta	Unadj Beta	Standard Error of the Regression	Standard Deviation of Beta	Rate of Return on Book Common Equity, Net Worth, or Partner's Capital 5-Year Projected (2) Percent	Student's Statistic
Air Products & Chem.	1.10	1.08	2.3626	0.0681	20.00 %	0.39
AptarGroup	1.00	1.00	2.5946	0.0747	11.50	(0.90)
Avery Dennison	1.00	0.95	2.3991	0.0691	17.00	(0.07)
Amer. Express	1.15	1.21	2.4846	0.0716	23.50	0.92
Ball Corp.	1.10	1.12	2.5673	0.0740	18.00	0.08
Can. National Railway	1.10	1.13	2.5814	0.0744	15.50	(0.30)
Rockwell Collins	1.05	1.02	2.4591	0.0708	21.50	0.61
Dow Chemical	1.00	0.96	2.5945	0.0747	14.00	(0.52)
DST Systems	1.00	0.97	2.3933	0.0689	29.50	1.83
Eaton Corp.	1.10	1.14	2.4262	0.0699	12.50	(0.75)
Fortune Brands	1.00	0.99	2.3314	0.0672	11.50	(0.90)
Honeywell Intl	1.10	1.08	2.4089	0.0694	21.00	0.54
Mettler-Toledo Intl	1.00	0.97	2.5052	0.0722	32.50 (6)	2.28
News Corp.	1.05	1.03	2.3072	0.0665	10.50	(1.05)
Praxair Inc.	1.05	1.02	2.3077	0.0665	23.50	0.92
Donnelley (R.R) & Sons	1.05	1.02	2.5412	0.0732	20.00	0.39
Republic Services	1.05	1.01	2.3435	0.0675	12.50	(0.75)
Stanley Works	1.10	1.09	2.6062	0.0751	16.50	(0.14)
Travelers Cos.	1.05	1.02	2.5261	0.0728	11.50	(0.90)
Time Warner	1.00	0.96	2.2781	0.0656	6.50	(1.66)
Average	1.05	1.04	2.4509	0.0706		
Southern Union Company	1.10	1.09	2.4005 (7)	0.0692		
Median (4)					16.75%	
Conservative Median (6)					16.50%	

See Page 54 for notes.

Missouri Gas Energy
Comparable Earnings Analysis

Notes:

(1) The criteria for selection of the proxy group of nine non-utility companies was that the non-utility companies be domestic and have a meaningful rate of return on book common equity, shareholders' equity, net worth, or partners' capital for each of the five years ended 2007 and projected 2011- 2013 as reported in Value Line Investment Survey (Standard Edition). The proxy group of nine non-utility companies was selected based uponthe proxy group of nine Value Line natural gas distribution companies' unadjusted beta range of 0.40 – 0.64 and standard error of the regression range of 1.9155 – 2.2845. These ranges are based upon plus or minus two standard deviations of the unadjusted beta and standard error of the regression as detailed in Mr. Hanley's direct testimony. Plus or minus two standard deviations captures 95.50% of the distribution of unadjusted betas and standard errors of the regression.

(2) 2011 - 2013.

(3) The standard deviation of group of ten Value Line electric and combination electric and gas companies' standard error of the regression is 0.0923. The standard deviation of the standarderror of the regression is calculated as follows:

$$\text{Standard Deviation of the Std. Err. of the Regr.} = \frac{\text{Standard Error of the Regression}}{\sqrt{2N}}$$

where: N = number of observations. Since Value Line betas are derived from weekly price change observations over a period of five years, N = 259

$$\text{Thus, } 0.0923 = \frac{2.100}{\sqrt{518}} = \frac{2.100}{22.7596}$$

(4) Median five year projected rate of return on book common equity, shareholder's equity, net worth, or partners' capital.

(5) The criteria for selection of the proxy group of twenty companies was that the non-utility companies be domestic and have a meaningful projected rate of return on book common equity, shareholders' equity, net worth, or partners' capital 2011 - 2013 as reported in Value Line Investment Survey (Standard Edition). The proxy group of twenty non-utility companies was selected based uponSouthern Union Company's unadjusted beta range of 0.95 – 1.23 and standard error of the regression range of 2.1896 – 2.6114. These ranges are based upon plus or minus two standard deviations of the unadjusted beta and standard error of the regression as detailed in Mr. Hanley's direct testimony. Plus or minus two standard deviations captures 95.50% of the distribution of unadjusted betas and standard errors of the regression.

(6) The Student's T-statistic associated with these returns exceeds 2.083 at the 95% level of confidence. Therefore, they have been excluded, as outliers, to arrive at proper mean projected returns as fully explained in Mr. Hanley's testimony.

(7) The standard deviation of the proxy group of eight Value Line natural gas distribution companies' standard error of the regression is 0.2110 (2.4005 / 22.7596).

(8) Median of the five year historical and five year projected return on book common equity, shareholder's equity, net worth or partner's capital excluding returns identified as outliers as outlined on Note 6) above.

Source of Information: Value Line, Inc., December 15, 2008
Value Line Investment Survey (Standard Edition)

Missouri Gas Energy
Authorized Returns on Equity and Equity Ratios for
Natural Gas Distribution Companies from January 2008 to August 2009

Company	State	Case Identification	Date	Return on Equity (%)		Common Equity /Total Cap (%)	
Northern States Power Co-WI	Wisconsin	D-4220-UR-115 (gas)	1/8/2008	10.75		52.51	
Wisconsin Electric Power Co.	Wisconsin	D-5-UR-103 (WEP-GAS)	1/17/2008	10.75		54.36	
Wisconsin Gas LLC	Wisconsin	D-5-UR-103 (WG)	1/17/2008	10.75		46.64	
North Shore Gas Co.	Illinois	D-07-0241	2/5/2008	9.99		56.00	
Peoples Gas Light & Coke Co.	Illinois	D-07-0242	2/5/2008	10.19		56.00	
Indiana Gas Co.	Indiana	Ca-43298	2/13/2008	10.20	(1)	48.99	(1)
Avista Corp.	Oregon	D-UG-181	3/31/2008	10.00	(1)	50.00	(1)
Duke Energy Ohio Inc.	Ohio	C-07-0589-GA-AIR	5/28/2008	10.50	(1)	55.76	(1)
Atmos Energy Corp.	Texas	GUD-9762	6/24/2008	10.00		48.27	
Questar Gas Co.	Utah	D-07-057-13	6/27/2008	10.00	(1)	51.38	(1)
San Diego Gas & Electric Co.	California	AP-06-12-009 (gas)	7/31/2008	10.70	(1)	49.00	(1)
Southern California Gas Co.	California	AP-06-12-010	7/31/2008	10.82	(1)	48.00	(1)
SourceGas Distribution LLC	Colorado	D-08S-108G	8/27/2008	10.25	(1)	53.13	(1)
Chesapeake Utilities Corp.	Delaware	D-07-186	9/2/2008	10.25	(1)	61.81	(1)
Atmos Energy Corp.	Georgia	D-27163-U	9/17/2008	10.70		45.00	
Central Illinois Light Co.	Illinois	D-07-0586	9/24/2008	10.68		46.50	
Central Illinois Public	Illinois	D-07-0589	9/24/2008	10.68		47.91	
Illinois Power Co.	Illinois	D-07-0590	9/24/2008	10.68		51.76	
Avista Corp.	Idaho	C-AVU-G-08-01	9/30/2008	10.20	(1)	47.94	(1)
New Jersey Natural Gas Co.	New Jersey	D-GR-07110889	10/3/2008	10.30	(1)	51.20	(1)
Puget Sound Energy Inc.	Washington	D-UG-07-2301	10/8/2008	10.15	(1)	46.00	(1)
CenterPoint Energy Resources	Texas	GUD 9791	10/20/2008	10.06		55.40	
Piedmont Natural Gas Co.	North Carolina	D-G-9, Sub 550	10/24/2008	10.60	(1)	51.00	(1)
Public Service Co. of NC	North Carolina	D-G-5, Sub 495	10/24/2008	10.60	(1)	54.00	(1)
Southwest Gas Corp.	California	A-07-12-022 (SoCalDiv)	11/21/2008	10.50	(1)	47.00	(1)
Southwest Gas Corp.	California	A-07-12-022 (NoCalDiv)	11/21/2008	10.50	(1)	47.00	(1)
Southwest Gas Corp.	California	A-07-12-022 (LkTah)	11/21/2008	10.50	(1)	47.00	(1)
Narragansett Electric Co.	Rhode Island	D-3943	11/24/2008	10.50		NA	
Columbia Gas of Ohio Inc	Ohio	C-08-0072-GA-AIR	12/3/2008	10.39	(1)	NA	(1)
Southwest Gas Corp.	Arizona	D-G-01551A-07-0504	12/24/2008	10.00		43.44	
Northwest Natural Gas Co.	Washington	D-UG-08-0546	12/26/2008	10.10	(1)	50.74	(1)
Avista Corp.	Washington	D-UG-08-0417	12/29/2008	10.20	(1)	46.30	(1)
Michigan Gas Utilities Corp	Michigan	C-U-15549	1/13/2009	10.45	(1)	46.49	(1)
New England Gas Company	Massachusetts	DPU 08-35	2/2/2009	10.05		34.19	
Louisville Gas & Electric Co.	Kentucky	C-2008-00252 (gas)	2/5/2009	NA	(1)	NA	(1)
Equitable Gas Company	Pennsylvania	C-R-2008-2029325	2/26/2009	NA	(1)	NA	(1)
Atmos Energy Corp.	Tennessee	D-08-00197	3/9/2009	10.30	(1)	48.12	(1)
Northern Illinois Gas Co.	Illinois	D-08-0363	3/25/2009	10.17		46.42	
Entergy New Orleans Inc.	Louisiana	D-UD-08-03 (gas)	4/2/2009	10.75	(1)	NA	(1)
Peoples Gas System	Florida	D-080318-GU	5/5/2009	10.75		48.51	
Niagara Mohawk Power Corp.	New York	C-08-G-0609	5/14/2009	10.20	(1)	43.70	(1)
Minnesota Energy Resources	Minnesota	D-G-007,011/GR-08-835	5/21/2009	10.21		48.77	
EnergyNorth Natural Gas Inc	New Hampshire	D-DG-08-009	5/29/2009	9.54	(1)	50.00	(1)
Black Hills Iowa Gas Utility	Iowa	D-RPU-08-3	6/3/2009	10.10	(1)	51.38	(1)
Central Hudson Gas & Electric	New York	C-08-G-0888	6/18/2009	10.00		47.00	
CT Natural Gas Corp.	Connecticut	D-08-12-06	6/30/2009	9.31		52.52	
Southern Connecticut Gas Co.	Connecticut	D-08-12-07	7/17/2009	9.26		52.00	
Avista Corp.	Idaho	C-AVU-G-09-01	7/17/2009	10.50	(1)	50.00	(1)
UGI Central Penn Gas	Pennsylvania	R-2008-2079675	8/27/2009	NA	(1)	NA	(1)
UGI Penn Natural Gas	Pennsylvania	R-2008-2079660	8/27/2009	NA	(1)	NA	(1)
			Average	10.31	%	49.51	%
			Median	10.28	%	48.99	%
			Average of Litigated Cases	10.27	%	49.12	%
			Median of Litigated Cases	10.20	%	48.51	%

Notes:
(1) Order followed stipulation or settlement by the parties. Decision particulars not necessarily precedent-setting or specifically adopted by the regulatory body.

Source of Information:
Report downloaded from Regulatory Research Associates, Inc. (RRA) an SNL Energy Company on September 10, 2009.

Missouri Gas Energy
Inappropriate Inclusion of NICOR, Inc., Nisource, Inc., and UGI Corporation
as Proxy Companies

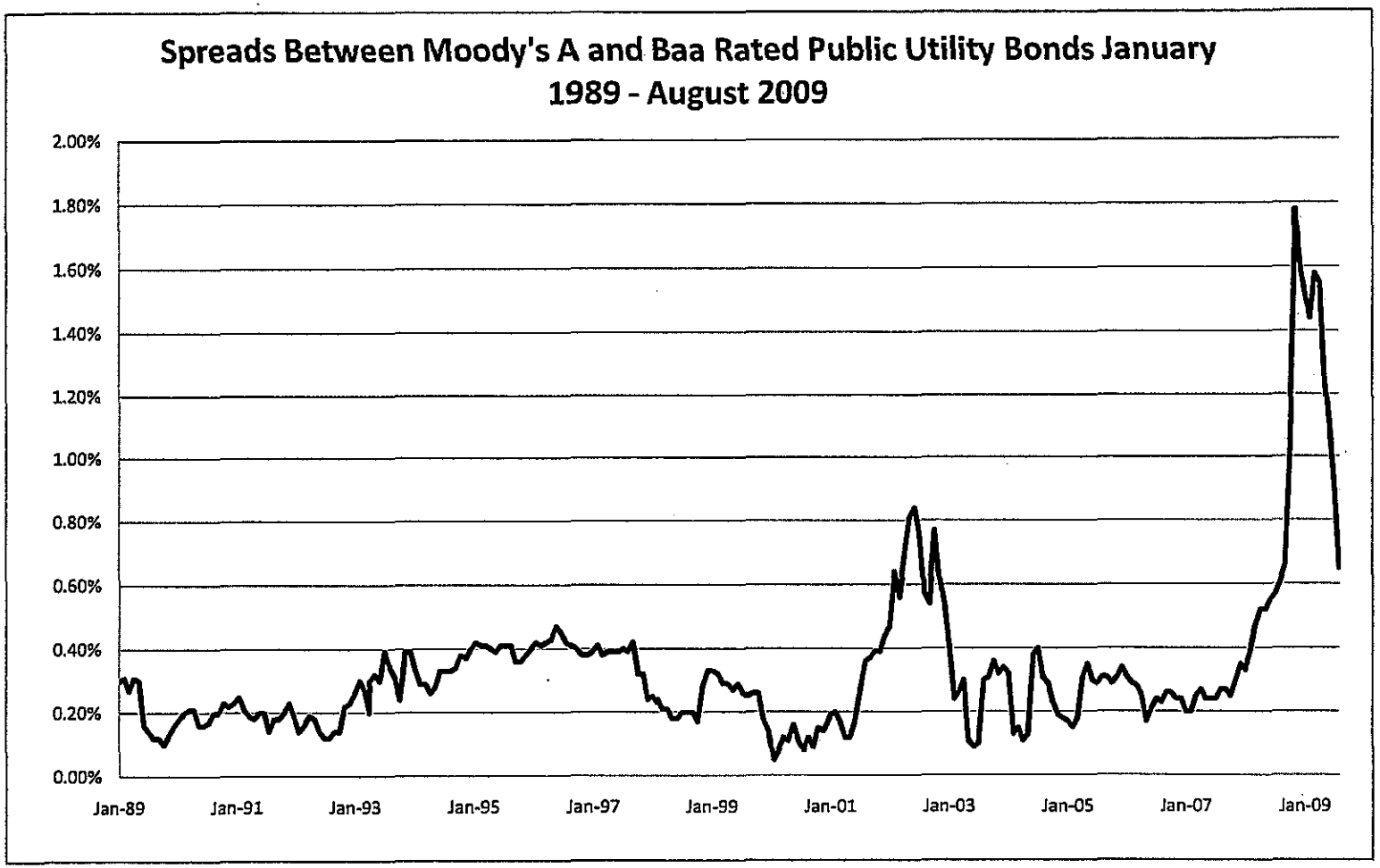
	Company Name	Dividend Omission / Cutters?	Pending / Expected Merger or Acquisition?	Over 60% of Operating Income due to Regulated Gas Distribution Operations?	Over 60% of Total Assets due to Regulated Gas Distribution Operations?
GAS	NICOR, Inc.		Yes		
NI	Nisource, Inc.			36.49%	37.11%
UGI	UGI Corporation			23.51%	26.22%

Source of Information:

Value Line Investment Survey
AUS Merger and Acquisition Quarterly Report June 30, 2009
Company 2008 SEC Filing 10K

Schedule FJH-22

Missouri Gas Energy
Spreads Between Moody's
Moody's A and Baa Rated Public Utility Bonds
1989 - Present



Source of Information:
Mergent Bond Record, Various Dates.

Missouri Gas Energy
Moody's Bond Yields
January 1989 - August 2009

DATE	Moody's A Rated Public Utility Bonds	Moodys Baa Rated Utility Bonds	Spread between A and Baa Rated Public Utility Bonds
Jan-89	10.08%	10.38%	0.30%
Feb-89	10.07%	10.38%	0.31%
Mar-89	10.23%	10.50%	0.27%
Apr-89	10.18%	10.49%	0.31%
May-89	9.99%	10.29%	0.30%
Jun-89	9.64%	9.80%	0.16%
Jul-89	9.50%	9.64%	0.14%
Aug-89	9.52%	9.64%	0.12%
Sep-89	9.58%	9.70%	0.12%
Oct-89	9.54%	9.64%	0.10%
Nov-89	9.51%	9.64%	0.13%
Dec-89	9.44%	9.60%	0.16%
Jan-90	9.56%	9.74%	0.18%
Feb-90	9.76%	9.96%	0.20%
Mar-90	9.85%	10.06%	0.21%
Apr-90	9.92%	10.13%	0.21%
May-90	10.00%	10.16%	0.16%
Jun-90	9.80%	9.96%	0.16%
Jul-90	9.75%	9.92%	0.17%
Aug-90	9.92%	10.12%	0.20%
Sep-90	10.12%	10.32%	0.20%
Oct-90	10.05%	10.28%	0.23%
Nov-90	9.90%	10.12%	0.22%
Dec-90	9.73%	9.96%	0.23%
Jan-91	9.71%	9.96%	0.25%
Feb-91	9.47%	9.68%	0.21%
Mar-91	9.55%	9.74%	0.19%
Apr-91	9.46%	9.64%	0.18%
May-91	9.44%	9.64%	0.20%
Jun-91	9.59%	9.79%	0.20%
Jul-91	9.55%	9.69%	0.14%
Aug-91	9.29%	9.47%	0.18%
Sep-91	9.16%	9.34%	0.18%
Oct-91	9.12%	9.32%	0.20%
Nov-91	9.05%	9.28%	0.23%
Dec-91	8.88%	9.07%	0.19%
Jan-92	8.84%	8.98%	0.14%
Feb-92	8.93%	9.09%	0.16%
Mar-92	8.97%	9.16%	0.19%
Apr-92	8.93%	9.11%	0.18%
May-92	8.87%	9.01%	0.14%
Jun-92	8.78%	8.90%	0.12%
Jul-92	8.57%	8.69%	0.12%
Aug-92	8.44%	8.58%	0.14%
Sep-92	8.40%	8.54%	0.14%
Oct-92	8.54%	8.76%	0.22%
Nov-92	8.63%	8.86%	0.23%
Dec-92	8.43%	8.69%	0.26%

Missouri Gas Energy
Moody's Bond Yields
January 1989 - August 2009

DATE	Moody's A Rated Public Utility Bonds	Moodys Baa Rated Utility Bonds	Spread between A and Baa Rated Public Utility Bonds
Jan-93	8.27%	8.57%	0.30%
Feb-93	8.04%	8.31%	0.27%
Mar-93	7.90%	8.10%	0.20%
Apr-93	7.81%	8.11%	0.30%
May-93	7.86%	8.18%	0.32%
Jun-93	7.75%	8.05%	0.30%
Jul-93	7.54%	7.93%	0.39%
Aug-93	7.25%	7.59%	0.34%
Sep-93	7.04%	7.35%	0.31%
Oct-93	7.03%	7.27%	0.24%
Nov-93	7.30%	7.69%	0.39%
Dec-93	7.34%	7.73%	0.39%
Jan-94	7.33%	7.66%	0.33%
Feb-94	7.47%	7.76%	0.29%
Mar-94	7.47%	7.76%	0.29%
Apr-94	7.85%	8.11%	0.26%
May-94	8.33%	8.61%	0.28%
Jun-94	8.31%	8.64%	0.33%
Jul-94	8.47%	8.80%	0.33%
Aug-94	8.41%	8.74%	0.33%
Sep-94	8.64%	8.98%	0.34%
Oct-94	8.86%	9.24%	0.38%
Nov-94	8.98%	9.35%	0.37%
Dec-94	8.76%	9.16%	0.40%
Jan-95	8.73%	9.15%	0.42%
Feb-95	8.52%	8.93%	0.41%
Mar-95	8.37%	8.78%	0.41%
Apr-95	8.27%	8.67%	0.40%
May-95	7.91%	8.30%	0.39%
Jun-95	7.60%	8.01%	0.41%
Jul-95	7.70%	8.11%	0.41%
Aug-95	7.83%	8.24%	0.41%
Sep-95	7.62%	7.98%	0.36%
Oct-95	7.46%	7.82%	0.36%
Nov-95	7.43%	7.81%	0.38%
Dec-95	7.23%	7.63%	0.40%
Jan-96	7.22%	7.64%	0.42%
Feb-96	7.37%	7.78%	0.41%
Mar-96	7.73%	8.15%	0.42%
Apr-96	7.89%	8.32%	0.43%
May-96	7.98%	8.45%	0.47%
Jun-96	8.06%	8.51%	0.45%
Jul-96	8.02%	8.44%	0.42%
Aug-96	7.84%	8.25%	0.41%

Missouri Gas Energy
Moody's Bond Yields
January 1989 - August 2009

DATE	Moody's A Rated Public Utility Bonds	Moodys Baa Rated Utility Bonds	Spread between A and Baa Rated Public Utility Bonds
Sep-96	8.01%	8.41%	0.40%
Oct-96	7.77%	8.15%	0.38%
Nov-96	7.49%	7.87%	0.38%
Dec-96	7.59%	7.98%	0.39%
Jan-97	7.77%	8.18%	0.41%
Feb-97	7.64%	8.02%	0.38%
Mar-97	7.87%	8.26%	0.39%
Apr-97	8.03%	8.42%	0.39%
May-97	7.89%	8.28%	0.39%
Jun-97	7.72%	8.12%	0.40%
Jul-97	7.48%	7.87%	0.39%
Aug-97	7.51%	7.93%	0.42%
Sep-97	7.47%	7.79%	0.32%
Oct-97	7.35%	7.67%	0.32%
Nov-97	7.25%	7.49%	0.24%
Dec-97	7.16%	7.41%	0.25%
Jan-98	7.05%	7.28%	0.23%
Feb-98	7.12%	7.36%	0.24%
Mar-98	7.16%	7.37%	0.21%
Apr-98	7.16%	7.37%	0.21%
May-98	7.16%	7.34%	0.18%
Jun-98	7.03%	7.21%	0.18%
Jul-98	7.03%	7.23%	0.20%
Aug-98	7.00%	7.20%	0.20%
Sep-98	6.93%	7.13%	0.20%
Oct-98	6.96%	7.13%	0.17%
Nov-98	7.03%	7.31%	0.28%
Dec-98	6.91%	7.24%	0.33%
Jan-99	6.97%	7.30%	0.33%
Feb-99	7.09%	7.41%	0.32%
Mar-99	7.26%	7.55%	0.29%
Apr-99	7.22%	7.51%	0.29%
May-99	7.47%	7.74%	0.27%
Jun-99	7.74%	8.03%	0.29%
Jul-99	7.71%	7.97%	0.26%
Aug-99	7.91%	8.16%	0.25%
Sep-99	7.93%	8.19%	0.26%
Oct-99	8.06%	8.32%	0.26%
Nov-99	7.94%	8.12%	0.18%
Dec-99	8.14%	8.28%	0.14%
Jan-00	8.35%	8.40%	0.05%
Feb-00	8.25%	8.33%	0.08%
Mar-00	8.28%	8.40%	0.12%
Apr-00	8.29%	8.40%	0.11%

Missouri Gas Energy
Moody's Bond Yields
January 1989 - August 2009

DATE	Moody's A Rated Public Utility Bonds	Moodys Baa Rated Utility Bonds	Spread between A and Baa Rated Public Utility Bonds
May-00	8.70%	8.86%	0.16%
Jun-00	8.36%	8.47%	0.11%
Jul-00	8.25%	8.33%	0.08%
Aug-00	8.13%	8.25%	0.12%
Sep-00	8.23%	8.32%	0.09%
Oct-00	8.14%	8.29%	0.15%
Nov-00	8.11%	8.25%	0.14%
Dec-00	7.84%	8.01%	0.17%
Jan-01	7.80%	7.99%	0.19%
Feb-01	7.74%	7.94%	0.20%
Mar-01	7.68%	7.85%	0.17%
Apr-01	7.94%	8.06%	0.12%
May-01	7.99%	8.11%	0.12%
Jun-01	7.85%	8.02%	0.17%
Jul-01	7.78%	8.05%	0.27%
Aug-01	7.59%	7.95%	0.36%
Sep-01	7.75%	8.12%	0.37%
Oct-01	7.63%	8.02%	0.39%
Nov-01	7.57%	7.96%	0.39%
Dec-01	7.83%	8.27%	0.44%
Jan-02	7.66%	8.13%	0.47%
Feb-02	7.54%	8.18%	0.64%
Mar-02	7.76%	8.32%	0.56%
Apr-02	7.57%	8.26%	0.69%
May-02	7.52%	8.33%	0.81%
Jun-02	7.42%	8.26%	0.84%
Jul-02	7.31%	8.07%	0.76%
Aug-02	7.17%	7.74%	0.57%
Sep-02	7.08%	7.62%	0.54%
Oct-02	7.23%	8.00%	0.77%
Nov-02	7.14%	7.76%	0.62%
Dec-02	7.07%	7.61%	0.54%
Jan-03	7.06%	7.47%	0.41%
Feb-03	6.93%	7.17%	0.24%
Mar-03	6.79%	7.05%	0.26%
Apr-03	6.64%	6.94%	0.30%
May-03	6.36%	6.47%	0.11%
Jun-03	6.21%	6.30%	0.09%
Jul-03	6.57%	6.67%	0.10%
Aug-03	6.78%	7.08%	0.30%
Sep-03	6.56%	6.87%	0.31%
Oct-03	6.43%	6.79%	0.36%

Missouri Gas Energy
Moody's Bond Yields
January 1989 - August 2009

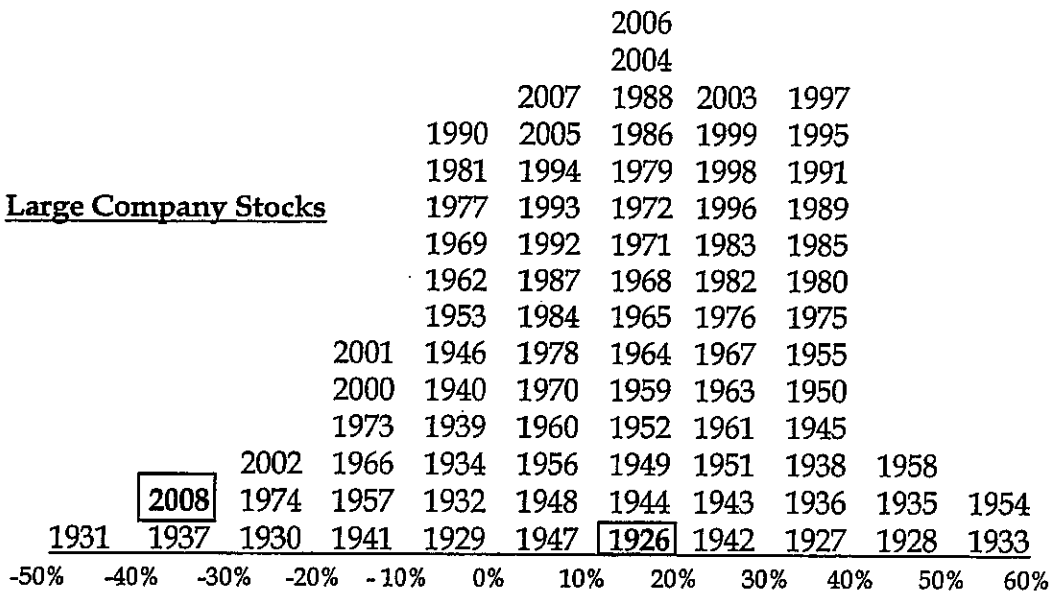
DATE	Moody's A Rated Public Utility Bonds	Moodys Baa Rated Utility Bonds	Spread between A and Baa Rated Public Utility Bonds
Nov-03	6.37%	6.69%	0.32%
Dec-03	6.27%	6.61%	0.34%
Jan-04	6.15%	6.47%	0.32%
Feb-04	6.15%	6.28%	0.13%
Mar-04	5.97%	6.12%	0.15%
Apr-04	6.35%	6.46%	0.11%
May-04	6.62%	6.75%	0.13%
Jun-04	6.46%	6.84%	0.38%
Jul-04	6.27%	6.67%	0.40%
Aug-04	6.14%	6.45%	0.31%
Sep-04	5.98%	6.27%	0.29%
Oct-04	5.94%	6.17%	0.23%
Nov-04	5.97%	6.16%	0.19%
Dec-04	5.92%	6.10%	0.18%
Jan-05	5.78%	5.95%	0.17%
Feb-05	5.61%	5.76%	0.15%
Mar-05	5.83%	6.01%	0.18%
Apr-05	5.64%	5.95%	0.31%
May-05	5.53%	5.88%	0.35%
Jun-05	5.40%	5.70%	0.30%
Jul-05	5.51%	5.80%	0.29%
Aug-05	5.50%	5.81%	0.31%
Sep-05	5.52%	5.83%	0.31%
Oct-05	5.79%	6.08%	0.29%
Nov-05	5.88%	6.19%	0.31%
Dec-05	5.80%	6.14%	0.34%
Jan-06	5.75%	6.06%	0.31%
Feb-06	5.82%	6.11%	0.29%
Mar-06	5.98%	6.26%	0.28%
Apr-06	6.29%	6.54%	0.25%
May-06	6.42%	6.59%	0.17%
Jun-06	6.40%	6.61%	0.21%
Jul-06	6.37%	6.61%	0.24%
Aug-06	6.20%	6.43%	0.23%
Sep-06	6.00%	6.26%	0.26%
Oct-06	5.98%	6.24%	0.26%
Nov-06	5.80%	6.04%	0.24%
Dec-06	5.81%	6.05%	0.24%
Jan-07	5.96%	6.16%	0.20%
Feb-07	5.90%	6.10%	0.20%
Mar-07	5.85%	6.10%	0.25%
Apr-07	5.97%	6.24%	0.27%
May-07	5.99%	6.23%	0.24%
Jun-07	6.30%	6.54%	0.24%

Missouri Gas Energy
Moody's Bond Yields
January 1989 - August 2009

DATE	Moody's A Rated Public Utility Bonds	Moodys Baa Rated Utility Bonds	Spread between A and Baa Rated Public Utility Bonds
Jul-07	6.25%	6.49%	0.24%
Aug-07	6.24%	6.51%	0.27%
Sep-07	6.18%	6.45%	0.27%
Oct-07	6.11%	6.36%	0.25%
Nov-07	5.97%	6.27%	0.30%
Dec-07	6.16%	6.51%	0.35%
Jan-08	6.02%	6.35%	0.33%
Feb-08	6.21%	6.60%	0.39%
Mar-08	6.21%	6.68%	0.47%
Apr-08	6.29%	6.81%	0.52%
May-08	6.27%	6.79%	0.52%
Jun-08	6.38%	6.93%	0.55%
Jul-08	6.40%	6.97%	0.57%
Aug-08	6.37%	6.98%	0.61%
Sep-08	6.49%	7.15%	0.66%
Oct-08	7.56%	8.58%	1.02%
Nov-08	7.20%	8.98%	1.78%
Dec-08	6.54%	8.13%	1.59%
Jan-09	6.39%	7.90%	1.51%
Feb-09	6.30%	7.74%	1.44%
Mar-09	6.42%	8.00%	1.58%
Apr-09	6.48%	8.03%	1.55%
May-09	6.49%	7.76%	1.27%
Jun-09	6.20%	7.30%	1.10%
Jul-09	5.97%	6.87%	0.90%
Aug-09	5.71%	6.36%	0.65%

Source of Information:
Mergent Bond Record, Various Dates

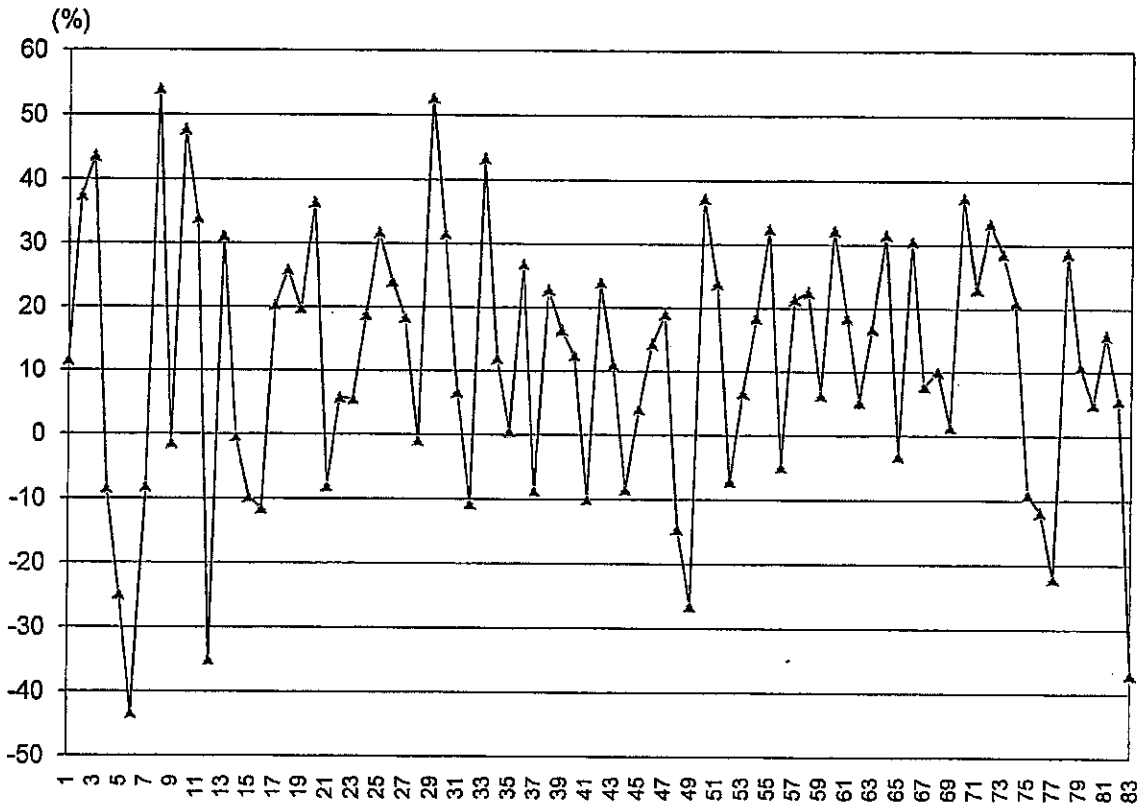
Missouri Gas Energy
Total Returns on Large Company Stocks
1926 to 2008



Arithmetic Mean: $r_A = \sum_{t=1}^{n} r_t / n$

Source : Ibbotson SBBI – 2009 Valuation Yearbook – Market Results for Stocks, Bonds, Bills, and Inflation –1926-2008, pp. 166-167, Morningstar, Inc., 2009 Chicago, IL

Missouri Gas Energy
Large Company Stock Returns
From 1926 to 2008

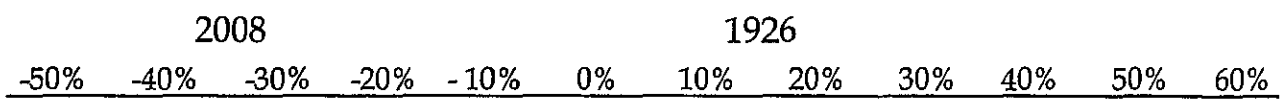


Source of Information:

Ibbotson SBBI - 2009 Valuation Yearbook - Market Results for Stocks Bonds Bills and Inflation - 1926-2008, Morningstar, Inc., 2009 Chicago, IL.

Missouri Gas Energy
Total Returns on Large Company Stocks
1926 to 2008

Large Company Stocks



Geometric Mean: $r_G = \left[V_n / V_0 \right]^{1/n} - 1$

Source : Ibbotson SBBI - 2009 Valuation Yearbook - Market Results for Stocks, Bonds, Bills, and Inflation -1926-2008, pp. 166-167, Morningstar, Inc., 2009 Chicago, IL

Predicted Equity Risk Premium based on Regression Analysis of OCP Witness Lawton on Schedule (DJL-10)

Missouri Gas Energy
Regression Analysis of Observed Risk Premiums
1980 - 2008

	BCP Witness Lawton Observations (1)		
	Avg Bond Yield	Authorized Returns	Indicated Risk Premium
1980	13.15%	14.23%	1.08%
1981	13.31%	15.36%	2.05%
1982	14.03%	15.32%	1.29%
1983	15.33%	15.78%	0.45%
1984	15.62%	15.22%	-0.40%
1985	12.29%	15.20%	2.91%
1986	9.46%	13.93%	4.47%
1987	9.98%	12.99%	3.01%
1988	10.45%	12.79%	2.34%
1989	9.66%	12.97%	3.31%
1990	9.76%	12.70%	2.94%
1991	9.21%	12.55%	3.34%
1992	8.57%	12.09%	3.52%
1993	7.56%	11.41%	3.85%
1994	8.30%	11.34%	3.04%
1995	7.91%	11.55%	3.64%
1996	7.74%	11.39%	3.65%
1997	7.63%	11.40%	3.77%
1998	7.00%	11.66%	4.66%
1999	7.55%	10.77%	3.22%
2000	8.14%	11.43%	3.29%
2001	7.72%	11.09%	3.37%
2002	7.53%	11.16%	3.63%
2003	6.61%	10.97%	4.36%
2004	6.20%	10.75%	4.55%
2005	5.67%	10.54%	4.87%
2006	6.08%	10.36%	4.28%
2007	6.11%	10.36%	4.25%
2008	6.65%	10.46%	3.81%

Regression Predictions		
Observation	*Predicted Y*	*Residuals*
1	0.016012414	-0.005212414
2	0.017148227	-0.021148227
3	0.018284039	-0.013784039
4	0.019419852	0.001080148
5	0.020555665	-0.007655665
6	0.021691478	0.007408522
7	0.022827291	0.021872709
8	0.023963103	0.006136897
9	0.025098916	-0.001698916
10	0.026234729	0.006865271
11	0.027370542	0.002029458
12	0.028506355	0.004893645
13	0.029642167	0.005557833
14	0.03077798	0.00772202
15	0.031913793	-0.001513793
16	0.033049606	0.003350394
17	0.034185419	0.002314581
18	0.035321232	0.002378768
19	0.036457044	0.010142956
20	0.037592857	-0.005392857
21	0.03872867	-0.00582867
22	0.039864483	-0.006164483
23	0.041000296	-0.004700296
24	0.042136108	0.001463892
25	0.043271921	0.002228079
26	0.044407734	0.004292266
27	0.045543547	-0.002743547
28	0.04667936	-0.00417936
29	0.047815172	-0.009715172

T-Statistic 6.16694392

Notes:
(1) From Schedule (DJL-10).

Predicted Equity Risk Premium based on Regression Analysis of OPC Witness Lawton on Schedule (DJL-10)

Missouri Gas Energy
Regression Analysis of Observed Risk Premiums
1980 - 2008

BCP Witness Lawton Observations (1)

	Avg Bond Yield	Authorized Returns	Indicated Risk Premium
2005	5.67%	10.54%	4.87%
2006	6.08%	10.36%	4.28%
2007	6.11%	10.36%	4.25%
2004	6.20%	10.75%	4.55%
2003	6.61%	10.97%	4.36%
2008	6.65%	10.46%	3.81%
1998	7.00%	11.66%	4.66%
2002	7.53%	11.16%	3.63%
1999	7.55%	10.77%	3.22%
1993	7.56%	11.41%	3.85%
1997	7.63%	11.40%	3.77%
2001	7.72%	11.09%	3.37%
1996	7.74%	11.39%	3.65%
1995	7.91%	11.55%	3.64%
2000	8.14%	11.43%	3.29%
1994	8.30%	11.34%	3.04%
1992	8.57%	12.09%	3.52%
1991	9.21%	12.55%	3.34%
1986	9.46%	13.93%	4.47%
1989	9.66%	12.97%	3.31%
1990	9.76%	12.70%	2.94%
1987	9.98%	12.99%	3.01%
1988	10.45%	12.79%	2.34%
1985	12.29%	15.20%	2.91%
1980	13.15%	14.23%	1.08%
1983	13.31%	15.36%	2.05%
1984	14.03%	15.32%	1.29%
1982	15.33%	15.78%	0.45%
1981	15.62%	15.22%	-0.40%

Observation	*Predicted Y*	*Residuals*
1	0.046282568	0.002417432
2	0.044587512	-0.001787512
3	0.044463483	-0.001963483
4	0.044091398	0.001408602
5	0.042396341	0.001203659
6	0.04223097	-0.00413097
7	0.040783971	0.005816029
8	0.0385928	-0.0022928
9	0.038510114	-0.006310114
10	0.038468772	3.12284E-05
11	0.038179372	-0.000479372
12	0.037807286	-0.004107286
13	0.0377246	-0.0012246
14	0.037021772	-0.000621772
15	0.036070887	-0.003170887
16	0.035409401	-0.005009401
17	0.034293145	0.000906855
18	0.031647203	0.001752797
19	0.030613632	0.014086368
20	0.029786775	0.003313225
21	0.029373347	2.66531E-05
22	0.028463804	0.001636196
23	0.026520691	-0.003120691
24	0.018913609	0.010186391
25	0.015358124	-0.004558124
26	0.014696639	0.005803361
27	0.011719955	0.001180045
28	0.006345385	-0.001845385
29	0.005146443	-0.009146443

T-Statistic -12.7385

Notes:
(1) From Schedule (DJL-10).

Missouri Gas Energy
Lawton Corrected Risk Premium Method
Reflecting a Forecasted Equity Risk Premium

Projected Baa Corporate Bond (1)	7.05 %
Spread Between Baa Corporates and Baa Public Utiliy Bonds (2)	-0.19
Projected Baa Public Utility Bond	6.86 %
Expected Risk Premium Over Public Utility Bonds (3)	4.78
Indicated Common Equity Cost Rate Based on Risk	11.64 %
Projected Baa Public Utility Bond	6.86 %
Expected Equity Risk Premium due to Inverse Relationship between Treasury Bond Yields and Equity Risk Premia (4)	4.14
Indicated Common Equity Cost Rate Based on Risk	11.00 %
Average of the Two Methods	11.32 %

Notes:

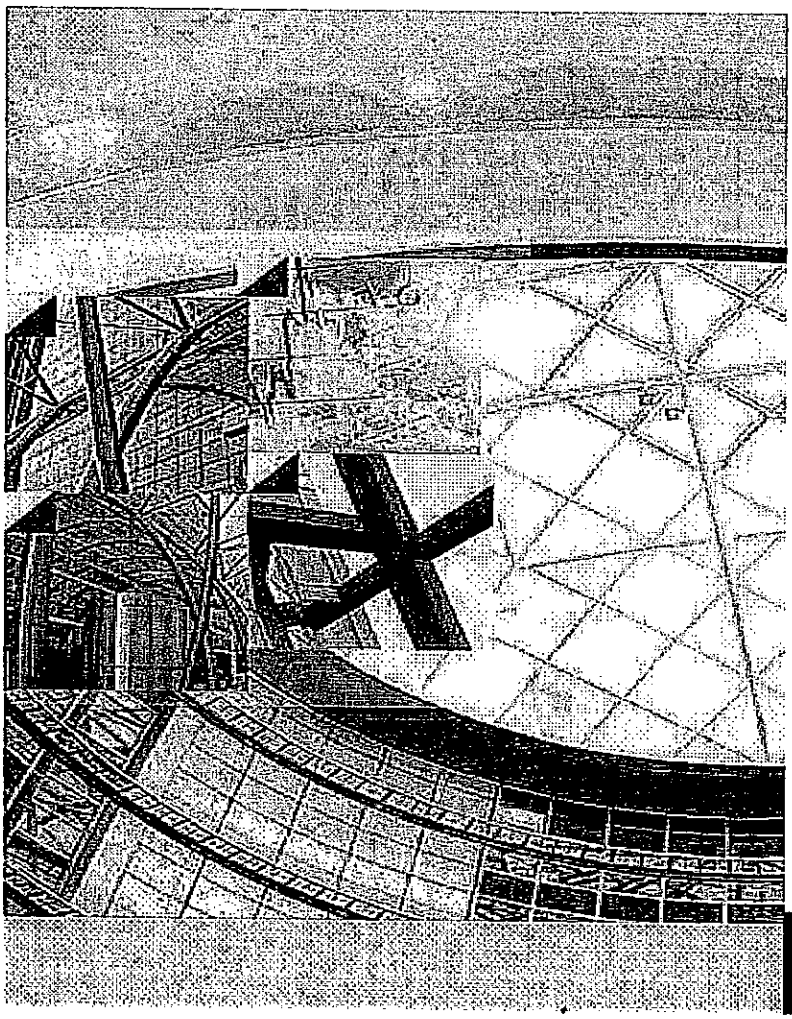
(1) Average forecast based upon six quarterly estimates of Baa rated corporate bonds per the consensus of nearly 50 economists reported in Blue Chip Financial Forecasts dated September 1, 2009 (see Page 40 of Schedule FJH-21). The estimates are detailed below.

Third Quarter 2009	7.00 %
Fourth Quarter 2009	7.00
First Quarter 2010	7.00
Second Quarter 2010	7.00
Third Quarter 2010	7.10
Fourth Quarter 2010	7.20
Average	7.05 %

(2) From Schedule (DJL-4).

(3) From Schedule FJH-25, Sheet 2.

(4) From Schedule FJH-25, Sheet 4.



Southern Union

Market Update

August, 20 2009

CALYON
CRÉDIT AGRICOLE CIB

Utilities Recent Transactions
Industry Comparable

Southern Union

COMPANY	DYNEGY HOLDINGS INC	AMEREN CORP	NORTHWESTERN CORP	INTEGRYS ENERGY	DTE ENERGY CO
INDUSTRY	Electric Services	Electric Services	Electric and other services	Electric Services	Integrated Energy Compagny DTE Energy / Electric Generation & Distribution Detroit Ed. / Natural Gas Distribution MichCon
CORPORATE RATING	B/B2	BB3-/Baa3	BBB/Baa2	BBB+/A3	BBB / BBB-/Baa2
UNSECURED RATING	B/B3	BB+/Baa3	BBB/Baa2	BBB+/A3	BBB/Baa1 / BBB/Baa1
DATE	5-Aug-09	29-Jun-09	29-Jun-09	27-May-09	29-Apr-09
FACILITY DESCRIPTION	RC (5-year) $850MM TLB (6-year) $70MM LC (5-year) $450MM	RC (2-year) $1,079.5 MM RC (2-year) $800 MM	RC (3-year) $250 MM	RC (364-day) $425MM (accordion to $750MM)	$1,000MM (total) 2-Yr RC $538MM / $211MM / $250MM
PURPOSE	Debt Repayment	Corporate Purposes	Corporate Purposes	Corporate Purpose	Corporate Purpose
FIRST DRAWN / UNDRAWN COST	L+375 bps CF: 75 bps	L+425 bps 100 bps	L+300 bps CF: 50 bps	L+300.0 bps CF: 50 bps	L+350.0 bps / L+300.0 bps / L+300.0 bps 87.5 bps / 62.5 bps / 62.5 bps
PRICING GRID			Sr Rating / Margin / Cmt Fee ≥ A-/A3 225.0 bps 25.0 bps BBB+/Baa1 275.0 bps 37.5 bps BBB/Baa2 300.0 bps 50.0 bps BBB-/Baa3 350.0 bps 62.5 bps ≤ BB+/Ba1 400.0 bps 75.0 bps	Sr Rating / Margin / Cmt Fee ≥ AA/Aa3 200.0 bps 15.0 bps A+/A1 225.0 bps 20.0 bps A/A2 250.0 bps 25.0 bps A-/A3 275.0 bps 37.5 bps BBB+/Baa1 300.0 bps 50.0 bps BBB/Baa2 325.0 bps 62.5 bps BBB-/Baa3 375.0 bps 75.0 bps	Sr Rating / Drawn Cost / Fac Fee ≥ A-/A3 250.0 bps 50.0 bps BBB+/Baa1 300.0 bps 62.5 bps BBB/Baa2 350.0 bps 87.5 bps BBB-/Baa3 400.0 bps 112.5 bps ≤ BB+/Ba1 450.0 bps 125.0 bps
COVENANTS	Max Debt/EBITDA 2.50x Mint cons EBITDA/ Int Exc 1.75x		Cons Debt/Cap: 65%	Max Debt/Cap: 65%	Max Debt/Cap: 65%

Source: Thomson Reuters LPC, Bloomberg

CALYON CRÉDIT AGRICOLE CIB

Utilities Recent Transactions
Industry Comparable

Southern Union

COMPANY	DYNEGY HOLDINGS INC	AMEREN CORP	NORTHWESTERN CORP	INTEGRYS ENERGY	GTE ENERGY CO
COMMENTS	Amendment Fee: 50 bps Expects a "temporary reduction in availability of liquidity" under its credit facility in mid-to late-2009 "as a result of forecasted EBITDA and a corresponding borrowing limitation under the secured debt to EBITDA covenant	These facilities cumulatively provide $2.1 billion of credit through July 14, 2010, reducing to $1.88 billion through July 14, 2011. The facilities were oversubscribed		Comes with an accordion for increment credit to $750 MM Upfront fee 200.0 bps (as per news article)	Commitment / Upfront Fee ≥ $65MM 250.0 bps ≥ $55MM 225.0 bps ≥ $35MM 200.0 bps <$35MM 175.0 bps
	Lenders / Admin. Agent Citigroup Admin. Agent JP Morgan Doc. Agent ABN AMRO Bank NV Doc. Agent Bank of America Credit Suisse Doc. Agent Calyon Participant Lehman Brothers Participant	Lenders / Admin. Agent JP Morgan Admin. Agent Barclays Capital Synd. Agent BNP Paribas Participant BTMU Participant US Bank Participant	Lenders / Admin. Agent Bank of America Merrill Lynch Admin. Agent JP Morgan Syndic. Agent US Bank Doc. Agent Union Bank of California Doc. Agent Bank of Nova Scotia Participant Credit Suisse Participant Keycorp Participant UBS Participant	Lenders / Admin. Agent Bank of America Admin. Agent JP Morgan Syndic. Agent Nova Scotia Co-Doc Agent Morgan Stanley Co-Doc Agent US Bank Co-Doc Agent State Bank of India Participant Union Bank Participant Keybank Participant Land Bank of Taiwan Participant Taiwan Business Bank Participant Mega International Participant State Street Participant	Lenders / Agent Barclays Agent Citigroup Agent JP Morgan Agent Royal Bank of Scotland Agent Bank of America Agent Bank of Nova Scotia Agent Expected Closing Date 4/29/2009 $500MM already committed by Bank meeting date (03/30/2009)

Source: Thomson Reuters LPC, Bloomberg

CALYON CRÉDIT AGRICOLE CIB

Missouri Gas Energy
Indicators that Mr. Murray's Proxy Companies are Viewed
as Gas Distribution Companies by Investors

Company	Ticker	Included in Edward Jones Gas Distribution Companies?	Included in Value Line Natural Gas Utility Group?	% of Net Operating Income Derived from Gas Distribution Operations	% of Total Assets Devoted to Gas Distribution Operations
AGL Resources, Inc	AGL	Yes	Yes	67.99%	78.98%
Atmos Energy Corporation	ATO	Yes	Yes	61.13%	79.44%
New Jersey Resources Corporation	NJR	Yes	Yes	43.75%	64.27%
Northwest Natural Gas Company	NWN	Yes	Yes	89.53%	96.28%
Piedmont Natural Gas Co., Inc.	PNY	Yes	Yes	100.13%	96.70%
South Jersey Industries, Inc.	SJI	Yes	Yes	54.99%	73.84%
WGL Holdings, Inc.	WGL	Yes	Yes	96.63%	90.58%
Average				73.45%	82.87%
Median				67.99%	79.44%

Source of Information:
2008 SEC Filings of Company 10K

Schedule FJH-28

Missouri Gas Energy
Indicated Common Equity Cost Rate Through Use
of the Capital Asset Pricing Model for
Staff Witness Murray's Proxy Group of Seven Utility Companies

Line No.		Staff Witness Murray's Proxy Group of Seven Utility Companies
1.	Traditional Capital Asset Pricing Model (1)	10.44 %
2.	Empirical Capital Asset Pricing Model (1)	11.21 %
3.	Conclusion	10.83 %

Notes: (1) From Page 2 of this Schedule.

Missouri Gas Energy
Indicated Common Equity Cost Rate Through Use
of the Capital Asset Pricing Model

	1	2	3
	Value Line Adjusted Beta	Company-Specific Risk Premium Based on Market Premium of 8.87% (1)	CAPM Result Including Risk-Free Rate of 4.67% (2)
		Traditional Capital Asset Pricing Model (3)	
Staff Witness Murray's Proxy Group of Seven Utility Companies			
AGL Resources, Inc	0.75	6.65	11.32
Atmos Energy Corporation	0.65	5.77	10.44
New Jersey Resources Corporation	0.65	5.77	10.44
Northwest Natural Gas Company	0.60	5.32	9.99
Piedmont Natural Gas Co., Inc.	0.65	5.77	10.44
South Jersey Industries, Inc.	0.65	5.77	10.44
WGL Holdings, Inc.	0.65	5.77	10.44
Average	0.66	5.83 %	10.50 %
Median	0.65	5.77 %	10.44 %
		Empirical Capital Asset Pricing Model (4)	
Staff Witness Murray's Proxy Group of Seven Utility Companies			
AGL Resources, Inc	0.75	7.21	11.88
Atmos Energy Corporation	0.65	6.54	11.21
New Jersey Resources Corporation	0.65	6.54	11.21
Northwest Natural Gas Company	0.60	6.21	10.88
Piedmont Natural Gas Co., Inc.	0.65	6.54	11.21
South Jersey Industries, Inc.	0.65	6.54	11.21
WGL Holdings, Inc.	0.65	6.54	11.21
Average	0.66	6.59 %	11.26 %
Median	0.65	6.54 %	11.21 %

Please see Schedule FJH-21, Page 51 for notes.

Missouri Gas Energy
Implied ROEs Based on Murray Reasonableness Check
Shown on Page 42 of Staff Direct Testimony

Staff Proposed Capital Structure (1)	Ratio		Embedded Cost		Weighted Cost of Capital	
Common Stock Equity	51.06	%	9.75	% (2)	4.98	%
Long-Term Debt	40.47		5.92		2.40	
Short-Term Debt	8.47		0.89		0.08	
	100.00	%			7.46	%
Reasonableness Check based on Lowest ROR (3)						
Common Stock Equity	51.06	%	10.83	%	5.53	%
Long-Term Debt	40.47		5.92		2.40	
Short-Term Debt	8.47		0.89		0.08	
	100.00	%			8.01	%
Reasonableness Check based on Highest ROR (4)						
Common Stock Equity	51.06	%	12.34	%	6.30	%
Long-Term Debt	40.47		5.92		2.40	
Short-Term Debt	8.47		0.89		0.08	
	100.00	%			8.78	%
Reasonableness Check based on Average ROR (5)						
Common Stock Equity	51.06	%	11.44	%	5.84	%
Long-Term Debt	40.47		5.92		2.40	
Short-Term Debt	8.47		0.89		0.08	
	100.00	%			8.32	%

Notes:

(1) From Murray Schedule 19.

(2) Midpoint of Mr. Murray's DCF cost rate range of 9.25% - 10.25 %.

(3) Based on the lowest average quarterly ROR awarded to gas utilities shown on Page 42 of the Staff Report.

(4) Based on the highest average quarterly ROR awarded to gas utilities shown on Page 42 of the Staff Report.

(5) Based on the average of all quarterly awarded RORs shown on Page 42 of the Staff Report.