Exhibit No.:	
Issues:	Return on Equity
Witness:	Pauline M. Ahern
Exhibit Type:	Rebuttal
Sponsoring Party:	Missouri-American Water Company
Case No.:	WR-2010-0131
Date:	April 15, 2010

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. WR-2010-0131

REBUTTAL TESTIMONY

OF

PAULINE M. AHERN, CRRA

ON BEHALF OF

MISSOURI AMERICAN WATER COMPANY

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

IN THE MATTER OF MISSOURI-AMERICAN WATER COMPANY FOR AUTHORITY TO FILE TARIFFS REFLECTING INCREASED RATES FOR WATER AND SEWER SERVICE	**)))))**	**CASE NO. WR-2010-0131** **CASE NO. SR-2010-0135**

AFFIDAVIT OF PAULINE M. AHERN

Pauline M. Ahern, being first duly sworn, deposes and says that she is the witness who sponsors the accompanying testimony entitled "Rebuttal Testimony of Pauline M. Ahern"; that said testimony and schedules were prepared by her and/or under her direction and supervision; that if inquires were made as to the facts in said testimony and schedules, she would respond as therein set forth; and that the aforesaid testimony and schedules are true and correct to the best of her knowledge.

Pauline M. Ahern

Pauline M. Ahern

State of New Jersey
County of Burlington
SUBSCRIBED and sworn to
Before me this 13th **day of** April **2010.**

Sharon M Keefe

Notary Public

My commission expires:

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

I. INTRODUCTION

Q. Please state your name, occupation and business address.

A. My name is Pauline M. Ahern and I am a Principal of AUS Consultants. My business address is 155 Gaither Drive, Suite A, Mt. Laurel, New Jersey 08054.

Q. Are you the same Pauline M. Ahern who previously submitted prepared direct testimony in this proceeding?

A. Yes, I am.

Q. Have you prepared schedules which support your rebuttal testimony?

A. Yes, I have. They have been marked for identification as Schedules PMA-14 through PMA- 23.

II. PURPOSE

Q. What is the purpose of this testimony?

A. The purpose of this testimony is to rebut certain aspects of the Missouri Public Service Commission Staff Report – Cost of Service (Staff Report). Specifically, I will address Staff's comments relative to the concept of double leverage; its application of the Discounted Cash Flow (DCF) Model and Capital Asset Pricing Model (CAPM), its failure to reflect Missouri American Water Company's (MAWC) greater business risk relative to its proxy group of comparable water companies, and the inadequacy of its recommended range of common equity cost rate.

III. SUMMARY

Q. Please briefly summarize your rebuttal testimony.

A. My rebuttal testimony addresses Staff's discussion of the concept of double leverage and how it violates the basic financial principle that it is the use of invested funds, not the source of those funds, which gives rise to the riskiness of an asset/investment.

My rebuttal testimony also describes a number of errors causing Staff's recommended common equity cost rate to be well below any reasonable range for MAWC because:

- Staff erroneously relies primarily upon the DCF model to arrive at its recommended common equity cost rate despite the Commission's consideration of the results of other cost of common equity models and the results of recently awarded ROEs to utilities by various regulatory commissions around the country as noted in Case No. GR-2006-0422. Staff uses, albeit incorrectly, the CAPM model but only as a check on its flawed and understated recommendation. The Efficient Market Hypothesis (EMH), upon which all the cost of common equity models are premised, confirms that investors rely upon multiple cost of common equity models in formulating their required rates of return.
- Staff erroneously includes a multi-stage DCF analysis while acknowledging that the utility industry is a stable mature one.
- Staff's test of reasonableness, i.e., its CAPM analysis, is flawed.
- Staff's recommended range of common equity cost rate is not consistent with either recent awards by other state regulatory commissions or the expected returns on book common equity for Staff's proxy group of water companies.

Finally, my rebuttal testimony provides an updated common equity cost rate based upon current capital market conditions.

IV. CAPITAL STRUCTURE

A. Double Leverage

Q. On page 23 at lines 20-21 of the Staff Report, Staff provides the fourth reason for its use of American Water Company's (American Water) consolidated capital structure, namely American Water's use of double leverage. Please comment.

A. The notion that American Water employs double leverage, i.e., a mix of debt and equity, to fund its equity infusions to MAWC or any of its operating subsidiaries, as a rationale for using American Water's consolidated capital structure for ratemaking purposes to determine MAWC's allowed overall rate of return violates the basic financial principle that any investment's required rate of return is a function of that investment's specific risks.

In the instant proceeding, it is the rate base of MAWC, and MAWC alone, to which the overall rate of return set in this proceeding will be applied. Hence, MAWC should be evaluated as a stand alone utility. To do otherwise would be discriminatory and confiscatory. It is a generally-accepted and well-documented financial principle that the risk of any investment is directly related to the assets in which the capital is invested. Just as with any other utility under its jurisdiction, the Commission must focus on the risk and return on the common equity investment in MAWC's jurisdictional rate base because it is MAWC's rates alone which will be set in this proceeding and it is MAWC's rate base alone which serves its ratepayers.

The risk of investment in MAWC's rate base is independent of the nature of investor capital used to finance that rate base. As previously stated, it is a basic financial principle that it is the use of the funds invested which gives rise to the risk of the investment, not the source of the funds. As Richard A. Brealey and Stewart C. Myers state in Principles of Corporate Finance[1]:

> *The true cost of capital depends on the use to which the capital is put.*
>
> * * *
>
> ***Each project should be evaluated at its own opportunity cost of capital; the true cost of capital depends on the use to which the capital is put.*** (italics and bold in original)

Morin[2] also states:

> Financial theory clearly establishes that the cost of equity is the risk-adjusted opportunity cost to the investors and not the cost of the specific capital sources employed by investors. The true cost of capital depends on the use to which the capital is put and not on its source. The *Hope* and *Bluefield* doctrines have made clear that the relevant considerations in calculating a company's cost of capital are the alternatives available to investors and the returns and risks associated with those alternatives. The specific source of funding and the cost of those funds to the investor are irrelevant considerations.
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> * * *
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> The cost of capital is governed by the risk to which the capital is exposed and not by the cost of those funds or whether they were obtained from bondholders or common shareholders. The identity of the subsidiary's shareholders should have no bearing on its cost of equity because it is the risk to which the subsidiary's

[1] Richard A. Brealey and Stewart C. Myers, Principles of Corporate Finance, McGraw-Hill Book Company, 1988, pp. 173 and 198.

[2] Morin, Roger A., New Regulatory Finance (Public Utilities Reports, Inc., 2006) 523-524.

equity is exposed that governs its cost of money, not whether it is borrowed from bondholders or sold to common shareholders for issued shares. Had the parent company not been in the picture, and had the subsidiary's stock been widely held by the public, the subsidiary would be entitled to a return that would fully cover the cost of both its debt and equity.

Hence, MAWC must be viewed on its own merits, including its financial risk as reflected in its capital structure and not American Water's consolidated one, regardless of the source of its equity capital, i.e., its parent, American Water. Therefore, the specific risk of investment in MAWC, including its small size, as was discussed in my direct testimony and will be discussed subsequently, as well as its greater financial risk, relative to the proxy companies utilized to estimate the cost rate of common equity capital by Staff and myself in this proceeding, is most important in order to establish an appropriate common equity cost rate.

As Bluefield[3] so clearly states:

> A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; . . .

Bluefield is clear then, that it is the "risks and uncertainties" surrounding the property employed for the "convenience of the public" which determines the appropriate level of rates and not the source of the capital financing that property. In this proceeding, the property employed "for the convenience of the public" is the rate base of MAWC. Therefore, it is the total investment risk

[3] Bluefield Water Works Improvement Co. v. Public Serv. Comm'n, 252 U.S. 679 (1922).

including the financial risk reflected in its own capital structure and its rate base that is relevant to the determination of a cost rate of common equity to be applied to the common equity financed portion of that rate base.

V. COMMON EQUITY COST RATE

A. Testimony of MoPSC Staff Witness David Murray

1. Discounted Cash Flow Model

Q. Staff's range of recommended common equity cost rate, 8.95% - 9.55%, with a midpoint of 9.25% is based exclusively upon a Discounted Cash Flow (DCF) analysis, notwithstanding its use of the CAPM as a check. Please comment.

A. The DCF model utilized by Staff is market-based since recent as well as current market prices are employed in its application. Therefore, it is based upon the EMH which is the foundation of modern investment theory, first pioneered by Eugene F. Fama[4] in 1970. As discussed in my direct testimony, pages 24 through 27, an efficient market is one in which security prices reflect all relevant information all the time. This implies that prices adjust instantaneously to new information, thus reflecting the intrinsic fundamental economic value of a security.[5]

The semistrong form of the EMH, which asserts that all publicly available information is fully reflected in securities prices, i.e., fundamental analysis cannot "outperform the market", is generally held to be true because the use of

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4 Fama, Eugene F., "Efficient Capital Markets: A Review of Theory and Empirical Work" (Journal of Finance, May 1970) 383-417.

5 Brigham, Eugene F., Fundamentals of Financial Management, Fifth Edition (The Dryden Press, 1989) 225.

insider information often enables investors to "outperform the market" and earn excessive returns. This means that all perceived risks are taken into account by investors in the prices they pay for securities. Investors are thus aware of all publicly-available information, including bond ratings; discussions about companies by bond rating agencies and investment analysts; as well as the various cost of common equity methodologies (models) discussed in the financial literature. Hence, no single common equity cost rate model should be relied upon in determining a cost rate of common equity and that the results of multiple cost of common equity models should be taken into account.

Q. Your direct testimony provides academic support for the need to rely upon more than one cost of common equity model in arriving at a recommended common equity cost rate. Would you please revisit the concept?

A. Yes. For example, Phillips[6] states:

> Since regulation establishes a level of authorized earnings which, in turn, implicitly influences dividends per share, estimation of the growth rate from such data is an inherently circular process. For these reasons, the DCF model "suggests a degree of precision which is in fact not present" and leaves "wide room for controversy and argument about the level of k". (italics added) (p. 396)
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> * * *
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> Despite the difficulty of measuring relative risk, the comparable earnings standard is no harder to apply than is the market-determined standard. The DCF method, to illustrate, requires a subjective determination of the growth rate the market is contemplating. Moreover, as Leventhal has argued: 'Unless the utility is permitted to earn a return comparable to that available elsewhere on similar risk, it will not be able in the long run to attract capital.' (italics added) (p. 398)

[6] Phillips, Jr., Charles F. The Regulation of Public Utilities-Theory and Practice (Public Utility Reports, Inc., 1993) 396, 398.

Also, Morin[7] states:

> Each methodology requires the exercise of considerable judgment on the reasonableness of the assumptions underlying the methodology and on the reasonableness of the proxies used to validate a theory. *The inability of the DCF model to account for changes in relative market valuation, discussed below, is a vivid example of the potential shortcomings of the DCF model when applied to a given company.* Similarly, the inability of the CAPM to account for variables that affect security returns other than beta tarnishes its use. (italics added)
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> No one individual method provides the necessary level of precision for determining a fair return, but each method provides useful evidence to facilitate the exercise of an informed judgment. Reliance on any single method or preset formula is inappropriate when dealing with investor expectations because of possible measurement difficulties and vagaries in individual companies' market data. (Morin, p. 428)
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> * * *
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> The financial literature supports the use of multiple methods. Professor Eugene Brigham, a widely respected scholar and finance academician, asserts:[1(footnote omitted)]
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> > Three methods typically are used: (1) the Capital Asset Pricing Model (CAPM), (2) the discounted cash flow (DCF) method, and (3) the bond-yield-plus-risk-premium approach. These methods are not mutually exclusive – no method dominates the others, and all are subject to error when used in practice. Therefore, when faced with the task of estimating a company's cost of equity, we generally use all three methods and then choose among them on the basis of our confidence in the data used for each in the specific case at hand.
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> Another prominent finance scholar, Professor Stewart Myers, in an early pioneering article on regulatory finance, stated:[2(footnote omitted)]
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> > Use more than one model when you can. Because estimating the opportunity cost of capital is difficult, only a fool throws away useful information. That means you should not use any one model or measure mechanically and exclusively. Beta is helpful

[7] Morin 428-431.

> as one tool in a kit, to be used in parallel with DCF models or other techniques for interpreting capital market data.
>
> Reliance on multiple tests recognizes that no single methodology produces a precise definitive estimate of the cost of equity. As stated in Bonbright, Danielsen, and Kamerschen (1988), '*no single or group test or technique is conclusive*.' Only a fool discards relevant evidence. (italics in original) (Morin, p. 430)
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> * * *
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> While it is certainly appropriate to use the DCF methodology to estimate the cost of equity, there is no proof that the DCF produces a more accurate estimate of the cost of equity than other methodologies. Sole reliance on the DCF model ignores the capital market evidence and financial theory formalized in the CAPM and other risk premium methods. The DCF model is one of many tools to be employed in conjunction with other methods to estimate the cost of equity. *It is not a superior methodology that supplants other financial theory and market evidence. The broad usage of the DCF methodology in regulatory proceedings in contrast to its virtual disappearance in academic textbooks does not make it superior to other methods. The same is true of the Risk Premium and CAPM methodologies.* (italics added) (Morin, p. 431)

In view of the foregoing, it is clear that investors are aware of all of the models available for use in determining common equity cost rate. The EMH requires the assumption that, collectively, investors use them all. Therefore, Staff's exclusive reliance upon the DCF model, notwithstanding its use of the CAPM as a check, is at odds with the very foundation, i.e., the EMH, upon which the DCF is predicated.

Q. Please discuss Staff's reliance upon a multi-stage DCF analysis.

A. In my opinion, a multi-stage DCF analysis is inappropriate for determining the cost of common equity for utility companies. The single-stage DCF is the appropriate version of the DCF model because utilities are generally in the mature stage of their lifecycles and not transitioning from one growth stage to another, such as start-up biotech firms, venture capital firms, and the like.

All companies, including utilities, go through typical life cycles in their development, initially progressing through a growth stage, moving onto a transition stage and finally assuming a steady-state or constant growth state. However, the U.S. public utility industry is a long-standing industry in the U.S., dating back to approximately 1882. The standards of rate of return regulation for public utilities date back to the principles of fair rate of return established in the Hope[8] and Bluefield[9] decisions of 1944 and 1923, respectively. Hence, the public utility industry in the U.S. is a stable and mature industry characterized by the steady-state or constant-growth stage of a multi-stage DCF model. The economics of the utility industry reflect the features of this relative stability including demand maturity. As regulated businesses, the returns on utility capital investment, i.e., rate base, are set through the ratemaking process and not determined in the competitive markets. This characteristic, taken together with the longevity of the public utility industry, all contribute to the stability and maturity of the industry, including the water utility industry.

Since there is no basis for applying multi-stage growth versions of the DCF model to determine the common equity cost rates of mature public utility companies, the constant growth model is most appropriate.

Q. Nevertheless, do you have any comments upon Staff's rationale or application of the multi-stage DCF model?

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8 Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591 (1944).

9 Bluefield Water Works Improvement Co. v. Public Serv. Comm'n, 262 U.S. 679 (1923).

A. Yes. On page 25, lines 7 – 9 of the Staff Report – Cost of Service (Staff Report), Staff indicates that it has supplemented "its constant-growth DCF analysis in this case with [a] multi-stage DCF analysis primarily due [to] Staff's concerns about the sustainability of projected growth rates." Staff's rationale for also using a multi-stage DCF is provided on page 28 of the Staff Report at lines 2 – 4, where Staff "notes that assuming that water utility companies' dividends can grow in perpetuity at a growth rate that is higher than expected growth in the overall economy should result in an upwardly biased estimated cost of common equity." On page 30, at lines 17 – 20, Staff further notes that it "considers this approach [multi-stage DCF] to be appropriate in situations in which it is difficult to estimate a sustainable growth rate with much confidence and/or when in staff's opinion 5-year projected growth rates are <u>not sustainable due to the fact that such rates are higher than expected economic or industry sustainable growth rates."</u>

Q. Is the concern voiced in the Staff Report about analyst-projected growth rates consistent with Staff's past practice?

A. No. Staff did not voice this concern in prior rate cases for MAWC. In MAWC's most recent rate case, Case No. WR-2008-0311, the average projected growth rate in earnings per share (EPS) or 8.59% was higher than Staff's current average projected growth rate in EPS of 7.33% shown in Column (3) on Schedule 15. Nevertheless, Staff based its cost of equity analysis on a single stage DCF model. Likewise, Staff did not voice this concern in MAWC's 2007 rate case, Case No. WR-2007-0216, where its average projected growth in

EPS or 7.54% was also greater than the current growth rate, yet it based its cost of equity analysis on a single stage DCF model. Not only were Staff's average projected growth rates in EPS higher in the two previous MAWC rate cases, but the projected growth in Gross Domestic Product (GDP) in both of those cases was significantly lower than Staff's average projected growth rates in EPS. In Case No. WR-2008-0311, the Energy Information Administration (EIA) in its Annual Energy Outlook (AEO) released in December 2007, was forecasting an average GDP growth rate of 4.5% for the period 2008 – 2030. In Case No. WR-2007-0216, EIA was forecasting a GDP growth rate for 2007 – 2030 of 4.8% in its AEO released in December 2006.

Q. Do you have any further observations?

A. Yes. In addition, as stated above, Staff opines that "5-year projected growth rates are not sustainable due to the fact that such rates are higher than expected economic or industry sustainable growth rates." Staff provides no empirical evidence that in the second or even third stage, any company, especially relatively stable utility companies, would grow at the average of the U.S. economy. The average growth in the U.S. economy, as measured by GDP growth, is just that – an average. Some sectors/industries/companies will grow faster than the economy and some will grow more slowly. Schedule PMA-15 demonstrates that the growth in nominal GDP is an average. As shown on Schedule PMA-15, the nominal GDP grew 3.31% from 2007-2008 and 5.58% on average for the ten years ending 2008. In contrast, the utilities' component of nominal GDP grew 8.74% from 2007 – 2008 and 6.02% on average from 1998 – 2008. It is also shown on Schedule PMA-15 that other industry sectors grew either more or less than GDP as a whole, whether for 2007 – 2008 or 1998 – 2008. Thus, there is no basis to assume all industries, including the utility / water industry, will grow at the average rate of the economy as a whole as measured by composite GDP growth.

In view of the foregoing, there is no basis for utilizing a multi-stage DCF for stable, mature water companies nor has Staff demonstrated that it is appropriate to assume that projected growth in EPS are not sustainable and that projected growth in GDP is an appropriate growth rate for the water industry. Therefore, Staff's multi-stage DCF analysis should be rejected.

Q. What would Staff's DCF results have been if Staff had properly relied upon a single-stage growth DCF analysis using projected growth in EPS?

A As shown on Schedule PMA-16, had Staff utilized a single-stage growth DCF with projected growth in EPS, an average DCF cost rate of 10.86% results. The average projected EPS growth rate ranges from 6.75% - 9.30% and when applied to Staff's dividend yield of 3.35%, results in a range of DCF cost rate of 10.10% - 12.65%, with a midpoint of 11.375%. DCF cost rates of 10.86% and 11.375% clearly demonstrate that both Staff's single-stage constant growth DCF results, ranging from 8.75% - 9.75% and Staff's recommended range of common equity cost rate of 8.95% - 9.55% are grossly understated. Moreover, these cost rates are further understated because they reflect the lower business and financial risk of Staff's proxy group of four water companies.

2. Capital Asset Pricing Model

Q. Do you have any comment regarding Staff's application of the CAPM?

A. Yes. Staff's application of the CAPM is flawed in four respects; 1) its choice of the historical yield on 30-year U.S. Treasury bond as the risk-free rate; 2) its use of an historical market equity risk premium which is incorrectly derived; 3) its failure to also include a forecasted market equity risk premium; and 4) its failure to also apply the empirical CAPM to account for the fact that Security Market Line (SML) as described by the traditional CAPM is not as steeply sloped as the predicted SML.

Q. Please comment upon Staff's use of the historical yield on 30-year U.S. Treasury bonds as the risk-free rate.

A. Both the determination of cost of capital and the determination of rates for utility services are prospective in nature. Therefore, it is inappropriate to use an historical yield as the risk-free rate in a CAPM analysis. Rather, the <u>prospective</u> yield on the 30-year U.S. Treasury bonds should be used. As shown in note 1 on page 3 of Schedule PMA-17, the forecasted consensus yield on long-term U. S. Treasury bonds by the nearly 50 economists reported in Blue Chip Financial Forecasts dated March 1, 2010[10] is 4.90% for the six quarters ending with the second quarter 2011. Thus, Staff's recommended 4.57% average historical yield (December 2009 – February 2010) on 30-year U.S. Treasury bonds significantly understates the prospective yield.

Q. You have stated that Staff erred in exclusively relying upon an historical market

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[10] Most current available at the time of the preparation of the Staff Report.

equity risk premium which was incorrectly derived. Please explain.

A. Staff's market equity risk premium of 5.6% is derived from the Ibbotson SBBI – 2009 Valuation Yearbook – Market Results for Stocks, Bonds, Bills and Inflation – 1926-2008 (SBBI) as the difference between the arithmetic mean 1926-2008 total return on large company stocks of 11.7% and the arithmetic mean 1926-2008 total return on long-term government bonds of 6.1%. (5.6% = 11.7% - 6.1%).[11] The correct derivation of the historical market equity risk premium is the difference between the total return on large company stocks of 11.7% and the arithmetic mean 1926-2008 income return on long-term government bonds of 5.2% which results in a market equity risk premium of 6.5% (6.5% = 11.7% - 5.2%). However, when the Staff Report was written, the 1926 – 2009 market risk premium was available in the 2010 Ibbotson Risk Premia Over Time Report – Estimates for 1926-2009, which reported a total return on large company stocks of 11.8% and the income return on long-term government bonds of 5.20% resulting in a correctly calculated arithmetic mean market equity risk premium of 6.60% (6.60% = 11.80% - 5.20%) available at the time of the preparation of the Staff Report. Regarding the use of the income return and not the total return for Treasury securities in deriving an equity risk premium, SBBI states[12] :

> 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

11 Ibbotson SBBI – 2009 Valuation Yearbook – Market Results for Stocks, Bonds, Bills and Inflation – 1926-2007 (Morningstar, Inc., 2009) 23.

12 Ibbotson SBBI 55-62.

> 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. <u>The income return is thus used in the estimation of the equity risk premium because it represents the truly riskless portion of the return</u>.[2 (footnote omitted)] (emphasis added)

Hence, the correct historical market equity risk premium to use is 6.6% and not 5.6%.

Q. You have also stated that Staff erred in not including a forecasted market equity risk premium in its CAPM analysis. Please explain.

A. Staff relied exclusively upon an historical market equity risk premium which is in direct contrast to its use of both historical and projected growth rates in its application of the DCF model. As stated previously, the cost of capital is prospective and while the arithmetic mean of long-term historical stock market returns can provide insight into investors' expectations of stock market returns because the arithmetic mean of historical returns provides investors with the valuable insight needed to estimate future risk, it is also appropriate to use an estimate of the forecasted or projected stock market return. One indication of the forecasted stock market return can be derived using <u>Value Line</u> 3-5 year median total market price appreciation projections and dividend yield projections as explained in detail on pages 47 and 48 of my direct testimony and derived in note 3 on page 3 of Schedule PMA-17. Based upon <u>Value Line</u>, a forecasted total market return of 13.65% is indicated using the same three months, December 2009, January 2010, and February 2010, used by Staff in developing its dividend yield in its DCF analysis. When the forecasted yield on 30-year U.S. Treasury bonds (notes) of 4.90% is subtracted from Value Line's forecasted total market return, a forecasted market equity risk premium of 8.75% results which, when averaged with the historical market equity risk premium of 6.60% as reported by Ibbotson, results in a market equity risk premium of 7.68%.

Q. You have stated that Staff also failed to apply the empirical CAPM to account for the fact that Security Market Line (SML) as described by the traditional CAPM is not as steeply sloped as the predicted SML. Please comment.

A. As discussed in my direct testimony at lines 21 on page 54 through line 16 on page 55 of my direct testimony, while numerous tests of the CAPM have confirmed its validity, these tests have determined that "the implied intercept term exceeds the risk-free rate and the slope term is less than predicted by the CAPM."[13] These tests have also indicated that the expected return on a security is related to its risk by the following formula:

$$K = R_F + 0.25(R_M - R_F) + 0.75\beta(R_M - R_F)$$

Some critics of the ECAPM model claim that using adjusted betas in a traditional CAPM amounts to using an ECAPM but such a claim is not valid.

As discussed in my direct testimony, using adjusted betas in a CAPM analysis is not equivalent to the ECAPM. Betas are adjusted because of the regression tendency of betas to converge toward 1.0 over time, i.e., over

[13] Morin 175.

successive calculations of beta. As discussed previously, numerous studies have determined that the SML described by the CAPM formula at any given moment in time is not as steeply sloped as the predicted SML. Morin[14] states:

> Some have argued that the use of the ECAPM is inconsistent with the use of adjusted betas, such as those supplied by Value Line and Bloomberg. This is because the reason for using the ECAPM is to allow for the tendency of betas to regress toward the mean value of 1.00 over time, and, since Value Line betas are already adjusted for such trend [sic], an ECAPM analysis results in double-counting. This argument is erroneous. Fundamentally, the ECAPM is not an adjustment, increase or decrease, in beta. This is obvious from the fact that the expected return on high beta securities is actually lower than that produced by the CAPM estimate. The ECAPM is a formal recognition that the observed risk-return tradeoff is flatter than predicted by the CAPM based on myriad empirical evidence. The ECAPM and the use of adjusted betas comprised two separate features of asset pricing. Even if a company's beta is estimated accurately, the CAPM still understates the return for low-beta stocks. Even if the ECAPM is used, the return for low-beta securities is understated if the betas are understated. Referring back to Figure 6-1, the ECAPM is a return (vertical axis) adjustment and not a beta (horizontal axis) adjustment. Both adjustments are necessary.

Moreover, the slope of the SML should not be confused with beta. As Eugene F. Brigham, finance professor emeritus and the author of many financial textbooks states[15] :

> The slope of the SML reflects the degree of risk aversion in the economy – the greater the average investor's aversion to risk, then (1) the steeper is the slope of the line, (2) the greater is the risk premium for any risky asset, and (3) the higher is the required rate of return on risky assets.[12]
>
> [12]Students sometimes confuse beta with the slope of the SML. This is a mistake. As we saw earlier in connection with Figure 6-8, and as is developed further in Appendix 6A, beta does represent the slope of a line, but *not* the Security Market Line. This

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[14] Morin 191.

[15] Eugene F. Brigham, Financial Management – Theory and Practice, 4th Ed. (The Dryden Press, 1985) 203.

> confusion arises partly because the SML equation is generally written, in this book and throughout the finance literature, as $k_i = R_F + b_i(k_M - R_F)$, and in this form b_i looks like the slope coefficient and $(k_M - R_F)$ the variable. It would perhaps be less confusing if the second term were written $(k_M - R_F)b_i$, but this is not generally done.

Q. Please discuss Staff's use of geometric average market risk premium for the years 1926-2008.

A. In addition to calculating a CAPM derived common equity cost rate based upon the historical arithmetic mean equity risk premium, albeit, incorrectly derived, Staff also calculated a CAPM derived common equity cost rate using the long-term historical geometric mean equity risk premium. This latter calculation is not a valid means of estimating the cost of capital based upon historical returns.

The arithmetic mean return and not the geometric mean return which is appropriate for cost of capital purposes as noted in SBBI:

> Arithmetic mean return rates and yields are appropriate because ex-post (historical) total returns and equity risk premiums differ in size and direction over time, providing insight into the variance and standard deviation of returns. Because the arithmetic mean captures the prospect for variance in returns and equity risk premiums, it provides the valuable insight needed by investors in estimating future risk when making a current investment. Absent such valuable insight into the potential variance of returns, investors cannot meaningfully evaluate prospective risk. If investors alternatively relied upon the geometric mean of ex-post equity risk premiums, they would have no insight into the potential variance of future returns because the geometric mean relates the change over many periods to a <u>constant</u> rate of change, thereby obviating the year-to-year fluctuations, or variance, *critical to risk analysis*.

Because historical total returns and equity risk premia differ in size and direction over time, the arithmetic mean provides insight into the variance and standard deviation of returns, i.e., risk. Thus the prospect for variance, i.e., standard deviation, captured in the arithmetic mean, provides the valuable insight needed by investors and rate of return analysts alike to estimate the expected risk of stocks. Without such insight, investors cannot meaningfully evaluate prospective risk. Because the geometric mean relates the change over many periods to a constant rate of change, the variance, i.e., year-to-year fluctuations, and hence, risk, which is critical to rate of return analysis, is not reflected in geometric mean returns / premia.

The financial literature is quite clear on this point, that risk is measured by the variability of expected returns, i.e., the probability distribution of returns.[16] Pages 55 through 62 of SBBI (see Schedule PMA-18) explain in detail why the arithmetic mean is the correct mean to use when estimating the cost of capital.

In addition, Weston and Brigham[17] provide the standard financial textbook definition of the riskiness of an asset when they state:

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

And Morin states[18]:

> The geometric mean answers the question of what constant return you would have to achieve in each year to have your investment growth match the return achieved by the stock market. The arithmetic mean answers the question of what growth rate is the best estimate of the future amount of money that will be produced by continually reinvesting in the stock market. It is the rate of

16 Brigham (1989) 639.

17 Weston, J. Fred and Brigham, Eugene F., Essentials of Managerial Finance Third Edition (The Dryden Press, 1974) 272.

18 Morin 133.

> return which, compounded over multiple periods, gives the mean of the probability distribution of ending wealth. (emphasis added)

In addition, Brealey and Myers[19] note:

> The proper uses of arithmetic and compound rates of return from past investments are often misunderstood. . . Thus the arithmetic average of the returns correctly measures the opportunity cost of capital for investments. . . *Moral*: If the cost of capital is estimated from historical returns or risk premiums, use arithmetic averages, not compound annual rates of return. (italics in original)

As previously discussed, investors gain insight into relative riskiness by analyzing expected future variability. This is accomplished by the use of the arithmetic mean of a distribution of returns / premia. Only the arithmetic mean takes into account all of the returns / premia, hence, providing meaningful insight into the variance and standard deviation of those returns / premia.

Q. Can it be demonstrated that the arithmetic mean takes into account all of the returns and therefore, that the arithmetic mean is appropriate to use when estimating the opportunity cost of capital in contrast to the geometric mean?

A. Yes. Schedule PMA-19, which consists of three pages, graphically demonstrates this premise. Page 1 charts the returns on large company stocks for each and every year, 1926 through 2008 from SBBI. It is clear from looking at the variation of these returns that stock market returns, and hence, equity risk premia, vary.

Shown on page 2 is the distribution of each and every one of those returns for the entire period from 1926 through 2008. There is a clear bell-

19 Brealey, R.A. and Myers, S.C., Principles of Corporate Finance Fifth Edition (McGraw-Hill Publications, Inc., 1996) 146-147.

shaped pattern to the probability distribution of returns, an indication that they are randomly generated. The arithmetic mean of this distribution of returns considers all of the returns in the distribution. In doing so, the arithmetic mean takes into account the standard deviation or likely variance which may be experienced in the future when estimating the rate of return based upon such historical returns. In contrast, page 3 of Schedule PMA-19 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 by the geometric average. That constant return, graphically, represents a flat line over the entire 1926 to 2008 time period which is obviously far different from reality, based upon the probability distribution of returns shown on page 2 and demonstrated on page 1.

Only the arithmetic mean takes the standard deviation of returns which is critical to risk analysis 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. What would Staff's CAPM results have been had Staff relied upon a correctly-derived historical market equity risk premium, included a forecasted market equity risk premium as well as a forecasted risk-free rate?

A. In the top half of page 1 of Schedule PMA-17, I have derived the traditional CAPM, the version applied by Staff, using the correct forecasted risk-free rate of 4.90% and an average market equity risk premium based upon the arithmetic mean historical market equity risk premium correctly calculated as described above coupled with a forecasted market equity risk premium. This results in a traditional CAPM-derived common equity cost rate of 10.37%, which is 181 basis points (1.81%) higher than Staff's derived arithmetic CAPM cost rate of 8.56%, based solely upon an historical risk-free rate and an incorrectly derived arithmetic mean equity risk premium for the years 1926-2008. On the bottom half of Schedule PMA-17, I have derived an ECAPM, based upon the forecasted risk-free rate and correctly-derived average historical and projected market equity risk premium. The ECAPM-derived common equity cost rate is 10.92%, which is 236 basis points (2.36%) higher than Staff's arithmetic mean CAPM cost rate of 8.56%.

When averaged, the traditional CAPM results of 10.37% and the ECAPM results of 10.92% result in a CAPM of 10.65%. Such a cost rate corroborates neither Staff's range of DCF results of 8.75% - 9.75% or its recommended range of common equity cost rate of 8.95% - 9.55%. In addition, these cost rates are further understated because they reflect the lower business and financial risk of Staff's proxy group of four water companies.

B. Recommended Common Equity Cost Rate

Q. Please comment upon Staff's use of the expected return of 8.5% by the Missouri State Employee's Retirement System (MOSERS) on "large capitalization domestic equities" as discussed by Staff on page 36, lines 8 – 14 of the Staff Report.

A. The expected return on pension fund assets has no relevance to the determination of a common equity cost rate relative to a single asset / security, i.e., MAWC's rate base. The MOSERS' pension fund is a portfolio of assets including large and small capitalization U.S. equities, international developing equities and emerging markets, bonds, private debt, private equity, real estate, commodities, timber, etc..[20] The projected return on pension fund assets therefore reflects the risk reducing benefits of portfolio diversification. In addition, the fiduciary responsibility of pension fund managers requires a level of conservatism in portfolio management. Also, the 8.5% expected return is a return expected over the next ten years, a relatively short duration compared with the infinite investment horizon implicit in the standard DCF model.

The 8.5% expected return expected by the MOSERS' report and cited by Staff relates to large capitalization domestic equities. In contrast, MAWC's rate base is significantly smaller than the average large capitalization stock. As shown on page 1 of Schedule PMA-21, MAWC's estimated market capitalization is $655.329 million in contrast to the midpoint market capitalization of $172.209 billion of decile 1, comprised of the largest market capitalization stocks. Therefore, a substantial size premium, i.e., 2.11% (see column 3 on page 1 of Schedule PMA-21) would be required. Even without consideration that the 8.5% expected return is based upon, and thus reflects the reduced risk of a diverse portfolio, a size premium of 2.11% relative to MAWC would result in a 10.61% expected return (10.61% = 8.50% + 2.11%) more appropriately applicable to MAWC, but still understated because the

20 Summit Strategies Group – Bond Retreat – Missouri State Employees' Retirement System, July 9 – 10, 2009, www.mosers.org/About-MOSERS/Reports-Research/Summit-Strategies-Capital-Markets-Assumptions.aspx.

8.5% is based upon a diversified, risk-reduced portfolio.

Q. Please discuss Staff's recommended common equity cost rate range of 8.95% - 9.55%, with a midpoint of 9.25%.

A. Staff's recommended common equity cost rate range of 8.95% - 9.55% is inadequate for two reasons; 1) such a cost rate range provides an insufficient achieved return on the book common equity of MAWC; and 2) such a cost rate is not consistent with the recently authorized ROEs throughout the country for other utilities.

Q. How does Staff's recommended range of common equity cost rate of 8.95% - 9.55% with a midpoint of 9.25% compare with the expected ROEs of its four comparable water utility companies?

A. It is far below the level of earnings expected by Value Line for the three companies in its group of four comparable water utility companies for which Value Line publishes a projected ROE for the years 2012-2014. The latest (January 22, 2010) Value Line Ratings & Reports (Standard Edition) for American States Water Company, Aqua America, Inc. and California Water Service Group, (there is no projection for York Water Company) indicate that Value Line expects them to earn 12.0%, 12.0% and 12.0% on year-end book common equity (see Schedule PMA-20) over the next 3-5 years averaging 12.00%. While these forecasts are for earnings on book common equity, it must be remembered that the return on common equity authorized in this proceeding will be applied to the book value of the common equity financed portion of MAWC's and will therefore become MAWC's opportunity for earnings on book value. An opportunity to earn a range of return on book common equity of either Staff's recommended range of 8.95% - 9.55% is woefully inadequate in comparison with these expected returns on book common equity of comparable water companies.

Such a common equity cost rate range is also inconsistent with the comparability of returns standard enunciated in the Hope decision which states:

> The return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks.

Therefore, Staff's recommended common equity cost rate range should be rejected by the MoPSC in setting rates for MAWC in this proceeding.

Q. How does Staff's recommended range of common equity cost rate compare with recently authorized ROEs by other regulatory jurisdictions throughout the country?

A. Schedule PMA-21 is a summary of regulatory awards made to electric and gas distribution companies during the fifteen months ending March 2010 derived from Regulatory Research Associates (an SNL Energy Company). Although Regulatory Research Associates does not report authorized ROEs for water companies, the authorized ROEs for electric and gas distribution companies are relevant to the instant proceeding as MAWC, indeed, all water utilities, compete in the same marketplace for capital as do electric and gas distribution utilities. As shown, the average authorized ROE was 10.32% relative to an average common equity ratio of 48.78%. An average awarded ROE of 10.32%

is significantly higher than Staff's range of common equity cost rate of 8.95% - 9.55% Also, as shown, the average awarded ROE of 10.32% represented an average equity risk premium of 4.30% over the yield on Moody's A rated utility bonds in the months prior to the awards. The average yield on A rated utility bonds for those litigated cases was 6.02%. The projected yield on A rated utility bonds is 6.20%, as derived on page 32 of Schedule PMA-23. The 6.30% yield plus an equity risk premium of 4.30% equals an ROE of 10.50% which verifies that Staff's recommended common equity cost rate range understates the common equity cost rate applicable to MAWC.

As discussed in my direct testimony at pages 14 through 19, all else equal, size has a bearing on risk. Smaller companies are simply less able to cope with significant events which affect sales, revenues and earnings. In general, the loss of revenues from a few larger customers, for example, would have a greater effect on a small company than on a much larger company with a larger customer base. In addition, the effect of extreme weather conditions, i.e., prolonged droughts or extremely wet weather will have a greater affect upon a small operating water utility than upon the much larger, more geographically diverse holding companies.

Because MAWC is the regulated utility to whose rate base the Commission's ultimately allowed overall cost of capital will be applied and because it is the use of funds invested which gives rise to the riskiness of any investment as discussed previously, the relevant risk reflected in the cost of capital must be that of MAWC, including the impact of its small size on common equity cost rate. MAWC is smaller than the average company in Staff's proxy group based upon the results of a study of the market capitalization of the four water companies shown on page 1 of Schedule PMA-21 and in Table 1 below based upon Staff's average market price.

Table 1

	Market Capitalization(1)	Times Greater than the Company
	($ Millions)	
Staff's Proxy Group of Four AUS Utility Reports Water Companies	$979.663	1.5x
MAWC	655.329 (2)	

(1) From page 1 of Schedule PMA-21.
(2) Based upon the average market-to-book ratio of Staff's proxy group of four water companies.

Because MAWC's common stock is not publicly traded, I have assumed that if it were, its common shares would be selling at the same market-to-book ratio as the average market-to-book ratio for Staff's proxy group, 193.1% as shown on page 2 of Schedule PMA-21. Hence, MAWC's market capitalization is estimated at $655.329 million based upon the average market-to-book ratio of the four water companies. In contrast, the market capitalization of the average water company in Staff's proxy group was $979.633 million, or 1.5 times larger than MAWC's estimated market capitalization. As discussed in my direct testimony, it is conventional wisdom, supported by actual returns over time, that smaller companies tend to be more risky causing investors to expect greater returns as compensation for that risk.

Q. Is there a way to quantify a business risk adjustment due to MAWC's small size relative to Staff's proxy group?

A. Yes. As discussed in my direct testimony at pages 67 through 69, it is necessary to upwardly adjust the common equity DCF and CAPM cost rates of 10.86% or 11.375% and 10.65% based upon Staff's proxy groups. An adjustment is based upon data contained in Ibbotson – SBBI as also discussed in my direct testimony, is appropriate and on pages 3 through 14 of Schedule PMA-1. On page 1 of Schedule PMA-4, the average size premium for the decile in which the proxy group falls has been compared to the average size premium for the 7^{th} - 8^{th} deciles between which MAWC would fall if its stock were traded and sold at the average market/book ratio of 193.1% and 153.3% experienced by Staff's proxy group for the three months ended February 2010. The size premium spread between MAWC and the four water companies is 38 basis points (0.37%).

Although a business risk adjustment of 0.38% is indicated based upon the four water companies, a conservatively reasonable business risk adjustment of 5 basis points (0.05%) relative to the four water companies is appropriate and consistent with the similar adjustment I made in my direct testimony relative to my water proxy group to reflect MAWC's greater relative business risk as discussed previously.

Adding 5 basis points (0.05%) to the corrected DCF cost rates of 10.86% and 11.375% and to a corrected CAPM cost rate of 10.65% yields business risk adjusted common equity cost rates of 10.91%, 10.425% and 10.96%, respectively. Both Staff and I have made an approximate 30 basis points (0.30%) financial/credit risk adjustment due to MAWC's greater financial/credit risk as discussed in my direct testimony at pages 69 through 71 and in the Staff Report at pages 32 and 33. Adding this 30 basis point (0.30%) financial/credit risk adjustment to the business risk adjusted corrected DCF and CAPM cost rates of 10.91%, 10.425% and 10.96% derived above, yields business and financial/credit risk adjusted common equity cost rates of 11.21%, 10.725% and 11.26%, which more properly reflect MAWC's common equity cost rate than Staff's recommended range of 8.95% - 9.55%.

V. UPDATED OVERALL COST OF CAPITAL AND RATE OF RETURN ON COMMON EQUITY

Q. Have you updated your recommended rate of return on common equity for MAWC?

A. Yes. Page 1 of Schedule PMA-23 shows the updated overall rate of return for MAWC of 8.83% using the pro forma capital structure ratios and senior capital cost rates at April 30, 2010 and my updated common equity cost rate recommendation of 11.35%. In arriving at my updated common equity cost rate recommendation, I have applied the same four cost of common equity models in an identical manner to the current market data of the proxy groups of water and gas distribution companies as in my direct testimony.

Q. Does that conclude your rebuttal testimony?

A. Yes.

Exhibit No.:	
Issues:	Return on Equity
Witness:	Pauline M. Ahern
Exhibit Type:	Rebuttal
Sponsoring Party:	Missouri-American Water Company
Case No.:	WR-2010-0131
Date:	April 15, 2010

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. WR-2010-0131

EXHIBIT

TO ACCOMPANY THE

REBUTTAL TESTIMONY

OF

PAULINE M. AHERN, CRRA

ON BEHALF OF

MISSOURI AMERICAN WATER COMPANY

Missouri-American Water Company
Table of Contents
to the Financial Supporting Schedules
of Pauline M. Ahern, CRRA

Missouri-American Water Company
Percent Change in Gross Domestic Product (GDP) for the Years 1998 - 2008

Code	Industry Title	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	'07-'08	'98-'08
Value added (Millions of dollars)													% Change	
VA	Gross domestic product	8746997	9268410	9816969	10127976	10469601	10960770	11685901	12421885	13178376	13807539	14264597	**3.31%**	**5.58%**
VA	Private industries	7652501	8127193	8614288	8869652	9131169	9542338	10194273	10853091	11529271	12064612	12424626	2.98%	5.53%
VA	Agriculture, forestry, fishing, and hunting	102395	93779	98019	97895	95444	114383	142160	133337	121627	167907	157695	-6.08%	4.92%
VA	Farms	78901	68774	71526	73134	70819	88267	114673	104123	91118	137251	...		
VA	Forestry, fishing, and related activities	23494	25005	26494	24761	24625	26116	27487	29214	30509	30656	...		
VA	Mining	74785	85397	121334	118737	106534	143345	171341	223815	262406	275012	325343	18.30%	17.75%
VA	Oil and gas extraction	35173	47217	80990	72515	62753	93817	114315	150491	160557	164678	...		
VA	Mining, except oil and gas	27031	27492	26992	27082	26834	27238	30333	36755	43196	45310	...		
VA	Support activities for mining	12581	10688	13353	19140	16946	22290	26693	36569	58653	65025	...		
VA	Utilities	180806	185417	189291	202286	207326	219976	240271	239454	272736	281424	306024	**8.74%**	**6.02%**
VA	Construction	374387	406602	435914	469535	482277	496212	539216	605450	646015	610842	581537	-4.80%	5.01%
VA	Manufacturing	1343850	1373112	1426218	1341330	1352640	1359327	1427887	1480590	1577399	1616826	1637671	1.29%	2.22%
VA	Durable goods	806865	820392	865268	778871	774784	771794	807475	845060	899423	921964	914711	-0.79%	1.40%
VA	Wood products	29358	31930	31437	31313	30421	32103	37477	38437	33780	31449	...		
VA	Nonmetallic mineral products	42327	45103	45743	44862	45941	45134	49335	53018	57964	54421	...		
VA	Primary metals	49422	47303	48193	41072	41943	38352	54533	56352	63449	62387	...		
VA	Fabricated metal products	112705	116360	121686	112040	107403	106304	115193	123732	131647	140391	...		
VA	Machinery	111472	105629	109296	103157	96525	94277	103446	111643	119511	125680	...		
VA	Computer and electronic products	165673	162777	185563	136931	124152	124001	125461	133736	144407	146294	...		
VA	Electrical equipment, appliances, and components	44735	48196	50580	49194	48785	48804	45659	46268	55270	58381	...		
VA	Motor vehicles, bodies and trailers, and parts	108827	115397	118105	103694	118882	124093	106942	98225	98315	98454	...		
VA	Other transportation equipment	63344	64253	64439	69175	69642	62352	70877	80573	87665	96140	...		
VA	Furniture and related products	29101	30965	32712	30200	31061	33447	31196	34738	36620	35383	...		
VA	Miscellaneous manufacturing	49902	52480	57515	57234	60029	62928	67357	68339	70795	72984	...		
VA	Nondurable goods	536985	552720	560950	562459	577855	587533	620413	635529	677976	694861	722960	4.04%	3.36%
VA	Food and beverage and tobacco products	137539	153567	154809	167129	172880	167940	161045	159206	160181	174696	...		
VA	Textile mills and textile product mills	27127	26440	26453	22713	21948	23107	23119	23230	21720	19783	...		
VA	Apparel and leather and allied products	26049	24739	25052	22796	20913	18259	17325	17071	16679	16077	...		
VA	Paper products	52154	54150	55594	48946	50311	50310	50687	50245	56943	50659	...		
VA	Printing and related support activities	46508	48183	49009	46868	45662	45249	45554	46319	47488	47854	...		
VA	Petroleum and coal products	30643	22399	26248	33376	26246	39148	56621	70903	73600	70412	...		
VA	Chemical products	153362	157142	157057	157227	174363	179485	198746	201497	236003	249195	...		
VA	Plastics and rubber products	63603	66100	66728	63406	65534	64034	67314	67060	65362	66186	...		
VA	Wholesale trade	542939	577698	591688	607078	615365	637005	686657	722433	773243	805319	818787	1.67%	4.67%
VA	Retail trade	598633	635456	662430	691578	719578	751483	776919	824653	866527	892522	885486	-0.79%	4.45%
VA	Transportation and warehousing	273704	287410	301622	296948	304557	316576	344625	364727	387381	407188	414858	1.88%	4.73%
VA	Air transportation	52501	54888	57678	49960	48336	51729	49142	48282	50289	55244	...		
VA	Rail transportation	24531	24668	25530	25559	26191	28079	29835	33549	38970	40548	...		
VA	Water transportation	6516	6413	7222	7417	6958	8739	9510	9984	10826	10700	...		
VA	Truck transportation	86196	89838	92821	93315	95651	98360	111395	118425	122488	127622	...		
VA	Transit and ground passenger transportation	13777	14400	14457	15088	15684	16066	17580	17850	18309	19316	...		
VA	Pipeline transportation	9245	9243	8718	9166	11519	9858	10671	9473	11353	12018	...		
VA	Other transportation and support activities	59852	64750	70225	71359	73378	75425	85337	91581	97806	101484	...		
VA	Warehousing and storage	21085	23209	24971	25084	26841	28320	31155	35584	37339	40255	...		
VA	Information	381573	439313	458304	476934	482981	489083	530619	557770	559587	586269	621986	6.09%	5.58%
VA	Publishing industries (includes software)	96656	118664	116733	118671	118993	123546	130830	143309	134284	138792	...		
VA	Motion picture and sound recording industries	25288	30107	32525	33568	38884	38282	40243	42318	42883	43430	...		
VA	Broadcasting and telecommunications	229782	253834	271301	283196	278949	277937	302218	310409	317042	342391	...		
VA	Information and data processing services	29847	36709	37746	41499	46156	49318	57328	61734	65377	61656	...		
VA	Finance, insurance, real estate, rental, and leasing	1684608	1798398	1930952	2059197	2141889	2244618	2378770	2527949	2685771	2811217	2848410	1.32%	6.01%
VA	Finance and insurance	641118	679842	740489	782627	822728	864623	907883	989473	1060925	1091416	1064895	-2,43%	5.80%
VA	Federal Reserve banks, credit intermediation, and related activities	277742	308007	319025	360055	417443	445015	457792	495860	518776	504425	...		
VA	Securities, commodity contracts, and investments	134070	139930	167713	170223	148390	145887	158266	188535	211922	237501	...		
VA	Insurance carriers and related activities	217437	216867	238264	234393	237439	254999	267747	279995	311757	332486	...		
VA	Funds, trusts, and other financial vehicles	11869	15038	15487	17956	19456	18723	24077	25083	18470	17003	...		
VA	Real estate and rental and leasing	1043490	1118556	1190463	1276571	1319162	1379995	1470887	1538476	1624847	1719802	1783514	3.70%	6.14%
VA	Real estate	950298	1017949	1082118	1169699	1215893	1274230	1366737	1428175	1498258	1586549	...		
VA	Rental and leasing services and lessors of intangible assets	93192	100608	108345	106872	103269	105765	104149	110302	126589	133253	...		
VA	Professional and business services	976168	1064543	1140848	1165880	1188985	1248930	1338190	1463927	1566433	1694145	1805772	6.59%	7.07%
VA	Professional, scientific, and technical services	565310	613936	675121	698825	705227	733125	792709	859400	930568	1007780	1095570	8.71%	7.63%

http://www.bea.gov/industry.gdpbyind_data.htm

Missouri-American Water Company

Percent Change in Gross Domestic Product (GDP) for the Years 1998 - 2008

Code	Industry Title	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	'07-'08	'98-'08
	Value added (Millions of dollars)												% Change	
VA	Legal services	120893	127345	136126	145563	145752	154213	168743	179768	187516	198351	...		
VA	Computer systems design and related services	92862	107792	125744	127064	127323	124333	126870	134870	152409	169262	...		
VA	Miscellaneous professional, scientific, and technical services	351555	378798	413251	426198	432152	454580	497096	544762	590643	640168	...		
VA	Management of companies and enterprises	156810	170458	183354	177636	183799	195502	210146	236230	246938	271251	283750	4.61%	6.81%
VA	Administrative and waste management services	254047	280150	282373	289419	299958	320303	335335	368298	388927	415113	426451	2.73%	5.92%
VA	Administrative and support services	231877	255407	257207	264073	273252	290899	304336	335193	356869	381215	...		
VA	Waste management and remediation services	22170	24742	25166	25346	26706	29403	30999	33104	32058	33898	...		
VA	Educational services, health care, and social assistance	601537	634488	678436	739327	799568	857265	916268	969729	1025813	1086972	1157916	6.53%	7.55%
VA	Educational services	67634	72774	79239	85094	93268	100096	108296	113584	121060	129531	138254	6.73%	8.27%
VA	Health care and social assistance	533904	561713	599197	654233	706300	757169	807972	856145	904753	957440	1019662	6.50%	7.45%
VA	Ambulatory health care services	276083	288565	307624	338120	361803	385673	406661	438712	467011	498101	...		
VA	Hospitals and nursing and residential care facilities	214539	225566	238552	258044	281113	303854	330483	340961	356825	373681	...		
VA	Social assistance	43282	47583	53022	58069	63384	67641	70828	76472	80917	85658	...		
VA	Arts, entertainment, recreation, accommodation, and food services	305973	327774	350119	361469	381505	398862	427462	451766	484868	513335	536346	4.48%	6.44%
VA	Arts, entertainment, and recreation	76824	83801	88676	95664	102390	107188	113744	118141	126898	133847	140134	4.70%	6.91%
VA	Performing arts, spectator sports, museums, and related activities	34634	37757	40012	42695	46731	49577	52713	54218	58760	61808	...		
VA	Amusements, gambling, and recreation industries	42191	46044	48664	52969	55659	57611	61031	63924	68138	72038	...		
VA	Accommodation and food services	229148	243973	261443	265805	279115	291674	313718	333625	357970	379489	396212	4.41%	6.27%
VA	Accommodation	78072	84297	90672	87487	89100	90692	98428	106068	113713	120894	...		
VA	Food services and drinking places	151077	159677	170771	178318	190015	200982	215290	227557	244257	258594	...		
VA	Other services, except government	211145	217806	229112	241458	252521	265274	273890	287493	299464	315634	326796	3.54%	4.97%
VA	Government	1094496	1141217	1202681	1258325	1338432	1418433	1491628	1568794	1649105	1742926	1839971	5.57%	5.94%
VA	Federal	352911	361860	378749	385701	417325	448589	479354	501905	527587	554009	586564	5.88%	5.81%
VA	General government	293058	300904	315362	325665	352873	383934	412592	438239	460138	484229	...		
VA	Government enterprises	59853	60956	63387	60036	64452	64655	66762	63666	67449	69780	...		
VA	State and local	741585	779357	823932	872623	921107	969844	1012274	1066889	1121518	1188917	1253407	5.42%	6.00%
VA	General government	677223	711795	754226	800769	848938	896175	935844	986647	1037183	1098994	...		
VA	Government enterprises	64363	67562	69706	71854	72169	73668	76430	80242	84335	89923	...		
VA	NIPA reconciliation item /1/	...	...	...	...	...	...	...	...	...	...	...		
	Addenda:													
VA	Gross domestic product, NIPAs	...	...	...	...	...	...	...	...	...	...	...		
VA	Less: Value added, all industries	...	...	...	...	...	...	...	...	...	...	...		
VA	Equals: NIPA reconciliation item /1/	...	...	...	...	...	...	...	...	...	...	...		
VA	Private goods-producing industries /3/	1895417	1958889	2081485	2027496	2036893	2113266	2280603	2443191	2607447	2670587	2702246	1.19%	4.02%
VA	Private services-producing industries /4/	5757084	6168304	6532802	6842155	7094276	7429072	7913670	8409900	8921824	9394025	9722379	3.50%	6.00%
VA	Information-communications-technology-producing industries /5/	385038	425942	465786	424164	416624	421198	440488	473649	496478	516004	535680	3.81%	3.74%

http://www.bea.gov/industry.gdpbyind_data.htm

Missouri-American Water Company

Correction of MoPSC Staff's Single Stage DCF using only Projected 5-Year EPS Growth Rates

	[1]	[2]	[3]	[4]	[5]
MoPSC Witness Murray's Proxy Group of Four Water Companies	Expected Annual Dividend (1)	Average High / Low Price (1)	Projected Dividend Yield (1)	Average Projected Growth Rate (2)	Estimated Cost of Common Equity (3)
American States Water Company	1.05	33.992	3.09%	6.75%	9.84%
Aqua America, Inc.	0.59	17.117	3.45%	9.30%	12.75%
California Water Service Group	1.19	36.788	3.23%	7.25%	10.48%
York Water Company	0.51	14.102	3.63%	6.75%	10.38%
			3.35%	7.51%	10.86%

Proposed Dividend Yield:	3.35%
Proposed Range of Growth:	6.75% - 9.30%
Indicated Cost of Common Equity:	10.10% - 12.65%

Notes:

(1) From Schedule 17 of the Staff Report.

(2) From Schedule 15 of the Staff Report. Used only projected estimates of 5-year EPS growth rates for the companies and included the 7.50% 5 year EPS growth rate for York Water Company provided by Value Line sheet in which Staff omitted.

(3) Column 3 + Column 4.

Missouri-American Water Company
Capital Asset Pricing Model (CAPM) Cost-of-Common-Equity Estimates
for MoPSC Staff's Four Water Companies Corrected
to Reflect a Risk-Free Rate and a Market Risk Premium which Accounts for
a Properly derived Historical Market Risk Premium and a Projected Market Risk Premium

	1	2	3	4	5
	Traditional Capital Asset Pricing Model				
MoPSC Staff's Proxy Group of Four Water Companies	Risk-Free Rate (1)	Company's Beta (2)	Market Risk Premium (3)	Beta Adjusted Market Risk Premium (4)	Cost of Common Equity (5)
American States Water Company	4.90%	0.80	7.68%	6.14%	11.04%
Aqua America, Inc.	4.90%	0.65	7.68%	4.99%	9.89%
California Water Services Group	4.90%	0.75	7.68%	5.76%	10.66%
York Water Company	4.90%	0.65	7.68%	4.99%	9.89%
Average	4.90%	0.71	7.68%	5.47%	10.37%

	Empirical Capital Asset Pricing Model				
MoPSC Staff's Proxy Group of Four Water Companies	Risk-Free Rate (1)	Company's Beta (2)	Market Risk Premium (3)	Beta Adjusted Market Risk Premium (6)	Cost of Common Equity (5)
American States Water Company	4.90%	0.80	7.68%	6.53%	11.43%
Aqua America, Inc.	4.90%	0.65	7.68%	5.66%	10.56%
California Water Services Group	4.90%	0.75	7.68%	6.24%	11.14%
York Water Company	4.90%	0.65	7.68%	5.66%	10.56%
Average	4.90%	0.71	7.68%	6.02%	10.92%

Average of Traditional and Empirical CAPM 10.65%

Notes on page 3 of this Schedule.

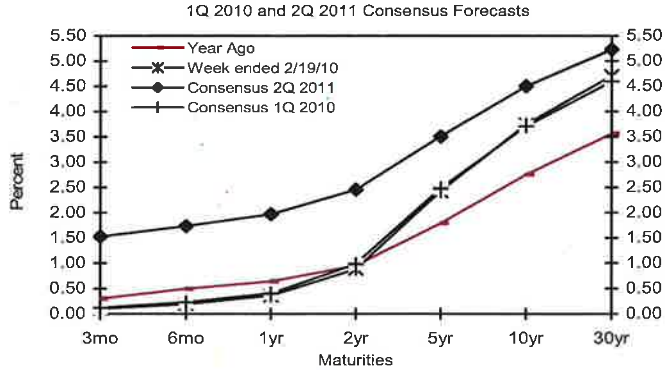
Consensus Forecasts Of U.S. Interest Rates And Key Assumptions[1]

	History								Consensus Forecasts-Quarterly Avg.					
	Average For Week End				Average For Month			Latest Q	1Q	2Q	3Q	4Q	1Q	2Q
Interest Rates	Feb.19	Feb.12	Feb.5	Jan.29	Jan.	Dec.	Nov.	4Q 2009	2010	2010	2010	2010	2011	2011
Federal Funds Rate	0.12	0.13	0.13	0.12	0.11	0.12	0.12	0.12	**0.1**	**0.2**	**0.3**	**0.7**	**1.1**	**1.5**
Prime Rate	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	**3.2**	**3.3**	**3.4**	**3.7**	**4.1**	**4.5**
LIBOR, 3-mo.	0.25	0.25	0.25	0.25	0.25	0.25	0.27	0.27	**0.3**	**0.4**	**0.6**	**0.9**	**1.4**	**1.7**
Commercial Paper, 1-mo.	0.14	0.12	0.11	0.12	0.13	0.14	0.13	0.13	**0.2**	**0.3**	**0.4**	**0.8**	**1.2**	**1.6**
Treasury bill, 3-mo.	0.10	0.11	0.10	0.07	0.06	0.05	0.05	0.06	**0.1**	**0.2**	**0.4**	**0.8**	**1.2**	**1.5**
Treasury bill, 6-mo.	0.19	0.18	0.17	0.15	0.15	0.17	0.15	0.16	**0.2**	**0.3**	**0.6**	**0.9**	**1.4**	**1.7**
Treasury bill, 1 yr.	0.36	0.35	0.33	0.31	0.35	0.37	0.31	0.35	**0.4**	**0.6**	**0.8**	**1.2**	**1.6**	**2.0**
Treasury note, 2 yr.	0.89	0.86	0.83	0.86	0.93	0.87	0.80	0.87	**1.0**	**1.2**	**1.5**	**1.8**	**2.2**	**2.5**
Treasury note, 5 yr.	2.42	2.34	2.33	2.39	2.48	2.34	2.23	2.30	**2.5**	**2.6**	**2.8**	**3.1**	**3.3**	**3.5**
Treasury note, 10 yr.	3.74	3.69	3.66	3.66	3.73	3.59	3.40	3.46	**3.7**	**3.8**	**4.0**	**4.2**	**4.3**	**4.5**
Treasury note, 30 yr.	4.70	4.62	4.55	4.55	4.60	4.49	4.31	4.33	**4.6**	**4.7**	**4.8**	**5.0**	**5.1**	**5.2**
Corporate Aaa bond	5.44	5.36	5.29	5.28	5.26	5.26	5.19	5.20	**5.3**	**5.4**	**5.5**	**5.7**	**5.8**	**5.9**
Corporate Baa bond	6.45	6.36	6.25	6.23	6.25	6.37	6.32	6.33	**6.4**	**6.5**	**6.6**	**6.8**	**6.8**	**7.0**
State & Local bonds	4.38	4.34	4.36	4.39	4.33	4.21	4.37	4.26	**4.5**	**4.6**	**4.7**	**4.8**	**4.9**	**5.0**
Home mortgage rate	4.93	4.97	5.01	4.98	5.03	4.93	4.88	4.92	**5.1**	**5.2**	**5.4**	**5.7**	**5.8**	**6.0**
	History								Consensus Forecasts-Quarterly					
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q
Key Assumptions	2008	2008	2008	2008	2009	2009	2009	2009	2010	2010	2010	2010	2011	2011
Major Currency Index	72.0	70.9	73.5	81.3	82.7	79.4	75.4	73.6	**75.4**	**75.6**	**75.9**	**76.1**	**76.3**	**76.6**
Real GDP	-0.7	1.5	-2.7	-5.4	-6.4	-0.7	2.2	5.9	**3.0**	**3.0**	**2.9**	**3.0**	**3.0**	**3.1**
GDP Price Index	1.9	1.8	4.0	0.1	1.9	0.0	0.4	0.4	**1.5**	**1.3**	**1.5**	**1.5**	**1.8**	**1.7**
Consumer Price Index	4.5	4.5	6.2	-8.3	-2.4	1.3	3.6	3.4	**2.0**	**1.6**	**1.9**	**1.9**	**2.1**	**2.0**

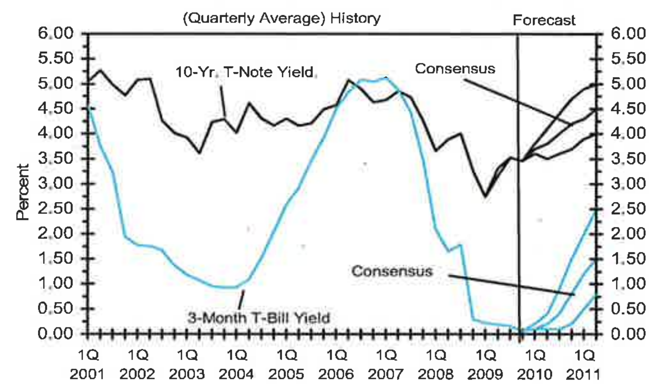
Forecasts for interest rates and the Federal Reserve's Major Currency Index represent averages for the quarter. Forecasts for Real GDP, GDP Price Index and Consumer Price Index are seasonally-adjusted annual rates of change (saar). Individual panel members' forecasts are on pages 4 through 9. Historical data for interest rates except LIBOR is from Federal Reserve Release (FRSR) H.15. LIBOR quotes available from *The Wall Street Journal*. Interest rate definitions are the same as those in FRSR H.15. Treasury yields are reported on a constant maturity basis. Historical data for the Fed' 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 February 19, 2009 and Year Ago vs. 1Q 2010 and 2Q 2011 Consensus Forecasts

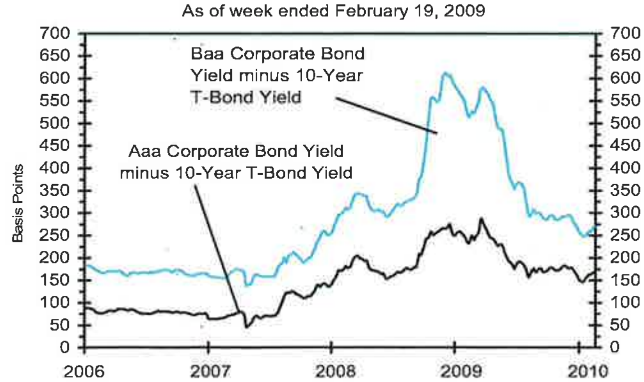


U.S. 3-Mo. T-Bills & 10-Yr. T-Note Yield



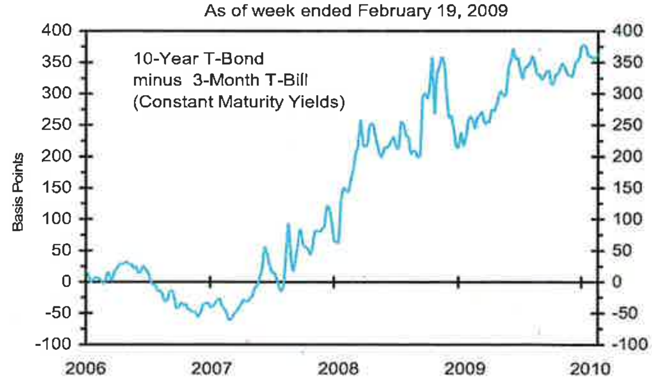
Corporate Bond Spreads

As of week ended February 19, 2009



U.S. Treasury Yield Curve

As of week ended February 19, 2009



Missouri-American Water Company
Development of the Market-Required Rate of Return on Common Equity Using
the Capital Asset Pricing Model for
MoPSC Staff's Proxy Group of Four Water Companies

Notes:

(1) 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 dated March 1, 2010 (see page 2 of this Schedule). The estimates are detailed below:

	30-Year Treasury Note Yield
First Quarter 2010	4.60
Second Quarter 2010	4.70
Third Quarter 2010	4.80
Fourth Quarter 2010	5.00
First Quarter 2011	5.10
Second Quarter 2011	5.20
Average	4.90%

(2) From Schedule PMA-20.

(3) For reasons explained in Ms. Ahern's direct testimony, from the three previous month-end (December 2009 – February 2010), Value Line Summary & Index, a forecasted 3-5 year total annual market return of 13.65% can be derived by averaging the 3-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 55% produces a four-year average annual return of 11.58% (($1.55^{.25}$) - 1). When the average annual forecasted dividend yield of 2.07% is added, a total average market return of 13.65% (2.07% + 11.58%) is derived.

The 3-month and spot forecasted total market return of 13.65% minus the forecasted risk-free rate of 4.90% (developed in Note 2) is 8.75% (13.65% - 4.90%). The Morningstar, Inc. (Ibbotson Associates) calculated market premium of 6.60% for the period 1926-2009 results from a total market return of 11.80% less the average income return on long-term U.S. Government Securities of 5.20% (11.80% - 5.20% = 6.60%). This is then averaged with the 8.75% Value Line market premium resulting in a 7.68% market premium. The 7.68% market premium is then multiplied by the beta in column 2 of page 1 of this Schedule.

(4) 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

(5) Column 4 + Column 1.

(6) 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, March 1, 2010
Value Line Investment Survey, January 22, 2010 Standard Edition and Small and Mid-Cap Edition
2010 Ibbotson Risk Premia Over Time Report – Estimates for 1926-2009

Ibbotson® SBBI®

2009 Valuation Yearbook

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

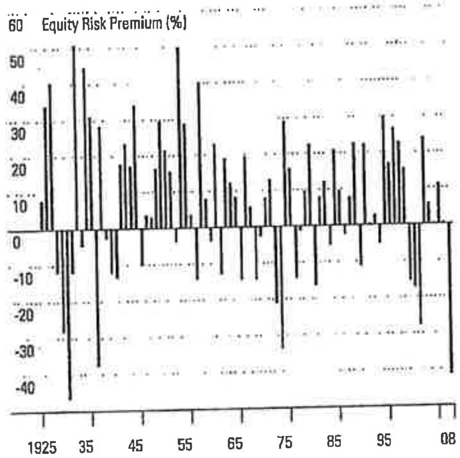
MORNINGSTAR®

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.

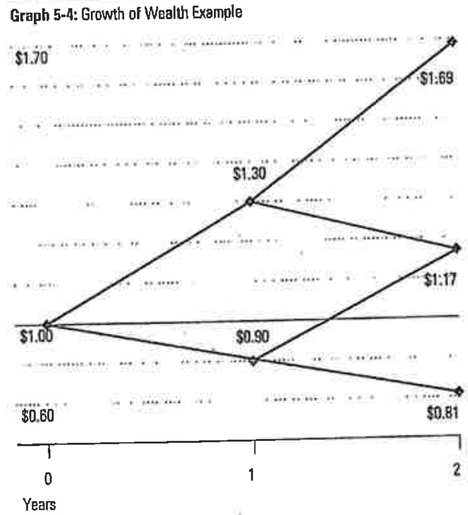
Graph 5-3: Realized Equity Risk Premium Per Year



Data from 1926–2008.

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:

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

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

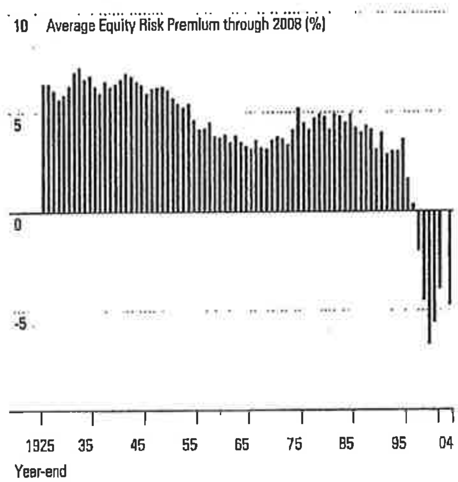
It is interesting to take a look at the realized returns and realized equity risk premium in the context of the above discussion. Table 5-5 shows the average stock market return and the average (arithmetic mean) realized long-horizon equity risk premium over various historical time periods. Similarly, 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

Table 5-5: Stock Market Return and Equity Risk Premium Over Time

Length (Yrs.)	Period Dates	Large Company Stock Arithmetic Mean Total Return (%)	Long-Horizon Equity Risk Premium (%)
83	1926–2008	11.7	6.5
70	1939–2008	11.9	6.3
60	1949–2008	12.4	6.3
50	1959–2008	10.6	3.8
40	1969–2008	10.6	3.2
30	1979–2008	12.5	5.0
20	1989–2008	10.4	4.2
15	1994–2008	8.7	3.1
10	1999–2008	0.7	-4.5
5	2004–2008	0.0	-4.7

Data from 1926–2008.

Graph 5-5: Equity Risk Premium Using Different Starting Dates



Data from 1926–2008

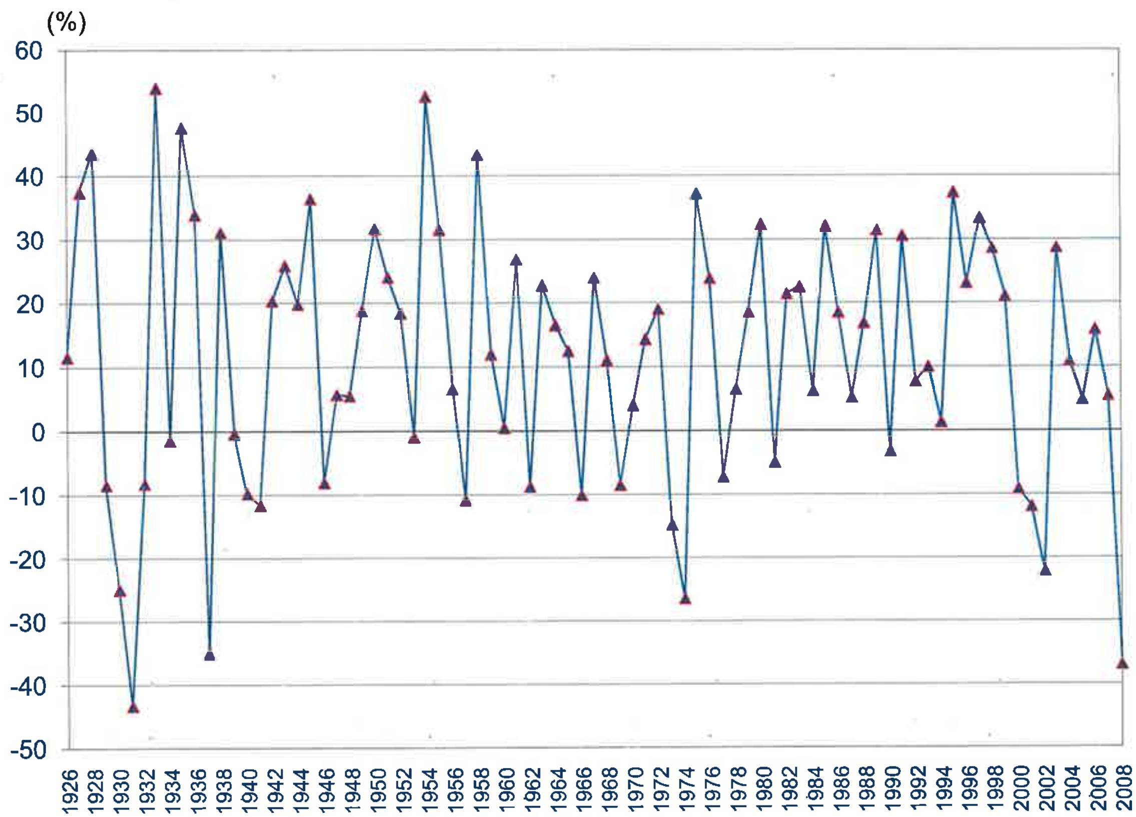
that using a longer historical period provides a more stable estimate of the equity risk premium. The reason is that any unique period will not be weighted heavily in an average covering a longer historical period. It better represents the probability of these unique events occurring over a long period of time.

Looking carefully at Graph 5-5 will clarify this point. The graph shows the realized equity risk premium for a series of time periods through 2008, starting with 1926. In other words, the first value on the graph represents the average realized equity risk premium over the period 1926–2008. The next value on the graph represents the average realized equity risk premium over the period 1927–2008, and so on, with the last value representing the average over the most recent five years, 2004–2008. Concentrating on the left side of Graph 5-5, one notices that the realized equity risk premium, when measured over long periods of time, is relatively stable. In viewing the graph from left to right, moving from longer to shorter historical periods, one sees that the value of the realized equity risk premium begins to decline significantly. Why does this occur? The reason is that the severe bear market of 1973–1974 is receiving proportionately more weight in the shorter, more recent average. If you continue to follow the line to the right, however, you will also notice that when 1973 and 1974 fall out of the recent average, the realized equity risk premium jumps up by nearly 1.2 percent.

Additionally, use of recent historical periods for estimation purposes can lead to illogical conclusions. As seen in Table 5-5, the recent bear market in the early 2000's and in 2008 has caused the realized equity risk premium in the shorter historical periods to be lower than the long-term average.

The impact of adding one additional year of data to a historical average is lessened the greater the initial time period of measurement. Short-term averages can be affected considerably by one or more unique observations. On the other hand, long-term averages produce more stable results. A series of graphs looking at the realized equity risk premium will illustrate this effect. Graph 5-6 shows the average (arithmetic mean) realized long-horizon equity risk premium starting in 1926. Each additional point on the graph represents the addition of another year to the average. Although the graph is extremely volatile in the beginning periods, the stability of the long-term average is quite remarkable. Again, the "unique" periods of time will not be weighted heavily in a long-term average, resulting in a more stable estimate.

Missouri-American Water Company
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-American Water Company
Total Returns on Large Company Stocks
1926 to 2008

Large Company Stocks

						2006				
						2004				
					2007	1988	2003	1997		
				1990	2005	1986	1999	1995		
				1981	1994	1979	1998	1991		
				1977	1993	1972	1996	1989		
				1969	1992	1971	1983	1985		
				1962	1987	1968	1982	1980		
				1953	1984	1965	1976	1975		
			2001	1946	1978	1964	1967	1955		
			2000	1940	1970	1959	1963	1950		
			1973	1939	1960	1952	1961	1945		
		2002	1966	1934	1956	1949	1951	1938	1958	
	$\boxed{\textbf{2008}}$	1974	1957	1932	1948	1944	1943	1936	1935	1954
1931	1937	1930	1941	1929	1947	$\boxed{\textbf{1926}}$	1942	1927	1928	1933

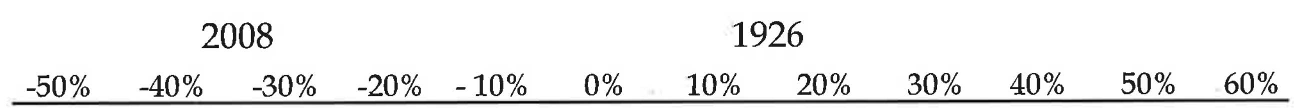
-50% -40% -30% -20% - 10% 0% 10% 20% 30% 40% 50% 60%

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-American Water Company
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

AMER. STATES WATER NYSE-AWR

RECENT PRICE **34.75** | P/E RATIO **18.5** (Trailing: 18.6 Median: 22.0) | RELATIVE P/E RATIO **1.07** | DIV'D YLD **3.0%** | VALUE LINE

TIMELINESS **3** Lowered 6/5/09
SAFETY **3** New 2/4/00
TECHNICAL **3** Raised 12/4/09
BETA .80 (1.00 = Market)

2012-14 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	60	(+75%)	17%
Low	40	(+15%)	6%

Insider Decisions

	F	M	A	M	J	J	A	S	O
to Buy	0	0	0	0	0	0	0	0	0
Options	0	0	0	0	0	0	0	0	0
to Sell	0	1	0	0	0	0	1	0	0

Institutional Decisions

	1Q2009	2Q2009	3Q2009
to Buy	55	66	54
to Sell	66	53	53
Hld's(000)	9283	10578	10847

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
High:	19.5	26.5	25.3	26.4	29.0	29.0	26.8	34.6	43.8	46.1	42.0	38.8
Low:	14.1	14.8	16.7	19.0	20.3	21.6	20.8	24.3	30.3	33.6	27.0	29.8

Target Price Range 2012 | 2013 | 2014

% TOT. RETURN 12/09

	THIS STOCK	VL ARITH. INDEX
1 yr.	10.5	60.8
3 yr.	-0.5	1.9
5 yr.	56.5	25.9

1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	© VALUE LINE PUB., INC.	12-14
9.27	10.43	11.03	11.37	11.44	11.02	12.91	12.17	13.06	13.78	13.98	13.61	14.06	15.76	17.49	18.42	*19.60*	*20.55*	Revenues per sh	*21.75*
1.67	1.68	1.75	1.75	1.85	2.04	2.26	2.20	2.53	2.54	2.08	2.23	2.64	2.89	3.31	3.37	*3.65*	*3.90*	"Cash Flow" per sh	*4.60*
1.11	.95	1.03	1.13	1.04	1.08	1.19	1.28	1.35	1.34	.78	1.05	1.32	1.33	1.62	1.55	*1.85*	*2.00*	Earnings per sh A	*2.60*
.79	.80	.81	.82	.83	.84	.85	.86	.87	.87	.88	.89	.90	.91	.96	1.00	1.01	*1.05*	Div'd Decl'd per sh B■	*1.22*
1.90	2.43	2.19	2.40	2.58	3.11	4.30	3.03	3.18	2.68	3.76	5.03	4.24	3.91	2.89	4.45	*4.05*	*4.25*	Cap'l Spending per sh	*5.00*
9.95	10.07	10.29	11.01	11.24	11.48	11.82	12.74	13.22	14.05	13.97	15.01	15.72	16.64	17.53	17.95	*19.60*	*20.00*	Book Value per sh	*22.00*
11.71	11.77	11.77	13.33	13.44	13.44	13.44	15.12	15.12	15.18	15.21	16.75	16.80	17.05	17.23	17.30	*18.60*	*19.00*	Common Shs Outst'g C	*20.00*
13.4	12.6	11.6	12.6	14.5	15.5	17.1	15.9	16.7	18.3	31.9	23.2	21.9	27.7	24.0	22.6	*18.54*		Avg Ann'l P/E Ratio	*19.0*
.79	.84	.78	.79	.84	.81	.97	1.03	.86	1.00	1.82	1.23	1.17	1.50	1.27	1.37	*1.22*		Relative P/E Ratio	*1.25*
5.3%	6.6%	6.7%	5.8%	5.5%	5.0%	4.2%	4.2%	3.9%	3.6%	3.5%	3.6%	3.1%	2.5%	2.5%	2.9%	2.9%		Avg Ann'l Div'd Yield	*2.4%*

CAPITAL STRUCTURE as of 9/30/09
Total Debt $327.5 mill. Due in 5 Yrs $25.0 mill.
LT Debt $306.3 mill. LT Interest $23.5 mill.
(LT interest earned: 3.8x; total interest coverage: 3.5x) (46% of Cap'l)

Leases, Uncapitalized: Annual rentals $2.9 mill.

Pension Assets-12/08 $54.2 mill.
Oblig. $94.5 mill.

Pfd Stock None.

Common Stock 18,512,032 shs.
as of 11/3/09
MARKET CAP: $650 million (Small Cap)

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010		12-14
173.4	184.0	197.5	209.2	212.7	228.0	236.2	268.6	301.4	318.7	*365*	*390*	Revenues ($mill)	*450*
16.1	18.0	20.4	20.3	11.9	16.5	22.5	23.1	28.0	26.8	*35.0*	*39.0*	Net Profit ($mill)	*52.0*
46.0%	45.7%	43.0%	38.9%	43.5%	37.4%	47.0%	40.5%	42.6%	37.8%	*38.5%*	*38.5%*	Income Tax Rate	*40.0%*
--	--	--	--	--	--	--	12.2%	8.5%	6.9%	*5.0%*	*5.0%*	AFUDC % to Net Profit	*5.0%*
51.0%	47.5%	54.9%	52.0%	52.0%	47.7%	50.4%	48.6%	46.9%	46.2%	*46.0%*	*44.5%*	Long-Term Debt Ratio	*46.5%*
48.4%	51.9%	44.7%	48.0%	48.0%	52.3%	49.6%	51.4%	53.1%	53.8%	*54.0%*	*55.5%*	Common Equity Ratio	*53.5%*
326.2	371.1	447.6	444.4	442.3	480.4	532.5	551.6	569.4	577.0	*675*	*705*	Total Capital ($mill)	*825*
449.6	509.1	539.8	563.3	602.3	664.2	713.2	750.6	776.4	825.3	*870*	*920*	Net Plant ($mill)	*1025*
6.6%	6.4%	6.1%	6.5%	4.6%	5.2%	5.4%	6.0%	6.7%	6.4%	*7.0%*	*7.5%*	Return on Total Cap'l	*8.5%*
10.0%	9.2%	10.1%	9.5%	5.6%	6.6%	8.5%	8.1%	9.3%	8.6%	*9.5%*	*10.5%*	Return on Shr. Equity	*12.0%*
10.1%	9.3%	10.1%	9.5%	5.6%	6.6%	8.5%	8.1%	9.3%	8.6%	*9.5%*	*10.5%*	Return on Com Equity	*12.0%*
2.9%	3.0%	3.6%	3.3%	NMF	1.0%	2.8%	2.7%	3.9%	3.1%	*4.5%*	*5.0%*	Retained to Com Eq	*6.5%*
72%	68%	65%	65%	113%	84%	67%	67%	58%	64%	*54%*	*53%*	All Div'ds to Net Prof	*47%*

CURRENT POSITION ($MILL.)	2007	2008	9/30/09
Cash Assets	1.7	7.3	7.4
Other	61.4	83.3	92.3
Current Assets	63.1	90.6	99.7
Accts Payable	29.1	36.6	37.4
Debt Due	37.8	75.3	21.2
Other	27.4	25.5	40.4
Current Liab.	94.3	137.4	99.0
Fix. Chg. Cov.	314%	293%	352%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '06-'08 to '12-'14
Revenues	4.5%	5.0%	*4.0%*
"Cash Flow"	5.5%	6.0%	*6.5%*
Earnings	3.5%	5.5%	*9.5%*
Dividends	1.5%	2.0%	*4.5%*
Book Value	4.5%	5.0%	*4.0%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2006	64.3	63.0	75.0	66.3	268.6
2007	72.3	79.3	75.8	74.0	301.4
2008	68.9	80.3	85.3	84.2	318.7
2009	79.6	93.6	101.8	*90.0*	*365*
2010	*85.0*	*100*	*108*	*97.0*	*390*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2006	.35	.36	.32	.30	1.33
2007	.40	.42	.44	.35	1.62
2008	.30	.53	.26	.43	1.55
2009	.28	.64	.52	*.41*	*1.85*
2010	*.30*	*.65*	*.58*	*.47*	*2.00*

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	.225	.225	.225	.235	.91
2007	.235	.235	.235	.250	.96
2008	.250	.250	.250	.250	1.00
2009	.250	.250	.250	.260	1.01
2010					

BUSINESS: American States Water Co. operates as a holding company. Through its principal subsidiary, Golden State Water Company, it supplies water to more than 250,000 customers in 75 communities in 10 counties. Service areas include the greater metropolitan areas of Los Angeles and Orange Counties. The company also provides electric utility services to nearly 23,250 customers in the city of Big Bear Lake and in areas of San Bernardino County. Acquired Chaparral City Water of Arizona (10/00). Has roughly 675 employees. Officers & directors own 2.5% of common stock (4/09 Proxy). Chairman: Lloyd Ross. President & CEO: Floyd Wicks. Inc: CA. Addr.: 630 East Foothill Boulevard, San Dimas, CA 91773. Tele.: 909-394-3600. Internet: www.aswater.com.

American States Water posted impressive third-quarter growth. Indeed, the water utility reported earnings of $0.52 a share, as revenues advanced 17%, to a record $101 million.

Expectations should be tempered a bit, however. Last year's third-quarter figures were relatively weak. The December-period comparisons are far more formidable. Plus, although the top line is likely to continue being the beneficiary of favorable general rate case rulings from the California Public Utilities Commission, operating expenses look to be on the rise, as evidenced by the most recent double-digit increase. Already decaying infrastructures are only growing older and requiring more investment. Much in that vein, we anticipate that the company had trouble meeting last year's share-net total in the fourth quarter, despite a healthy high single-digit top-line advance. For many of the same reasons, bottom-line growth for full-year 2010, though healthy, will likely pale in comparison to the levels witnessed in 2009.

The company's balance sheet is not exactly seductive. In order to meet the growing infrastructure requirements mentioned above, the cash-strapped entity will have to continue to seek outside financing, with debt and share offerings likely becoming commonplace. The higher interest rate and share count associated with these transactions will limit the benefits of the expansion of the nonregulated business.

These shares are not too intriguing at this juncture. Share-price momentum has tapered off in the months following our October review and is likely to remain relatively stagnant over the coming six to 12 months as the emergence from the recession continues to gain steam and investors regain confidence and take a more aggressive stance. The longer-term picture is not much better, with burgeoning financing costs curbing 3- to 5-year shareholder gains. Although risk-averse investors may be intrigued by the issue's income component (in a much anticipated move the board recently raised the quarterly dividend by 4% to $0.26 a share), it should be noted that there are a number of better income sources, particularly in the utility genre, to choose from.

Andre J. Costanza *January 22, 2010*

(A) Primary earnings. Excludes nonrecurring gains/(losses): '04, 14¢; '05, 25¢; '06, 6¢; '08, (27¢). Next earnings report due late February. May not add due to rounding.
(B) Dividends historically paid in early March, June, September, and December. ■ Div'd reinvestment plan available.
(C) In millions, adjusted for split.

Company's Financial Strength	B++
Stock's Price Stability	80
Price Growth Persistence	70
Earnings Predictability	70

AQUA AMERICA NYSE-WTR

RECENT PRICE **17.57** | P/E RATIO **20.9** (Trailing: 23.7 / Median: 25.0) | RELATIVE P/E RATIO **1.21** | DIV'D YLD **3.4%** | VALUE LINE

TIMELINESS **3** Lowered 6/26/09
SAFETY **3** Lowered 6/1/03
TECHNICAL **3** Lowered 1/1/10
BETA .65 (1.00 = Market)

2012-14 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	30	(+70%)	14%
Low	20	(+15%)	3%

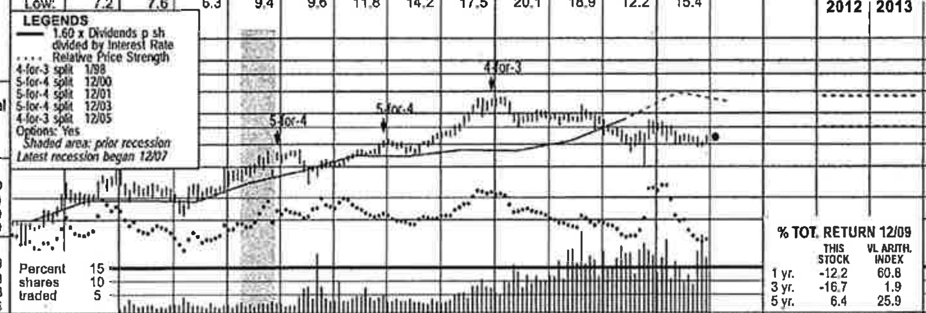
Insider Decisions

	F	M	A	M	J	J	A	S	O
to Buy	0	0	0	0	0	0	0	0	0
Options	1	0	0	0	0	0	0	0	0
to Sell	0	0	0	0	0	0	0	0	0

Institutional Decisions

	1Q2009	2Q2009	3Q2009
to Buy	130	117	88
to Sell	134	136	118
Hld's(000)	63551	61341	60196

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
High:	11.5	11.5	12.0	14.8	15.0	16.8	18.5	29.2	29.8	26.6	22.0	21.5
Low:	7.2	7.6	6.3	9.4	9.6	11.8	14.2	17.5	20.1	18.9	12.2	15.4



% TOT. RETURN 12/09

	THIS STOCK	VL ARITH. INDEX
1 yr.	-12.2	60.8
3 yr.	-16.7	1.9
5 yr.	6.4	25.9

1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	© VALUE LINE PUB., INC.	12-14
1.70	1.82	1.84	1.86	2.02	2.09	2.41	2.46	2.70	2.85	2.97	3.48	3.85	4.03	4.52	4.63	4.95	5.35	Revenues per sh	6.45
.42	.42	.47	.50	.56	.61	.72	.76	.86	.94	.96	1.09	1.21	1.26	1.37	1.42	1.70	1.85	"Cash Flow" per sh	2.40
.24	.26	.29	.30	.34	.40	.42	.47	.51	.54	.57	.64	.71	.70	.71	.73	.80	.90	Earnings per sh A	1.25
.21	.21	.22	.23	.24	.26	.27	.28	.30	.32	.35	.37	.40	.44	.48	.51	.55	.59	Div'd Decl'd per sh B ■	.70
.47	.46	.52	.48	.58	.82	.90	1.16	1.09	1.20	1.32	1.54	1.84	2.05	1.79	1.98	1.90	1.95	Cap'l Spending per sh	2.15
2.29	2.41	2.46	2.69	2.84	3.21	3.42	3.85	4.15	4.36	5.34	5.89	6.30	6.96	7.32	7.82	7.90	8.35	Book Value per sh	10.35
59.40	59.77	63.74	65.75	67.47	72.20	106.80	111.82	113.97	113.19	123.45	127.18	128.97	132.33	133.40	135.37	136.30	137.00	Common Shs Outst'g C	139.00
14.4	13.5	12.0	15.6	17.8	22.5	21.2	18.2	23.6	23.6	24.5	25.1	31.8	34.7	32.0	24.9	22.2		Avg Ann'l P/E Ratio	21.0
.85	.89	.80	.98	1.03	1.17	1.21	1.18	1.21	1.29	1.40	1.33	1.69	1.87	1.70	1.50	1.48		Relative P/E Ratio	1.40
5.9%	6.0%	6.2%	4.9%	3.9%	2.9%	3.0%	3.3%	2.5%	2.5%	2.5%	2.3%	1.8%	1.8%	2.1%	2.8%	3.0%		Avg Ann'l Div'd Yield	2.0%

CAPITAL STRUCTURE as of 9/30/09
Total Debt $1320.2 mill. Due in 5 Yrs $245.0 mill.
LT Debt $1265.4 mill. LT Interest $65.0 mill.
(LT interest earned: 3.4x; total interest coverage: 3.4x) (54% of Cap'l)

Pension Assets-12/08 $112.2 mill. Oblig. $204.7 mill.

Pfd Stock None

Common Stock 136,270,613 shares as of 10/20/09

MARKET CAP: $2.4 billion (Mid Cap)

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010		12-14
257.3	275.5	307.3	322.0	367.2	442.0	496.8	533.5	602.5	627.0	675	735	Revenues ($mill)	900
45.0	50.7	58.5	62.7	67.3	80.0	91.2	92.0	95.0	97.9	109	123	Net Profit ($mill)	175
38.4%	38.9%	39.3%	38.5%	39.3%	39.4%	38.4%	39.6%	38.9%	39.7%	39.0%	39.0%	Income Tax Rate	39.0%
--	--	--	--	--	--	--	--	2.9%	3.1%	3.0%	2.6%	AFUDC % to Net Profit	2.0%
52.9%	52.0%	52.2%	54.2%	51.4%	50.0%	52.0%	51.6%	55.4%	54.1%	54.0%	53.0%	Long-Term Debt Ratio	48.0%
46.7%	47.8%	47.7%	45.8%	48.6%	50.0%	48.0%	48.4%	44.6%	45.9%	46.0%	47.0%	Common Equity Ratio	52.0%
782.7	901.1	990.4	1076.2	1355.7	1497.3	1690.4	1904.4	2191.4	2306.6	2276	2345	Total Capital ($mill)	2765
1135.4	1251.4	1368.1	1490.8	1824.3	2069.8	2280.0	2506.0	2792.8	2997.4	3150	3300	Net Plant ($mill)	3500
7.6%	7.4%	7.8%	7.6%	6.4%	6.7%	6.9%	6.4%	5.9%	5.7%	6.0%	6.5%	Return on Total Cap'l	7.5%
12.2%	11.7%	12.3%	12.7%	10.2%	10.7%	11.2%	10.0%	9.7%	9.3%	10.0%	10.5%	Return on Shr. Equity	12.0%
12.3%	11.7%	12.4%	12.7%	10.2%	10.7%	11.2%	10.0%	9.7%	9.3%	10.0%	10.5%	Return on Com Equity	12.0%
4.3%	4.7%	5.1%	5.2%	4.2%	4.6%	4.9%	3.7%	3.2%	2.6%	3.5%	3.0%	Retained to Com Eq D	5.0%
65%	60%	59%	59%	59%	57%	56%	63%	67%	70%	66%	69%	All Div'ds to Net Prof	57%

CURRENT POSITION ($MILL.)	2007	2008	9/30/09
Cash Assets	14.5	14.9	18.0
Receivables	82.9	84.5	86.1
Inventory (AvgCst)	8.8	9.8	10.3
Other	9.3	11.8	10.5
Current Assets	115.5	121.0	124.9
Accts Payable	45.8	50.0	26.3
Debt Due	80.8	87.9	54.8
Other	56.6	55.3	149.0
Current Liab.	183.2	193.2	230.1
Fix. Chg. Cov.	323%	329%	325%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '06-'08 to '12-'14
Revenues	8.0%	9.0%	6.5%
"Cash Flow"	9.5%	8.0%	10.0%
Earnings	7.5%	5.5%	10.0%
Dividends	7.0%	8.0%	6.5%
Book Value	9.5%	10.0%	6.0%

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	117.9	131.7	147.0	136.9	533.5
2007	137.3	150.6	165.5	149.1	602.5
2008	139.3	151.0	177.1	159.6	627.0
2009	154.5	167.3	180.8	172.4	675
2010	165	185	195	190	735

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	.13	.17	.21	.19	.70
2007	.13	.17	.22	.19	.71
2008	.11	.17	.26	.19	.73
2009	.14	.19	.25	.22	.80
2010	.15	.22	.28	.25	.90

Cal-endar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	.107	.107	.115	.115	.44
2007	.115	.115	.125	.125	.48
2008	.125	.125	.125	.135	.51
2009	.135	.135	.135	.145	.55
2010					

BUSINESS: Aqua America, Inc. is the holding company for water and wastewater utilities that serve approximately three million residents in Pennsylvania, Ohio, North Carolina, Illinois, Texas, New Jersey, Florida, Indiana, and five other states. Divested three of four non-water businesses in '91; telemarketing group in '93; and others. Acquired AquaSource, 7/03; Consumers Water, 4/99; and others. Water supply revenues '08: residential, 60%; commercial, 14%; industrial & other, 26%. Officers and directors own 1.3% of the common stock (4/09 Proxy). Chairman & Chief Executive Officer: Nicholas DeBenedictis. Incorporated: Pennsylvania. Address: 762 West Lancaster Avenue, Bryn Mawr, Pennsylvania 19010. Telephone: 610-525-1400. Internet: www.aquaamerica.com.

During the September interim, Aqua America lost some ground on a year-over-year basis. Although revenues were up slightly from the prior year, earnings dropped a penny, as unfavorable weather conditions and higher operating costs hurt profits during the third quarter. Looking ahead, though, **the company probably ended the year on a good note.** A number of rate-relief cases were set to be decided in the fourth quarter which, if approved, should provide a slight last-minute boost to the top and bottom lines. Also, management has been actively working to reduce operating costs, and the benefits of these efforts should help widen margins. For the year, we expect a total increase in revenues and earnings of $48 million and $0.07 a share, respectively, but it should be noted that last year included a gain from the sale of its underperforming Woodhaven system.

Aqua America should continue to expand its reach through acquisitions and rate-relief cases over the next few years. The company has acquired a wastewater treatment plant in Lumpkin County, Georgia, and this new subsidiary (Aqua Georgia Inc.) may be bolstered by further purchases in this region. Also, WTR expanded its Aqua Pennsylvania division in December, purchasing the assets of Athens Township Authority, and subsequently signed a 20-year contract to provide water services. Additionally, the $75 million in rate cases filed in 2009 should, if judged in Aqua's favor, boost revenues and earnings over the next few years.

These shares are a neutral choice for the coming six to 12 month period, but hold some appeal for the long haul. One attractive trait is the steady dividend yield, which was raised 7.4% during the fourth quarter of 2008. The company has historically raised its payout every year, and this will most likely continue over the coming 3- to 5-year stretch. Also, the top- and bottom-line gains we project over the 2012-2014 horizon give this equity good recovery potential. Conservative investors should also take note of the high scores for Stock Price Stability and Earnings Predictability, as well as the below-the-market average Beta coefficient.

John D. Burke *January 22, 2010*

(A) Diluted shares. Excl. nonrec. gains (losses): '99, (11¢); '00, 2¢; '01, 2¢; '02, 5¢; '03, 4¢. Excl. gain from disc. operations: '96, 2¢. Next earnings report due early February.

(B) Dividends historically paid in early March, June, Sept. & Dec. ■ Div'd. reinvestment plan available (5% discount).

(C) In millions, adjusted for stock splits.

Company's Financial Strength	B+
Stock's Price Stability	95
Price Growth Persistence	70
Earnings Predictability	100

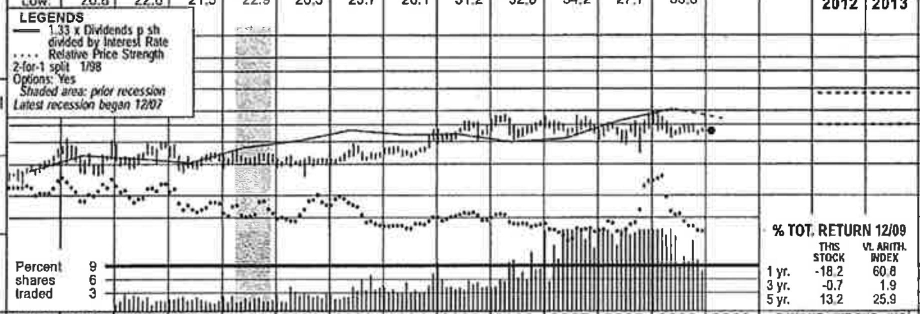
CALIFORNIA WATER NYSE-CWT

RECENT PRICE	36.83	P/E RATIO	18.4 (Trailing: 18.5 Median: 22.0)	RELATIVE P/E RATIO	1.06	DIV'D YLD	3.2%	VALUE LINE

TIMELINESS **4** Lowered 11/6/09
SAFETY **3** Lowered 7/27/07
TECHNICAL **3** Lowered 12/25/09
BETA .75 (1.00 = Market)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
High:	33.8	32.0	31.4	28.6	26.9	31.4	37.9	42.1	45.8	45.4	46.6	48.3
Low:	20.8	22.6	21.5	22.9	20.5	23.7	26.1	31.2	32.8	34.2	27.7	33.5

Target Price Range 2012 | 2013 | 2014



2012-14 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	60	(+65%)	15%
Low	40	(+10%)	5%

Insider Decisions

	F	M	A	M	J	J	A	S	O
to Buy	0	0	0	0	0	0	0	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

	1Q2009	2Q2009	3Q2009
to Buy	83	76	56
to Sell	81	85	75
Hld's(000)	10000	10018	9635

% TOT. RETURN 12/09

	THIS STOCK	VL ARITH. INDEX
1 yr.	-18.2	60.8
3 yr.	-0.7	1.9
5 yr.	13.2	25.9

1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	© VALUE LINE PUB., INC.	12-14
13.34	12.59	13.17	14.48	15.48	14.76	15.96	16.16	16.26	17.33	16.37	17.18	17.44	16.20	17.76	19.80	*21.35*	*22.10*	Revenues per sh	*23.90*
2.25	2.02	2.07	2.50	2.92	2.60	2.75	2.52	2.20	2.65	2.51	2.83	3.03	2.71	3.12	3.72	*4.05*	*4.25*	"Cash Flow" per sh	*4.80*
1.35	1.22	1.17	1.51	1.83	1.45	1.53	1.31	.94	1.25	1.21	1.46	1.47	1.34	1.50	1.90	*1.99*	*2.10*	Earnings per sh A	*2.60*
.96	.99	1.02	1.04	1.06	1.07	1.09	1.10	1.12	1.12	1.12	1.13	1.14	1.15	1.16	1.17	1.18	*1.19*	Div'd Decl'd per sh B ■	*1.25*
2.53	2.26	2.17	2.83	2.61	2.74	3.44	2.45	4.09	5.82	4.39	3.73	4.01	4.28	3.68	4.82	*5.20*	*5.25*	Cap'l Spending per sh	*5.25*
10.90	11.56	11.72	12.22	13.00	13.38	13.43	12.90	12.95	13.12	14.44	15.66	15.79	18.15	18.50	19.44	*20.00*	*19.75*	Book Value per sh C	*21.30*
11.38	12.49	12.54	12.62	12.62	12.62	12.94	15.15	15.18	15.18	16.93	18.37	18.39	20.66	20.67	20.72	*21.00*	*21.25*	Common Shs Outst'g D	*23.00*
13.6	14.1	13.7	11.9	12.6	17.8	17.8	19.6	27.1	19.8	22.1	20.1	24.9	29.2	26.1	19.8	*19.3*		Avg Ann'l P/E Ratio	*19.0*
.80	.92	.92	.75	.73	.93	1.01	1.27	1.39	1.08	1.26	1.06	1.33	1.58	1.39	1.20	*1.26*		Relative P/E Ratio	*1.25*
5.2%	5.8%	6.4%	5.8%	4.6%	4.2%	4.0%	4.3%	4.4%	4.5%	4.2%	3.9%	3.1%	2.9%	3.0%	3.1%	3.1%		Avg Ann'l Div'd Yield	*2.5%*

CAPITAL STRUCTURE as of 9/30/09
Total Debt $397.9 mill. Due in 5 Yrs $40.0 mill.
LT Debt $373.5 mill. LT Interest $25.0 mill.

(LT interest earned: 7.8x; total int. cov.: 6.6x)

Pension Assets-12/08 $66.9 mill.
Oblig. $192.9 mill.

Pfd Stock None

Common Stock 20,744,952 shs.
as of 11/2/09

MARKET CAP: $775 million (Small Cap)

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	© VALUE LINE PUB., INC.	12-14
206.4	244.8	246.8	263.2	277.1	315.6	320.7	334.7	367.1	410.3	*448*	*470*	Revenues ($mill) E	*550*
19.9	20.0	14.4	19.1	19.4	26.0	27.2	25.6	31.2	39.8	*42.0*	*45.0*	Net Profit ($mill)	*60.0*
37.9%	42.3%	39.4%	39.7%	39.9%	39.6%	42.4%	37.4%	39.9%	37.7%	*40.0%*	*39.0%*	Income Tax Rate	*39.0%*
--	--	--	--	10.3%	3.2%	3.3%	10.6%	8.3%	8.6%	*8.5%*	*10.0%*	AFUDC % to Net Profit	*10.0%*
46.9%	48.9%	50.3%	55.3%	50.2%	48.6%	48.3%	43.5%	42.9%	41.6%	*47.0%*	*46.5%*	Long-Term Debt Ratio	*48.5%*
52.0%	50.2%	48.8%	44.0%	49.1%	50.8%	51.1%	55.9%	56.6%	58.4%	*53.0%*	*53.5%*	Common Equity Ratio	*51.5%*
333.8	388.8	402.7	453.1	498.4	565.9	568.1	670.1	674.9	690.4	*795*	*805*	Total Capital ($mill)	*950*
515.4	582.0	624.3	697.0	759.5	800.3	862.7	941.5	1010.2	1112.4	*1175*	*1240*	Net Plant ($mill)	*1425*
7.6%	6.8%	5.3%	5.9%	5.6%	6.1%	6.3%	5.2%	5.9%	7.1%	*7.0%*	*7.0%*	Return on Total Cap'l	*8.0%*
11.2%	10.0%	7.2%	9.4%	7.8%	8.9%	9.3%	6.8%	8.1%	9.9%	*10.0%*	*10.5%*	Return on Shr. Equity	*12.0%*
11.4%	10.1%	7.2%	9.5%	7.9%	9.0%	9.3%	6.8%	8.1%	9.9%	*10.0%*	*10.5%*	Return on Com Equity	*12.0%*
3.5%	1.8%	NMF	1.0%	.7%	2.1%	2.1%	1.0%	1.8%	3.6%	*4.0%*	*5.0%*	Retained to Com Eq	*6.5%*
70%	82%	119%	90%	91%	77%	78%	86%	77%	61%	*59%*	*56%*	All Div'ds to Net Prof	*48%*

CURRENT POSITION ($MILL.)	2007	2008	9/30/09
Cash Assets	6.7	13.9	47.6
Other	53.3	65.9	92.8
Current Assets	60.0	79.8	140.4
Accts Payable	36.7	45.1	54.4
Debt Due	2.7	42.8	24.4
Other	30.3	35.3	52.0
Current Liab.	69.7	123.2	130.8
Fix. Chg. Cov.	333%	398%	430%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '06-'08 to '12-'14
Revenues	2.0%	1.5%	*5.0%*
"Cash Flow"	2.0%	5.5%	*7.0%*
Earnings	--	7.0%	*8.5%*
Dividends	1.0%	0.5%	*1.5%*
Book Value	4.0%	6.5%	*2.0%*

Calendar	QUARTERLY REVENUES ($ mill.) E Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	65.2	81.1	107.8	80.6	334.7
2007	71.6	95.8	113.8	85.9	367.1
2008	72.9	105.6	131.7	100.1	410.3
2009	86.7	116.7	139.2	*105.4*	*448*
2010	*91.0*	*122*	*146*	*111*	*470*

Calendar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	.04	.31	.68	.31	1.34
2007	.07	.37	.67	.39	1.50
2008	.01	.48	1.06	.35	1.90
2009	.12	.58	.94	*.35*	*1.99*
2010	*.11*	*.60*	*1.00*	*.39*	*2.10*

Calendar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	.2875	.2875	.2875	.2875	1.15
2007	.290	.290	.290	.290	1.16
2008	.293	.293	.293	.293	1.17
2009	.295	.295	.295	.295	1.18
2010					

BUSINESS: California Water Service Group provides regulated and nonregulated water service to roughly 463,600 customers in 83 communities in California, Washington, New Mexico, and Hawaii. Main service areas: San Francisco Bay area, Sacramento Valley, Salinas Valley, San Joaquin Valley & parts of Los Angeles. Acquired Rio Grande Corp; West Hawaii Utilities (9/08). Revenue breakdown, '08: residential, 69%; business, 18%; public authorities, 5%; industrial, 5%; other, 3%. '08 reported depreciation rate: 2.4%. Has roughly 929 employees. Chairman: Robert W. Foy. President & CEO: Peter C. Nelson (4/09 Proxy). Inc.: Delaware. Address: 1720 North First Street, San Jose, California 95112-4598. Telephone: 408-367-8200. Internet: www.calwatergroup.com.

Improvements on the regulatory front augur well for California Water Service Group's top line. Indeed, earlier rate increases handed down by the California Public Utilities Commission (CPUC) enabled the water utility to post record-high revenues of $139.2 million in the third quarter, a 6% improvement from the year before. We look for similar growth in the fourth quarter and for full-year 2010. Meanwhile, the company filed its 2009 general rate case during the period, seeking $71 million in 2011 with increases of nearly $25 million in 2012 and 2013. It was CWT's first consolidated request, covering all 24 districts, and a ruling may well take 18 months to be made. We expect a relatively favorable outcome given the CPUC's more recent disposition.

However, operating costs appear to be on the rise, too. Despite the top-line benefits mentioned above, share earnings fell 11% in the September period and came in a dime below our estimate. Operating expenses swelled 10%, as aging infrastructures required greater maintenance, and the increased demand drove up distribution costs. We suspect that these trends persisted in the fourth quarter and will only intensify going forward. As a result, we've tempered our expectations, estimating that CWT barely broke even in the final quarter of 2009 and that earnings growth will not be anything to write home about for full-year 2010.

The stock has fallen a notch for Timeliness and is now ranked 4 (Below Average). Recent share-price declines, coupled with the tough outlook, make this an unattractive selection for the coming six to 12 months.

Its 3- to 5-year appeal is better, but still lacking in our opinion. CWT does not have the finances on hand to meet the rising infrastructure costs that are likely to amount over the next couple of years. The share and/or debt offerings that will be required to help improve the balance sheet will come at a price, with the higher share count and interest rate expenses limiting potential shareholder gains. Although the dividend yield looks healthy at first blush, those seeking an income vehicle have better options available, particularly on a risk-adjusted basis.

Andre J. Costanza *January 22, 2010*

(A) Basic EPS. Excl. nonrecurring gain (loss): '00, (7¢); '01, 4¢; '02, 8¢. Next earnings report due early February.
(B) Dividends historically paid in mid-Feb., May, Aug., and Nov. ■ Div'd reinvestment plan available.
(C) Incl. deferred charges. In '08: $3.9 mill., $.19/sh.
(D) In millions, adjusted for split.
(E) Excludes non-reg. rev.

Company's Financial Strength	B++
Stock's Price Stability	80
Price Growth Persistence	75
Earnings Predictability	80

YORK WATER CO NDQ--YORW

RECENT PRICE	TRAILING P/E RATIO	RELATIVE P/E RATIO	DIV'D YLD	VALUE LINE
14.08	21.3	1.19	3.6%	

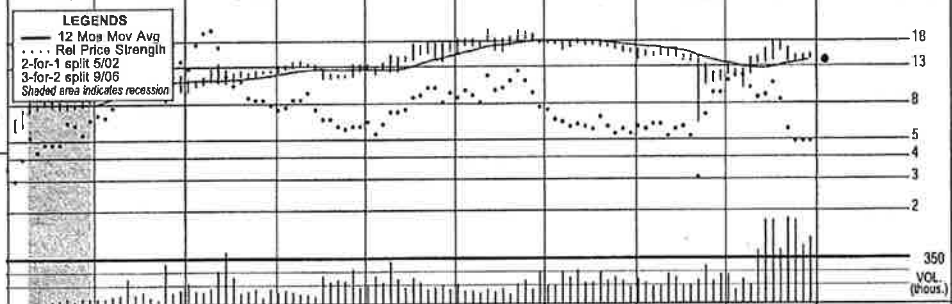
RANKS		2001	2002	2003	2004	2005	2006	2007	2008	2009	
		10.22	13.45	13.49	14.03	17.87	20.99	18.55	16.50	17.95	High
		5.67	8.20	9.33	11.00	11.67	15.33	15.45	6.23	9.74	Low

PERFORMANCE 3 Average

Technical 3 Average

SAFETY 3 Average

BETA .65 (1.00 = Market)



Financial Strength	B+
Price Stability	85
Price Growth Persistence	55
Earnings Predictability	95

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010/2011
REVENUES PER SH	2.05	2.05	2.17	2.18	2.58	2.56	2.79	2.89	--	
"CASH FLOW" PER SH	.59	.57	.65	.65	.79	.77	.86	.88	--	
EARNINGS PER SH	.43	.40	.47	.49	.56	.58	.57	.57	***.66*** A,B	***.66*** C/NA
DIV'D DECL'D PER SH	.34	.35	.37	.39	.42	.45	.48	.49	--	
CAP'L SPENDING PER SH	.75	.66	1.07	2.50	1.69	1.85	1.69	2.17	--	
BOOK VALUE PER SH	3.79	3.90	4.06	4.65	4.85	5.84	5.97	6.14	--	
COMMON SHS OUTST'G (MILL)	9.46	9.55	9.63	10.33	10.40	11.20	11.27	11.37	--	
AVG ANN'L P/E RATIO	17.9	26.9	24.5	25.7	26.3	31.2	30.3	24.6	***21.3***	***21.3/NA***
RELATIVE P/E RATIO	.92	1.47	1.40	1.36	1.39	1.68	1.61	1.48	--	
AVG ANN'L DIV'D YIELD	4.3%	3.3%	3.2%	3.1%	2.9%	2.5%	2.8%	3.5%	--	
REVENUES ($MILL)	19.4	19.6	20.9	22.5	26.8	28.7	31.4	32.8	--	***Bold figures are consensus earnings estimates and, using the recent prices, P/E ratios.***
NET PROFIT ($MILL)	4.0	3.8	4.4	4.8	5.8	6.1	6.4	6.4	--	
INCOME TAX RATE	35.8%	34.9%	34.8%	36.7%	36.7%	34.4%	36.5%	36.1%	--	
AFUDC % TO NET PROFIT	2.2%	3.7%	--	--	--	7.2%	3.6%	10.1%	--	
LONG-TERM DEBT RATIO	47.7%	46.7%	43.4%	42.5%	44.1%	48.3%	46.5%	54.5%	--	
COMMON EQUITY RATIO	52.3%	53.3%	56.6%	57.5%	55.9%	51.7%	53.5%	45.5%	--	
TOTAL CAPITAL ($MILL)	68.6	69.9	69.0	83.6	90.3	126.5	125.7	153.4	--	
NET PLANT ($MILL)	102.3	106.7	116.5	140.0	155.3	174.4	191.6	211.4	--	
RETURN ON TOTAL CAP'L	7.9%	7.4%	8.5%	7.6%	8.4%	6.2%	6.7%	5.7%	--	
RETURN ON SHR. EQUITY	11.2%	10.2%	11.4%	10.0%	11.6%	9.3%	9.5%	9.2%	--	
RETURN ON COM EQUITY	11.2%	10.2%	11.4%	10.0%	11.6%	9.3%	9.5%	9.2%	--	
RETAINED TO COM EQ	2.5%	1.3%	2.6%	2.1%	3.0%	2.2%	1.7%	1.4%	--	
ALL DIV'DS TO NET PROF	78%	88%	77%	79%	74%	77%	82%	85%	--	

A No. of analysts changing earn. est. in last 9 days: 0 up, 0 down, consensus 5-year earnings growth 7.5% per year. B Based upon 4 analysts' estimates. C Based upon 4 analysts' estimates.

ANNUAL RATES

of change (per share)	5 Yrs.	1 Yr.
Revenues	5.5%	3.5%
"Cash Flow"	7.0%	3.5%
Earnings	6.0%	--
Dividends	6.0%	3.0%
Book Value	9.0%	3.0%

Fiscal Year	QUARTERLY SALES ($mill.) 1Q	2Q	3Q	4Q	Full Year
12/31/07	7.4	7.9	8.3	7.8	31.4
12/31/08	7.5	7.8	8.6	8.9	32.8
12/31/09	8.8	9.2	9.8		
12/31/10					

Fiscal Year	EARNINGS PER SHARE 1Q	2Q	3Q	4Q	Full Year
12/31/06	.12	.14	.17	.15	.58
12/31/07	.12	.15	.15	.15	.57
12/31/08	.11	.13	.15	.18	.57
12/31/09	.13	.17	.18	***.17***	
12/31/10	***.14***	***.17***			

Cal-endar	QUARTERLY DIVIDENDS PAID 1Q	2Q	3Q	4Q	Full Year
2007	.118	.118	.118	.118	.47
2008	.121	.121	.121	.121	.48
2009	.126	.126	.126	.126	.50
2010	.128				

INSTITUTIONAL DECISIONS

	1Q'09	2Q'09	3Q'09
to Buy	17	30	35
to Sell	10	12	16
Hld's(000)	1956	2477	2941

ASSETS ($mill.)	2007	2008	9/30/09
Cash Assets	.0	.0	.1
Receivables	5.2	5.9	5.7
Inventory (Avg cost)	.8	.7	.8
Other	.8	.7	1.1
Current Assets	6.8	7.3	7.7
Property, Plant & Equip, at cost	223.1	246.0	--
Accum Depreciation	31.5	34.6	--
Net Property	191.6	211.4	220.9
Other	12.6	21.7	21.3
Total Assets	211.0	240.4	249.9
LIABILITIES ($mill.)			
Accts Payable	3.2	2.0	2.6
Debt Due	15.0	8.7	9.3
Other	3.2	3.5	4.3
Current Liab	21.4	14.2	16.2

LONG-TERM DEBT AND EQUITY as of 9/30/09

Total Debt $83.3 mill. Due in 5 Yrs. NA
LT Debt $74.0 mill.
Including Cap. Leases NA
(47% of Cap'l)

Leases, Uncapitalized Annual rentals NA

Pension Liability $9.8 mill. in '08 vs. $4.0 mill. in '07

Pfd Stock None Pfd Div'd Paid None

Common Stock 12,411,181 shares
(53% of Cap'l)

INDUSTRY: Water Utility

BUSINESS: The York Water Company engages in the impounding, purification, and distribution of water in York County and Adams County, Pennsylvania. The company supplies water for residential, commercial, industrial, and other customers. It has two reservoirs, Lake Williams, which is 700 feet long and 58 feet high, and creates a reservoir covering approximately 165 acres containing about 870 million gallons of water; and Lake Redman, which is 1,000 feet long and 52 feet high and creates a reservoir covering approximately 290 acres containing about 1.3 billion gallons of water. It also has a 15-mile pipeline from the Susquehanna River to Lake Redman that provides access to an additional supply of water. As of December 31, 2008, the company served approximately 176,000 residential, commercial, industrial, and other customers. In November, the company completed the Beaver Creek Village water system acquisition. Has 110 employees. C.E.O. & President: Jeffrey R. Hines. Inc.: PA. Address: 130 East Market Street, York, PA 17401. Tel.: (717) 845-3601. Internet: http://www.yorkwater.com.

W.T.

January 22, 2010

TOTAL SHAREHOLDER RETURN

Dividends plus appreciation as of 12/31/2009

3 Mos.	6 Mos.	1 Yr.	3 Yrs.	5 Yrs.
5.61%	-3.72%	24.34%	-10.37%	30.61%

Missouri-American Water Company
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 (1) (millions)	1 Market Capitalization (1) (times smaller)	2 Applicable Decile of the NYSE/AMEX/ NASDAQ (2)	3 Applicable Size Premium (3)	4 Spread from Applicable Size Premium for (4)
1.	Apply Canyon Utility Company					
a.	Based upon MoPSC Staff's Proxy Group of Four Water Companies	$ 655.329	1.5	7 - 8	2.11%	
2.	MoPSC Staff's Proxy Group of Four Water Companies	$ 979.633		7	1.73%	0.38%

(A) Decile	(B) Smallest Company in Decile (millions)	(C) Largest Company in Decile (millions)	(D) Midpoint (millions)	(E) Size Premium (Return in Excess of CAPM) (2)
1 - Largest	$ 14,692.016	$ 329,725.255	$ 172,208.636	-0.37%
2	5,975.836	14,691.668	10,333.752	0.74%
3	3,428.570	5,936.147	4,682.359	0.85%
4	2,386.985	3,414.634	2,900.810	1.15%
5	1,602.429	2,384.026	1,993.228	1.69%
6	1,063.333	1,600.169	1,331.751	1.73%
7	685.129	1,063.308	874.219	1.73%
8	432.175	684.790	558.483	2.49%
9	214.194	431.256	322.725	2.85%
10 - Smallest	1.007	214.111	107.559	6.28%

Source: 2010 Ibbotson Risk Premia Over Time Report - Estimates for 1926-2009

Notes:
(1) From Page 2 of this Schedule.
(2) Gleaned from Column (D) on the bottom of 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 0.38% in Column 4, Line No. 2 is derived as follows 0.38% = 2.11% - 1.73%.

Missouri-American Water Company
Market Capitalization of Missouri-American Water Company, and
MoPSC Staff's Proxy Group of Four Water Companies

Company	Exchange	1 Common Stock Shares Outstanding at Fiscal Year End 2009 (millions)	2 Book Value per Share at Fiscal Year End 2009 (1)	3 Total Common Equity at Fiscal Year End 2009 (millions)	4 Average Stock Market Price (2)	5 Market-to-Book Ratio on March 24, 2010 (3) (4)	6 Market Capitalization (5) (millions)
Missouri-American Water Company		NA	NA	$ 339.373 (6)	NA		
Based upon MoPSC Staff's Proxy Group of Four Water Companies						193.1 %	$ 655.329
MoPSC Staff's Proxy Group of Four Water Companies							
American States Water Co.		18.532	$ 19.395	$ 359.430	$ 33.992	175.3 %	$ 629.951
Aqua America, Inc.		137.149	8.085	1,108.904	17.117	211.700	2,347.575
California Water Service Group		20.765	20.257	420.634	36.788	181.600	763.903
York Water Company		12.559	6.921	86.922	14.102	203.800	177.103
Average		47.251	$ 13.665	$ 493.973	$ 25.500	193.1 %	$ 979.633

NA= Not Available

Notes: (1) Column 3 / Column 1.
(2) From Schedule 17 of the Staff Report.
(3) Column 4 / Column 2.
(4) The market-to-book ratio of Missouri-American Water Company is assumed to be equal to the average market-to-book ratio of MoPSC Staff's proxy group of four water companies.
(5) Column 5* Column 3.
(6) From Schedule PMA-1, page 4. 2009 annual data not available at the end of February 2010, the time of MoPSC Staff's rate of return analysis.

Source of Information: 2009 Annual Forms 10K
yahoo.finance.com

Missouri-American Water Company

Fully- Litigated Authorized Returns on Common Equity and
Common Equity Ratios for Electric and Natural Gas Distribution
Companies from January 2009 Through March 31, 2010

State	Company	Case Identification	Service	Date	(1) Rate Increase ($M)	(2) Return on Rate Base	(3) Return on Equity	(4) Common Equity Ratio	(5) Moody's A Rated Utility Bonds (1)	(6) Implied Equity Risk Premium (2)
Oklahoma	Public Service Co. of OK	Ca-PUD-200800144	Electric	1/14/2009	$ 59.3	8.31 %	10.50 %	44.10 %	7.60 %	2.90 %
Ohio	Cleveland Elec Illuminating Co	C-07-0551-EL-AIR (CEI)	Electric	1/21/2009	29.20	8.48	10.50	49.00	6.54	3.96
Ohio	Ohio Edison Co.	C-07-0551-EL-AIR (OE)	Electric	1/21/2009	68.90	8.48	10.50	49.00	6.54	3.96
Ohio	Toledo Edison Co.	C-07-0551-EL-AIR (TE)	Electric	1/21/2009	38.50	8.48	10.50	49.00	6.54	3.96
Missouri	Union Electric Co.	C-ER-2008-0318	Electric	1/27/2009	161.70	8.34	10.76	52.01	6.54	4.22
Idaho	Idaho Power Co.	C-IPC-E-08-10	Electric	1/30/2009	27.00	8.18	10.50	49.27	6.54	3.96
Massachusetts	New England Gas Company	DPU 08-35	Natural Gas	2/2/2009	3.70	7.74	10.05	34.19	6.54	3.51
Connecticut	United Illuminating Co.	D-08-07-04	Electric	2/4/2009	6.10	7.59	8.75	50.00	6.54	2.21
Indiana	Indiana Michigan Power Co.	Ca-43306	Electric	3/4/2009	19.10	7.62	10.50	45.80	6.39	4.11
California	Southern California Edison Co.	Ap-07-11-011	Electric	3/12/2009	308.10	8.75	11.50	48.00	6.39	5.11
Florida	Tampa Electric Co.	D-080317-EI	Electric	3/17/2009	147.70	8.29	11.25	47.49	6.30	4.95
Illinois	Northern Illinois Gas Co.	D-08-0363	Natural Gas	3/25/2009	80.20	8.09	10.17	51.07	6.30	3.87
Minnesota	ALLETE (Minnesota Power)	D-E-015/GR-08-415	Electric	4/3/2009	20.40	8.45	10.74	54.79	6.30	4.44
Utah	PacifiCorp	D-08-035-38	Electric	4/21/2009	45.00	8.36	10.61	51.00	6.42	4.19
New York	Consolidated Edison Co. of NY	C-08-E-0539	Electric	4/24/2009	523.40	7.79	10.00	48.00	6.42	3.58
Florida	Peoples Gas System	D-080318-GU	Natural Gas	5/5/2009	19.20	8.50	10.75	48.51	6.42	4.33
Idaho	Idaho Power Co.	C-IPC-E-09-07	Electric	5/29/2009	10.50	8.18	10.50	49.27	6.48	4.02
New York	Central Hudson Gas & Electric	C-08-E-0887	Electric	6/22/2009	39.60	7.28	10.00	47.00	6.49	3.51
Nevada	Nevada Power Co.	D-08-12002	Electric	6/24/2009	222.70	8.66	10.80	44.15	6.49	4.31
Minnesota	Minnesota Energy Resources	D-G-007,011/GR-08-835	Natural Gas	6/29/2009	15.40	7.98	10.21	48.77	6.49	3.72
Connecticut	CT Natural Gas Corp.	D-08-12-06	Natural Gas	6/30/2009	(16.20)	7.92	9.31	52.52	6.49	2.82
Connecticut	Southern Connecticut Gas Co.	D-08-12-07	Natural Gas	7/17/2009	(12.50)	8.05	9.26	52.00	6.20	3.06
Texas	Oncor Electric Delivery Co.	D-35717	Electric	8/31/2009	115.10	8.28	10.25	40.00	5.97	4.28
Minnesota	Northern States Power Co. - MN	D-E-002/GR-08-1065	Electric	10/23/2009	91.40	8.83	10.88	52.47	5.53	5.35
Nevada	Southwest Gas Corp.	D-09-04003 (Southern)	Natural Gas	10/28/2009	17.60	7.40	10.15	47.09	5.53	4.62
Nevada	Southwest Gas Corp.	D-09-04003 (Northern)	Natural Gas	10/28/2009	(0.50)	8.30	10.15	47.09	5.53	4.62
Massachusetts	Bay State Gas Co.	DPU 09-30	Natural Gas	10/30/2009	19.10	8.18	9.95	53.57	5.53	4.42
Michigan	Consumers Energy Co.	C-U-15645	Electric	11/2/2009	139.40	6.98	10.70	40.51	5.53	5.17
West Virginia	Hope Gas Inc	C-08-1783-G-42T	Natural Gas	11/20/2009	8.80	6.86	9.45	42.34	5.55	3.90
Massachusetts	Massachusetts Electric Co.	DPU 09-39	Electric	11/30/2009	43.90	7.85	10.35	43.15	5.55	4.80
Wisconsin	Wisconsin Electric Power Co.	D-5-UR-104 (WEP-EL)	Electric	12/18/2009	85.80	8.96	10.40	53.02	5.64	4.76
Wisconsin	Wisconsin Power and Light Co	6680 UR-117 (elec)	Electric	12/18/2009	58.60	9.81	10.40	50.38	5.64	4.76
Wisconsin	Wisconsin Electric Power Co.	D-5-UR-104 (WEP-GAS)	Natural Gas	12/18/2009	(2.00)	8.85	10.40	53.02	5.64	4.76
Wisconsin	Wisconsin Gas LLC	D-5-UR-104 (WG)	Natural Gas	12/18/2009	5.70	9.09	10.50	46.62	5.64	4.86
Wisconsin	Wisconsin Power and Light Co	D-6680-UR-117 (gas)	Natural Gas	12/18/2009	5.60	8.84	10.40	50.38	5.64	4.76
Wisconsin	Madison Gas and Electric Co.	D-3270-UR-116 (elec)	Electric	12/22/2009	11.90	8.67	10.40	55.34	5.64	4.76
Wisconsin	Northern States Power Co - WI	D-4220-UR-116 (elec)	Electric	12/22/2009	6.40	8.93	10.40	52.30	5.64	4.76
Wisconsin	Madison Gas and Electric Co.	D-3270-UR-116 (gas)	Natural Gas	12/22/2009	(1.50)	8.86	10.40	55.34	5.64	4.76
Maryland	Delmarva Power & Light Co.	C-9192	Electric	12/30/2009	7.50	7.96	10.00	49.87	5.64	4.36
Iowa	Interstate Power & Light Co.	D-RPU-2009-0002	Electric	1/4/2010	83.70	8.91	10.80	49.52	5.64	5.16
Michigan	Detroit Edison Co.	C-U-15768	Electric	1/11/2010	217.40	7.02	11.00	39.48	5.64	5.36
Minnesota	CenterPoint Energy Resources	D-G-008/GR-08-1075	Natural Gas	1/11/2010	40.80	8.09	10.24	52.55	5.64	4.60
Illinois	North Shore Gas Co.	D-09-0166	Natural Gas	1/21/2010	13.90	8.19	10.33	56.00	5.79	4.54
Illinois	Peoples Gas Light & Coke Co.	D-09-0167	Natural Gas	1/21/2010	69.80	8.05	10.23	56.00	5.79	4.44
Texas	Atmos Energy Corp.	GUD 9869	Natural Gas	1/26/2010	2.70	8.60	10.40	48.91	5.79	4.61
Rhode Island	Narragansett Electric Co.	D-4065	Electric	2/9/2010	23.50	7.20	9.80	42.75	5.79	4.01
Utah	PacifiCorp	D-09-035-23	Electric	2/18/2010	32.40	8.34	10.60	51.00	5.77	4.83
Texas	CenterPoint Energy Resources	GUD 9902	Natural Gas	2/23/2010	5.10	8.65	10.50	55.60	5.77	4.73
District of Columbia	Potomac Electric Power Co.	F.C. 1076	Electric	3/2/2010	19.80	8.01	9.63	46.18	5.77	3.86
Florida	Florida Power Corp.	D-090079-EI	Electric	3/5/2010	126.20	7.88	10.50	46.74	5.77	4.73
Nebraska	SourceGas Distribution LLC	D-NG-0060	Natural Gas	3/9/2010	1.60	7.80	9.60	49.96	5.77	3.83
Florida	Florida Power & Light Co.	D-080677-EI	Electric	3/17/2010	75.50	6.65	10.00	47.00	5.87	4.13
Illinois	MidAmerican Energy Co.	D-09-0312	Natural Gas	3/24/2010	2.70	7.60	10.13	47.08	5.87	4.26
Georgia	Atmos Energy Corp.	D-30442	Natural Gas	3/31/2010	2.90	8.61	10.70	47.70	5.87	4.83
			Average		$ 58.3	8.18 %	10.32 %	48.78 %	6.02 %	4.30 %
		Average Implied Equity Risk Premium								4.30 %
		Projected Yield on A Rated Public Utility Bonds (3)								6.12
		Implied Common Common Equity Cost Rate								10.42 %

Notes:

(1) Actual A rated yield represents the yield of the previous month if the order was issued on or after the 15th of each month, or the yield of two months prior if the order was issued on or before the 15th of each month. For example, the yield for 1/14/09 is the A rated Public Utility yield for November 2008 and the yield for 1/21/09 is the A rated Public Utility yield for December 2008.

(2) Column 3 - Column 5.

(3) From Page 2 of this Schedule.

Missouri-American Water Company
Calculation of Prospective Yield on A Rated Public Utility Bonds

Blue Chip Forecast of Aaa Corporate Bonds Ending Q2 2011 (1):	5.60 %
Adjustment to Reflect Spread Between Aaa Corporate bonds and A Rated Public Utility Bonds (2)	0.52
Adjusted Prospective Yield on A Rated Public Utility Bonds	6.12 %

Notes:

(1) From page 2 of Schedule 17.

(2) Three month spread between Moody's Aaa corporate and A rated utility bond yields ending February 2010, consistant with Staff's DCF study.

Source of Information:

Blue Chip Financial Forecasts, March 1, 2010
Mergent Bond Record, March 2010, Vol 77, No. 3.

Missouri-American Water Company
Summary of Cost of Capital and Fair Rate of Return
Based upon the Pro Forma Capital Structure of at April 30, 2010

Type of Capital	Ratios (1)	Cost Rate	Weighted Cost Rate
Long-Term Debt	50.40%	6.36% (1)	3.21%
Short-Term Debt	0.00%	3.62%	0.00%
Total Debt	50.40%		3.21%
Preferred Stock	0.33%	9.20%	0.03%
Common Equity	49.27%	11.35% (2)	5.59%
Total	100.00%		8.83%

(1) Company-provided.

(2) Based upon informed expert judgment from the entire study, the principal results of which are summarized on Page 2 of this Schedule.

Missouri-American Water Company
Brief Summary of Common Equity Cost Rate

No.	Principal Methods	Proxy Group of Six AUS Utility Reports Water Companies		Proxy Group of Eight AUS Utility Reports Gas Distribution Companies
1.	Discounted Cash Flow Model (DCF) (1)	10.55 %		9.10 %
2.	Risk Premium Model (RPM) (2)	10.81		10.53
3.	Capital Asset Pricing Model (CAPM) (3)	10.85		10.04
4.	Comparable Earnings Model (CEM) (4)	13.50		NMF
5.	Indicated Common Equity Cost Rate before Adjustment for Business Risk	11.85 %		10.15 %
6.	Business Risk Adjustment (5)	0.05		0.15
7.	Range of Indicated Common Equity Cost Rate After Adjustment for Business Risk	11.90 %		10.30 %
8.	Financial / Credit Risk Adjustment (6)	0.32		0.21
9.	Range of Indicated Common Equity Cost Rate After Adjustment for Business and Financial / Credit Risk	12.22 %		10.51 %
10.	Recommended Common Equity Cost Rate		11.35%	

Notes: (1) From page 16 of this Schedule.
(2) From page 33 of this Schedule.
(3) From page 41 of this Schedule.
(4) From pages 45 and 46 of this Schedule.
(5) Business risk adjustment to reflect Missouri-American Water Company's greater business risk due to its small size relative to the proxy groups as detailed in Ms. Ahern's direct testimony.
(6) Financial / credit risk adjustment to reflect Missouri-American Water Company's greater financial / credit risk relative to the proxy groups as detailed in Ms. Ahern's direct testimony.

Missouri-American Water Company
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 30, 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-American Water Company					
a.	Based Upon the Proxy Group of Six AUS Utility Reports Water Companies	$ 946.511		7	1.73%	
b.	Based Upon the Proxy Group of Eight AUS Utility Reports Gas Distribution Companies	$ 501.593		8	2.49%	
2.	Proxy Group of Six AUS Utility Reports Water Companies	$ 1,327.285	1.4 x	6	1.73%	0.00%
3.	Proxy Group of Eight AUS Utility Reports Gas Distribution Companies	$ 1,286.114	2.6 x	6	1.73%	0.76%

(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) (2)
1 - Largest	168	$ 8,067,379.357	$ 48,020.115	-0.37%
2	176	1,681,320.126	$ 9,552.955	0.74%
3	174	802,997.270	$ 4,614.927	0.85%
4	185	566,025.344	$ 3,059.596	1.15%
5	215	435,313.426	$ 2,024.714	1.69%
6	241	319,576.916	$ 1,326.045	1.73%
7	305	281,895.344	$ 924.247	1.73%
8	417	197,085.621	$ 472.627	2.49%
9	560	178,722.563	$ 319.147	2.85%
10 - Smallest	1361	118,046.268	$ 86.735	6.28%

*From pages 7 and 11 of this Schedule

Notes:
(1) From Page 4 of this Schedule.
(2) Gleaned from Column (D) on the bottom of 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 2.28% in Column 4, Line No. 2 is derived as follows 2.28% = 4.26% - 1.99%.

Missouri-American Water Company
Market Capitalization of United Water New York, Inc.
the Proxy Group of Six AUS Utility Reports Water Companies
and the Proxy Group of Eight AUS Utility Reports Natrual Gas Distribution Companies

Company	Exchange	1 Common Stock Shares Outstanding at December 31, 2009 (millions)	2 Book Value per Share at December 31, 2008 (1)	3 Total Common Equity at December 31, 2009 (millions)	4 Closing Stock Market Price on April 5, 2010	5 Market-to-Book Ratio on September 30, 2009 (2)	6 Market Capitalization on September 30, 2009 (3) (millions)
Missouri-American Water Company		NA	NA	$ 339.373 (4)	NA		
Based Upon the Proxy Group of Six AUS Utility Reports Water Companies						278.9 % (5)	$ 946.511 (6)
Based Upon the Proxy Group of Eight AUS Utility Reports Gas Distribution Companies						147.8 % (7)	$ 501.593 (8)
Proxy Group of Six AUS Utility Reports Water Companies							
American States Water Co.	NYSE	18.532	$ 19.395	$ 359.430	$ 39.250	202.4 %	$ 727.394
Aqua America, Inc.	NYSE	137.149	8.085	1,108.904	38.900	481.1	5,335.086
California Water Service Group	NYSE	20.765	20.257	420.634	35.950	177.5	746.502
Middlesex Water Company	NASDAQ	13.519	10.329	139.631	17.960	173.9	242.801
SJW Corporation	NYSE	18.500	13.663	252.756	29.390	215.1 %	543.703
York Water Company	NASDAQ	12.559	6.921	86.922	29.320	423.6	368.222
Average		36.837	$ 13.108	$ 394.713	$ 31.795	278.9 %	$ 1,327.285
Proxy Group of Eight AUS Utility Reports Gas Distribution Companies							
AGL Resources, Inc.	NYSE	77.500	$ 22.968	$ 1,780.000	$ 34.240	149.1 %	$ 2,653.600
Atmos Energy Corp.	NYSE	92.552	23.519	2,176.761	17.650	75.0	1,633.538
Delta Natural Gas Company	NYSE	3.318	16.725	55.493	47.480	283.9	157.541
Laclede Group, Inc.	NYSE	22.168	23.323	517.030	27.610	118.4	612.062
Northwest Natural Gas Company	NYSE	26.533	24.879	660.105	26.240	105.5	696.227
Piedmont Natural Gas Co., Inc.	NYSE	73.266	12.665	927.948	30.680	242.2	2,247.801
Southwest Gas Corporation	NYSE	45.092	24.442	1,102.127	35.020	143.3	1,579.113
WGL Holdings, Inc.	NYSE	50.143	21.891	1,097.698	14.140	64.6	709.029
Average		48.822	$ 21.302	$ 1,039.645	$ 29.133	147.8 %	$ 1,286.114

NA = Not Available

Notes:
(1) Column 3 / Column 1.
(2) Column 4 / Column 2.
(3) Column 5 * Column 3.
(4) From Missouri-American Water Co.'s 2009 Annual Report to the Missouri Public Service Commission.
(5) The market-to-book ratio of Missouri-American Water Company on April 5, 2010 is assumed to be equal to the average market-to-book ratio at April 5, 2010 of the proxy group of six AUS Utility Reports water companies.
(6) Missouri-American Water Company's common stock, if traded, would trade at a market-to-book ratio equal to the average market-to-book ratio at April 5, 2010 of the proxy group of six AUS Utility Reports water companies, 278.9%, and Missouri-American Water Company's market capitalization on April 5, 2010 would therefore have been $660.080 million. ($946.511 = $339.373 * 278.9%).
(7) The market-to-book ratio of Missouri-American Water Company on April 5, 2010 is assumed to be equal to the average market-to-book ratio at April 5, 2010 of the proxy group of eight AUS Utility Reports gas distribution companies.
(8) Missouri-American Water Company's common stock, if traded, would trade at a market-to-book ratio equal to the average market-to-book ratio at April 5, 2010 of the proxy group of eight AUS Utility Reports gas distribution companies, 147.8%, and Missouri-American Water Company's market capitalization on April 5, 2010 would therefore have been $501.593 million. ($501.593 = $339.363 * 147.8%).

Source of Information: Edgar Online's I-Metrix database.
yahoo.finance.com

Schedule PMA-23

Ibbotson® SBBI®
2010 Valuation Yearbook

Market Results for
Stocks, Bonds, Bills, and Inflation
1926–2009

MORNINGSTAR®

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 liquidity discount and could be applied to the valuation directly, or alternatively reflected as an liquidity premium in the cost of capital.

This chapter does not tell you how to estimate this incremental liquidity valuation discount (or cost of capital liquidity 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 NYSE, NYSE 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
Number of Companies, Historical and Recent Market Capitalization

Decile	Historical Average Percentage of Total Capitalization	Recent Number of Companies	Recent Decile Market Capitalization (in Thousands)	Recent Percentage of Total Capitalization
1	63.26%	168	$8,087,379,357	63.78%
2	13.94	176	1,681,320,126	13.29
3	7.54	174	802,997,270	6.35
4	4.72	185	566,025,344	4.48
5	3.24	215	435,313,426	3.44
6	2.39	241	319,576,916	2.53
7	1.76	305	281,895,344	2.23
8	1.31	417	197,085,621	1.56
9	1.02	560	178,722,563	1.41
10-Smallest	0.83	1,361	118,046,268	0.93
Mid-Cap 3-5	15.49	574	1,804,336,040	14.27
Low-Cap 6-8	5.45	963	798,557,882	6.31
Micro-Cap 9-10	1.86	1,921	296,768,831	2.35

Data from 1926–2009. Source: Morningstar and CRSP. Calculated (or Derived) based on data from CRSP US Stock Database and CRSP US Indices Database ©2010 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 84 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 December 31, 2009.

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	$329,725,255	Exxon Mobil Corp.
2	14,691,668	Sysco Corp.
3	5,936,147	American International Group Inc.
4	3,414,634	Resmed Inc.
5	2,384,026	Mirant Corp.
6	1,600,169	Cypress Semiconductor Corp.
7	1,063,308	Enersys
8	684,790	Live Nation Inc.
9	431,256	American Reprographics Co.
10-Smallest	214,111	Quicksilver Gas Services LP

Source: Morningstar and CRSP. Calculated (or Derived) based on data from CRSP US Stock Database and CRSP US Indices Database ©2010 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, 2009.

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 168 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 84 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 as of December 31, 2009.

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 $5,936,147,000 but greater than $1,600,169,000. Low-cap stocks include deciles 6–8 and currently include all companies in the NYSE/AMEX/NASDAQ with market capitalizations at or below $1,600,169,000 but greater than $431,256,000. Micro-cap stocks include deciles 9–10 and include companies with market capitalizations at or below $431,256,000. The market capitalization of the smallest company included in the micro-capitalization group is currently $1,006,616.

Presentation of the Decile Data

Summary statistics of annual returns of the 10 deciles over 1926–2009 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 (Continued)

1926–1965

Date	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	13,050	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	55,125	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	683
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	82,517	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	29,791	8,502	463
1955	170,829	41,445	12,366	41,681	12,444	553
1956	183,792	46,805	13,524	46,886	13,623	1,122
1957	194,300	47,658	13,844	48,509	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	61,485	19,293	61,529	19,344	831
1961	296,261	77,983	23,562	77,996	23,613	2,455
1962	250,786	58,785	18,952	58,866	18,968	1,018
1963	308,903	71,846	23,927	71,971	24,056	296
1964	349,675	79,508	25,595	79,937	25,607	223
1965	365,675	84,600	28,483	85,065	28,543	250

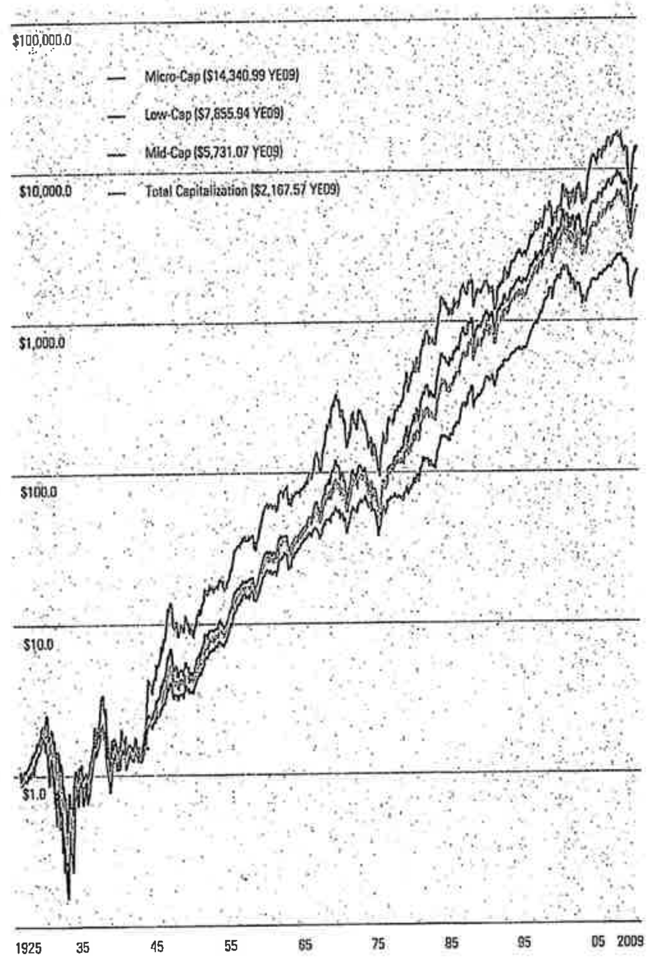
Schedule PMA-23

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

1966–2009

	Capitalization of Largest Company (in Thousands)			Capitalization of Smallest Company (in Thousands)		
Date	Mid-Cap 3–5	Low-Cap 6–8	Micro-Cap 9–10	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	531,306	150,893	60,543	151,260	60,719	592
1969	518,485	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	540
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	948
1980	762,195	199,312	50,496	199,315	50,544	549
1981	962,397	264,690	72,104	264,783	72,450	1,448
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	94,875	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	696
1989	2,145,947	480,975	100,285	483,623	100,384	96
1990	2,171,217	474,065	93,750	474,477	93,790	132
1991	2,129,863	457,958	87,586	458,853	87,733	278
1992	2,428,671	500,327	103,352	500,346	103,500	510
1993	2,705,192	603,588	137,105	607,449	137,137	602
1994	2,470,244	596,059	148,104	597,975	148,216	598
1995	2,789,938	647,210	155,386	647,253	155,532	89
1996	3,142,657	751,316	193,001	751,680	193,016	1,043
1997	3,484,440	813,923	228,900	814,355	229,058	585
1998	4,216,707	925,688	252,553	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	5,156,315	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	597,243	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
2009	5,936,147	1,600,169	431,256	1,602,429	432,175	1,007

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 1925–2009.

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	9.1	10.9	19.4	0.07
2	10.4	12.8	22.4	0.01
3	10.7	13.4	23.9	-0.04
4	10.7	13.8	26.2	-0.03
5	11.3	14.6	27.0	-0.04
6	11.2	14.8	27.6	0.02
7	11.2	15.2	29.8	0.00
8	11.4	16.3	34.4	0.04
9	11.5	17.0	36.7	0.04
10-Smallest	13.1	20.9	45.2	0.14
Mid Cap	10.9	13.7	25.0	-0.04
Low Cap	11.3	15.2	29.4	0.02
Micro	12.1	18.2	39.2	0.07
NYSE/AMEX/ NASDAQ Total Value Weighted Index	9.6	11.6	20.5	0.01

Data from 1926–2009. Source: Morningstar and CRSP. Calculated (or Derived) based on data from CRSP US Stock Database and CRSP US Indices Database ©2010 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*	Arithmetic 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	10.90	5.72	6.09	-0.37
2	1.03	12.81	7.64	6.90	0.74
3	1.10	13.36	8.18	7.33	0.85
4	1.12	13.82	8.65	7.50	1.15
5	1.16	14.59	9.41	7.72	1.69
6	1.18	14.81	9.63	7.90	1.73
7	1.24	15.19	10.01	8.28	1.73
8	1.30	16.33	11.15	8.67	2.49
9	1.35	17.01	11.84	8.99	2.85
10-Smallest	1.41	20.85	15.68	9.39	6.28
Mid-Cap, 3-5	1.12	13.71	8.54	7.45	1.08
Low-Cap, 6-8	1.23	15.20	10.03	8.18	1.85
Micro-Cap, 9-10	1.36	18.23	13.06	9.07	3.99

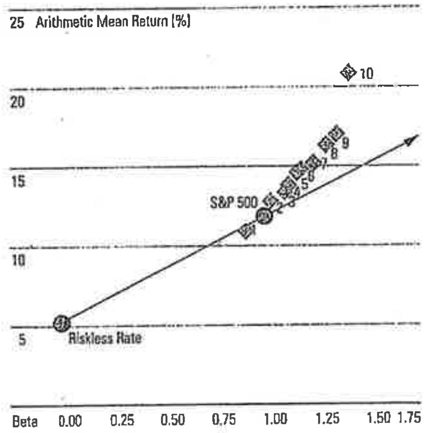
Data from 1926–2009.

*Betas are estimated from monthly returns in excess of the 30-day U.S. Treasury bill total return, January 1926–December 2009.

**Historical riskless rate measured by the 84-year arithmetic mean income return component of 20-year government bonds (5.18).

†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 (11.85 percent) minus the arithmetic mean income return component of 20-year government bonds (5.18 percent) from 1926–2009.

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



Data from 1926–2009.

Source: Morningstar and CRSP. Calculated (or Derived) based on data from CRSP US Stock Database and CRSP US Indices Database ©2010 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 84 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 of the NYSE/AMEX/NASDAQ
10th Decile Sub-Portfolios

Decile		Recent Number of Companies	Market Capitalization of Largest Company (in Thousands)	Company Name
10a		395	214,111	Quicksilver Gas Services L P
	10w	163	214,111	Quicksilver Gas Services L P
	10x	232	169,497	Landry's Restaurants, Inc.
10b		1,382	123,516	Lee Enterprises
	10y	302	123,516	Lee Enterprises
	10z	1,080	76,052	Federal Agricultural Mortgage Corporation A

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

Source: Morningstar and CRSP. Calculated (or Derived) based on data from CRSP US Stock Database and CRSP US Indices Database ©2010 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, 2009.

This phenomenon can also be viewed graphically, as depicted in 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 further 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.

Ibbotson first split the 10th decile into 10a and 10b in the 2001 Ibbotson SBBI Valuation Yearbook. With the 2010 Ibbotson SBBI Valuation Yearbook, we introduce an even closer look at the smallest companies by splitting 10a into 10w and 10x, and splitting 10b into 10y and 10z.

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 NYSE AMEX and NASDAQ were allocated into the same size groupings. This same methodology was used to split the 10th decile into four parts: 10w, 10x (sub-portfolios of 10a), and 10y, and 10z (sub-portfolios of 10b). Splitting the 10th decile into 10a and 10b is equivalent to breaking the stocks down into 20 size groupings, with portfolios 19 and 20 representing 10a and 10b. Further splitting 10a into 10w and 10x and 10b into 10y and 10z is equivalent to breaking the stocks down into 40 size groupings, with portfolios 37 and 38 representing 10w and 10x, and portfolios 39 and 40 representing 10y and 10z.

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, and the portfolio made up of the smallest companies, 10z, has the largest size premium, which is demonstrated visually in Graph 7-3. This can be useful information in valuing companies that are extremely small. Table 7-6 presents the size, composition, and breakpoints of each size category. First, the recent number of companies and total decile market capitalization are presented for each of the portfolios. Then the market capitalization and name of the largest company is presented. Breaking the smallest decile down lowers the significance of the results compared to results for the 10th decile taken as a whole, however. There are always going to be more companies included in the Micro-cap than in the 10th decile, and more companies in the 10th decile than in the 10b category. The more stocks included in a sample, the more significance can be placed on the results. The 10th decile gets as small as 49 companies back in March of 1926. This is still significant.

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 group-ing. 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 demonstrate that the company size to size premia relationship continues to hold true, even when broken down into subdivisions 10a, 10w, 10x, 10b, 10y, and 10z.

All things considered, size premia developed for these portfolios 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.

Overlapping Size Categories

A common question among valuation practioners is about how to use the various size premium metrics that Morningstar provides when size-based category breakpoints overlap. This issue is magnified now that we have published even more granulatiry for the 10th decile.

There are going to be cases when the estimated equity value for a subject could categorize it in a number of size premium buckets. This range of postential size premium choices would have a tremendous effect on the firm's enterprise value. There are two decision paths when making this choice. The improper path is to choose the size premium that achieves the self-serving goal of influencing the enterprise value in the direction most desired. In many cases this leads to choosing the highest size premium number (12.06% in Table 7-7), because this will lead to the lowest enterprise value for tax purposes, marital dissolution, acquisition valuation, etc. The proper path is to choose the size premium that is most statistically relevant for your application.

Choosing the Right Size Premium

There are two primary factors in determining which size premium to use. First, identify how close to a size category boundary your subject company falls. Second, determine how confident you are in your estimate of equity value.

Let's say you have an example where the estimated equity value is close to the top breakpoint of the 10b category, toward the middle of the 10th decile, and toward the bottom of the Micro-cap. In this case, the statistically conservative choice is the 10th decile. We need to balance the confidence that our subject firm actually falls within a particular size category with the need to tailor that size grouping as tight as possible to make the peers relevant to our analysis. The Micro-cap category is too broad for this case, since the subject firm falls in the lower range of the category, and 10b is too narrow since our subject company would barely squeeze in under the top breakpoint before sliding into 10a. We can say with confidence that the 10th decile puts our company among the most peers of similar size.

Since estimating equity value for the purpose of size premium categorization is a circular challenge, it makes sense to use as many quality metrics that are available to perform this estimate. In doing so, you may find that the equity estimates cross a number of size premium categories. In this case, it is advisable to sacrifice granularity for statistical confidence. For example, if you have three equity estimates indicating that your firm would fall in the middle of 10x, bottom of 10x, and middle of 10y categories, the overall 10th decile size premium would be the best category to capture the size of similar peer companies while acknowledging that the imperfectings and circular nature of the size bucketing process.

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-metic Mean Return (%)	Realized Return in Excess of Riskless Rate** (%)	Estimated Return in Excess of Riskless Rate† (%)	Size Premium (Return in Excess of CAPM) (%)
1	0.91	10.90	5.72	6.09	-0.37
2	1.03	12.81	7.64	6.90	0.74
3	1.10	13.36	8.18	7.33	0.85
4	1.12	13.82	8.65	7.50	1.15
5	1.16	14.59	9.41	7.72	1.69
6	1.18	14.81	9.63	7.90	1.73
7	1.24	15.19	10.01	8.28	1.73
8	1.30	16.33	11.15	8.67	2.49
9	1.35	17.01	11.84	8.99	2.85
10a	1.42	19.10	13.92	9.47	4.45
10w	1.39	18.33	13.15	9.30	3.85
10x	1.45	19.78	14.60	9.69	4.91
10b	1.38	24.39	19.21	9.20	10.01
10y	1.40	23.58	18.40	9.35	9.05
10z	1.35	26.23	21.05	8.99	12.06
Mid-Cap, 3-5	1.12	13.71	8.54	7.45	1.08
Low-Cap, 6-8	1.23	15.20	10.03	8.18	1.85
Micro-Cap, 9-10	1.36	18.23	13.06	9.07	3.99

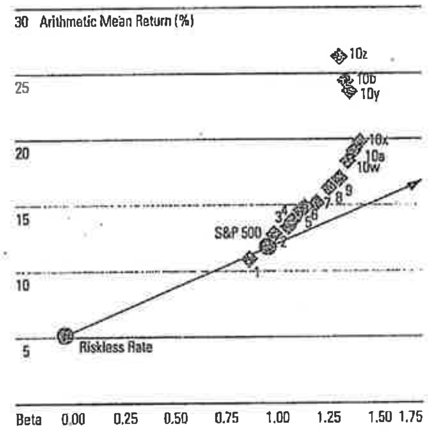
Data from 1926–2009. Source: Morningstar and CRSP. Calculated (or Derived) based on data from CRSP US Stock Database and CRSP US Indices Database ©2010 Center for Research in Security Prices (CRSP®), The University of Chicago Booth School of Business. Used with permission.

*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 2009.

**Historical riskless rate is measured by the 84-year arithmetic mean income return component of 20-year government bonds (5.18 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 (11.85 percent) minus the arithmetic mean income return component of 20-year government bonds (5.18 percent) from 1926–2009.

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



Data from 1926–2009.

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	1,927
2005	1,746
2006	1,744
2007	1,775
2008	1,626
2009	1,777

Source: Morningstar and CRSP. Calculated (or Derived) based on data from CRSP US Stock Database and CRSP US Indices Database ©2010 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	0.99	10.90	5.72	5.84	-0.13
2	1.11	12.81	7.64	6.59	1.05
3	1.17	13.36	8.18	6.95	1.24
4	1.20	13.82	8.65	7.12	1.53
5	1.23	14.59	9.41	7.29	2.12
6	1.26	14.81	9.63	7.45	2.18
7	1.32	15.19	10.01	7.81	2.20
8	1.38	16.33	11.15	8.17	2.98
9	1.42	17.01	11.84	8.44	3.39
10	1.48	20.85	15.68	8.79	6.89
Mid-Cap, 3-5	1.19	13.71	8.54	7.06	1.48
Low-Cap, 6-8	1.30	15.20	10.03	7.71	2.32
Micro-Cap, 9-10	1.43	18.23	13.06	8.50	4.55

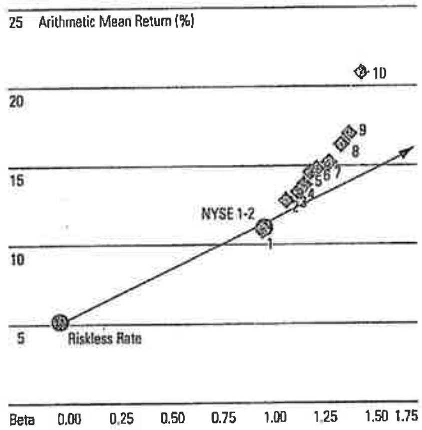
Data from 1926–2009. Source: Morningstar and CRSP. Calculated (or Derived) based on data from CRSP US Stock Database and CRSP US Indices Database ©2010 Center for Research in Security Prices (CRSP®), The University of Chicago Booth School of Business. Used with permission.

*Betas are estimated from monthly portfolio total returns in excess of the 30-day U.S. Treasury bill total return versus the CRSP Deciles 1–2 total returns in excess of the 30-day U.S. Treasury bill, January 1926–December 2009.

**Historical riskless rate is measured by the 84-year arithmetic mean income return component of 20-year government bonds (5.18 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 CRSP Deciles 1–2 (11.10 percent) minus the arithmetic mean income return component of 20-year government bonds (5.18 percent) from 1926–2009.

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



Data from 1926–2009.

For the entire period analyzed, 1926–2009, 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 5.93, as opposed to 6.67 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.

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

	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	0.91	10.90	5.72	6.08	-0.36
2	1.06	12.81	7.64	7.04	0.59
3	1.13	13.36	8.18	7.55	0.64
4	1.20	13.82	8.65	8.00	0.65
5	1.24	14.59	9.41	8.25	1.17
6	1.30	14.81	9.63	8.66	0.96
7	1.38	15.19	10.01	9.21	0.80
8	1.49	16.33	11.15	9.97	1.19
9	1.56	17.01	11.84	10.38	1.46
10-Smallest	1.71	20.85	15.68	11.40	4.28
Mid-Cap, 3-5	1.17	13.71	8.54	7.81	0.73
Low-Cap, 6-8	1.36	15.20	10.03	9.10	0.93
Micro-Cap, 9-10	1.60	18.23	13.06	10.67	2.38

Data from 1926–2009. Source: Morningstar and CRSP. Calculated (or Derived) based on data from CRSP US Stock Database and CRSP US Indices Database ©2010 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 2009.

**Historical riskless rate is measured by the 84-year arithmetic mean income return component of 20-year government bonds (5.18 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 (11.85 percent) minus the arithmetic mean income return component of 20-year government bonds (5.18 percent) from 1926–2009.

Schedule PMA-7
(UPDATED)

Missouri-American Water Company
Indicated Common Equity Cost Rate Through Use of the
Single Stage Discounted Cash Flow Model for
the Proxy Group of Six AUS Utility Reports Water Companies
and the Proxy Group of Eight AUS Utility Reports Natrual Gas Distribution Companies

	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 Six AUS Utility Reports Water Companies					
American States Water Co.	3.01 %	0.10 %	3.11 %	6.75 %	9.86 %
Aqua America, Inc.	3.31	0.15	3.46	9.30	12.76
California Water Service Group	3.15	0.11	3.26	7.25	10.51
Middlesex Water Company	4.16	0.19	4.35	9.00	13.35
SJW Corporation	2.73	NA	2.73	NA	2.73
York Water Company	3.71	0.13	3.84	6.75	10.59
Average	3.35 %	0.14 %	3.46 %	7.81 %	9.97 %
Median	3.23 %	0.13 %	3.36 %	7.25 %	10.55 %
Proxy Group of Eight AUS Utility Reports Gas Distribution Companies					
AGL Resources, Inc.	4.60 %	0.10 %	4.70 %	4.55 %	9.25 %
Atmos Energy Corp.	4.68	0.12	4.80	5.00	9.80
Delta Natural Gas Company	4.43	0.07	4.50	3.00	7.50
Laclede Group, Inc.	4.71	0.06	4.77	2.50	7.27
Northwest Natural Gas Company	3.61	0.09	3.70	5.25	8.95
Piedmont Natural Gas Co., Inc.	4.08	0.11	4.19	5.50	9.69
Southwest Gas Corporation	3.21	0.11	3.32	6.75	10.07
WGL Holdings, Inc.	4.33	0.03	4.36	1.55	5.91
Average	4.21 %	0.09 %	4.29 %	4.26 %	8.56 %
Median	4.38 %	0.10 %	4.43 %	4.78 %	9.10 %

Notes:
(1) From page 17 of this Schedule.
(2) This reflects a growth rate component equal to one-half the conclusion of growth rate (from page 18 of this Schedule) x Column 1 to reflect the periodic payment of dividends (Gordon Model) as opposed to the continuous payment. Thus, for American States Water Co., 3.01% x (1/2 x 6.75%) = 0.10%.
(3) Column 1 + Column 2.
(4) From page 18 of this Schedule.
(5) Column 3 + Column 4.

Schedule PMA-8
(UPDATED)

Missouri-American Water Company
Derivation of Dividend Yield for Use in the
Discounted Cash Flow Model

	Dividend Yield		
	Spot (4/5/2010)	Average of Last 3 Months (2)	Average Dividend Yield (3)
Proxy Group of Six AUS Utility Reports Companies			
American States Water Co.	2.89 %	3.12 %	3.01 %
Aqua America, Inc.	3.23	3.40	3.31
California Water Service Group	3.06	3.24	3.15
Middlesex Water Company	4.08	4.25	4.16
SJW Corporation	2.59	2.88	2.73
York Water Company	3.62	3.79	3.71
Average	3.25 %	3.44 %	3.35 %
Median	3.15 %	3.32 %	3.23 %
Proxy Group of Eight AUS Utility Reports Companies			
AGL Resources Inc.	4.48 %	4.72 %	4.60 %
Atmos Energy Corporation	4.56	4.81	4.68
Delta Natural Gas Company	4.43	4.42	4.43
Laclede Group, Inc.	4.61	4.80	4.71
Northwest Natural Gas Co.	3.50	3.72	3.61
Piedmont Natural Gas Co., Inc.	4.06	4.10	4.08
Southwest Gas Corporation	3.10	3.32	3.21
WGL Holdings, Inc.	4.20	4.46	4.33
Average	4.12 %	4.29 %	4.21 %
Median	4.32 %	4.44 %	4.38 %

Notes: (1) The spot dividend yield is the current annualized dividend per share divided by thespot market price on 4/5/10.

(2) The average 3-month dividend yield was computed by relating the indicated annualized dividend rate and market price on the last trading day of each of the three months ended 3/31/10.

(3) Equal weight has been given to the 3-month average and spot dividend yield.

Source of Information: yahoo.finance.com

Missouri-American Water Company
Historical and Projected Growth

	1	2		3
	Value Line Projected 2006-'08 to 2012-'14 Growth Rate (1)	Reuters Mean Consensus Projected Five Year EPS Growth Rate		Average Projected Five Year Growth Rate in EPS (2)
	EPS	EPS	No. of Est.	
Proxy Group of Six AUS Utility Reports Water Companies				
American States Water Co.	9.50 %	4.00 %	[1]	6.75 %
Aqua America, Inc.	10.00	8.60	[5]	9.30
California Water Service Group	8.50	6.00	[2]	7.25
Middlesex Water Company	9.00	NA	[NA]	9.00
SJW Corporation	NA	NA	[NA]	NA
York Water Company	7.50	6.00	[1]	6.75
Average	8.90 %	6.15 %		7.81 %
Median	9.00 %	6.00 %		7.25 %
Proxy Group of Eight AUS Utility Reports Gas Distribution Companies				
AGL Resources, Inc.	3.50 %	5.60 %	[4]	4.55 %
Atmos Energy Corp.	5.50	4.50	[5]	5.00
Delta Natural Gas Company	3.00	3.00	[1]	3.00
Laclede Group, Inc.	2.50	NA	[NA]	2.50
Northwest Natural Gas Company	5.00	5.50	[2]	5.25
Piedmont Natural Gas Co., Inc.	4.00	7.00	[2]	5.50
Southwest Gas Corporation	8.00	5.50	[2]	6.75
WGL Holdings, Inc.	2.50	0.60	[1]	1.55
Average	4.25 %	4.53 %		4.26 %
Median	3.75 %	5.50 %		4.78 %

NA= Not Available

Notes: (1) As shown on pages 19 through 32 of this Schedule.
(2) Average of Columns 1 and 2.

Source of Information: Value Line Investment Survey, January 22, and March 12, 2010
Reuters Company Research (Printed April 6, 2010)

AMER. STATES WATER NYSE-AWR

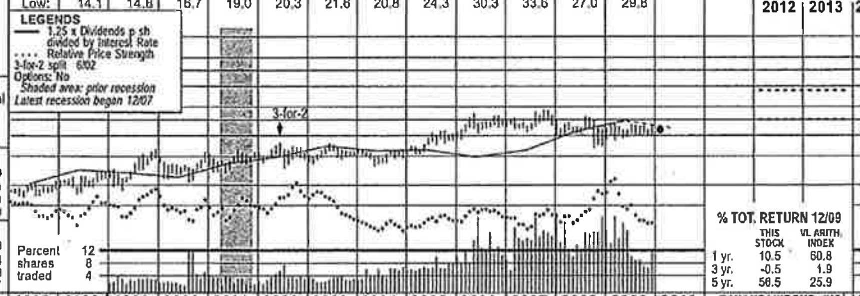
RECENT PRICE 34.75 | P/E RATIO 18.5 (Trailing: 18.6 Median: 22.0) | RELATIVE P/E RATIO 1.07 | DIV'D YLD 3.0% | VALUE LINE

TIMELINESS 3 Lowered 6/5/09
SAFETY 3 New 2/4/00
TECHNICAL 3 Raised 12/4/09
BETA .80 (1.00 = Market)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
High:	19.5	26.5	25.3	26.4	29.0	29.0	26.8	34.6	43.8	46.1	42.0	38.8
Low:	14.1	14.8	16.7	19.0	20.3	21.6	20.8	24.3	30.3	33.6	27.0	29.8

Target Price Range 2012 | 2013 | 2014

LEGENDS
— 1.25 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
3-for-2 split 6/02
Options: No
Shaded area: prior recession
Latest recession began 12/07



2012-14 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	60	(+75%)	17%
Low	40	(+15%)	6%

Insider Decisions

	F	M	A	M	J	J	A	S	O
to Buy	0	0	0	0	0	0	0	0	0
Options	0	0	0	0	0	0	0	0	0
to Sell	0	1	0	0	0	0	1	0	0

Institutional Decisions

	1Q2009	2Q2009	3Q2009
to Buy	55	66	54
to Sell	66	53	53
Hld's(000)	9283	10578	10847

Percent shares traded 12 8 4

% TOT. RETURN 12/09

	THIS STOCK	VL ARITH. INDEX
1 yr.	10.5	60.8
3 yr.	-0.5	1.9
5 yr.	56.5	25.9

1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	© VALUE LINE PUB., INC.	12-14
9.27	10.43	11.03	11.37	11.44	11.02	12.91	12.17	13.06	13.78	13.98	13.61	14.06	15.76	17.49	18.42	19.60	20.55	Revenues per sh	21.75
1.67	1.68	1.75	1.75	1.85	2.04	2.26	2.20	2.53	2.54	2.08	2.23	2.64	2.89	3.31	3.37	3.65	3.90	"Cash Flow" per sh	4.60
1.11	.95	1.03	1.13	1.04	1.08	1.19	1.28	1.35	1.34	.78	1.05	1.32	1.33	1.62	1.55	1.85	2.00	Earnings per sh A	2.60
.79	.80	.81	.82	.83	.84	.85	.86	.87	.87	.88	.89	.90	.91	.96	1.00	1.01	1.05	Div'd Decl'd per sh B■	1.22
1.90	2.43	2.19	2.40	2.58	3.11	4.30	3.03	3.18	2.68	3.76	5.03	4.24	3.91	2.89	4.45	4.05	4.25	Cap'l Spending per sh	5.00
9.95	10.07	10.29	11.01	11.24	11.48	11.82	12.74	13.22	14.05	13.97	15.01	15.72	16.64	17.53	17.95	19.60	20.00	Book Value per sh	22.00
11.71	11.77	11.77	13.33	13.44	13.44	13.44	15.12	15.12	15.18	15.21	16.75	16.80	17.05	17.23	17.30	18.60	19.00	Common Shs Outst'g C	20.00
13.4	12.8	11.6	12.6	14.5	15.5	17.1	15.9	16.7	18.3	31.9	23.2	21.9	27.7	24.0	22.6	18.54		Avg Ann'l P/E Ratio	19.0
.79	.84	.78	.79	.84	.81	.97	1.03	.86	1.00	1.82	1.23	1.17	1.50	1.27	1.37	1.22		Relative P/E Ratio	1.25
5.3%	6.6%	6.7%	5.8%	5.5%	5.0%	4.2%	4.2%	3.9%	3.6%	3.5%	3.6%	3.1%	2.5%	2.5%	2.9%	2.9%		Avg Ann'l Div'd Yield	2.4%

CAPITAL STRUCTURE as of 9/30/09
Total Debt $327.5 mill. Due In 5 Yrs $25.0 mill.
LT Debt $306.3 mill. LT Interest $23.5 mill.
(LT interest earned: 3.8x: total interest coverage: 3.5x) (46% of Cap'l)

Leases, Uncapitalized: Annual rentals $2.9 mill.

Pension Assets-12/08 $54.2 mill. Oblig. $94.5 mill.

Pfd Stock None.

Common Stock 18,512,032 shs. as of 11/3/09
MARKET CAP: $650 million (Small Cap)

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	© VALUE LINE PUB., INC.	12-14
173.4	184.0	197.5	209.2	212.7	228.0	236.2	268.6	301.4	318.7	365	390	Revenues ($mill)	450
16.1	18.0	20.4	20.3	11.9	16.5	22.5	23.1	28.0	26.8	35.0	39.0	Net Profit ($mill)	52.0
46.0%	45.7%	43.0%	38.9%	43.5%	37.4%	47.0%	40.5%	42.6%	37.8%	38.5%	38.5%	Income Tax Rate	40.0%
--	--	--	--	--	--	--	12.2%	8.5%	6.9%	5.0%	5.0%	AFUDC % to Net Profit	5.0%
51.0%	47.5%	54.9%	52.0%	52.0%	47.7%	50.4%	48.6%	46.9%	46.2%	46.0%	44.5%	Long-Term Debt Ratio	46.5%
48.4%	51.9%	44.7%	48.0%	48.0%	52.3%	49.6%	51.4%	53.1%	53.8%	54.0%	55.5%	Common Equity Ratio	53.5%
328.2	371.1	447.6	444.4	442.3	480.4	532.5	551.6	569.4	577.0	675	705	Total Capital ($mill)	825
449.6	509.1	539.8	563.3	602.3	664.2	713.2	750.6	776.4	825.3	870	920	Net Plant ($mill)	1025
6.6%	6.4%	6.1%	6.5%	4.6%	5.2%	5.4%	6.0%	6.7%	6.4%	7.0%	7.5%	Return on Total Cap'l	8.5%
10.0%	9.2%	10.1%	9.5%	5.6%	6.6%	8.5%	8.1%	9.3%	8.6%	9.5%	10.5%	Return on Shr. Equity	12.0%
10.1%	9.3%	10.1%	9.5%	5.6%	6.6%	8.5%	8.1%	9.3%	8.6%	9.5%	10.5%	Return on Com Equity	12.0%
2.9%	3.0%	3.6%	3.3%	NMF	1.0%	2.8%	2.7%	3.9%	3.1%	4.5%	5.0%	Retained to Com Eq	6.5%
72%	68%	65%	65%	113%	84%	67%	67%	58%	64%	54%	53%	All Div'ds to Net Prof	47%

CURRENT POSITION ($MILL.)	2007	2008	9/30/09
Cash Assets	1.7	7.3	7.4
Other	61.4	83.3	92.3
Current Assets	63.1	90.6	99.7
Accts Payable	29.1	36.6	37.4
Debt Due	37.8	75.3	21.2
Other	27.4	25.5	40.4
Current Liab.	94.3	137.4	99.0
Fix. Chg. Cov.	314%	293%	352%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '06-'08 to '12-'14
Revenues	4.5%	5.0%	4.0%
"Cash Flow"	5.5%	6.0%	6.5%
Earnings	3.5%	5.5%	9.5%
Dividends	1.5%	2.0%	4.5%
Book Value	4.5%	5.0%	4.0%

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2006	64.3	63.0	75.0	66.3	268.6
2007	72.3	79.3	75.8	74.0	301.4
2008	68.9	80.3	85.3	84.2	318.7
2009	79.6	93.6	101.8	90.0	365
2010	85.0	100	108	97.0	390

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2006	.35	.36	.32	.30	1.33
2007	.40	.42	.44	.35	1.62
2008	.30	.53	.26	.43	1.55
2009	.28	.64	.52	.41	1.85
2010	.30	.65	.58	.47	2.00

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	.225	.225	.225	.235	.91
2007	.235	.235	.235	.250	.96
2008	.250	.250	.250	.250	1.00
2009	.250	.250	.250	.260	1.01
2010					

BUSINESS: American States Water Co. operates as a holding company. Through its principal subsidiary, Golden State Water Company, it supplies water to more than 250,000 customers in 75 communities in 10 counties. Service areas include the greater metropolitan areas of Los Angeles and Orange Counties. The company also provides electric utility services to nearly 23,250 customers in the city of Big Bear Lake and in areas of San Bernardino County. Acquired Chaparral City Water of Arizona (10/00). Has roughly 675 employees. Officers & directors own 2.5% of common stock (4/09 Proxy). Chairman: Lloyd Ross. President & CEO: Floyd Wicks. Inc: CA. Addr.: 630 East Foothill Boulevard, San Dimas, CA 91773. Tele.: 909-394-3600. Internet: www.aswater.com.

American States Water posted impressive third-quarter growth. Indeed, the water utility reported earnings of $0.52 a share, as revenues advanced 17%, to a record $101 million.

Expectations should be tempered a bit, however. Last year's third-quarter figures were relatively weak. The December-period comparisons are far more formidable. Plus, although the top line is likely to continue being the beneficiary of favorable general rate case rulings from the California Public Utilities Commission, operating expenses look to be on the rise, as evidenced by the most recent double-digit increase. Already decaying infrastructures are only growing older and requiring more investment. Much in that vein, we anticipate that the company had trouble meeting last year's share-net total in the fourth quarter, despite a healthy high single-digit top-line advance. For many of the same reasons, bottom-line growth for full-year 2010, though healthy, will likely pale in comparison to the levels witnessed in 2009.

The company's balance sheet is not exactly seductive. In order to meet the growing infrastructure requirements mentioned above, the cash-strapped entity will have to continue to seek outside financing, with debt and share offerings likely becoming commonplace. The higher interest rate and share count associated with these transactions will limit the benefits of the expansion of the nonregulated business.

These shares are not too intriguing at this juncture. Share-price momentum has tapered off in the months following our October review and is likely to remain relatively stagnant over the coming six to 12 months as the emergence from the recession continues to gain steam and investors regain confidence and take a more aggressive stance. The longer-term picture is not much better, with burgeoning financing costs curbing 3- to 5-year shareholder gains. Although risk-averse investors may be intrigued by the issue's income component (in a much anticipated move the board recently raised the quarterly dividend by 4% to $0.26 a share), it should be noted that there are a number of better income sources, particularly in the utility genre, to choose from.

Andre J. Costanza *January 22, 2010*

(A) Primary earnings. Excludes nonrecurring gains/(losses): '04, 14¢; '05, 25¢; '06, 6¢; '08, (27¢). Next earnings report due late February. May not add due to rounding.

(B) Dividends historically paid in early March, June, September, and December. ■ Div'd reinvestment plan available.
(C) In millions, adjusted for split.

Company's Financial Strength	B++
Stock's Price Stability	80
Price Growth Persistence	70
Earnings Predictability	70

AQUA AMERICA NYSE-WTR

RECENT PRICE 17.57 | P/E RATIO 20.9 (Trailing: 23.7 Median: 25.0) | RELATIVE P/E RATIO 1.21 | DIV'D YLD 3.4% | VALUE LINE

TIMELINESS 3 Lowered 6/26/09
SAFETY 3 Lowered 8/1/03
TECHNICAL 3 Lowered 1/1/10
BETA .65 (1.00 = Market)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
High:	11.5	11.5	12.0	14.8	15.0	16.8	18.5	29.2	29.8	26.6	22.0	21.5
Low:	7.2	7.6	6.3	9.4	9.6	11.8	14.2	17.5	20.1	18.9	12.2	15.4

Target Price Range 2012 | 2013 | 2014

2012-14 PROJECTIONS

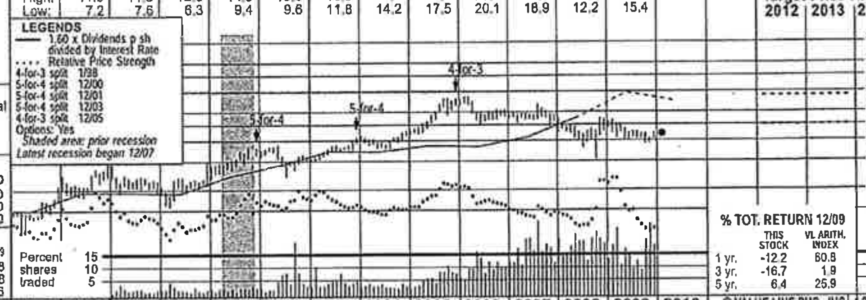
	Price	Gain	Ann'l Total Return
High	30	(+70%)	14%
Low	20	(+15%)	3%

Insider Decisions

	F	M	A	M	J	J	A	S	O
to Buy	0	0	0	0	0	0	0	0	0
Options	1	0	0	0	0	0	0	0	0
to Sell	0	0	0	0	0	0	0	0	0

Institutional Decisions

	1Q2009	2Q2009	3Q2009
to Buy	130	117	88
to Sell	134	136	118
Hld's(000)	63551	61341	60196



% TOT. RETURN 12/09

	THIS STOCK	VL ARITH. INDEX
1 yr.	-12.2	60.8
3 yr.	-16.7	1.9
5 yr.	6.4	25.9

1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	© VALUE LINE PUB., INC.	12-14
1.70	1.82	1.84	1.86	2.02	2.09	2.41	2.46	2.70	2.85	2.97	3.48	3.85	4.03	4.52	4.63	4.95	5.35	Revenues per sh	6.45
.42	.42	.47	.50	.56	.61	.72	.76	.86	.94	.96	1.09	1.21	1.26	1.37	1.42	1.70	1.85	"Cash Flow" per sh	2.40
.24	.26	.29	.30	.34	.40	.42	.47	.51	.54	.57	.64	.71	.70	.71	.73	.80	.90	Earnings per sh A	1.25
.21	.21	.22	.23	.24	.26	.27	.28	.30	.32	.35	.37	.40	.44	.48	.51	.55	.59	Div'd Decl'd per sh B■	.70
.47	.46	.52	.48	.58	.62	.90	1.16	1.09	1.20	1.32	1.54	1.84	2.05	1.79	1.96	1.90	1.95	Cap'l Spending per sh	2.15
2.29	2.41	2.46	2.69	2.84	3.21	3.42	3.85	4.15	4.36	5.34	5.89	6.30	6.96	7.32	7.82	7.90	8.35	Book Value per sh	10.35
59.40	59.77	63.74	65.75	67.47	72.20	106.80	111.82	113.97	113.19	123.45	127.18	128.97	132.33	133.40	135.37	136.30	137.00	Common Shs Outst'g C	139.00
14.4	13.5	12.0	15.6	17.8	22.5	21.2	18.2	23.6	23.6	24.5	25.1	31.6	34.7	32.0	24.9	22.2		Avg Ann'l P/E Ratio	21.0
.85	.89	.80	.98	1.03	1.17	1.21	1.18	1.21	1.29	1.40	1.33	1.69	1.87	1.70	1.50	1.48		Relative P/E Ratio	1.40
5.9%	6.0%	6.2%	4.9%	3.9%	2.9%	3.0%	3.3%	2.5%	2.5%	2.5%	2.3%	1.8%	1.8%	2.1%	2.8%	3.0%		Avg Ann'l Div'd Yield	2.0%

CAPITAL STRUCTURE as of 9/30/09
Total Debt $1320.2 mill. Due In 5 Yrs $245.0 mill.
LT Debt $1265.4 mill. LT Interest $65.0 mill.
(LT Interest earned: 3.4x; total interest coverage: 3.4x) (54% of Cap'l)

Pension Assets-12/08 $112.2 mill. Oblig. $204.7 mill.

Pfd Stock None
Common Stock 136,270,613 shares as of 10/20/09

MARKET CAP: $2.4 billion (Mid Cap)

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	© VALUE LINE PUB., INC.	12-14
257.3	275.5	307.3	322.0	367.2	442.0	496.8	533.5	602.5	627.0	675	735	Revenues ($mill)	900
45.0	50.7	58.5	62.7	67.3	80.0	91.2	92.0	95.0	97.9	109	123	Net Profit ($mill)	175
38.4%	38.9%	39.3%	38.5%	39.3%	39.4%	38.4%	39.6%	38.9%	39.7%	39.0%	39.0%	Income Tax Rate	39.0%
--	--	--	--	--	--	--	--	2.9%	3.1%	3.0%	2.6%	AFUDC % to Net Profit	2.0%
52.9%	52.0%	52.2%	54.2%	51.4%	50.0%	52.0%	51.6%	55.4%	54.1%	54.0%	53.0%	Long-Term Debt Ratio	48.0%
46.7%	47.8%	47.7%	45.8%	48.6%	50.0%	48.0%	48.4%	44.6%	45.9%	46.0%	47.0%	Common Equity Ratio	52.0%
782.7	901.1	990.4	1076.2	1355.7	1497.3	1690.4	1904.4	2191.4	2306.6	2276	2345	Total Capital ($mill)	2765
1135.4	1251.4	1368.1	1490.8	1824.3	2069.8	2280.0	2506.0	2792.8	2997.4	3150	3300	Net Plant ($mill)	3500
7.6%	7.4%	7.8%	7.6%	6.4%	6.7%	6.9%	6.4%	5.9%	5.7%	6.0%	6.5%	Return on Total Cap'l	7.5%
12.2%	11.7%	12.3%	12.7%	10.2%	10.7%	11.2%	10.0%	9.7%	9.3%	10.0%	10.5%	Return on Shr. Equity	12.0%
12.3%	11.7%	12.4%	12.7%	10.2%	10.7%	11.2%	10.0%	9.7%	9.3%	10.0%	10.5%	Return on Com Equity	12.0%
4.3%	4.7%	5.1%	5.2%	4.2%	4.6%	4.9%	3.7%	3.2%	2.8%	3.5%	3.0%	Retained to Com Eq D	5.0%
65%	60%	59%	59%	59%	57%	56%	63%	67%	70%	66%	69%	All Div'ds to Net Prof	57%

CURRENT POSITION ($MILL.)	2007	2008	9/30/09
Cash Assets	14.5	14.9	18.0
Receivables	82.9	84.5	86.1
Inventory (AvgCst)	8.8	9.8	10.3
Other	9.3	11.8	10.5
Current Assets	115.5	121.0	124.9
Accts Payable	45.8	50.0	26.3
Debt Due	80.8	87.9	54.8
Other	56.6	55.3	149.0
Current Liab.	183.2	193.2	230.1
Fix. Chg. Cov.	323%	329%	325%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '06-'08 to '12-'14
Revenues	8.0%	9.0%	6.5%
"Cash Flow"	9.5%	8.0%	10.0%
Earnings	7.5%	5.5%	10.0%
Dividends	7.0%	8.0%	6.5%
Book Value	9.5%	10.0%	6.0%

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	117.9	131.7	147.0	136.9	533.5
2007	137.3	150.6	165.5	149.1	602.5
2008	139.3	151.0	177.1	159.6	627.0
2009	154.5	167.3	180.8	172.4	675
2010	165	185	195	190	735

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	.13	.17	.21	.19	.70
2007	.13	.17	.22	.19	.71
2008	.11	.17	.26	.19	.73
2009	.14	.19	.25	.22	.80
2010	.15	.22	.28	.25	.90

Cal-endar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	.107	.107	.115	.115	.44
2007	.115	.115	.125	.125	.48
2008	.125	.125	.125	.135	.51
2009	.135	.135	.135	.145	.55
2010					

BUSINESS: Aqua America, Inc. is the holding company for water and wastewater utilities that serve approximately three million residents in Pennsylvania, Ohio, North Carolina, Illinois, Texas, New Jersey, Florida, Indiana, and five other states. Divested three of four non-water businesses in '91; telemarketing group in '93; and others. Acquired AquaSource, 7/03; Consumers Water, 4/99; and others. Water supply revenues '08: residential, 60%; commercial, 14%; industrial & other, 26%. Officers and directors own 1.3% of the common stock (4/09 Proxy). Chairman & Chief Executive Officer: Nicholas DeBenedictis. Incorporated: Pennsylvania. Address: 762 West Lancaster Avenue, Bryn Mawr, Pennsylvania 19010. Telephone: 610-525-1400. Internet: www.aquaamerica.com.

During the September interim, Aqua America lost some ground on a year-over-year basis. Although revenues were up slightly from the prior year, earnings dropped a penny, as unfavorable weather conditions and higher operating costs hurt profits during the third quarter. Looking ahead, though, **the company probably ended the year on a good note.** A number of rate-relief cases were set to be decided in the fourth quarter which, if approved, should provide a slight last-minute boost to the top and bottom lines. Also, management has been actively working to reduce operating costs, and the benefits of these efforts should help widen margins. For the year, we expect a total increase in revenues and earnings of $48 million and $0.07 a share, respectively, but it should be noted that last year included a gain from the sale of its underperforming Woodhaven system.

Aqua America should continue to expand its reach through acquisitions and rate-relief cases over the next few years. The company has acquired a wastewater treatment plant in Lumpkin County, Georgia, and this new subsidiary (Aqua Georgia Inc.) may be bolstered by further purchases in this region. Also, WTR expanded its Aqua Pennsylvania division in December, purchasing the assets of Athens Township Authority, and subsequently signed a 20-year contract to provide water services. Additionally, the $75 million in rate cases filed in 2009 should, if judged in Aqua's favor, boost revenues and earnings over the next few years.

These shares are a neutral choice for the coming six to 12 month period, but hold some appeal for the long haul. One attractive trait is the steady dividend yield, which was raised 7.4% during the fourth quarter of 2008. The company has historically raised its payout every year, and this will most likely continue over the coming 3- to 5-year stretch. Also, the top- and bottom-line gains we project over the 2012-2014 horizon give this equity good recovery potential. Conservative investors should also take note of the high scores for Stock Price Stability and Earnings Predictability, as well as the below-the-market average Beta coefficient.

John D. Burke *January 22, 2010*

(A) Diluted shares. Excl. nonrec. gains (losses): '99, (11¢); '00, 2¢; '01, 2¢; '02, 5¢; '03, 4¢. Excl. gain from disc. operations: '96, 2¢. Next earnings report due early February.

(B) Dividends historically paid in early March, June, Sept. & Dec. ■ Div'd. reinvestment plan available (5% discount).

(C) In millions, adjusted for stock splits.

Company's Financial Strength	B+
Stock's Price Stability	95
Price Growth Persistence	70
Earnings Predictability	100

CALIFORNIA WATER NYSE-CWT

RECENT PRICE 36.83 | P/E RATIO 18.4 (Trailing: 18.5 / Median: 22.0) | RELATIVE P/E RATIO 1.06 | DIV'D YLD 3.2% | VALUE LINE

TIMELINESS 4 Lowered 11/6/09
SAFETY 3 Lowered 7/27/07
TECHNICAL 3 Lowered 12/25/09
BETA .75 (1.00 = Market)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
High:	33.8	32.0	31.4	28.6	26.9	31.4	37.9	42.1	45.8	45.4	46.6	48.3
Low:	20.8	22.6	21.5	22.9	20.5	23.7	26.1	31.2	32.8	34.2	27.7	33.5

2012-14 PROJECTIONS

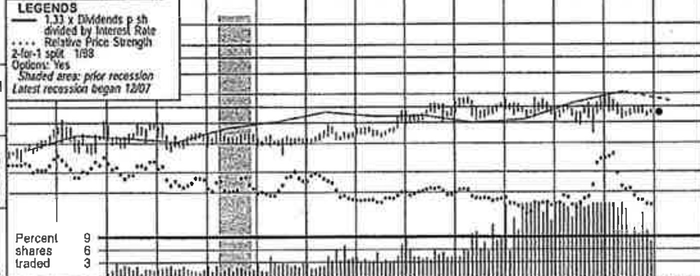
	Price	Gain	Ann'l Total Return
High	60	(+65%)	15%
Low	40	(+10%)	5%

Insider Decisions

	F	M	A	M	J	J	A	S	O
to Buy	0	0	0	0	0	0	0	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

	1Q2009	2Q2009	3Q2009
to Buy	83	76	56
to Sell	81	85	75
Hld's(000)	10000	10018	9635



Target Price Range
2012 | 2013 | 2014
128
96
80
64
48
40
32
24
16
12

% TOT. RETURN 12/09

	THIS STOCK	VL ARITH. INDEX
1 yr.	-18.2	60.8
3 yr.	-0.7	1.9
5 yr.	13.2	25.9

1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	© VALUE LINE PUB., INC.	12-14
13.34	12.59	13.17	14.48	15.48	14.76	15.96	16.16	16.26	17.33	16.37	17.18	17.44	16.20	17.76	19.80	21.35	22.10	Revenues per sh	23.90
2.25	2.02	2.07	2.50	2.92	2.60	2.75	2.52	2.20	2.65	2.51	2.83	3.03	2.71	3.12	3.72	4.05	4.25	"Cash Flow" per sh	4.80
1.35	1.22	1.17	1.51	1.83	1.45	1.53	1.31	.94	1.25	1.21	1.46	1.47	1.34	1.50	1.90	1.99	2.10	Earnings per sh A	2.60
.96	.99	1.02	1.04	1.06	1.07	1.09	1.10	1.12	1.12	1.12	1.13	1.14	1.15	1.16	1.17	1.18	1.19	Div'd Decl'd per sh B ■	1.25
2.53	2.26	2.17	2.83	2.61	2.74	3.44	2.45	4.09	5.82	4.39	3.73	4.01	4.28	3.68	4.62	5.20	5.25	Cap'l Spending per sh	5.25
10.90	11.56	11.72	12.22	13.00	13.38	13.43	12.90	12.95	13.12	14.44	15.66	15.79	18.15	18.50	19.44	20.00	19.75	Book Value per sh C	21.30
11.38	12.49	12.54	12.62	12.62	12.62	12.94	15.15	15.18	15.18	16.93	18.37	18.39	20.66	20.67	20.72	21.00	21.25	Common Shs Outst'g D	23.00
13.6	14.1	13.7	11.9	12.6	17.8	17.8	19.6	27.1	19.8	22.1	20.1	24.9	29.2	26.1	19.8	19.3		Avg Ann'l P/E Ratio	19.0
.80	.92	.92	.75	.73	.93	1.01	1.27	1.39	1.08	1.26	1.06	1.33	1.58	1.39	1.20	1.26		Relative P/E Ratio	1.25
5.2%	5.8%	6.4%	5.8%	4.6%	4.2%	4.0%	4.3%	4.4%	4.5%	4.2%	3.9%	3.1%	2.9%	3.0%	3.1%	3.1%		Avg Ann'l Div'd Yield	2.5%
						206.4	244.8	246.8	263.2	277.1	315.6	320.7	334.7	367.1	410.3	448	470	Revenues ($mill) E	550
						19.9	20.0	14.4	19.1	19.4	26.0	27.2	25.6	31.2	39.8	42.0	45.0	Net Profit ($mill)	60.0
						37.9%	42.3%	39.4%	39.7%	39.9%	39.6%	42.4%	37.4%	39.9%	37.7%	40.0%	39.0%	Income Tax Rate	39.0%
						--	--	--	--	10.3%	3.2%	3.3%	10.6%	8.3%	8.6%	8.5%	10.0%	AFUDC % to Net Profit	10.0%
						46.9%	48.9%	50.3%	55.3%	50.2%	48.6%	48.3%	43.5%	42.9%	41.6%	47.0%	46.5%	Long-Term Debt Ratio	48.5%
						52.0%	50.2%	48.6%	44.0%	49.1%	50.8%	51.1%	55.9%	56.6%	58.4%	53.0%	53.5%	Common Equity Ratio	51.5%
						333.8	388.8	402.7	453.1	498.4	565.9	568.1	670.1	674.9	690.4	795	805	Total Capital ($mill)	950
						515.4	582.0	624.3	697.0	759.5	800.3	862.7	941.5	1010.2	1112.4	1175	1240	Net Plant ($mill)	1425
						7.8%	6.8%	5.3%	5.9%	5.6%	6.1%	6.3%	5.2%	5.9%	7.1%	7.0%	7.0%	Return on Total Cap'l	8.0%
						11.2%	10.0%	7.2%	9.4%	7.8%	8.9%	9.3%	6.8%	8.1%	9.9%	10.0%	10.5%	Return on Shr. Equity	12.0%
						11.4%	10.1%	7.2%	9.5%	7.9%	9.0%	9.3%	6.8%	8.1%	9.9%	10.0%	10.5%	Return on Com Equity	12.0%
						3.5%	1.8%	NMF	1.0%	.7%	2.1%	2.1%	1.0%	1.8%	3.8%	4.0%	5.0%	Retained to Com Eq	6.5%
						70%	82%	119%	90%	91%	77%	78%	86%	77%	61%	59%	56%	All Div'ds to Net Prof	48%

CAPITAL STRUCTURE as of 9/30/09
Total Debt $397.9 mill. Due in 5 Yrs $40.0 mill.
LT Debt $373.5 mill. LT Interest $25.0 mill.

(LT interest earned: 7.8x; total int. cov.: 6.6x)

Pension Assets-12/08 $66.9 mill.
Oblig. $192.9 mill.

Pfd Stock None

Common Stock 20,744,952 shs.
as of 11/2/09

MARKET CAP: $775 million (Small Cap)

CURRENT POSITION ($MILL.)	2007	2008	9/30/09
Cash Assets	6.7	13.9	47.6
Other	53.3	65.9	92.8
Current Assets	60.0	79.8	140.4
Accts Payable	36.7	45.1	54.4
Debt Due	2.7	42.8	24.4
Other	30.3	35.3	52.0
Current Liab.	69.7	123.2	130.8
Fix. Chg. Cov.	333%	398%	430%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '06-'08 to '12-'14
Revenues	2.0%	1.5%	5.0%
"Cash Flow"	2.0%	5.5%	7.0%
Earnings	--	7.0%	8.5%
Dividends	1.0%	0.5%	1.5%
Book Value	4.0%	6.5%	2.0%

Cal-endar	QUARTERLY REVENUES ($ mill.)E Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	65.2	81.1	107.8	80.6	334.7
2007	71.6	95.8	113.8	85.9	367.1
2008	72.9	105.6	131.7	100.1	410.3
2009	86.7	116.7	139.2	105.4	448
2010	91.0	122	146	111	470

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	.04	.31	.68	.31	1.34
2007	.07	.37	.67	.39	1.50
2008	.01	.48	1.06	.35	1.90
2009	.12	.58	.94	.35	1.99
2010	.11	.60	1.00	.39	2.10

Cal-endar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	.2875	.2875	.2875	.2875	1.15
2007	.290	.290	.290	.290	1.16
2008	.293	.293	.293	.293	1.17
2009	.295	.295	.295	.295	1.18
2010					

BUSINESS: California Water Service Group provides regulated and nonregulated water service to roughly 463,600 customers in 83 communities in California, Washington, New Mexico, and Hawaii. Main service areas: San Francisco Bay area, Sacramento Valley, Salinas Valley, San Joaquin Valley & parts of Los Angeles. Acquired Rio Grande Corp; West Hawaii Utilities (9/08). Revenue breakdown, '08: residential, 69%; business, 18%; public authorities, 5%; industrial, 5%; other, 3%. '08 reported depreciation rate: 2.4%. Has roughly 929 employees. Chairman: Robert W. Foy. President & CEO: Peter C. Nelson (4/09 Proxy). Inc.: Delaware. Address: 1720 North First Street, San Jose, California 95112-4598. Telephone: 408-367-8200. Internet: www.calwatergroup.com.

Improvements on the regulatory front augur well for California Water Service Group's top line. Indeed, earlier rate increases handed down by the California Public Utilities Commission (CPUC) enabled the water utility to post record-high revenues of $139.2 million in the third quarter, a 6% improvement from the year before. We look for similar growth in the fourth quarter and for full-year 2010. Meanwhile, the company filed its 2009 general rate case during the period, seeking $71 million in 2011 with increases of nearly $25 million in 2012 and 2013. It was CWT's first consolidated request, covering all 24 districts, and a ruling may well take 18 months to be made. We expect a relatively favorable outcome given the CPUC's more recent disposition.

However, operating costs appear to be on the rise, too. Despite the top-line benefits mentioned above, share earnings fell 11% in the September period and came in a dime below our estimate. Operating expenses swelled 10%, as aging infrastructures required greater maintenance, and the increased demand drove up distribution costs. We suspect that these trends persisted in the fourth quarter and will only intensify going forward. As a result, we've tempered our expectations, estimating that CWT barely broke even in the final quarter of 2009 and that earnings growth will not be anything to write home about for full-year 2010.

The stock has fallen a notch for Timeliness and is now ranked 4 (Below Average). Recent share-price declines, coupled with the tough outlook, make this an unattractive selection for the coming six to 12 months.

Its 3- to 5-year appeal is better, but still lacking in our opinion. CWT does not have the finances on hand to meet the rising infrastructure costs that are likely to amount over the next couple of years. The share and/or debt offerings that will be required to help improve the balance sheet will come at a price, with the higher share count and interest rate expenses limiting potential shareholder gains. Although the dividend yield looks healthy at first blush, those seeking an income vehicle have better options available, particularly on a risk-adjusted basis.

Andre J. Costanza *January 22, 2010*

(A) Basic EPS. Excl. nonrecurring gain (loss): '00, (7¢); '01, 4¢; '02, 8¢. Next earnings report due early February.
(B) Dividends historically paid in mid-Feb., May, Aug., and Nov. ■ Div'd reinvestment plan available.
(C) Incl. deferred charges. In '08: $3.9 mill., $.19/sh.
(D) In millions, adjusted for split.
(E) Excludes non-reg. rev.

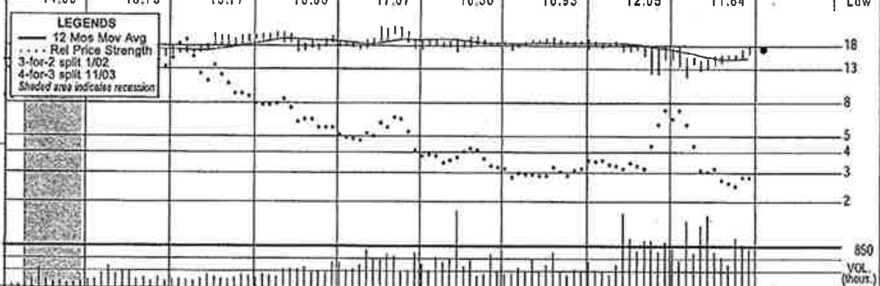
Company's Financial Strength	B++
Stock's Price Stability	80
Price Growth Persistence	75
Earnings Predictability	80

MIDDLESEX WATER NDQ--MSEX

RECENT PRICE **17.21** | TRAILING P/E RATIO **23.6** | RELATIVE P/E RATIO **1.31** | DIV'D YLD **4.2%** | VALUE LINE

RANKS	18.73 / 14.69	20.04 / 13.73	21.23 / 15.77	21.81 / 16.66	23.47 / 17.07	20.50 / 16.50	20.24 / 16.93	19.83 / 12.05	17.91 / 11.64	High / Low

PERFORMANCE	3	Average
Technical	3	Average
SAFETY	2	Above Average
BETA .80		(1.00 = Market)
Financial Strength	B+	
Price Stability	95	
Price Growth Persistence	40	
Earnings Predictability	90	



© VALUE LINE PUBLISHING, INC.	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010/2011
SALES PER SH	5.87	5.98	6.12	6.25	6.44	6.16	6.50	6.79	–	
"CASH FLOW" PER SH	1.18	1.20	1.15	1.28	1.33	1.33	1.49	1.53	–	
EARNINGS PER SH	.66	.73	.61	.73	.71	.82	.87	.89	.70[A,B]	.80[C]/NA
DIV'DS DECL'D PER SH	.62	.63	.65	.66	.67	.68	.69	.70	--	
CAP'L SPENDING PER SH	1.25	1.59	1.87	2.54	2.18	2.31	1.66	2.12	--	
BOOK VALUE PER SH	7.11	7.39	7.60	8.38	8.60	9.82	10.05	10.28	--	
COMMON SHS OUTST'G (MILL)	10.17	10.36	10.48	11.36	11.58	13.17	13.25	13.40	--	
AVG ANN'L P/E RATIO	24.6	23.5	30.0	26.4	27.4	22.7	21.6	19.8	24.6	21.5/NA
RELATIVE P/E RATIO	1.26	1.28	1.71	1.39	1.45	1.23	1.15	1.19	–	
AVG ANN'L DIV'D YIELD	3.8%	3.7%	3.5%	3.4%	3.5%	3.7%	3.7%	4.0%	–	
SALES ($MILL)	59.6	61.9	64.1	71.0	74.6	81.1	86.1	91.0	--	*Bold figures are consensus earnings estimates and, using the recent prices, P/E ratios.*
OPERATING MARGIN	47.2%	47.1%	44.0%	44.4%	44.4%	47.4%	47.0%	46.9%	--	
DEPRECIATION ($MILL)	5.3	5.0	5.6	6.4	7.2	7.8	8.2	8.5	--	
NET PROFIT ($MILL)	7.0	7.8	6.6	8.4	8.5	10.0	11.8	12.2	--	
INCOME TAX RATE	34.8%	33.3%	32.8%	31.1%	27.6%	33.4%	32.6%	33.2%	--	
NET PROFIT MARGIN	11.7%	12.5%	10.3%	11.9%	11.4%	12.4%	13.8%	13.4%	--	
WORKING CAP'L ($MILL)	d.9	d9.3	d13.3	d11.8	d4.5	2.8	d9.6	d40.9	--	
LONG-TERM DEBT ($MILL)	88.1	87.5	97.4	115.3	128.2	130.7	131.6	118.2	--	
SHR. EQUITY ($MILL)	76.4	80.6	83.7	99.2	103.6	133.3	137.1	141.2	--	
RETURN ON TOTAL CAP'L	5.6%	6.0%	5.0%	5.1%	5.0%	5.1%	5.6%	5.8%	--	
RETURN ON SHR. EQUITY	9.1%	9.6%	7.9%	8.5%	8.2%	7.5%	8.6%	8.6%	--	
RETAINED TO COM EQ	.5%	1.3%	NMF	.9%	.5%	1.2%	1.8%	1.9%	--	
ALL DIV'DS TO NET PROF	94%	87%	106%	90%	94%	84%	79%	78%	--	

[A]No. of analysts changing earn. est. in last 9 days: 0 up, 0 down, consensus 5-year earnings growth 9.0% per year. [B]Based upon 3 analysts' estimates. [C]Based upon 3 analysts' estimates.

ANNUAL RATES

of change (per share)	5 Yrs.	1 Yr.
Sales	1.5%	4.5%
"Cash Flow"	4.5%	2.5%
Earnings	5.5%	2.5%
Dividends	2.0%	1.5%
Book Value	6.5%	2.5%

Fiscal Year	QUARTERLY SALES ($mill.) 1Q	2Q	3Q	4Q	Full Year
12/31/07	19.0	21.8	24.1	21.2	86.1
12/31/08	20.8	23.0	25.7	21.5	91.0
12/31/09	20.6	23.1	25.5		
12/31/10					

Fiscal Year	EARNINGS PER SHARE 1Q	2Q	3Q	4Q	Full Year
12/31/06	.15	.25	.28	.14	.82
12/31/07	.13	.24	.31	.19	.87
12/31/08	.15	.26	.35	.13	.89
12/31/09	.10	.21	.29	*.10*	
12/31/10	*.08*	*.22*			

Cal-endar	QUARTERLY DIVIDENDS PAID 1Q	2Q	3Q	4Q	Full Year
2007	.173	.173	.173	.175	.69
2008	.175	.175	.175	.178	.70
2009	.178	.178	.178	.18	.71
2010					

INSTITUTIONAL DECISIONS

	1Q'09	2Q'09	3Q'09
to Buy	41	41	30
to Sell	27	33	28
Hld's(000)	4505	4902	4958

ASSETS ($mill.)	2007	2008	9/30/09
Cash Assets	2.0	3.3	3.1
Receivables	12.8	14.3	18.2
Inventory (Avg cost)	1.2	1.5	1.6
Other	1.4	1.5	1.7
Current Assets	17.4	20.6	24.6
Property, Plant & Equip, at cost	398.6	436.8	--
Accum Depreciation	64.7	70.5	--
Net Property	333.9	366.3	380.0
Other	41.4	53.1	52.2
Total Assets	392.7	440.0	456.8
LIABILITIES ($mill.)			
Accts Payable	6.5	5.7	4.5
Debt Due	9.0	43.9	47.4
Other	11.5	11.9	11.0
Current Liab	27.0	61.5	62.9

LONG-TERM DEBT AND EQUITY as of 9/30/09

Total Debt $174.1 mill. Due In 5 Yrs. NA
LT Debt $126.7 mill.
Including Cap. Leases NA
(47% of Cap'l)

Leases, Uncapitalized Annual rentals NA

Pension Liability $25.5 mill. in '08 vs. $13.3 mill. in '07

Pfd Stock None Pfd Div'd Paid None

Common Stock 13,469,000 shares
(53% of Cap'l)

INDUSTRY: Water Utility

BUSINESS: Middlesex Water Company engages in the ownership and operation of regulated water utility systems in New Jersey (NJ) and Delaware, and a regulated wastewater utility in NJ. It offers contract operations services and a service line maintenance program through its nonregulated subsidiary, Utility Service Affiliates, Inc. Its water utility system treats, stores, and distributes water for residential, commercial, industrial, and fire prevention purposes. It also provides water treatment and pumping services to the Township of East Brunswick. Its other NJ subsidiaries offer water and wastewater services to residents in Southampton Township. Its Delaware subsidiaries provide water services to retail customers in New Castle, Kent, and Sussex counties. In November, the company announced the acquisition of the assets of Twin Lakes Water Services, Inc., which serves approximately 330 people in Shohola, Pennsylvania. Has 269 employees. Chairman: J. Richard Tompkins. Address: 1500 Ronson Rd, P.O. BOX 1500, Iselin, NJ 08830. Tel.: 732-634-1500. Internet: http://www.middlesexwater.com.

W.T.

January 22, 2010

TOTAL SHAREHOLDER RETURN

Dividends plus appreciation as of 12/31/2009

3 Mos.	6 Mos.	1 Yr.	3 Yrs.	5 Yrs.
18.15%	24.79%	7.19%	5.45%	11.94%

SJW CORP. NYSE--SJW

RECENT PRICE 22.54 | TRAILING P/E RATIO 28.2 | RELATIVE P/E RATIO 1.57 | DIV'D YLD 2.9% | VALUE LINE

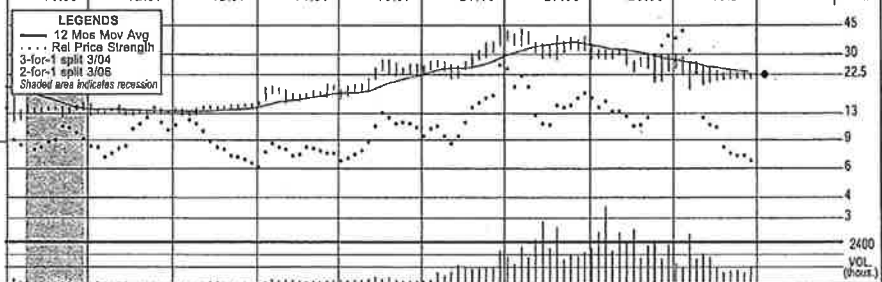
	2001	2002	2003	2004	2005	2006	2007	2008	2009	
High	17.83	15.07	14.95	19.64	27.80	45.33	43.00	35.11	30.44	
Low	11.58	12.67	12.57	14.60	16.07	21.16	27.65	20.05	18.22	

RANKS

PERFORMANCE	3	Average
Technical	3	Average
SAFETY	3	Average
BETA .95		(1.00 = Market)

Financial Strength	B+
Price Stability	70
Price Growth Persistence	75
Earnings Predictability	85

LEGENDS
— 12 Mos Mov Avg
.... Rel Price Strength
3-for-1 split 3/04
2-for-1 split 3/06
Shaded area indicates recession



© VALUE LINE PUBLISHING, INC.	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010/2011
SALES PER SH	7.45	7.97	8.20	9.14	9.86	10.35	11.25	12.12	--	
"CASH FLOW" PER SH	1.49	1.55	1.75	1.89	2.21	2.38	2.30	2.44	--	
EARNINGS PER SH	.77	.78	.91	.87	1.12	1.19	1.04	1.08	.80 A,B	1.17 C/NA
DIV'DS DECL'D PER SH	.43	.46	.49	.51	.53	.57	.61	.65	--	
CAP'L SPENDING PER SH	2.63	2.06	3.41	2.31	2.63	3.87	6.62	3.79	--	
BOOK VALUE PER SH	8.17	8.40	9.11	10.11	10.72	12.48	12.90	13.99	--	
COMMON SHS OUTST'G (MILL)	18.27	18.27	18.27	18.27	18.27	18.28	18.36	18.18	--	
AVG ANN'L P/E RATIO	18.5	17.3	15.4	19.6	19.7	23.5	33.4	26.2	28.2	19.3/NA
RELATIVE P/E RATIO	.95	.94	.88	1.04	1.04	1.27	1.77	1.58	--	
AVG ANN'L DIV'D YIELD	3.0%	3.4%	3.5%	3.0%	2.4%	2.0%	1.7%	2.3%	--	
SALES ($MILL)	136.1	145.7	149.7	166.9	180.1	189.2	206.6	220.3	--	*Bold figures are consensus earnings estimates and, using the recent prices, P/E ratios.*
OPERATING MARGIN	64.4%	63.7%	56.0%	56.4%	55.9%	57.0%	41.8%	42.4%	--	
DEPRECIATION ($MILL)	13.2	14.0	15.2	18.5	19.7	21.3	22.9	24.0	--	
NET PROFIT ($MILL)	14.0	14.2	16.7	16.0	20.7	22.2	19.3	20.2	--	
INCOME TAX RATE	34.5%	40.4%	36.2%	42.1%	41.6%	40.8%	39.4%	39.5%	--	
NET PROFIT MARGIN	10.3%	9.8%	11.2%	9.6%	11.5%	11.7%	9.4%	9.2%	--	
WORKING CAP'L ($MILL)	d3.8	d4.9	12.0	13.0	10.8	22.2	d1.4	d11.3	--	
LONG-TERM DEBT ($MILL)	110.0	110.0	139.6	143.6	145.3	163.6	216.3	216.6	--	
SHR. EQUITY ($MILL)	149.4	153.5	166.4	184.7	195.9	228.2	236.9	254.3	--	
RETURN ON TOTAL CAP'L	6.7%	6.9%	6.9%	6.5%	7.6%	7.0%	5.7%	5.8%	--	
RETURN ON SHR. EQUITY	9.4%	9.3%	10.0%	8.7%	10.6%	9.7%	8.2%	8.0%	--	
RETAINED TO COM EQ	4.1%	3.8%	4.7%	3.6%	5.6%	5.2%	3.5%	3.3%	--	
ALL DIV'DS TO NET PROF	56%	59%	53%	58%	47%	48%	57%	59%	--	

[A]No. of analysts changing earn. est. in last 9 days: 0 up, 0 down, consensus 5-year earnings growth not available. [B]Based upon 2 analysts' estimates. [C]Based upon 2 analysts' estimates.

ANNUAL RATES

of change (per share)	5 Yrs.	1 Yr.
Sales	7.5%	7.5%
"Cash Flow"	8.5%	6.0%
Earnings	6.0%	4.0%
Dividends	5.5%	6.5%
Book Value	9.0%	8.5%

Fiscal Year	QUARTERLY SALES ($mill.) 1Q	2Q	3Q	4Q	Full Year
12/31/07	39.0	55.1	64.9	47.6	206.6
12/31/08	41.3	60.0	69.5	49.5	220.3
12/31/09	40.0	58.2	69.3		
12/31/10					

Fiscal Year	EARNINGS PER SHARE 1Q	2Q	3Q	4Q	Full Year
12/31/06	.14	.35	.48	.22	1.19
12/31/07	.12	.29	.43	.20	1.04
12/31/08	.15	.34	.44	.15	1.08
12/31/09	d.01	.23	.43	*.13*	
12/31/10	*.09*	*.32*			

Cal-endar	QUARTERLY DIVIDENDS PAID 1Q	2Q	3Q	4Q	Full Year
2007	.151	.151	.151	.151	.60
2008	.161	.161	.161	.161	.64
2009	.165	.165	.165	.165	.66
2010					

INSTITUTIONAL DECISIONS

	1Q'09	2Q'09	3Q'09
to Buy	45	43	34
to Sell	32	40	29
Hld's(000)	8505	8694	8607

ASSETS ($mill.)	2007	2008	9/30/09
Cash Assets	2.4	3.4	1.9
Receivables	23.0	24.5	34.6
Inventory	.8	.9	.9
Other	5.4	3.2	2.5
Current Assets	31.6	32.0	39.9
Property, Plant & Equip, at cost	904.3	958.7	--
Accum Depreciation	258.8	274.5	--
Net Property	645.5	684.2	719.5
Other	90.2	134.7	121.9
Total Assets	767.3	850.9	881.3
LIABILITIES ($mill.)			
Accts Payable	9.3	5.8	9.1
Debt Due	5.6	19.1	5.1
Other	18.1	18.4	23.1
Current Liab	33.0	43.3	37.3

LONG-TERM DEBT AND EQUITY as of 9/30/09

Total Debt $251.1 mill. Due In 5 Yrs. NA
LT Debt $246.0 mill.
Including Cap. Leases NA
(49% of Cap'l)

Leases, Uncapitalized Annual rentals NA

Pension Liability $42.3 mill. in '08 vs. $23.4 mill. in '07

Pfd Stock None Pfd Div'd Paid None

Common Stock 18,498,897 shares
(51% of Cap'l)

INDUSTRY: Water Utility

BUSINESS: SJW Corporation, through its subsidiaries, engages in the production, purchase, storage, purification, distribution, and retail sale of water. The company offers nonregulated water-related services, including water system operations, cash remittances, and maintenance contract services. SJW also owns undeveloped land; a 70% limited partnership interest in 444 West Santa Clara Street, L.P.; and operates commercial buildings in Arizona, California, Connecticut, Florida, Tennessee, and Texas. As of December 31, 2008, SJW provided water service to approximately 226,000 connections that served a population of approximately one million people in the San Jose area. It also provides water service to approximately 8,700 connections that serve approximately 36,000 residents in a service area in the region between San Antonio and Austin, Texas. Has 379 employees. Chairman: Charles J. Toeniskoetter. Inc.: CA. Address: 110 W. Taylor Street, San Jose, CA 95110. Tel.: (408) 279-7800. Internet: http://www.sjwater.com.

W.T.

January 22, 2010

TOTAL SHAREHOLDER RETURN
Dividends plus appreciation as of 12/31/2009

3 Mos.	6 Mos.	1 Yr.	3 Yrs.	5 Yrs.
-0.50%	0.94%	-22.41%	-37.54%	39.31%

YORK WATER CO NDQ--YORW

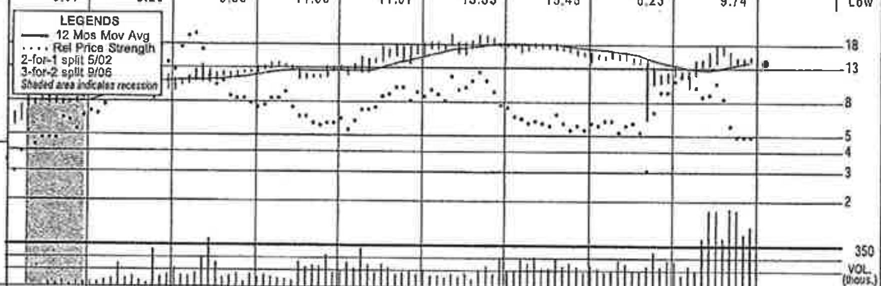
RECENT PRICE	TRAILING P/E RATIO	RELATIVE P/E RATIO	DIV'D YLD	VALUE LINE
14.08	21.3	1.19	3.6%	

	2001	2002	2003	2004	2005	2006	2007	2008	2009	
High	10.22	13.45	13.49	14.03	17.87	20.99	18.55	16.50	17.95	High
Low	5.67	8.20	9.33	11.00	11.67	15.33	15.45	6.23	9.74	Low

RANKS

PERFORMANCE	3	Average
Technical	3	Average
SAFETY	3	Average
BETA .65	(1.00 = Market)	

Financial Strength	B+
Price Stability	85
Price Growth Persistence	55
Earnings Predictability	95



© VALUE LINE PUBLISHING, INC.	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010/2011
REVENUES PER SH	2.05	2.05	2.17	2.18	2.58	2.56	2.79	2.89	--	
"CASH FLOW" PER SH	.59	.57	.65	.65	.79	.77	.86	.88	--	
EARNINGS PER SH	.43	.40	.47	.49	.56	.58	.57	.57	.66 A,B	.66 C/NA
DIV'D DECL'D PER SH	.34	.35	.37	.39	.42	.45	.48	.49	--	
CAP'L SPENDING PER SH	.75	.66	1.07	2.50	1.69	1.85	1.69	2.17	--	
BOOK VALUE PER SH	3.79	3.90	4.06	4.65	4.85	5.84	5.97	6.14	--	
COMMON SHS OUTST'G (MILL)	9.46	9.55	9.63	10.33	10.40	11.20	11.27	11.37	--	
AVG ANN'L P/E RATIO	17.9	26.9	24.5	25.7	26.3	31.2	30.3	24.6	21.3	21.3/NA
RELATIVE P/E RATIO	.92	1.47	1.40	1.36	1.39	1.68	1.61	1.48	--	
AVG ANN'L DIV'D YIELD	4.3%	3.3%	3.2%	3.1%	2.9%	2.5%	2.8%	3.5%	--	
REVENUES ($MILL)	19.4	19.6	20.9	22.5	26.8	28.7	31.4	32.8	--	*Bold figures are consensus earnings estimates and, using the recent prices, P/E ratios.*
NET PROFIT ($MILL)	4.0	3.8	4.4	4.8	5.8	6.1	6.4	6.4	--	
INCOME TAX RATE	35.8%	34.9%	34.8%	36.7%	36.7%	34.4%	36.5%	36.1%	--	
AFUDC % TO NET PROFIT	2.2%	3.7%	--	--	--	7.2%	3.6%	10.1%	--	
LONG-TERM DEBT RATIO	47.7%	46.7%	43.4%	42.5%	44.1%	48.3%	46.5%	54.5%	--	
COMMON EQUITY RATIO	52.3%	53.3%	56.6%	57.5%	55.9%	51.7%	53.5%	45.5%	--	
TOTAL CAPITAL ($MILL)	68.6	69.9	69.0	83.6	90.3	126.5	125.7	153.4	--	
NET PLANT ($MILL)	102.3	106.7	116.5	140.0	155.3	174.4	191.6	211.4	--	
RETURN ON TOTAL CAP'L	7.9%	7.4%	8.5%	7.6%	8.4%	6.2%	6.7%	5.7%	--	
RETURN ON SHR. EQUITY	11.2%	10.2%	11.4%	10.0%	11.6%	9.3%	9.5%	9.2%	--	
RETURN ON COM EQUITY	11.2%	10.2%	11.4%	10.0%	11.6%	9.3%	9.5%	9.2%	--	
RETAINED TO COM EQ	2.5%	1.3%	2.6%	2.1%	3.0%	2.2%	1.7%	1.4%	--	
ALL DIV'DS TO NET PROF	78%	88%	77%	79%	74%	77%	82%	85%	--	

A No. of analysts changing earn. est. in last 9 days: 0 up, 0 down, consensus 5-year earnings growth 7.5% per year. B Based upon 4 analysts' estimates. C Based upon 4 analysts' estimates.

ANNUAL RATES

of change (per share)	5 Yrs.	1 Yr.
Revenues	5.5%	3.5%
"Cash Flow"	7.0%	3.5%
Earnings	6.0%	--
Dividends	6.0%	3.0%
Book Value	9.0%	3.0%

Fiscal Year	QUARTERLY SALES ($mill.) 1Q	2Q	3Q	4Q	Full Year
12/31/07	7.4	7.9	8.3	7.8	31.4
12/31/08	7.5	7.8	8.6	8.9	32.8
12/31/09	8.8	9.2	9.8		
12/31/10					

Fiscal Year	EARNINGS PER SHARE 1Q	2Q	3Q	4Q	Full Year
12/31/06	.12	.14	.17	.15	.58
12/31/07	.12	.15	.15	.15	.57
12/31/08	.11	.13	.15	.18	.57
12/31/09	.13	.17	.18	*.17*	
12/31/10	*.14*	*.17*			

Calendar	QUARTERLY DIVIDENDS PAID 1Q	2Q	3Q	4Q	Full Year
2007	.118	.118	.118	.118	.47
2008	.121	.121	.121	.121	.48
2009	.126	.126	.126	.126	.50
2010	.128				

INSTITUTIONAL DECISIONS

	1Q'09	2Q'09	3Q'09
to Buy	17	30	35
to Sell	10	12	16
Hld's(000)	1958	2477	2941

ASSETS ($mill.)	2007	2008	9/30/09
Cash Assets	.0	.0	.1
Receivables	5.2	5.9	5.7
Inventory (Avg cost)	.8	.7	.8
Other	.8	.7	1.1
Current Assets	6.8	7.3	7.7
Property, Plant & Equip, at cost	223.1	246.0	--
Accum Depreciation	31.5	34.6	--
Net Property	191.6	211.4	220.9
Other	12.6	21.7	21.3
Total Assets	211.0	240.4	249.9

LIABILITIES ($mill.)			
Accts Payable	3.2	2.0	2.6
Debt Due	15.0	8.7	9.3
Other	3.2	3.5	4.3
Current Liab	21.4	14.2	16.2

LONG-TERM DEBT AND EQUITY as of 9/30/09

Total Debt $83.3 mill. Due In 5 Yrs. NA
LT Debt $74.0 mill.
Including Cap. Leases NA
(47% of Cap'l)

Leases, Uncapitalized Annual rentals NA

Pension Liability $9.8 mill. in '08 vs. $4.0 mill. in '07

Pfd Stock None Pfd Div'd Paid None

Common Stock 12,411,181 shares
(53% of Cap'l)

INDUSTRY: Water Utility

BUSINESS: The York Water Company engages in the impounding, purification, and distribution of water in York County and Adams County, Pennsylvania. The company supplies water for residential, commercial, industrial, and other customers. It has two reservoirs, Lake Williams, which is 700 feet long and 58 feet high, and creates a reservoir covering approximately 165 acres containing about 870 million gallons of water; and Lake Redman, which is 1,000 feet long and 52 feet high and creates a reservoir covering approximately 290 acres containing about 1.3 billion gallons of water. It also has a 15-mile pipeline from the Susquehanna River to Lake Redman that provides access to an additional supply of water. As of December 31, 2008, the company served approximately 176,000 residential, commercial, industrial, and other customers. In November, the company completed the Beaver Creek Village water system acquisition. Has 110 employees. C.E.O. & President: Jeffrey R. Hines. Inc.: PA. Address: 130 East Market Street, York, PA 17401. Tel.: (717) 845-3601. Internet: http://www.yorkwater.com.

W.T.

January 22, 2010

TOTAL SHAREHOLDER RETURN
Dividends plus appreciation as of 12/31/2009

3 Mos.	6 Mos.	1 Yr.	3 Yrs.	5 Yrs.
5.61%	-3.72%	24.34%	-10.37%	30.61%

AGL RESOURCES NYSE-AGL

RECENT PRICE 37.00 | P/E RATIO 12.5 (Trailing: 12.8 Median: 14.0) | RELATIVE P/E RATIO 0.74 | DIV'D YLD 4.8% | VALUE LINE

TIMELINESS 3 Raised 2/12/10
SAFETY 2 New 7/27/90
TECHNICAL 3 Lowered 2/12/10
BETA .75 (1.00 = Market)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
High:	23.4	23.2	24.5	25.0	29.3	33.7	39.3	40.1	44.7	39.1	37.5	37.2	
Low:	15.6	15.5	19.0	17.3	21.9	26.5	32.0	34.4	35.2	24.0	24.0	34.3	

2013-15 PROJECTIONS

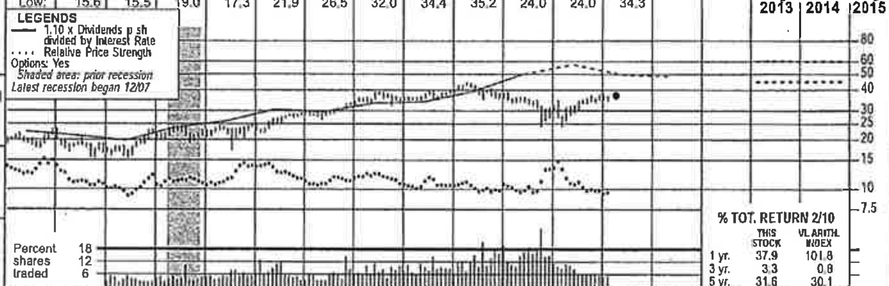
	Price	Gain	Ann'l Total Return
High	60	(+60%)	13%
Low	45	(+20%)	5%

Insider Decisions

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

Institutional Decisions

	1Q2009	2Q2009	3Q2009
to Buy	110	124	112
to Sell	107	96	99
Hld's(000)	45714	45662	45741



Target Price Range 2013 | 2014 | 2015

% TOT. RETURN 2/10

	THIS STOCK	VL ARITH. INDEX
1 yr.	37.9	101.8
3 yr.	3.3	0.8
5 yr.	31.6	30.1

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	© VALUE LINE PUB., INC.	13-15
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	29.90	34.35	36.10	Revenues per sh A	40.35
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	5.95	5.05	5.30	"Cash Flow" per sh	5.75
1.17	1.33	1.37	1.37	1.41	.91	1.29	1.50	1.82	2.08	2.28	2.48	2.72	2.72	2.71	2.89	2.95	3.10	Earnings per sh A B	3.40
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	1.80	Div'ds Decl'd per sh C ■	1.92
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	6.15	4.45	4.50	Cap'l Spending per sh	5.30
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	22.95	24.10	25.45	Book Value per sh D	29.95
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	77.50	78.50	79.00	Common Shs Outst'g E	80.50
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	11.1	Bold figures are		Avg Ann'l P/E Ratio	15.0
.99	.84	.86	.85	.72	1.22	.88	.75	.68	.71	.69	.76	.73	.78	.74	.73	Value Line		Relative P/E Ratio	1.00
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%	5.4%	estimates		Avg Ann'l Div'd Yield	3.8%
						607.4	1049.3	868.9	983.7	1832.0	2718.0	2621.0	2494.0	2800.0	2317.0	2695	2850	Revenues ($mill) A	3250
						71.1	82.3	103.0	132.4	153.0	193.0	212.0	211.0	207.6	260	230	245	Net Profit ($mill)	275
						34.3%	40.7%	36.0%	35.9%	37.0%	37.7%	37.8%	37.6%	40.5%	30.0%	35.0%	35.0%	Income Tax Rate	38.0%
						11.7%	7.8%	11.9%	13.5%	8.4%	7.1%	8.1%	8.5%	7.4%	11.2%	8.6%	8.6%	Net Profit Margin	8.4%
						45.9%	61.3%	58.3%	50.3%	54.0%	51.9%	50.2%	50.2%	50.3%	53.0%	54.0%	52.0%	Long-Term Debt Ratio	51.0%
						48.3%	38.7%	41.7%	49.7%	46.0%	48.1%	49.8%	49.8%	49.7%	48.0%	50.0%	48.0%	Common Equity Ratio	49.0%
						1286.2	1736.3	1704.3	1901.4	3008.0	3114.0	3231.0	3335.0	3327.0	3750	3800	4200	Total Capital ($mill)	4900
						1637.5	2058.9	2194.2	2352.4	3178.0	3271.0	3436.0	3566.0	3816.0	2900	3080	3250	Net Plant ($mill)	3900
						7.4%	6.5%	8.1%	8.9%	6.3%	7.9%	8.0%	7.7%	7.4%	7.0%	7.0%	6.5%	Return on Total Cap'l	6.5%
						10.2%	12.3%	14.5%	14.0%	11.0%	12.9%	13.2%	12.7%	12.6%	14.5%	12.0%	12.0%	Return on Shr. Equity	11.0%
						11.5%	12.3%	14.5%	14.0%	11.0%	12.9%	13.2%	12.7%	12.6%	14.5%	12.0%	12.0%	Return on Com Equity	11.0%
						3.2%	4.2%	7.0%	6.6%	5.6%	6.2%	6.3%	5.3%	5.1%	7.0%	5.0%	5.5%	Retained to Com Eq	5.0%
						72%	65%	52%	53%	49%	52%	52%	58%	60%	50%	58%	57%	All Div'ds to Net Prof	55%

CAPITAL STRUCTURE as of 12/31/09
Total Debt $2576.0 mill. Due In 5 Yrs $543.0 mill.
LT Debt $1974.0 mill. LT Interest $90.0 mill.
(Total interest coverage: 4.5x)

Leases, Uncapitalized Annual rentals $28.0 mill.
Pension Assets-12/09 $303.0 mill.
Oblig. $463.0 mill.

Pfd Stock None

Common Stock 77,543,821 shs.
as of 1/29/10
MARKET CAP: $2.9 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2007	2008	12/31/09
Cash Assets	21.0	16.0	26.0
Other	1790.0	2026.0	1974.0
Current Assets	1811.0	2042.0	2000.0
Accts Payable	172.0	202.0	237.0
Debt Due	580.0	866.0	602.0
Other	893.0	915.0	933.0
Current Liab.	1645.0	1983.0	1772.0
Fix. Chg. Cov.	391%	416%	472%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '06-'08 to '13-'15
Revenues	4.0%	15.5%	2.5%
"Cash Flow"	6.0%	6.5%	3.0%
Earnings	7.0%	8.5%	3.5%
Dividends	4.0%	8.0%	2.5%
Book Value	7.0%	10.0%	5.0%

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2007	973	467	369	685	2494
2008	1012	444	539	805	2800
2009	995	377	307	638	2317
2010	1020	450	475	750	2695
2011	1075	475	500	800	2850

Cal-endar	EARNINGS PER SHARE B Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2007	1.29	.40	.17	.86	2.72
2008	1.16	.30	.28	.97	2.71
2009	1.55	.26	.16	.92	2.89
2010	1.50	.30	.25	.90	2.95
2011	1.41	.36	.33	1.00	3.10

Cal-endar	QUARTERLY DIVIDENDS PAID C ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
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	.43	1.72
2010	.44				

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 2.3 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.

AGL Resources reported better-than-anticipated fourth quarter profit. Earnings of $0.92 a share topped our estimate of $0.78 a share. A good performance in the company's unregulated businesses offset disappointing results in AGL's gas utility operations. For the full year, the utility posted a solid bottom-line showing ($2.89 a share), thanks to strong results in the March period. However, a year-over-year decline in customers weighed on the top line ($2.3 billion).

The company provided positive guidance for 2010. Management expects share net to come in between $2.95 and $3.05 this year. We have increased our estimate by a nickel, matching the low end of this range. We look for results across AGL's operations to perform mostly in line with 2009's showing except at the company's wholesale services business, which should post improved results. Moreover, AGL will probably focus on new projects to offset the decline in customers due to the weak residential real estate market. Furthermore, the company recently added two new pipeline projects that began commercial operation recently, which should provide a boost to results over the coming months.

The board raised AGL's quarterly payout by a penny (or 2.3%) to $0.44 a share. Accordingly, income-oriented accounts may want to take note of these shares. Indeed, this stock's yield (4.8%) is above average for a natural gas utility.

Long-term prospects appear to be promising. The company reached a legal settlement, which will allow it to expand its presence on Jefferson Island. Moreover, a few rate cases should come into play in the near term, which if approved, would bolster results over the long haul. Additionally, AGL recently launched a new energy services business that targets large-scale clients. This should contribute to profits in the years ahead.

These shares are neutrally ranked for Timeliness. But this stock may be of interest to patient investors. Indeed, the issue is attractive on a risk-adjusted basis (Safety: 2) for total-return potential over the 3- to 5-year pull, based on our projections of steady earnings growth and modest dividend increases.

Richard Gallagher *March 12, 2010*

(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 April. (C) Dividends historically paid early March, June, Sept., and Dec. ■ Div'd reinvest. plan available. (D) Includes intangibles. In 2009: $418 million, $5.44/share.
(E) In millions.

Company's Financial Strength	B++
Stock's Price Stability	100
Price Growth Persistence	75
Earnings Predictability	95

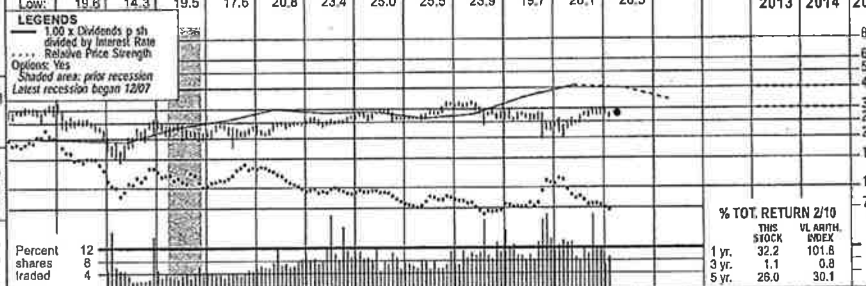
ATMOS ENERGY CORP. NYSE-ATO

RECENT PRICE 28.05 | P/E RATIO 12.5 (Trailing: 13.1 Median: 15.0) | RELATIVE P/E RATIO 0.74 | DIV'D YLD 4.8% | VALUE LINE

High:	33.0	26.3	25.8	24.5	25.5	27.6	30.0	33.1	33.5	29.3	30.3	30.0		Target Price Range
Low:	19.6	14.3	19.5	17.6	20.8	23.4	25.0	25.5	23.9	19.7	20.1	26.3		2013 | 2014 | 2015

TIMELINESS 3 Lowered 9/11/09
SAFETY 2 Raised 12/16/05
TECHNICAL 3 Raised 10/16/09
BETA .65 (1.00 = Market)

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



2013-15 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	40	(+45%)	13%
Low	30	(+5%)	6%

Insider Decisions

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

Institutional Decisions

	1Q2009	2Q2009	3Q2009
to Buy	106	107	79
to Sell	122	115	124
Hld's(000)	53874	54285	55892

Percent shares traded 12 8 4

% TOT. RETURN 2/10

	THIS STOCK	VL ARITH. INDEX
1 yr.	32.2	101.8
3 yr.	1.1	0.8
5 yr.	26.0	30.1

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.

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	© VALUE LINE PUB., INC.	13-15
26.61	35.36	22.82	54.39	46.50	61.75	75.27	66.03	79.52	53.69	48.95	50.00	Revenues per sh A	68.20
3.01	3.03	3.39	3.23	2.91	3.90	4.26	4.14	4.19	4.29	4.70	4.90	"Cash Flow" per sh	5.40
1.03	1.47	1.45	1.71	1.58	1.72	2.00	1.94	2.00	1.97	2.25	2.35	Earnings per sh A B	2.70
1.14	1.16	1.18	1.20	1.22	1.24	1.26	1.28	1.30	1.32	1.34	1.36	Div'ds Decl'd per sh C■	1.45
2.36	2.77	3.17	3.10	3.03	4.14	5.20	4.39	5.20	5.51	5.60	5.70	Cap'l Spending per sh	6.70
12.28	14.31	13.75	16.66	18.05	19.90	20.16	22.01	22.60	23.52	24.50	24.95	Book Value per sh	27.80
31.95	40.79	41.68	51.48	62.80	80.54	81.74	89.33	90.81	92.55	94.00	96.00	Common Shs Outst'g D	110.00
18.9	15.6	15.2	13.4	15.9	16.1	13.5	15.9	13.6	12.5	Bold figures are Value Line estimates		Avg Ann'l P/E Ratio	13.0
1.23	.80	.83	.76	.84	.86	.73	.84	.82	.82			Relative P/E Ratio	.85
5.9%	5.1%	5.4%	5.2%	4.9%	4.5%	4.7%	4.2%	4.8%	5.3%			Avg Ann'l Div'd Yield	4.1%
850.2	1442.3	950.8	2799.9	2920.0	4973.3	6152.4	5898.4	7221.3	4969.1	4600	4800	Revenues ($mill) A	7500
32.2	56.1	59.7	79.5	86.2	135.8	162.3	170.5	180.3	179.7	210	225	Net Profit ($mill)	300
36.1%	37.3%	37.1%	37.1%	37.4%	37.7%	37.6%	35.8%	38.4%	34.4%	38.5%	38.5%	Income Tax Rate	40.5%
3.8%	3.9%	6.3%	2.8%	3.0%	2.7%	2.6%	2.9%	2.5%	3.6%	4.6%	4.7%	Net Profit Margin	4.0%
48.1%	54.3%	53.9%	50.2%	43.2%	57.7%	57.0%	52.0%	50.8%	49.9%	49.0%	49.0%	Long-Term Debt Ratio	49.0%
51.9%	45.7%	46.1%	49.8%	56.8%	42.3%	43.0%	48.0%	49.2%	50.1%	51.0%	51.0%	Common Equity Ratio	51.0%
755.7	1276.3	1243.7	1721.4	1994.8	3785.5	3828.5	4092.1	4172.3	4346.2	4520	4700	Total Capital ($mill)	6000
982.3	1335.4	1300.3	1516.0	1722.5	3374.4	3629.2	3836.8	4136.9	4439.1	4745	5050	Net Plant ($mill)	6100
6.5%	5.9%	6.8%	6.2%	5.8%	5.3%	6.1%	5.9%	5.9%	5.9%	6.0%	6.5%	Return on Total Cap'l	6.5%
8.2%	9.6%	10.4%	9.3%	7.6%	8.5%	9.8%	8.7%	8.8%	8.3%	9.0%	9.5%	Return on Shr. Equity	10.0%
8.2%	9.6%	10.4%	9.3%	7.6%	8.5%	9.8%	8.7%	8.8%	8.3%	9.0%	9.5%	Return on Com Equity	10.0%
NMF	2.1%	1.9%	2.8%	1.7%	2.3%	3.6%	3.0%	3.1%	2.7%	3.5%	4.0%	Retained to Com Eq	4.5%
112%	79%	82%	70%	77%	73%	63%	65%	65%	68%	60%	58%	All Div'ds to Net Prof	53%

CAPITAL STRUCTURE as of 12/31/09
Total Debt $2349.3 mill. Due in 5 Yrs $685.0 mill.
LT Debt $2159.5 mill. LT Interest $130.0 mill.
(LT interest earned: 2.8x; total interest coverage: 2.8x)
Leases, Uncapitalized Annual rentals $17.8 mill.
Pfd Stock None
Pension Assets-9/09 $301.1 mill. Oblig. $380.0 mill.
Common Stock 93,054,189 shs. as of 1/28/10
MARKET CAP: $2.6 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2008	2009	12/31/09
Cash Assets	46.7	111.2	174.8
Other	1238.4	717.7	1111.8
Current Assets	1285.1	828.9	1286.6
Accts Payable	395.4	207.4	578.8
Debt Due	351.3	72.7	189.8
Other	460.4	457.3	413.8
Current Liab.	1207.1	737.4	1182.4
Fix. Chg. Cov.	450%	416%	435%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '07-'09 to '13-'15
Revenues	9.5%	10.0%	.5%
"Cash Flow"	3.5%	6.0%	4.5%
Earnings	4.0%	4.5%	5.5%
Dividends	2.0%	1.5%	2.0%
Book Value	7.0%	7.0%	3.5%

Fiscal Year Ends	QUARTERLY REVENUES ($ mill.) A Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2007	1602.6	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	650.6	4969.1
2010	1292.9	1650	900	757.1	4600
2011	1065	1835	1045	855	4800

Fiscal Year Ends	EARNINGS PER SHARE A B E Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
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.17	1.97
2010	1.00	1.32	.05	d.12	2.25
2011	.97	1.36	.03	d.01	2.35

Cal-endar	QUARTERLY DIVIDENDS PAID C■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
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	.335	1.33
2010	.335				

BUSINESS: Atmos Energy Corporation is engaged primarily in the distribution and sale of natural gas to over three 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 2009 gas volumes: 282 MMcf. Breakdown: 57%, residential; 32%, commercial; 7%, industrial; and 4% other. 2009 depreciation rate 3.6%. Has around 4,700 employees. Officers and directors own approximately 1.6% of common stock (12/09 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 got off to a strong start in fiscal 2010, which ends on September 30th, as first-quarter earnings per share were around 20% higher than the year-earlier tally. For one thing, the natural gas marketing segment enjoyed a substantial increase in unrealized margins, brought about, to a certain extent, by a narrowing of spreads between current cash prices and forward natural gas prices. Furthermore, results for the natural gas utility were aided partially by higher rates in the Mid-Tex, Louisiana, and West Texas service areas. That unit also benefited from a 7% rise in throughput, as colder temperatures boosted consumption. Finally, the regulated transmission and storage operation experienced a drop in operating expenses because of a decreased level of pipeline maintenance activity.

We expect the momentum to continue during the remaining three quarters. As a result, the bottom line stands to advance about 14%, to $2.25 a share, in fiscal 2010. Assuming further expansion in operating margins, share net may reach $2.35 next year. That would be a much slower rate of growth due to the difficult comparison.

Steady, though unexciting, earnings gains appear to be in store for the company in the next three to five years. The utility is one of the nation's largest natural gas-only distributors, now serving over three million customers across 12 states. Moreover, the unregulated segments (contributing between 15% and 35% to net income annually on a historical basis) possess healthy prospects. Lastly, management may return to its successful strategy of purchasing less-efficient utilities and shoring up their profitability through expense-reduction initiatives, rate relief, and aggressive marketing. (Future acquisitions are excluded from our figures, however.) In Atmos' current configuration, annual share-net growth could be in the mid-single-digit range over the 2013-2015 period.

On a risk-adjusted basis, total return potential is appealing. Meanwhile, these good-quality shares are ranked to perform in line with the broader market in the year ahead.

Frederick L. Harris, III *March 12, 2010*

(A) Fiscal year ends Sept. 30th. (B) Diluted shrs. Excl. nonrec. items: '00, 12¢; '03, d17¢; '06, d18¢; '07, d2¢; '09, 12¢. Next egs. rpt. due early May. (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	90

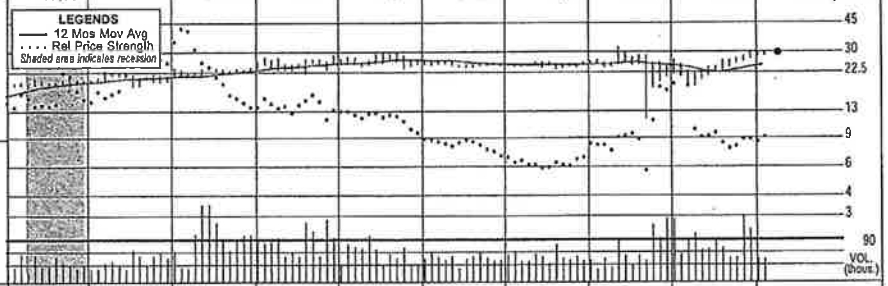
DELTA NAT. GAS NDQ-DGAS

RECENT PRICE 29.55 | TRAILING P/E RATIO 19.2 | RELATIVE P/E RATIO 1.06 | DIV'D YLD 4.4% | VALUE LINE

RANKS											
High	20.99	23.08	24.10	28.75	30.00	26.82	26.08	32.19	29.80	30.00	High
Low	17.69	18.50	21.00	22.02	23.60	24.11	23.50	11.70	18.48	27.96	Low

PERFORMANCE 3 Average
Technical 3 Average
SAFETY 2 Above Average
BETA .65 (1.00 = Market)

Financial Strength B+
Price Stability 95
Price Growth Persistence 50
Earnings Predictability 70



© VALUE LINE PUBLISHING, INC.	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010/2011
SALES PER SH	28.36	22.11	21.59	24.74	26.06	36.01	29.96	34.18	31.84	
"CASH FLOW" PER SH	3.08	3.16	2.65	2.65	2.86	2.94	3.19	3.49	2.89	
EARNINGS PER SH	1.47	1.45	1.49	1.20	1.55	1.55	1.62	2.08	1.58	1.65[A,B]/NA
DIV'DS DECL'D PER SH	1.14	1.16	1.18	1.18	1.18	1.20	1.22	1.24	1.28	
CAP'L SPENDING PER SH	2.83	3.72	2.90	2.80	1.65	2.39	2.47	1.69	2.54	
BOOK VALUE PER SH	13.12	13.51	14.49	15.26	15.73	16.16	16.61	17.48	17.78	
COMMON SHS OUTST'G (MILL)	2.50	2.53	3.17	3.20	3.23	3.26	3.28	3.30	3.32	
AVG ANN'L P/E RATIO	12.3	14.1	14.5	20.1	16.8	16.9	15.5	12.3	15.0	17.9/NA
RELATIVE P/E RATIO	.63	.77	.83	1.06	.89	.91	.82	.74	.99	
AVG ANN'L DIV'D YIELD	6.3%	5.7%	5.5%	4.9%	4.5%	4.6%	4.9%	4.9%	5.4%	
SALES ($MILL)	70.8	55.9	68.4	79.2	84.2	117.3	98.2	112.7	105.6	*Bold figures are consensus earnings estimates and, using the recent prices, P/E ratios.*
OPERATING MARGIN	23.2%	29.3%	24.7%	21.2%	21.9%	16.2%	20.4%	19.6%	18.0%	
DEPRECIATION ($MILL)	4.0	4.4	4.5	4.7	4.3	4.6	5.2	4.7	4.4	
NET PROFIT ($MILL)	3.6	3.6	3.9	3.8	5.0	5.0	5.3	6.8	5.2	
INCOME TAX RATE	38.0%	38.2%	38.0%	38.1%	38.3%	36.6%	37.3%	37.8%	36.6%	
NET PROFIT MARGIN	5.1%	6.5%	5.8%	4.8%	5.9%	4.3%	5.4%	6.1%	4.9%	
WORKING CAP'L ($MILL)	d12.6	d15.3	d.2	d.7	.9	4.6	5.1	8.2	5.5	
LONG-TERM DEBT ($MILL)	49.3	48.6	53.4	53.0	52.7	58.8	58.6	58.3	57.6	
SHR. EQUITY ($MILL)	32.8	34.2	45.9	48.8	50.8	52.6	54.4	57.6	59.0	
RETURN ON TOTAL CAP'L	6.7%	6.6%	5.9%	5.6%	6.7%	6.7%	6.3%	7.6%	6.2%	
RETURN ON SHR. EQUITY	11.1%	10.6%	8.6%	7.9%	9.8%	9.5%	9.7%	11.9%	8.8%	
RETAINED TO COM EQ	2.5%	2.1%	1.6%	.2%	2.4%	2.1%	2.4%	4.8%	1.7%	
ALL DIV'DS TO NET PROF	78%	80%	81%	98%	76%	77%	75%	60%	81%	

[A]No. of analysis changing earn. est. In last 27 days: 0 up, 0 down, consensus 5-year earnings growth 3.0% per year. [B]Based upon one analyst's estimate.

ANNUAL RATES

of change (per share)	5 Yrs.	1 Yr.
Sales	7.0%	-7.0%
"Cash Flow"	2.5%	-17.0%
Earnings	5.0%	-24.0%
Dividends	1.0%	3.0%
Book Value	3.5%	2.0%

Fiscal Year	QUARTERLY SALES ($mill.) 1Q	2Q	3Q	4Q	Full Year
06/30/07	13.1	28.4	41.0	15.7	98.2
06/30/08	12.4	29.3	48.4	22.6	112.7
06/30/09	18.1	33.9	43.2	10.4	105.6
06/30/10	8.1	21.1			

Fiscal Year	EARNINGS PER SHARE 1Q	2Q	3Q	4Q	Full Year
06/30/06	d.18	.89	1.03	d.19	1.55
06/30/07	d.16	.73	1.12	d.07	1.62
06/30/08	d.25	.75	1.65	d.07	2.08
06/30/09	.08	.37	1.29	d.16	1.58
06/30/10	d.17	.58			

Cal-endar	QUARTERLY DIVIDENDS PAID 1Q	2Q	3Q	4Q	Full Year
2007	.305	.305	.31	.31	1.23
2008	.31	.31	.32	.32	1.26
2009	.32	.32	.325	.325	1.29
2010	.325				

INSTITUTIONAL DECISIONS

	1Q'09	2Q'09	3Q'09
to Buy	8	9	11
to Sell	9	9	6
Hld's(000)	615	568	588

ASSETS ($mill.)	2008	2009	12/31/09
Cash Assets	.3	.1	.1
Receivables	11.4	4.1	12.7
Inventory (Avg cost)	15.0	10.4	11.5
Other	7.3	4.8	6.9
Current Assets	34.0	19.4	31.2
Property, Plant & Equip, at cost	192.1	199.3	--
Accum Depreciation	67.7	70.7	--
Net Property	124.4	128.6	129.2
Other	12.4	14.5	14.6
Total Assets	170.8	162.5	175.0
LIABILITIES ($mill.)			
Accts Payable	12.2	4.7	6.3
Debt Due	8.0	4.9	13.2
Other	5.6	4.3	4.4
Current Liab	25.8	13.9	23.9

LONG-TERM DEBT AND EQUITY as of 12/31/09

Total Debt $70.5 mill. Due In 5 Yrs. NA
LT Debt $57.3 mill.
Including Cap. Leases NA
(49% of Cap'l)

Leases, Uncapitalized Annual rentals NA

Pension Liability $.4 mill. in '09 vs. None in '08

Pfd Stock None Pfd Div'd Paid None

Common Stock 3,327,573 shares
(51% of Cap'l)

INDUSTRY: Natural Gas (Div.)

BUSINESS: Delta Natural Gas Company, Inc. sells natural gas to approximately 37,000 retail customers on its distribution system in central and southeastern Kentucky. Its Regulated segment sells natural gas to its retail customers, primarily in 23 rural counties. This segment also transports gas to industrial customers on its system who purchase gas in the open market, as well as transports gas on behalf of local producers not on its distribution system. The company's Non Regulated segment purchases natural gas on the open market and from Kentucky producers, and resells this gas to industrial customers on its distribution system and to others not on its system. This segment also produces natural gas that is sold to Delgasco for resale. As of June 30, the company owned approximately 2,500 miles of natural gas gathering, transmission, distribution, storage, and service lines, as well as interests in oil and gas leases on 10,300 acres in Bell, Knox, and Whitley counties. Has 155 employees. Chairman, C.E.O. & President: Glenn R. Jennings. Inc.: KY. Address: 3617 Lexington Road, Winchester, KY 40391. Tel.: (859) 744-6171. Internet: http://www.deltagas.com.

L.Y.

March 12, 2010

TOTAL SHAREHOLDER RETURN

Dividends plus appreciation as of 2/28/2010

3 Mos.	6 Mos.	1 Yr.	3 Yrs.	5 Yrs.
11.58%	16.40%	44.31%	37.61%	40.85%

Schedule PMA-23

Schedule PMA-10
Page 11 of 15
(UPDATED)

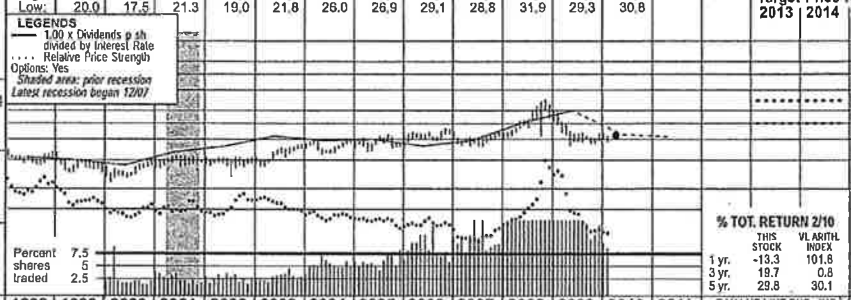
LACLEDE GROUP NYSE-LG

RECENT PRICE **33.81** | P/E RATIO **13.8** (Trailing: 13.4; Median: 14.0) | RELATIVE P/E RATIO **0.81** | DIV'D YLD **4.7%** | VALUE LINE

TIMELINESS **5** Lowered 2/5/10
SAFETY **2** Raised 6/20/03
TECHNICAL **1** Raised 2/5/10
BETA .60 (1.00 = Market)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
High:	27.0	24.8	25.5	25.0	30.0	32.5	34.3	37.5	36.0	55.8	48.3	34.8
Low:	20.0	17.5	21.3	19.0	21.8	26.0	26.9	29.1	28.8	31.9	29.3	30.8

Target Price Range 2013 | 2014 | 2015



2013-15 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	55	(+65%)	16%
Low	40	(+20%)	8%

Insider Decisions

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

Institutional Decisions

	1Q2009	2Q2009	3Q2009
to Buy	70	71	60
to Sell	81	81	67
Hld's(000)	11043	10569	10660

% TOT. RETURN 2/10

	THIS STOCK	VL ARITH. INDEX
1 yr.	-13.3	101.8
3 yr.	19.7	0.8
5 yr.	29.8	30.1

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	© VALUE LINE PUB., INC.	13-15
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	85.49	*72.90*	*76.10*	Revenues per sh	*96.15*
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	3.87	4.22	4.56	*4.15*	*4.35*	"Cash Flow" per sh	*5.20*
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	2.92	*2.45*	*2.60*	Earnings per sh A B	*3.00*
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*	*1.61*	Div'ds Decl'd per sh C ■	*1.75*
2.50	2.63	2.35	2.44	2.68	2.58	2.77	2.51	2.80	2.67	2.45	2.84	2.97	2.72	2.57	2.36	*2.45*	*2.55*	Cap'l Spending per sh	*3.15*
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	23.32	*23.90*	*24.30*	Book Value per sh D	*27.70*
15.67	17.42	17.56	17.58	17.63	18.88	18.88	18.88	18.96	19.11	20.98	21.17	21.36	21.65	21.99	22.17	*22.50*	*23.00*	Common Shs Outst'g E	*26.00*
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	13.4	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*16.0*
1.08	1.04	.75	.72	.81	.90	.97	.74	1.09	.78	.83	.86	.73	.75	.86	.88			Relative P/E Ratio	*1.05*
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%	3.9%			Avg Ann'l Div'd Yield	*3.7%*

CAPITAL STRUCTURE as of 12/31/09
Total Debt $509.5 mill. Due In 5 Yrs $180.0 mill.
LT Debt $364.3 mill. LT Interest $20.0 mill.
(Total interest coverage: 4.3x)

Leases, Uncapitalized Annual rentals $.9 mill.
Pension Assets-9/09 $223.7 mill. Oblig. $378.0 mill.

Pfd Stock None
Common Stock 22,262,436 shs. as of 1/28/10

MARKET CAP: $750 million (Small Cap)

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011		13-15
566.1	1002.1	755.2	1050.3	1250.3	1597.0	1997.6	2021.6	2209.0	1895.2	*1640*	*1750*	Revenues ($mill) A	*2500*
26.0	30.5	22.4	34.6	36.1	40.1	50.5	49.8	57.6	64.3	*55.0*	*60.0*	Net Profit ($mill)	*80.0*
35.2%	32.7%	35.4%	35.0%	34.8%	34.1%	32.5%	33.4%	31.3%	33.6%	*35.0%*	*35.0%*	Income Tax Rate	*35.0%*
4.6%	3.0%	3.0%	3.3%	2.9%	2.5%	2.5%	2.5%	2.6%	3.4%	*3.4%*	*3.4%*	Net Profit Margin	*3.2%*
45.2%	49.5%	47.5%	50.4%	51.6%	48.1%	49.5%	45.3%	44.4%	42.9%	*42.5%*	*43.0%*	Long-Term Debt Ratio	*47.0%*
54.5%	50.2%	52.3%	49.4%	48.3%	51.8%	50.4%	54.6%	55.5%	57.1%	*57.5%*	*57.0%*	Common Equity Ratio	*53.0%*
519.2	574.1	546.6	605.0	737.4	707.9	798.9	784.5	876.1	906.3	*935*	*980*	Total Capital ($mill)	*1360*
575.4	602.5	594.4	621.2	646.9	679.5	763.8	793.8	823.2	855.9	*870*	*915*	Net Plant ($mill)	*1230*
6.7%	6.9%	6.0%	7.4%	6.6%	7.6%	8.4%	8.5%	8.1%	8.7%	*7.0%*	*7.5%*	Return on Total Cap'l	*7.5%*
9.1%	10.5%	7.8%	11.5%	10.1%	10.9%	12.5%	11.6%	11.8%	12.4%	*10.0%*	*10.5%*	Return on Shr. Equity	*11.0%*
9.1%	10.5%	7.8%	11.6%	10.1%	10.9%	12.5%	11.6%	11.8%	12.4%	*10.0%*	*10.5%*	Return on Com Equity	*11.0%*
.2%	1.8%	NMF	3.1%	2.7%	3.1%	5.1%	4.3%	5.2%	5.9%	*3.5%*	*4.0%*	Retained to Com Eq	*5.0%*
98%	83%	113%	74%	73%	72%	59%	63%	56%	53%	*64%*	*62%*	All Div'ds to Net Prof	*57%*

CURRENT POSITION ($MILL.)	2008	2009	12/31/09
Cash Assets	14.9	74.6	80.0
Other	547.0	294.2	396.7
Current Assets	561.9	368.8	476.7
Accts Payable	159.6	72.8	135.1
Debt Due	216.1	129.8	145.2
Other	103.5	96.5	127.5
Current Liab.	479.2	299.1	407.8
Fix. Chg. Cov.	377%	420%	400%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '07-'09 to '13-'15
Revenues	12.0%	12.5%	*.5%*
"Cash Flow"	3.5%	8.5%	*3.5%*
Earnings	5.0%	10.5%	*2.5%*
Dividends	1.0%	2.0%	*2.5%*
Book Value	4.0%	6.5%	*4.0%*

Fiscal Year Ends	QUARTERLY REVENUES ($ mill.)A Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
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	251.9	1895.2
2010	491.2	*550*	*350*	*248.8*	*1640*
2011	*460*	*625*	*410*	*255*	*1750*

Fiscal Year Ends	EARNINGS PER SHARE A B F Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2007	.89	.97	.43	.03	2.31
2008	.99	1.39	.41	d.14	2.64
2009	1.42	1.40	.31	d.22	2.92
2010	1.03	*1.30*	*.35*	*d.23*	*2.45*
2011	*1.00*	*1.41*	*.41*	*d.22*	*2.60*

Cal-endar	QUARTERLY DIVIDENDS PAID C ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
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	.385	1.54
2010	.395				

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 2009: 1.07 mill. Revenue mix for regulated operations: residential, 65%; commercial and industrial, 24%; transportation, 1%; other, 10%. Has around 1,762 employees. Officers and directors own approximately 8% of common shares (1/10 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.

Laclede Group's share net plummeted 27% in the opening quarter of fiscal 2010, compared to the same period a year earlier. (Years end September 30th.) The shortfall occurred primarily because Laclede Energy Resources suffered from a substantial reduction in margins on sales of natural gas, reflecting narrower price differentials. On a positive note, results for Laclede Gas were boosted nicely by the sale of propane in the wholesale market, and, to a lesser degree, higher net investment income.

We expect more of the same during the remainder of the year. Consequently, the company's bottom line for fiscal 2010, as a whole, stands to drop about 16%, to $2.45 a share. But assuming a better performance from Laclede Energy Resources, share net may advance 6%, to $2.60, the following year. Note that our figures do not include a pending rate case (discussed below).

A rate case was filed with the Missouri Public Service Commission. Laclede seeks a net revenue increase of $52.6 million annually, to help offset the rising costs of providing natural gas service to its customers. Of course, there is no guarantee that the measure will be approved, or that the full amount requested will be received.

The company stands to register unspectacular results in the coming three to five years. The customer base for Laclede Gas will probably continue to expand at a moderate rate, since the service territory is in a mature phase. Laclede Energy Resources offers promising growth opportunities, but has contributed just a small portion to total profits on a historical basis. A major acquisition could help to offset this, but it seems that management has no such plans in the works, at this juncture.

The good-quality stock offers a generous amount of current dividend income, which is well covered by the company's earnings. But our projections indicate that additional increases in the distribution will be moderate. That is largely because of the utility's unexciting expansion prospects. Meanwhile, the shares of Laclede are ranked 5 (Lowest) for Timeliness.

Frederick L. Harris, III *March 12, 2010*

(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 April. (C) Dividends historically paid in early January, April, July, and October. ■ Dividend reinvestment plan available. (D) Incl. deferred charges. In '09: $468.3 mill., $22.03/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

N.W. NAT'L GAS NYSE-NWN

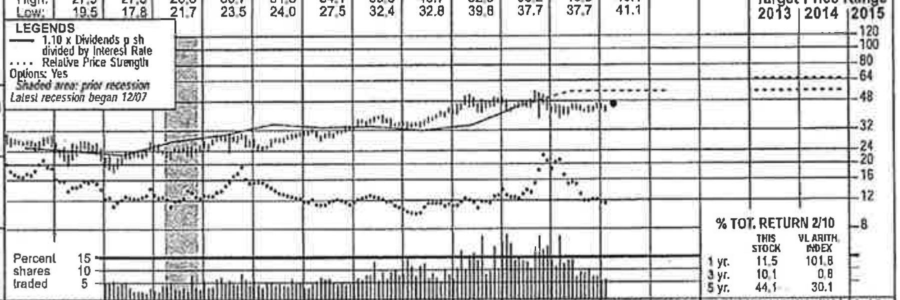
RECENT PRICE 45.85 | P/E RATIO 17.0 (Trailing: 16.6 / Median: 16.0) | RELATIVE P/E RATIO 1.00 | DIV'D YLD 3.7% | VALUE LINE

TIMELINESS 4 Lowered 3/12/10
SAFETY 1 Raised 3/18/05
TECHNICAL 2 Raised 2/12/10
BETA .60 (1.00 = Market)

High:	27.9	27.5	26.8	30.7	31.3	34.1	39.6	43.7	52.8	55.2	46.5	46.1
Low:	19.5	17.8	21.7	23.5	24.0	27.5	32.4	32.8	39.8	37.7	37.7	41.1

Target Price Range 2013 | 2014 | 2015

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



2013-15 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	65	(+40%)	12%
Low	55	(+20%)	8%

Insider Decisions

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

Institutional Decisions

	1Q2009	2Q2009	3Q2009
to Buy	67	78	64
to Sell	93	69	82
Hld's(000)	15126	15387	15134

% TOT. RETURN 2/10

	THIS STOCK	VL ARITH. INDEX
1 yr.	11.5	101.8
3 yr.	10.1	0.8
5 yr.	44.1	30.1

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	© VALUE LINE PUB., INC.	13-15
18.30	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	38.18	35.85	35.55	Revenues per sh	48.20
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	5.12	5.25	5.45	"Cash Flow" per sh	6.40
1.63	1.61	1.97	1.76	1.02	1.70	1.79	1.88	1.62	1.76	1.86	2.11	2.35	2.76	2.57	2.77	2.80	2.95	Earnings per sh A	3.50
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	1.78	Div'ds Decl'd per sh B ■	2.16
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	5.09	7.70	6.20	Cap'l Spending per sh	4.50
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	24.88	26.10	27.45	Book Value per sh	31.75
20.13	22.24	22.56	22.86	24.85	25.09	25.23	25.23	25.59	25.94	27.55	27.58	27.24	26.41	26.50	26.53	26.60	26.60	Common Shs Outst'g C	28.00
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	15.0	Bold figures are		Avg Ann'l P/E Ratio	17.0
.85	.86	.73	.83	1.39	.83	.81	.66	.94	.90	.88	.91	.86	.89	1.09	1.02	Value Line		Relative P/E Ratio	1.15
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%	3.7%	estimates		Avg Ann'l Div'd Yield	3.6%

CAPITAL STRUCTURE as of 12/31/09
Total Debt $738.7 mill. Due in 5 Yrs $145 mill.
LT Debt $601.7 mill. LT Interest $34.0 mill.

(Total interest coverage: 3.9x)

Pension Assets-12/08 $201 mill.
Oblig. $308 mill.
Pfd Stock None

Common Stock 26,533,028 shares
as of 2/23/10
MARKET CAP $1.2 billion (Mid Cap)

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011		13-15
532.1	650.3	641.4	611.3	707.6	910.5	1013.2	1033.2	1037.9	1012.7	950	1025	Revenues ($mill)	1350
47.8	50.2	43.8	46.0	50.6	58.1	65.2	74.5	68.5	73.5	74.5	80.0	Net Profit ($mill)	98.0
35.9%	35.4%	34.9%	33.7%	34.4%	36.0%	36.3%	37.2%	36.9%	38.3%	37.0%	37.0%	Income Tax Rate	37.0%
9.0%	7.7%	6.8%	7.5%	7.1%	6.4%	6.4%	7.2%	6.6%	7.0%	7.9%	7.8%	Net Profit Margin	7.3%
45.1%	43.0%	47.6%	49.7%	46.0%	47.0%	46.3%	46.3%	44.9%	47.7%	50%	51%	Long-Term Debt Ratio	50%
50.9%	53.2%	51.5%	50.3%	54.0%	53.0%	53.7%	53.7%	55.1%	52.3%	50%	49%	Common Equity Ratio	50%
887.8	880.5	937.3	1006.6	1052.5	1108.4	1116.5	1106.8	1140.4	1261.8	1400	1500	Total Capital ($mill)	1800
934.0	965.0	995.6	1205.9	1318.4	1373.4	1425.1	1495.9	1549.1	1670.1	1800	1900	Net Plant ($mill)	2200
6.7%	6.9%	5.9%	5.7%	5.9%	6.5%	7.1%	8.5%	7.7%	7.0%	8.0%	8.0%	Return on Total Cap'l	8.0%
9.6%	10.0%	8.9%	9.1%	8.9%	9.9%	10.9%	12.5%	10.9%	11.1%	11.0%	11.0%	Return on Shr. Equity	9.0%
10.0%	10.2%	8.5%	9.0%	8.9%	9.9%	10.9%	12.5%	10.9%	11.1%	11.0%	11.0%	Return on Com Equity	9.0%
3.1%	3.5%	1.9%	2.6%	2.7%	3.7%	4.5%	6.0%	4.5%	4.7%	4.5%	4.5%	Retained to Com Eq	3.5%
70%	67%	79%	72%	69%	63%	59%	52%	59%	58%	60%	60%	All Div'ds to Net Prof	62%

CURRENT POSITION ($MILL.)	2007	2008	2009
Cash Assets	6.1	6.9	8.4
Other	268.8	474.1	319.8
Current Assets	274.9	481.0	328.2
Accts Payable	119.7	94.4	123.7
Debt Due	146.1	248.0	137.0
Other	122.1	208.9	131.9
Current Liab.	389.9	551.3	392.6
Fx. Chg. Cov.	408%	393%	395%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '06-'08 to '13-'15
Revenues	9.0%	9.0%	2.5%
"Cash Flow"	3.5%	6.5%	3.5%
Earnings	5.0%	8.0%	5.0%
Dividends	2.0%	3.0%	6.0%
Book Value	3.5%	3.5%	5.0%

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2007	394.1	183.2	124.2	331.7	1033.2
2008	387.7	191.3	109.7	349.2	1037.9
2009	437.3	149.3	116.8	309.3	1012.7
2010	375	135	110	330	950
2011	400	145	125	355	1025

Calendar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
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.25	1.18	2.77
2010	1.70	.11	d.29	1.28	2.80
2011	1.77	.11	d.27	1.34	2.95

Calendar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
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	.415	1.60
2010	.415				

BUSINESS: Northwest Natural Gas Co. distributes natural gas to 90 communities, 668,000 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, 57%; commercial, 26%; industrial, gas transportation, and other, 17%. Employs 1,061. 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 2009 results reflected some unusual items. The company earned $15 million pretax from its commodity cost-sharing arrangement in Oregon, under which Northwest retains some of the difference between actual and forecast gas costs, with the majority going to the rate payers. That windfall was partially offset by higher pension, healthcare, incentive bonus, and severance costs. Customer growth was just below 1% last year, compared with an average of around 3% annually for many years through 2007, as the recession flattened housing starts. All told, earnings would have been around $2.60-$2.65 a share in 2009, excluding the unusual items.

We anticipate a normal year in 2010. Thanks to much-lower natural gas prices, Northwest is lowering its residential gas prices by around 10% this year. That and the incipient economic recovery should produce better customer growth than in 2009. Operating costs should remain moderate, owing to a roughly 20% headcount reduction since 2005. Pension and bonus expenses should decline, unless the latter rises due to a very good year.

Steady growth is likely next year. We expect the recovery in customer growth and industrial gas use to continue. Polls indicate that gas is favored over electricity for home heating by a three to one margin in Portland, and returning prosperity should increase conversions to gas from other fuels. Costs should remain moderate, as last year's new union contract provides for more workforce flexibility and caps payroll and healthcare costs at 3% annually depending on inflation. Finally, the Gill Ranch gas storage project in California is scheduled to open late this year and ought to contribute to results in 2011.

A new pipeline could boost earnings noticeably by 2013-2015. Northwest owns half of the proposed Palomar pipeline, which would provide Portland a needed second source of gas. If both halves are built, the company's investment would be around $400 million. Though that would entail raising some equity, it would lift earnings beyond our forecast, which excludes the project for now.

These high-quality shares offer good risk adjusted total-return potential.

Sigourney B. Romaine *March 12, 2010*

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

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

(C) In millions, adjusted for split.

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

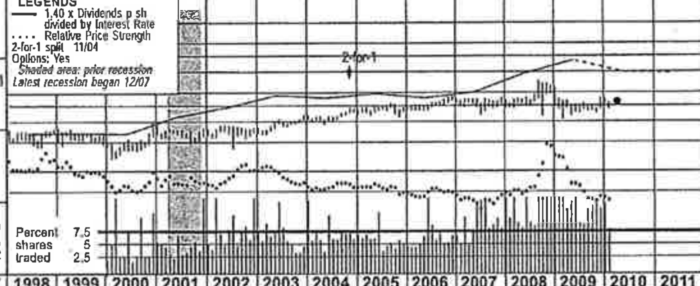
PIEDMONT NAT'L. GAS NYSE-PNY

RECENT PRICE 26.38 | P/E RATIO 16.0 (Trailing: 15.8 / Median: 17.0) | RELATIVE P/E RATIO 0.94 | DIV'D YLD 4.2% | VALUE LINE

High:	18.3	19.7	19.0	19.0	22.0	24.3	25.8	28.4	28.0	35.3	32.0	27.4
Low:	14.3	11.8	14.6	13.7	16.6	19.2	21.3	23.2	22.0	21.7	20.7	23.9

TIMELINESS 3 Raised 6/15/07
SAFETY 2 New 7/27/90
TECHNICAL 2 Raised 2/12/10
BETA .65 (1.00 = Market)

LEGENDS
— 1.40 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
2-for-1 split 11/04
Options: Yes
Shaded area: prior recession
Latest recession began 12/07



Target Price Range 2013 | 2014 | 2015

2013-15 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	40	(+50%)	15%
Low	30	(+15%)	8%

Insider Decisions

	A	M	J	J	A	S	O	N	D
to Buy	0	0	0	0	0	0	0	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

	1Q2009	2Q2009	3Q2009
to Buy	75	78	78
to Sell	123	96	82
Hld's(000)	34611	33567	33498

Percent shares traded 7.5 5 2.5

% TOT. RETURN 2/10

	THIS STOCK	VL ARITH. INDEX
1 yr.	11.7	101.8
3 yr.	15.5	0.8
5 yr.	34.1	30.1

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	© VALUE LINE PUB., INC.	13-15
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	22.36	*23.60*	*24.50*	Revenues per sh A	*27.75*
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	3.01	*2.90*	*2.95*	"Cash Flow" per sh	*3.25*
.68	.73	.84	.93	.98	.93	1.01	1.01	.95	1.11	1.27	1.32	1.28	1.40	1.49	1.67	*1.65*	*1.70*	Earnings per sh AB	*1.95*
.51	.54	.57	.61	.64	.68	.72	.76	.80	.82	.85	.91	.95	.99	1.03	1.07	*1.11*	*1.15*	Div'ds Decl'd per sh C■	*1.27*
1.95	1.72	1.64	1.52	1.48	1.58	1.65	1.29	1.21	1.16	1.85	2.50	2.74	1.85	2.47	1.76	*.65*	*.55*	Cap'l Spending per sh	*1.45*
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	12.67	*12.95*	*13.40*	Book Value per sh D	*14.70*
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	73.27	*72.00*	*71.50*	Common Shs Outst'g E	*69.00*
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	16.7	18.2	15.4	*Bold figures are*		Avg Ann'l P/E Ratio	*18.0*
1.03	.92	.87	.78	.85	1.01	.93	.86	1.01	.95	.88	.95	1.04	.99	1.10	1.02	*Value Line*		Relative P/E Ratio	*1.50*
4.8%	5.4%	4.9%	4.8%	4.0%	4.1%	5.0%	4.5%	4.6%	4.4%	4.1%	3.8%	3.9%	3.8%	3.8%	4.1%	*estimates*		Avg Ann'l Div'd Yield	*3.3%*
						830.4	1107.9	832.0	1220.8	1529.7	1761.1	1924.6	1711.3	2089.1	1638.1	*1700*	*1750*	Revenues ($mill) A	*1915*
						64.0	65.5	62.2	74.4	95.2	101.3	97.2	104.4	110.0	122.8	*119*	*120*	Net Profit ($mill)	*135*
						34.7%	34.6%	33.1%	34.8%	35.1%	33.7%	34.2%	33.0%	36.3%	28.5%	*35.0%*	*35.0%*	Income Tax Rate	*35.0%*
						7.7%	5.9%	7.5%	6.1%	6.2%	5.8%	5.0%	6.1%	5.3%	7.5%	*7.0%*	*7.0%*	Net Profit Margin	*7.0%*
						46.1%	47.6%	43.9%	42.2%	43.6%	41.4%	48.3%	48.4%	47.2%	44.1%	*44.5%*	*45.5%*	Long-Term Debt Ratio	*47.0%*
						53.9%	52.4%	56.1%	57.8%	56.4%	58.6%	51.7%	51.6%	52.8%	55.9%	*55.5%*	*54.5%*	Common Equity Ratio	*53.0%*
						978.4	1069.4	1051.6	1090.2	1514.9	1509.2	1707.9	1703.3	1681.5	1660.5	*1680*	*1760*	Total Capital ($mill)	*1915*
						1072.0	1114.7	1158.5	1812.3	1849.8	1939.1	2075.3	2141.5	2240.8	2304.4	*2350*	*2375*	Net Plant ($mill)	*2450*
						8.3%	7.9%	7.8%	8.6%	7.8%	8.2%	7.2%	7.8%	8.2%	9.1%	*8.5%*	*8.5%*	Return on Total Cap'l	*8.5%*
						12.1%	11.7%	10.6%	11.8%	11.1%	11.5%	11.0%	11.9%	12.4%	13.2%	*13.0%*	*12.5%*	Return on Shr. Equity	*13.0%*
						12.1%	11.7%	10.6%	11.8%	11.1%	11.5%	11.0%	11.9%	12.4%	13.2%	*13.0%*	*12.5%*	Return on Com Equity	*13.0%*
						3.5%	3.0%	1.7%	3.1%	3.7%	3.6%	2.8%	3.5%	3.9%	4.8%	*4.0%*	*4.0%*	Retained to Com Eq	*5.0%*
						71%	75%	83%	74%	66%	68%	74%	70%	69%	64%	*67%*	*67%*	All Div'ds to Net Prof	*65%*

CAPITAL STRUCTURE as of 10/31/09
Total Debt $1098.5 mill. Due in 5 Yrs $220.0 mill.
LT Debt $732.5 mill. LT Interest $55.1 mill.
(LT interest earned: 4.1x; total interest coverage: 3.5x)

Pension Assets-10/09 $184.3 mill. Oblig. $195.3 mill.

Pfd Stock None

Common Stock 73,295,803 shs. as of 12/11/09
MARKET CAP: $1.9 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2007	2008	10/31/09
Cash Assets	7.5	7.0	7.6
Other	427.8	593.8	505.6
Current Assets	435.3	600.8	513.2
Accts Payable	143.6	132.3	115.4
Debt Due	195.0	436.5	366.0
Other	85.9	112.7	118.8
Current Liab.	424.5	681.5	600.2
Fix. Chg. Cov.	309%	341%	316%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '07-'09 to '13-'15
Revenues	7.5%	8.0%	2.0%
"Cash Flow"	5.5%	6.5%	2.5%
Earnings	5.0%	6.5%	4.0%
Dividends	5.0%	4.5%	3.5%
Book Value	5.0%	4.5%	3.0%

Fiscal Year Ends	QUARTERLY REVENUES ($ mill.) A Jan.31	Apr.30	Jul.31	Oct.31	Full Fiscal Year
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	180.3	222.8	1638.1
2010	*795*	*470*	*195*	*240*	*1700*
2011	*805*	*480*	*210*	*255*	*1750*

Fiscal Year Ends	EARNINGS PER SHARE A B Jan.31	Apr.30	Jul.31	Oct.31	Full Fiscal Year
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.06	1.67
2010	*1.15*	*.75*	*d.10*	*d.15*	*1.65*
2011	*1.16*	*.77*	*d.09*	*d.14*	*1.70*

Cal-endar	QUARTERLY DIVIDENDS PAID C■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	.23	.24	.24	.24	.95
2007	.24	.25	.25	.25	.99
2008	.25	.26	.26	.26	1.03
2009	.26	.27	.27	.27	1.07
2010	.27				

BUSINESS: Piedmont Natural Gas Company is primarily a regulated natural gas distributor, serving over 952,469 customers in North Carolina, South Carolina, and Tennessee. 2009 revenue mix: residential (48%), commercial (28%), industrial (8%), other (16%). Principal suppliers: Transco and Tennessee Pipeline. Gas costs: 65.7% of revenues. '09 deprec. rate: 3.4%. Estimated plant age: 8.4 years. Non-regulated operations: sale of gas-powered heating equipment; natural gas brokering; propane sales. Has about 1,821 employees. Officers & directors own about 1.3% of common stock (1/10 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 likely posted a modest earnings advance for the first quarter of fiscal 2010 (ended January 31st). *The company was expected to issue financial results shortly after this report went to press.* Top line volumes probably advanced in the low single-digit range, thanks to additional customer accounts, and a firming up in natural gas pricing. Meantime, system throughput ought to have advanced a couple of percentage points as a result of colder-than-normal weather patterns. Margins likely continued to benefit from last year's rate-case increases in North Carolina and lower operations and maintenance expenses. On balance, profits probably rose approximately 5% over that time frame. However,

We trimmed $0.20 off our 2010 share-net estimate. PNY has proposed rate reductions for customers in North and South Carolina, due to the declining cost of wholesale gas prices. The proposal would lower residential billing rates in each state by roughly 5%. If it is passed, the new rates will have gone into effect on March 1st. Meantime, diminished contributions from the Southstar divestiture are also factored into our reduced estimates.

The company sold half of its Southstar Energy holdings. PNY received $57.5 million ($0.42 a share) from AGL Resources for a 15% stake in Southstar. That deal closed during the January interim and should provide a nice boost to cash. The downside is that earnings contributions from those holdings were starting to pick up, but due to the diminished stake, will now fall by roughly 50%.

We have introduced our 2011 revenue and earnings estimates of $1.75 billion and $1.70 a share, respectively. Continued growth in customer accounts, and the benefits from existing joint ventures should all contribute to the anticipated rebound in the top and bottom lines.

These neutrally ranked shares may appeal to income-oriented accounts. The equity offers a decent dividend yield, when compared to other utilities covered in the *Value Line Investment Survey.* Meantime, solid dividend-growth prospects, an Above-Average Safety rank (2), and a top mark for Price Stability (100) are all pluses.

Bryan J. Fong *March 12, 2010*

(A) Fiscal year ends October 31st.
(B) Diluted earnings. Excl. extraordinary item: '00, 8¢. Excl. nonrecurring charge: '97, 2¢. Next earnings report due early May. 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 2009: $31.6 million, 43¢/share.
(E) In millions, adjusted for stock split.

Company's Financial Strength	B++
Stock's Price Stability	100
Price Growth Persistence	60
Earnings Predictability	95

Schedule PMA-23

Schedule PMA-10
Page 14 of 15
(UPDATED)

SOUTHWEST GAS NYSE-SWX

RECENT PRICE 29.56 | P/E RATIO 14.6 (Trailing: 14.9 Median: 19.0) | RELATIVE P/E RATIO 0.86 | DIV'D YLD 3.4% | VALUE LINE

TIMELINESS 3 Raised 5/23/08
SAFETY 3 Lowered 1/4/91
TECHNICAL 2 Raised 2/26/10
BETA .75 (1.00 = Market)

2013-15 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	50	(+70%)	16%
Low	30	(Nil)	4%

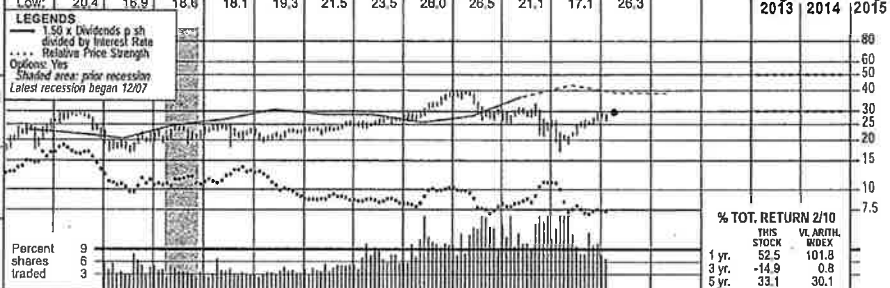
Insider Decisions

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

Institutional Decisions

	1Q2009	2Q2009	3Q2009
to Buy	63	86	73
to Sell	71	71	68
Hld's(000)	32859	32802	33100

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
High:	29.5	23.0	24.7	25.3	23.6	26.2	28.1	39.4	39.9	33.3	29.5	29.6
Low:	20.4	16.9	18.6	18.1	19.3	21.5	23.5	26.0	26.5	21.1	17.1	26.3



Target Price Range 2013 | 2014 | 2015

% TOT. RETURN 2/10

	THIS STOCK	VL ARITH. INDEX
1 yr.	52.5	101.8
3 yr.	-14.9	0.8
5 yr.	33.1	30.1

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	© VALUE LINE PUB., INC.	13-15
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	42.00	42.95	44.70	Revenues per sh	56.00
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	5.76	6.15	6.40	6.80	"Cash Flow" per sh	7.50
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	1.94	2.05	2.20	Earnings per sh A	2.65
.80	.82	.82	.82	.82	.82	.82	.82	.82	.82	.82	.82	.82	.86	.90	.95	1.00	1.05	Div'ds Decl'd per sh B■†	1.20
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	4.60	5.65	6.40	Cap'l Spending per sh	8.50
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	24.46	26.10	27.65	Book Value per sh	30.00
21.28	24.47	26.73	27.39	30.41	30.99	31.71	32.49	33.29	34.23	36.79	39.33	41.77	42.81	44.19	45.09	46.00	47.00	Common Shs Outst'g C	50.00
14.0	NMF	NMF	24.1	13.2	21.1	16.0	19.0	19.9	19.2	14.3	20.6	15.9	17.3	20.3	12.2	Bold figures are		Avg Ann'l P/E Ratio	15.0
.92	NMF	NMF	1.39	.69	1.20	1.04	.97	1.09	1.09	.76	1.10	.86	.92	1.22	.80	Value Line		Relative P/E Ratio	1.00
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%	2.8%	3.2%	4.0%	estimates		Avg Ann'l Div'd Yield	3.0%

CAPITAL STRUCTURE as of 12/31/09
Total Debt $1270.7 mill. Due in 5 Yrs $496.3 mill.
LT Debt $1269.4 mill. LT Interest $85.0 mill.
(Total interest coverage: 2.6x)
Leases, Uncapitalized Annual rentals $5.0 mill.
Pension Assets-12/09 $418.5 mill.
Oblig. $648.6 mill.
Pfd Stock None

Common Stock 45,228,164 shs.
as of 2/17/10

MARKET CAP: $1.3 billion (Mid Cap)

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011		13-15
1034.1	1396.7	1320.9	1231.0	1477.1	1714.3	2024.7	2152.1	2144.7	1893.8	1975	2100	Revenues ($mill)	2800
38.3	37.2	38.6	38.5	58.9	48.1	80.5	83.2	61.0	87.4	95.0	110	Net Profit ($mill)	135
26.2%	34.5%	32.8%	30.5%	34.8%	29.7%	37.3%	36.5%	40.1%	34.0%	35.0%	36.0%	Income Tax Rate	36.0%
3.7%	2.7%	2.9%	3.1%	4.0%	2.8%	4.0%	3.9%	2.8%	4.6%	4.8%	5.2%	Net Profit Margin	4.8%
60.2%	56.2%	62.5%	66.0%	64.2%	63.8%	60.6%	58.1%	55.3%	53.5%	51.0%	50.0%	Long-Term Debt Ratio	48.5%
35.8%	39.6%	34.1%	34.0%	35.8%	36.2%	39.4%	41.9%	44.7%	46.5%	49.0%	50.0%	Common Equity Ratio	51.5%
1489.9	1417.6	1748.3	1851.6	1968.6	2076.0	2287.8	2349.7	2323.3	2372.0	2450	2600	Total Capital ($mill)	2925
1686.1	1825.6	1979.5	2175.7	2336.0	2489.1	2668.1	2845.3	2983.3	3034.5	3125	3200	Net Plant ($mill)	3600
4.6%	5.1%	4.3%	4.2%	5.0%	4.3%	5.5%	5.5%	4.5%	5.5%	6.0%	6.0%	Return on Total Cap'l	6.5%
6.5%	6.0%	5.9%	6.1%	8.3%	6.4%	8.9%	8.5%	5.9%	7.9%	8.0%	8.5%	Return on Shr. Equity	9.0%
7.2%	6.6%	6.5%	6.1%	8.3%	6.4%	8.9%	8.5%	5.9%	7.9%	8.0%	8.5%	Return on Com Equity	9.0%
2.4%	1.9%	1.9%	1.7%	4.3%	2.2%	5.2%	4.8%	2.1%	4.0%	4.0%	4.5%	Retained to Com Eq	5.0%
67%	71%	70%	72%	49%	65%	42%	44%	63%	49%	48%	45%	All Div'ds to Net Prof	44%

CURRENT POSITION ($MILL.)	2007	2008	12/31/09
Cash Assets	32.0	26.4	65.3
Other	470.5	411.7	352.3
Current Assets	502.5	438.1	417.6
Accts Payable	220.7	191.4	158.9
Debt Due	47.1	62.8	1.3
Other	260.1	255.7	314.0
Current Liab.	527.9	509.9	474.2
Fix. Chg. Cov.	229%	224%	251%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '07-'09 to '13-'15
Revenues	6.0%	4.5%	2.0%
"Cash Flow"	4.5%	3.5%	4.0%
Earnings	7.0%	9.0%	8.0%
Dividends	0.5%	1.0%	5.5%
Book Value	4.5%	5.0%	4.5%

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2007	793.7	426.6	371.5	560.3	2152.1
2008	813.6	447.3	374.4	509.4	2144.7
2009	689.9	387.6	317.5	498.8	1893.8
2010	715	415	335	510	1975
2011	740	440	360	560	2100

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
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.18	1.02	1.94
2010	1.20	Nil	d.20	1.05	2.05
2011	1.25	Nil	d.15	1.10	2.20

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	.205	.205	.205	.205	.82
2007	.205	.215	.215	.215	.85
2008	.215	.225	.225	.225	.89
2009	.225	.238	.238	.238	.94
2010	.238	.250			

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. 2009 margin mix: residential and small commercial, 86%; large commercial and industrial, 4%; transportation, 10%. Total throughput: 2.2 billion therms. Sold PriMerit Bank, 7/96. Has 4,450 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 89193. Telephone: 702-876-7237. Internet: www.swgas.com.

Southwest Gas began 2010 on a sound note, despite a challenging operating environment. The bottom line should further benefit from higher rates in the company's service territories (discussed below) and improved cost controls. Modest customer growth should also help. Overall, we anticipate a moderate bottom-line advance at Southwest Gas for the current year. Growth will probably continue from 2011 onward. The company has reduced its capital expenditures, given the current low-growth environment. The southwest was one of the nation's hardest hit regions during the housing crisis. Even so, Southwest Gas continues to upgrade and expand its distribution system, and we expect investment in operations will gradually rebound in the coming years.

The company is benefiting from recent rate relief. Southwest Gas has realized higher rates in Nevada, California, and Arizona. In addition, SWX now has improved rate design in Nevada that allows it to more aggressively encourage conservation by its customers. The company's focus on procuring rate relief and improving rate design is important, as such approved revenue increases help it to cope with growth in operating expenses.

The board has recently approved a dividend increase of roughly 5%. Starting with the June payout, the quarterly dividend is now $0.25 per share. This follows other dividend hikes in recent years. We find this pattern encouraging and expect it to continue.

But the stock is not without risk. Warmer-than-usual temperatures during the winter months can hurt profitability at Southwest Gas. Also, the company will probably incur greater costs as it continues to expand operations. Moreover, insufficient, or lagging, rate relief can also hurt performance.

These shares remain neutrally ranked for year-ahead relative price performance. Looking further out, we anticipate solid bottom-line growth at the company over the pull to 2013-2015. Income-oriented accounts may find this issue's dividend growth prospects attractive. That said, total return potential for the coming years is not particularly compelling, from the present quotation.

Michael Napoli, CFA *March 12, 2010*

(A) Based on avg. shares outstand. thru. '96, then diluted. Excl. nonrec. gains (losses): '97, 16¢; '02, (10¢); '05, (11¢); '06, 7¢. Excl. loss from disc. ops.: '95, 75¢. Totals may not sum due to rounding. Next egs. report due late April/early May. (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	75

WGL HOLDINGS NYSE-WGL

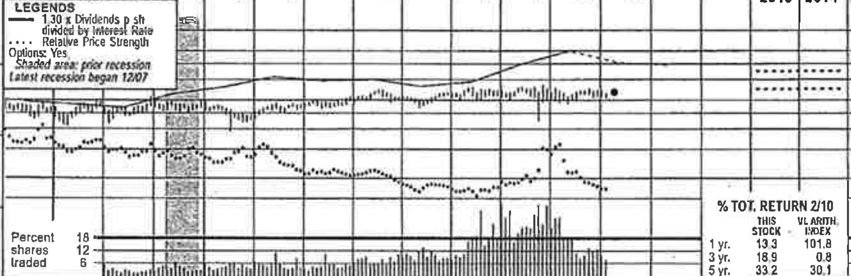
RECENT PRICE 33.53 | P/E RATIO 14.6 (Trailing: 13.7 Median: 15.0) | RELATIVE P/E RATIO 0.86 | DIV'D YLD 4.4% | VALUE LINE

TIMELINESS 4 Lowered 11/27/09
SAFETY 1 Raised 4/2/93
TECHNICAL 2 Raised 2/12/10
BETA .65 (1.00 = Market)

High:	29.4	31.5	30.5	29.5	28.8	31.4	34.8	33.6	35.9	37.1	35.5	34.5
Low:	21.0	21.8	25.3	19.3	23.2	26.7	28.8	27.0	29.8	22.4	28.6	31.0

Target Price Range 2013 | 2014 | 2015

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



2013-15 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	45	(+35%)	11%
Low	35	(+5%)	5%

Insider Decisions

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

Institutional Decisions

	1Q2009	2Q2009	3Q2009
to Buy	97	85	78
to Sell	96	98	74
Hld's(000)	30919	31333	31643

Percent shares traded 18 12 6

% TOT. RETURN 2/10

	THIS STOCK	VL ARITH. INDEX
1 yr.	13.3	101.8
3 yr.	18.9	0.8
5 yr.	33.2	30.1

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	© VALUE LINE PUB., INC.	13-15
21.69	19.30	22.19	24.16	23.74	20.92	22.19	29.80	32.63	42.45	42.93	44.94	53.96	53.51	52.65	53.98	53.00	54.00	Revenues per sh A	57.30
2.43	2.51	2.93	3.02	2.79	2.74	3.20	3.24	2.63	4.00	3.87	3.97	3.84	3.89	4.34	4.44	4.20	4.35	"Cash Flow" per sh	4.70
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	2.09	2.44	2.53	2.30	2.45	Earnings per sh B	2.70
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	1.55	Div'ds Decl'd per sh C ■	1.67
2.84	2.63	2.85	3.20	3.62	3.42	2.67	2.68	3.34	2.65	2.33	2.32	3.27	3.33	2.70	2.77	3.00	2.50	Cap'l Spending per sh	2.50
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	19.83	20.99	21.89	22.65	23.55	Book Value per sh D	26.75
42.19	42.93	43.70	43.70	43.84	46.47	46.47	48.54	48.56	48.63	48.67	48.65	48.89	49.45	49.92	50.14	50.00	50.00	Common Shs Outst'g E	50.00
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	12.6	Bold figures are Value Line estimates		Avg Ann'l P/E Ratio	15.0
.92	.85	.72	.73	.89	.99	.95	.75	1.26	.63	.75	.78	.84	.83	.82	.83			Relative P/E Ratio	1.00
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%	4.6%			Avg Ann'l Div'd Yield	4.1%

CAPITAL STRUCTURE as of 12/31/09
Total Debt $871.9 mill. Due in 5 Yrs $256.7 mill.
LT Debt $612.8 mill. LT Interest $40.4 mill.
(LT interest earned: 6.2x; total interest coverage: 5.7x)
Pension Assets-9/09 $550.0 mill. Oblig. $678.1 mill.
Preferred Stock $28.2 mill. Pfd. Div'd $1.3 mill.

Common Stock 50,302,721 shs. as of 1/29/10

MARKET CAP: $1.7 billion (Mid Cap)

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011		13-15
1031.1	1446.5	1584.8	2064.2	2089.6	2186.3	2637.9	2646.0	2628.2	2706.9	2650	2700	Revenues ($mill) A	2865
84.6	89.9	55.7	112.3	98.0	104.8	96.0	102.9	122.9	128.7	115	125	Net Profit ($mill)	135
36.1%	39.6%	34.0%	36.0%	38.2%	37.4%	39.0%	39.1%	37.1%	39.1%	37.0%	38.0%	Income Tax Rate	38.0%
8.2%	6.2%	3.5%	5.4%	4.7%	4.8%	3.6%	3.9%	4.7%	4.8%	4.5%	4.5%	Net Profit Margin	4.8%
43.1%	41.7%	45.7%	43.6%	40.9%	39.5%	37.8%	37.9%	35.9%	33.3%	36.0%	35.0%	Long-Term Debt Ratio	34.0%
54.8%	56.3%	52.4%	54.3%	57.2%	58.6%	60.4%	60.3%	62.4%	65.0%	62.5%	63.5%	Common Equity Ratio	64.5%
1299.2	1400.8	1462.5	1454.9	1443.6	1478.1	1526.1	1625.4	1679.5	1687.7	1810	1855	Total Capital ($mill)	2075
1460.3	1519.7	1606.8	1874.9	1915.6	1969.7	2067.9	2150.4	2208.3	2289.1	2330	2395	Net Plant ($mill)	2600
7.9%	7.9%	5.3%	9.1%	8.2%	8.5%	7.6%	7.6%	8.5%	8.8%	7.5%	8.0%	Return on Total Cap'l	8.0%
11.4%	11.0%	7.0%	13.7%	11.5%	11.7%	10.1%	10.2%	11.4%	11.4%	10.0%	10.5%	Return on Shr. Equity	10.5%
11.7%	11.2%	7.2%	14.0%	11.7%	12.0%	10.3%	10.4%	11.6%	11.6%	10.5%	11.0%	Return on Com Equity	11.0%
3.7%	3.8%	NMF	6.2%	4.1%	4.6%	3.2%	3.5%	5.0%	5.0%	3.5%	4.0%	Retained to Com Eq	4.0%
69%	67%	112%	56%	65%	62%	69%	66%	57%	57%	65%	63%	All Div'ds to Net Prof	61%

CURRENT POSITION ($MILL.)	2008	2009	12/31/09
Cash Assets	6.2	7.9	13.6
Other	736.1	675.6	852.1
Current Assets	742.3	683.5	865.7
Accts Payable	243.1	213.5	271.3
Debt Due	347.0	266.5	259.2
Other	158.4	154.6	244.5
Current Liab.	748.5	634.6	775.0
Fix. Chg. Cov.	490%	533%	535%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '07-'09 to '13-'15
Revenues	9.0%	6.5%	1.0%
"Cash Flow"	4.0%	4.0%	2.0%
Earnings	4.0%	5.5%	2.5%
Dividends	1.5%	2.0%	3.0%
Book Value	4.0%	5.0%	4.0%

Fiscal Year Ends	QUARTERLY REVENUES ($ mill.) A Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2007	732.9	1119.9	467.5	325.7	2646.0
2008	751.6	1020.0	464.7	391.9	2628.2
2009	826.2	1040.9	427.0	412.8	2706.9
2010	727.4	1050	455	417.6	2650
2011	740	1060	465	435	2700

Fiscal Year Ends	EARNINGS PER SHARE A B Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
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.25	2.53
2010	1.01	1.55	.05	d.31	2.30
2011	1.05	1.58	.07	d.25	2.45

Cal-endar	QUARTERLY DIVIDENDS PAID C ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2006	.333	.338	.338	.338	1.35
2007	.34	.34	.34	.34	1.36
2008	.34	.36	.36	.36	1.42
2009	.36	.37	.37	.37	1.47
2010	.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 (1,064,071 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 7.7% of common stock; Off./dir. less than 1% (1/10 proxy). Chrmn. & CEO: Terry D. McCallister. 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 is off to a so-so start in fiscal 2010 (began October 1st). Revenues declined 12% in the first quarter. This stemmed from diminished volumes at the regulated utility business due to soft pricing and customer conservation. But this was partially offset by rising volumes at the non-utility operations. Meantime, the design-build unit did not make meaningful contributions to the bottom line this past quarter as profitability fell into negative territory. Still, decreases in the cost of gas minimized the bottom-line decline to roughly 2%, which was better than we had expected. Nonetheless,
For the time being, we have left our 2010 earnings estimate unchanged. We look for the top line to register a low single-digit decline this year. This ought to stem from the continued depressed natural gas prices. Still, despite weak revenue volumes, the regulated utility segment has seen a 10,300 increase in active meters over the past 12 months. Meantime, the retail energy marketing segment has been experiencing higher realized margins and more-favorable weather patterns. On balance, we expect share net to contract about 9% this year.
WGL's balance sheet and overall financial position appear to be improving. The company's cash reserves increased approximately 74% so far this year, giving way to a nice financial cushion. Meantime, the debt levels remain at easily serviceable levels.
We have introduced our 2011 top- and bottom-line estimates of $2.7 billion and $2.45 a share, respectively. The regional economy is starting to show initial signs of a recovery. As the company continues on that road, efficiency initiatives, additional customers, and clean energy programs will only help to bolster its profitability and send earnings higher.
These shares are ranked to lag the broader market in the coming year. However, the stock price has remained stable throughout the financial market turmoil and all-but-officially ended recession. This bears out its Above-Average Safety rank and high mark for Price Stability. These features, coupled with an attractive dividend yield, may appeal to conservative income-oriented accounts.

Bryan J. Fong *March 12, 2010*

(A) Fiscal years end Sept. 30th.
(B) Based on diluted shares. Excludes nonrecurring losses: '01, (13¢); '02, (34¢); '07, (4¢); '08, (14¢) discontinued operations: '06, (15¢). Qtly egs. may not sum to total, due to change in shares outstanding. Next earnings report due late April.
(C) Dividends historically paid early February, May, August, and November. ■ Dividend reinvestment plan available.
(D) Includes deferred charges and intangibles. '09: $386.7 million, $7.71/sh.
(E) In millions, adjusted for stock split.

Company's Financial Strength	A
Stock's Price Stability	100
Price Growth Persistence	50
Earnings Predictability	95

Missouri-American Water Company
Indicated Common Equity Cost Rate
Through Use of a Risk Premium Model
Using an Adjusted Total Market Approach

Line No.		Proxy Group of Six AUS Utility Reports Water Companies	Proxy Group of Eight AUS Utility Reports Gas Distribution Companies
1.	Prospective Yield on Aaa Rated Corporate Bonds (1)	5.68 %	5.68 %
2.	Adjustment to Reflect Yield Spread Between Aaa Rated Corporate Bonds and A Rated Public Utility Bonds	0.52 (2)	0.52 (2)
3.	Adjusted Prospective Yield on A Rated Public Utility Bonds	6.20 %	6.20 %
4.	Adjustment to Reflect Bond Rating Difference of Proxy Group	0.00 (3)	0.14 (4)
5.	Adjusted Prospective Bond Yield	6.20	6.34
6.	Equity Risk Premium (5)	4.61	4.19
7.	Risk Premium Derived Common Equity Cost Rate	10.81 %	10.53 %

Notes:
(1) Derived in Note (3) on page 37 of this Schedule.
(2) The average yield spread of A rated public utility bonds over Aaa rated corporate bonds of 0.52% from page 35 of this Schedule.
(3) No adjustment necessary as the average Moody's bond rating of the proxy group of six AUS Utility Reports water companies is A2 as shown on page 34 of this Schedule.
(4) Adjustment to reflect the A3 Moody's Bond Rating of the proxy group of eight AUS Utility Reports natural gas distribution companies as shown on page 34 of this Schedule. The 14 basis point adjustment is derived by taking 1/3 of the spread between Baa and A Public Utility Bonds (1/3 * 0.41% = 0.14%).
(5) From page 5 of this Schedule.

Missouri-American Water Company
Comparison of Bond Ratings, Business Risk and Financial Risk Profiles for
the Proxy Group of Six AUS Utility Reports Water Companies
and the Proxy Group of Eight AUS Utility Reports Natrual Gas Distribution Companies

	Moody's Bond Rating April 2010		Standard & Poor's Bond Rating April 2010							
	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 Six AUS Utility Reports Water Companies										
American States Water Company (3)	A2	6.0	A	6.0	A	6.0	Excellent	1.0	Intermediate	3.0
Aqua America, Inc . (4)	NR	--	AA-	4.0	A+	5.0	Excellent	1.0	Intermediate	3.0
California Water Services Group (5)	NR	--	AA-	4.0	A+	5.0	Excellent	1.0	Intermediate	3.0
Middlesex Water Co	NR	--	A	6.0	A-	7.0	Excellent	1.0	Intermediate	3.0
SJW Corporation (6)	NR	--	NR	--	NR	--	NR	--	NR	--
York Water Company (The)	NR	--	A-	7.0	A-	7.0	Excellent	1.0	Intermediate	3.0
Average	A2	6.0	A+	5.4	A	6.0	Excellent	1.0	Intermediate	3.0
Proxy Group of Eight AUS Utility Reports Gas Distribution Companies										
AGL Resources Inc (7)	A3	7.0	A-	7.0	A-	7.0	Excellent	1.0	Significant	4.0
Atmos Energy Corporation	Baa2	9.0	BBB+	8.0	BBB+	8.0	Excellent	1.0	Significant	4.0
Delta Natural Gas Company, Inc.	NR	--	NR	--	NR	--	NR	--	NR	--
Laclede Group, Inc. (The) (8)	A2	6.0	A	6.0	A	6.0	Excellent	1.0	Intermediate	3.0
Northwest Natural Gas Company	A1	5.0	AA-	4.0	A+	5.0	Excellent	1.0	Intermediate	3.0
Piedmont Natural Gas Company	A3	7.0	A	6.0	A	6.0	Excellent	1.0	Intermediate	3.0
Southwest Gas Corp	Baa3	10.0	BBB	9.0	BBB	9.0	Excellent	1.0	Aggressive	5.0
WGL Holdings, Inc. (9)	A2	6.0	AA-	4.0	AA-	4.0	Excellent	1.0	Intermediate	3.0
Average	A3	7.1	A	6.3	A	6.0	Excellent	1.0	Significant	4.0

Notes:
(1) From page 3 of Schedule PMA-11.
(2) From Standard & Poor's Issuer Ranking: U.S. Investor-Owned Water Utilities, Strongest to Weakest, March 2, 2010 and U.S. Natural Gas Distribution and Integrated Gas Companies, Strongest to Weakest March 2, 2010.
(3) Ratings, business risk and financial risk profiles are those of Golden State Water Company
(4) Ratings, business risk and financial risk profiles are those of Aqua Pennsylvania, Inc.
(5) Ratings, business risk and financial risk profiles are those of California Water Service Company.
(6) Ratings, business risk and financial risk profiles are those of San Jose Water Company.
(7) Ratings, business risk and financial risk profiles are those of Atlanta Gas Light Company.
(8) Ratings, business risk and financial risk are those of Laclede Gas Company.
(9) 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

Moody's
Comparison of Interest Rate Trends
for the Three Months Ending February 2010 (1)

Months	Corporate Bonds	Public Utility Bonds			Spread - Corporate v. Public Utility Bonds			Spread - Public Utility Bonds	
	Aaa Rated	Aa Rated	A Rated	Baa Rated	Aa (Pub. Util.) over Aaa (Corp.)	A (Pub. Util.) over Aaa (Corp.)	Baa (Pub. Util.) over Aaa (Corp.)	A over Aa	Baa over A
December-09	5.26	5.52	5.79	6.26 %					
January-10	5.26	5.55	5.77	6.16					
February-10	5.35	5.69	5.87	6.25					
Average of Last 3 Months	5.29 %	5.59 %	5.81 %	6.22 %	0.30 %	0.52 %	0.93 %	0.22 %	0.41 %

Notes: (1) All yields are distributed yields.

Source of Information: Mergent Bond Record, March 2010, Vol. 77, No. 3.

Missouri-American Water Company
Judgment of Equity Risk Premium for
the Proxy Group of Six AUS Utility Reports Water Companies
and the Proxy Group of Eight AUS Utility Reports Natrual Gas Distribution Companies

Line No.		Proxy Group of Six AUS Utility Reports Water Companies	Proxy Group of Eight AUS Utility Reports Gas Distribution Companies
1.	Calculated equity risk premium based on the total market using the beta approach (1)	5.07 %	4.23 %
2.	Mean equity risk premium based on a study using the holding period returns of public utilities with A rated bonds (2)	4.15	4.15
3.	Average equity risk premium	4.61 %	4.19 %

Notes: (1) From page 37 of this Schedule.
(2) From page 39 of this Schedule.

Missouri-American Water Company
Derivation of Equity Risk Premium Based on the Total Market Approach
Using the Beta for
the Proxy Group of Six AUS Utility Reports Water Companies
and the Proxy Group of Eight AUS Utility Reports Natrual Gas Distribution Companies

Line No.		Proxy Group of Six AUS Utility Reports Water Companies	Proxy Group of Eight AUS Utility Reports Gas Distribution Companies
1.	Arithmetic mean total return rate on the Standard & Poor's 500 Composite Index - 1926-2009 (1)	11.80 %	11.80 %
2.	Arithmetic mean yield on Aaa and Aa Corporate Bonds 1926-2009 (2)	(6.10)	(6.10)
3.	Historical Equity Risk Premium	5.70 %	5.70 %
4.	Forecasted 3-5 year Total Annual Market Return (3)	12.99 %	12.99 %
5.	Prospective Yield an Aaa Rated Corporate Bonds (4)	(5.68)	(5.68)
6.	Forecasted Equity Risk Premium	7.31 %	7.31 %
7.	Conclusion of Equity Risk Premium (5)	6.51 %	6.51 %
8.	Adjusted Value Line Beta (6)	0.78	0.65
9.	Beta Adjusted Equity Risk Premium	5.07 %	4.23 %

Notes:

(1) From Ibbotson SBBI - 2010 Valuation Yearbook - Market Results for Stocks Bonds Bills and Inflation for 1926-2010, Morningstar, Inc., 2010 Chicago, IL.

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

(3) From page 43 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 April 1, 2010 (see page 38 of this Schedule). The estimates are detailed below.

Second Quarter 2010	5.30 %
Third Quarter 2010	5.50
Fourth Quarter 2010	5.60
First Quarter 2011	5.70
Second Quarter 2011	5.90
Third Quarter 2011	6.10
Average	5.68 %

(5) Average of the Historical Equity Risk Premium of 5.70% from Line No. 3 and the Forecasted Equity Risk Premium of 7.31% from Line No. 6 ((5.70% + 7.31%) / 2 = 6.51%).

(6) From page 40 of this Schedule.

Schedule PMA-11
Page 7 of 9
(UPDATED)

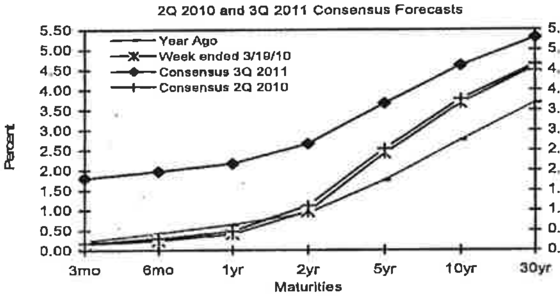
Consensus Forecasts Of U.S. Interest Rates And Key Assumptions

	History								Consensus Forecasts-Quarterly Avg.					
	Average For Week End				Average For Month			*Latest Q**	2Q	3Q	4Q	1Q	2Q	3Q
Interest Rates	Mar.19	Mar.12	Mar.5	Feb.26	Feb.	Jan.	Dec.	*1Q 2010*	2010	2010	2010	2011	2011	2011
Federal Funds Rate	0.18	0.16	0.13	0.12	0.13	0.11	0.12	*0.12*	0.2	0.2	0.5	0.9	1.3	1.7
Prime Rate	3.25	3.25	3.25	3.25	3.25	3.25	3.25	*3.25*	3.2	3.3	3.6	4.0	4.3	4.7
LIBOR, 3-mo.	0.27	0.26	0.25	0.25	0.25	0.25	0.25	*0.25*	0.3	0.5	0.8	1.2	1.6	2.0
Commercial Paper, 1-mo.	0.17	0.16	0.13	0.14	0.13	0.13	0.14	*0.13*	0.2	0.3	0.7	1.1	1.5	1.9
Treasury bill, 3-mo.	0.16	0.16	0.14	0.12	0.11	0.06	0.05	*0.09*	0.2	0.3	0.6	1.0	1.4	1.8
Treasury bill, 6-mo.	0.24	0.22	0.19	0.19	0.18	0.15	0.17	*0.17*	0.3	0.4	0.8	1.2	1.6	2.0
Treasury bill, 1 yr.	0.41	0.39	0.34	0.34	0.35	0.35	0.37	*0.35*	0.5	0.7	1.0	1.4	1.8	2.2
Treasury note, 2 yr.	0.97	0.93	0.84	0.86	0.86	0.93	0.87	*0.90*	1.1	1.3	1.7	2.0	2.3	2.7
Treasury note, 5 yr.	2.42	2.39	2.29	2.37	2.36	2.48	2.34	*2.41*	2.5	2.7	3.0	3.2	3.4	3.7
Treasury note, 10 yr.	3.68	3.72	3.62	3.69	3.69	3.73	3.59	*3.71*	3.8	3.9	4.1	4.3	4.4	4.6
Treasury note, 30 yr.	4.59	4.67	4.58	4.62	4.62	4.60	4.49	*4.61*	4.6	4.8	4.9	5.0	5.2	5.3
Corporate Aaa bond	5.21	5.28	5.24	5.31	5.35	5.26	5.26	*5.30*	5.3	5.5	5.6	5.7	5.9	6.1
Corporate Baa bond	6.21	6.30	6.26	6.33	6.34	6.25	6.37	*6.29*	6.3	6.5	6.7	6.8	6.9	7.1
State & Local bonds	4.32	4.33	4.34	4.36	4.36	4.33	4.21	*4.34*	4.5	4.6	4.7	4.8	4.9	5.1
Home mortgage rate	4.96	4.95	4.97	5.05	4.99	5.03	4.93	*5.00*	5.2	5.4	5.6	5.7	5.9	6.1
	History								Consensus Forecasts-Quarterly					
	2Q	3Q	4Q	1Q	2Q	3Q	4Q	*1Q**	2Q	3Q	4Q	1Q	2Q	3Q
Key Assumptions	2008	2008	2008	2009	2009	2009	2009	*2010*	2010	2010	2010	2011	2011	2011
Major Currency Index	70.9	73.5	81.3	82.7	79.4	75.4	73.6	*75.4*	75.6	75.8	76.4	76.4	76.6	77.0
Real GDP	1.5	-2.7	-5.4	-6.4	-0.7	2.2	5.6	*2.9*	3.0	2.9	3.0	3.0	3.1	3.2
GDP Price Index	1.8	4.0	0.1	1.9	0.0	0.4	0.5	*1.4*	1.2	1.4	1.4	1.7	1.7	1.7
Consumer Price Index	5.2	6.4	-9.2	-2.2	1.9	3.7	2.6	*1.7*	1.5	1.9	1.8	2.0	2.0	2.2

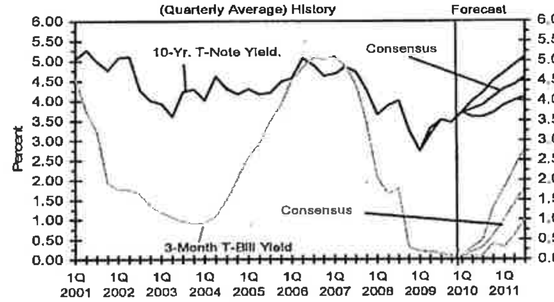
Forecasts for interest rates and the Federal Reserve's Major Currency Index represent averages for the quarter. Forecasts for Real GDP, GDP Price Index and Consumer Price Index are seasonally-adjusted annual rates of change (saar). Individual panel members' forecasts are on pages 4 through 9. Historical data for interest rates except LIBOR is from Federal Reserve Release (FRSR) H.15. LIBOR quotes available from *The Wall Street Journal*. Interest rate definitions are the same as those in FRSR H.15. Treasury yields are reported on a constant maturity basis. Historical data for the Fed' 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). ***Interest rate data for 1Q 2010 based on historical data through the week ended March 19th. *Data for 1Q 2010 Major Currency Index also is based on data through week ended March 19th. Figures for 1Q 2010 Real GDP, GDP Chained Price Index and Consumer Price Index are consensus forecasts based on a special question asked of the panelists this month (see page 14).***

U.S. Treasury Yield Curve

Week ended March 19, 2010 and Year Ago vs. 2Q 2010 and 3Q 2011 Consensus Forecasts

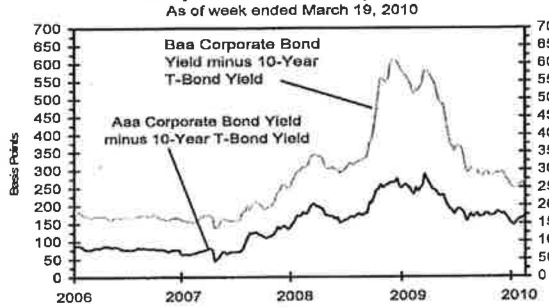


U.S. 3-Mo. T-Bills & 10-Yr. T-Note Yield



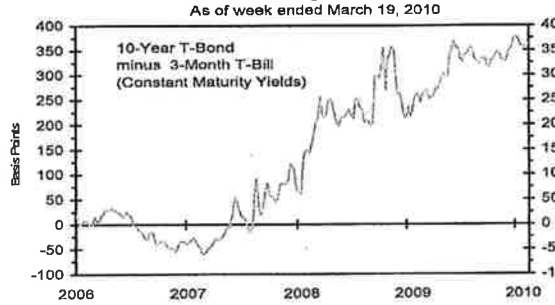
Corporate Bond Spreads

As of week ended March 19, 2010



U.S. Treasury Yield Curve

As of week ended March 19, 2010



Missouri-American Water Company
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)
Time Period		1928-2008
1.	Arithmetic Mean Holding Period Returns (2): Standard & Poor's Public Utility Index	10.74 %
2.	Arithmetic Mean Yield on: Moody's A Rated Public Utility Bonds	(6.59)
3.	Equity Risk Premium	4.15 %

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-American Water Company
Value Line Adjusted Betas for
the Proxy Group of Six AUS Utility Reports Water Companies
and the Proxy Group of Eight AUS Utility Reports Natrual Gas Distribution Companies

	Value Line Adjusted Beta
Proxy Group of Six AUS Utility Reports Water Companies	
American States Water Co.	0.80
Aqua America, Inc.	0.65
California Water Service Group	0.75
Middlesex Water Company	0.80
SJW Corporation	0.95
York Water Company	0.65
Average	0.77
Median	0.78
Proxy Group of Eight AUS Utility Reports Gas Distribution Companies	
AGL Resources, Inc.	0.75
Atmos Energy Corp.	0.65
Delta Natural Gas Company	0.65
Laclede Group, Inc.	0.60
Northwest Natural Gas Company	0.60
Piedmont Natural Gas Co., Inc.	0.65
Southwest Gas Corporation	0.75
WGL Holdings, Inc.	0.65
Average	0.66
Median	0.65

Source of Information: Value Line Investment Survey, January 22, and March 12, 2010
Standard Edition and Small and Mid-Cap Edition

Missouri-American Water Company
Indicated Common Equity Cost Rate Through Use
of the Capital Asset Pricing Model for the
the Proxy Group of Six AUS Utility Reports Water Companies
and the Proxy Group of Eight AUS Utility Reports Natrual Gas Distribution Companies

Line No.		Proxy Group of Six AUS Utility Reports Water Companies	Proxy Group of Eight AUS Utility Reports Gas Distribution Companies
1.	Traditional Capital Asset Pricing Model (1)	10.64 %	9.72 %
2.	Empirical Capital Asset Pricing Model (1)	11.05 %	10.36 %
3.	Conclusion	10.85 %	10.04 %

Notes: (1) From page 4 of this Schedule.

Missouri-American Water Company
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 7.31% (1)	CAPM Result Including Risk-Free Rate of 4.97% (2)
		Traditional Capital Asset Pricing Model (3)	
Proxy Group of Six AUS Utility Reports Water Companies			
American States Water Co.	0.80	5.85 %	10.82 %
Aqua America, Inc.	0.65	4.75	9.72
California Water Service Group	0.75	5.48	10.45
Middlesex Water Company	0.80	5.85	10.82
SJW Corporation	0.95	6.94	11.91
York Water Company	0.65	4.75	9.72
Average	0.77	5.60 %	10.57 %
Median	0.78	5.67 %	10.64 %
Proxy Group of Eight AUS Utility Reports Gas Distribution Companies			
AGL Resources, Inc.	0.75	5.48 %	10.45 %
Atmos Energy Corp.	0.65	4.75	9.72
Delta Natural Gas Company	0.65	4.75	9.72
Laclede Group, Inc.	0.60	4.39	9.36
Northwest Natural Gas Company	0.60	4.39	9.36
Piedmont Natural Gas Co., Inc.	0.65	4.75	9.72
Southwest Gas Corporation	0.75	5.48	10.45
WGL Holdings, Inc.	0.65	4.75	9.72
Average	0.66	4.84 %	9.81 %
Median	0.65	4.75 %	9.72 %
		Empirical Capital Asset Pricing Model (4)	
Proxy Group of Six AUS Utility Reports Water Companies			
American States Water Co.	0.80	6.21 %	11.18 %
Aqua America, Inc.	0.65	5.39	10.36
California Water Service Group	0.75	5.94	10.91
Middlesex Water Company	0.80	6.21	11.18
SJW Corporation	0.95	7.04	12.01
York Water Company	0.65	5.39	10.36
Average	0.77	6.03 %	11.00 %
Median	0.78	6.08 %	11.05 %
Proxy Group of Eight AUS Utility Reports Gas Distribution Companies			
AGL Resources, Inc.	0.75	5.94 %	10.91 %
Atmos Energy Corp.	0.65	5.39	10.36
Delta Natural Gas Company	0.65	5.39	10.36
Laclede Group, Inc.	0.60	5.12	10.09
Northwest Natural Gas Company	0.60	5.12	10.09
Piedmont Natural Gas Co., Inc.	0.65	5.39	10.36
Southwest Gas Corporation	0.75	5.94	10.91
WGL Holdings, Inc.	0.65	5.39	10.36
Average	0.66	5.46 %	10.43 %
Median	0.65	5.39 %	10.36 %

See page 43 for notes.

Missouri-American Water Company
Development of the Market-Required Rate of Return on Common Equity Using
the Capital Asset Pricing Model for
the Proxy Group of Six AUS Utility Reports Water Companies
and the Proxy Group of Eight AUS Utility Reports Natural Gas Distribution Companies
Adjusted to Reflect a Forecasted Risk-Free Rate and Market Return

Notes:

(1) For reasons explained in Ms. Ahern's accompanying direct testimony, from the three previous month-end (January 2010 – March 2010), as well as a recently available (April 9, 2010), Value Line Summary & Index, a forecasted 3-5 year total annual market return of 12.99% can be derived by averaging the 3-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 52% produces a four-year average annual return of 11.04% $((1.52^{0.25}) - 1)$. When the average annual forecasted dividend yield of 1.95% is added, a total average market return of 12.99% (1.95% + 11.04%) is derived.

The 3-month and spot forecasted total market return of 12.99% minus the forecasted risk-free rate of 4.97% (developed in Note 2) is 8.02% (12.99% - 4.97%). The Morningstar, Inc. (Ibbotson Associates) calculated market premium of 6.60% for the period 1926-2009 results from a total market return of 11.80% less the average income return on long-term U.S. Government Securities of 5.20% (11.80% - 5.20% = 6.60%). This is then averaged with the 11.80% Value Line market premium resulting in an 7.31% market premium. The 7.31% market premium is then multiplied by the beta in column 1 of page 2 of this Schedule.

(2) 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 dated April 1, 2010 (see page 37 of this Schedule). The estimates are detailed below:

	30-Year Treasury Note Yield
Second Quarter 2010	4.60
Third Quarter 2010	4.80
Fourth Quarter 2010	4.90
First Quarter 2011	5.00
Second Quarter 2011	5.20
Third Quarter 2011	5.30
Average	4.97%

(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, April 1, 2010
Value Line Investment Survey, January 22 and March 12, 2010 Standard Edition and Small and Mid-Cap Edition
Ibbotson SBBI – 2010 Valuation Yearbook – Market Results for Stocks, Bonds, Bills, and Inflation for 1926-2009, Morningstar, Inc., 2010, Chicago.

Missouri-American Water Company
Comparable Earnings Analysis
for a Proxy Group of One Hundred Seventeen Non-Utility Companies Comparable to the
Proxy Group of Six AUS Utility Reports Water Companies (1)

Proxy Group of One Hundred Seventeen Non-Utility Companies Comparable to the Proxy Group of Six AUS Utility Reports Water Companies (1)	VL Adjusted Beta	Unadjusted Beta	Residual 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): 5 Year Projection	Student's T Statistic
Affiliated Computer	0.75	0.56	3.2080	0.0714	N/A	N/A
Analog Devices	0.90	0.81	3.6726	0.0818	20.00	0.57
Allergan, Inc.	0.90	0.82	3.3584	0.0748	16.50	0.11
Gallagher (Arthur J.)	0.75	0.56	3.1255	0.0696	20.00	0.57
Amgen	0.65	0.42	3.8066	0.0847	13.50	(0.29)
Aon Corp.	0.70	0.52	3.9021	0.0869	14.00	(0.22)
AVX Corp.	0.95	0.85	3.4217	0.0762	8.00	(1.02)
Bed Bath & Beyond	0.90	0.85	3.7545	0.0836	12.50	(0.42)
Beckman Coulter	0.75	0.62	3.1885	0.0710	13.00	(0.36)
Bio-Rad Labs. A	0.90	0.84	3.8652	0.0860	11.50	(0.56)
BJs Wholesale Club	0.75	0.55	4.0163	0.0894	10.50	(0.69)
BMC Software	0.85	0.73	3.3622	0.0748	19.50	0.51
Brown & Brown	0.70	0.51	3.2448	0.0722	12.50 (3)	(0.42)
Cardinal Health	0.75	0.60	3.3076	0.0736	11.00	(0.62)
Coca-Cola Enterprises	0.90	0.81	3.5117	0.0782	45.50	3.96
Crown Holdings	0.90	0.83	3.4851	0.0776	26.50	1.44
Cephalon Inc.	0.70	0.52	4.0466	0.0901	14.50	(0.16)
Cerner Corp.	0.85	0.71	3.9413	0.0877	10.00	(0.75)
CLARCOR Inc.	0.95	0.85	3.7027	0.0824	12.00	(0.49)
Coherent, Inc.	0.90	0.78	3.8597	0.0859	7.00	(1.15)
Coca-Cola Bottling	0.70	0.47	3.6316	0.0808	20.00	0.57
Columbia Sportswear	0.90	0.77	3.8340	0.0854	12.50	(0.42)
Copart, Inc.	0.95	0.85	3.6280	0.0808	13.50	(0.29)
Charles River	0.85	0.77	3.7464	0.0834	9.00	(0.89)
Del Monte Foods	0.70	0.53	3.2767	0.0729	11.50	(0.56)
Dionex Corp.	0.90	0.79	3.5366	0.0787	17.00	0.18
DIRECTV Group (The)	0.85	0.77	3.1875	0.0710	NMF	NMF
DaVita Inc.	0.65	0.39	3.1744	0.0707	16.00	0.04
Lauder (Estee)	0.95	0.85	3.3989	0.0757	36.50 (3)	2.76
EarthLink, Inc.	0.70	0.51	4.0490	0.0901	13.00	(0.36)
EMC Corp.	0.90	0.84	3.8370	0.0854	10.50	(0.69)
Energy Transfer	0.85	0.71	3.1256	0.0696	N/A (3)	N/A
First Niagara Finl Group	0.85	0.73	3.5910	0.0799	9.00	(0.89)
Forest Labs.	0.80	0.63	3.8042	0.0847	9.50	(0.82)
Genzyme Corp.	0.65	0.44	3.7938	0.0845	11.00	(0.62)
Gilead Sciences	0.65	0.40	3.6747	0.0818	33.50	2.37
G&K Services 'A	0.80	0.69	3.3552	0.0747	8.00	(1.02)
Global Payments	0.85	0.70	3.7010	0.0824	16.50	0.11
Gen-Probe	0.85	0.76	4.0290	0.0897	13.00	(0.36)
Haemonetics Corp.	0.65	0.42	3.1695	0.0706	12.50	(0.42)
Hasbro, Inc.	0.80	0.62	3.3402	0.0744	22.00	0.84
HCC Insurance Hldgs.	0.85	0.71	3.1673	0.0705	12.00	(0.49)
Hewitt Associates A	0.75	0.58	3.2548	0.0725	18.00	0.31
Block (H&R)	0.90	0.78	3.7417	0.0833	28.00	1.64
Hospira Inc.	0.70	0.51	3.6472	0.0812	20.50	0.64
Heartland Express	0.85	0.72	3.9916	0.0889	23.00	0.97
IDEXX Labs.	0.85	0.77	3.2654	0.0727	24.00	1.10
Intuit Inc.	0.90	0.83	3.1749	0.0707	21.00	0.71
Investors Bancorp Inc	0.70	0.51	3.4584	0.0768	6.00	(1.29)
Intl Speedway A	0.90	0.82	3.4301	0.0764	8.00	(1.02)
J&J Snack Foods	0.75	0.57	3.4659	0.0772	12.50	(0.42)
Life Technologies	0.80	0.65	3.7722	0.0840	11.00	(0.62)
Lincare Holdings	0.65	0.41	3.2537	0.0724	19.50	0.51

Missouri-American Water Company
Comparable Earnings Analysis
for a Proxy Group of One Hundred Seventeen Non-Utility Companies Comparable to the
Proxy Group of Six AUS Utility Reports Water Companies (1)

Proxy Group of One Hundred Seventeen Non-Utility Companies Comparable to the Proxy Group of Six AUS Utility Reports Water Companies (1)	VL Adjusted Beta	Unadjusted Beta	Residual 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): 5 Year Projection	Student's T Statistic
Mattel, Inc.	0.85	0.76	3.6964	0.0867	19.00	0.44
Matthews Intl	0.85	0.72	3.2537	0.0724	16.00	0.04
McKesson Corp.	0.80	0.64	3.6895	0.0821	13.50	(0.29)
Medtronic, Inc.	0.75	0.60	3.4569	0.0770	20.00	0.57
Medco Health Solutions	0.70	0.49	3.5992	0.0801	15.00	(0.09)
Markel Corp.	0.90	0.80	3.2875	0.0732	7.00	(1.15)
Magellan Midstream	0.90	0.83	3.3682	0.0750	25.00	1.24
MAXIMUS Inc.	0.80	0.64	3.3819	0.0753	14.50	(0.16)
National Instruments	0.90	0.81	3.6957	0.0823	16.50 (3)	0.11
Annaly Capital Mgmt.	0.80	0.63	3.9643	0.0883	11.50	(0.56)
Novo Nordisk ADR	0.80	0.69	3.1452	0.0700	33.00	2.30
Northwest Bancorp	0.85	0.70	3.2705	0.0728	N/A	N/A
New York Community	0.80	0.69	3.6327	0.0809	11.50	(0.56)
Realty Income Corp.	0.90	0.84	3.6316	0.0808	8.00	(1.02)
Owens & Minor	0.70	0.50	3.3588	0.0748	13.50	(0.29)
Oracle Corp.	0.90	0.83	3.1502	0.0701	21.00	0.71
Odyssey Re Hldgs.	0.70	0.52	3.2108	0.0715	N/A	N/A
OReilly Automotive	0.85	0.72	3.5748	0.0796	11.00	(0.62)
Plains All Amer. Pipe.	0.90	0.79	3.5972	0.0801	10.00	(0.75)
PepsiAmericas Inc.	0.80	0.66	3.4481	0.0768	N/A	N/A
Peoples United Finl	0.65	0.40	3.2451	0.0722	6.00	(1.29)
Pepsi Bottling Group	0.90	0.78	3.3408	0.0744	N/A	N/A
Patterson Cos.	0.90	0.80	3.7787	0.0841	12.50	(0.42)
Peets Coffee & Tea	0.80	0.63	3.9190	0.0872	12.00 (3)	(0.49)
PerkinElmer Inc.	0.90	0.79	3.8054	0.0847	10.50	(0.69)
Papa Johns Intl	0.85	0.77	3.9534	0.0880	20.00	0.57
Ruddick Corp.	0.60	0.38	3.5943	0.0800	11.00	(0.62)
Reinsurance Group	0.85	0.76	3.7769	0.0841	13.00	(0.36)
ResMed Inc.	0.75	0.57	3.9162	0.0872	14.50	(0.16)
Rollins, Inc.	0.80	0.65	3.2083	0.0714	29.50	1.84
Ross Stores	0.85	0.72	3.8069	0.0847	36.50	2.76
Sycamore Networks	0.85	0.77	3.6995	0.0824	2.50	(1.75)
Schulman (A.)	0.90	0.81	4.0352	0.0898	7.50	(1.09)
Sherwin-Williams	0.75	0.55	3.3228	0.0740	27.50	1.57
Silgan Holdings	0.80	0.64	3.1408	0.0699	17.00	0.18
Synopsys, Inc.	0.85	0.72	3.7319	0.0831	12.50	(0.42)
Suburban Propane	0.75	0.62	3.2843	0.0731	37.00	2.83
Stericycle Inc.	0.65	0.47	3.5458	0.0789	15.00	(0.09)
STERIS Corp.	0.90	0.81	3.6866	0.0821	14.00	(0.22)
St. Jude Medical	0.80	0.68	4.0412	0.0900	17.00	0.18
Constellation Brands	0.85	0.76	3.8445	0.0856	11.00	(0.62)
Stryker Corp.	0.80	0.66	3.3340	0.0742	16.00	0.04
Hanover Insurance	0.85	0.77	3.2090	0.0714	9.50	(0.82)
TEPPCO Partners L.P.	0.90	0.82	3.5151	0.0783	N/A	N/A
Total System Svcs.	0.90	0.80	3.4338	0.0764	15.00	(0.09)
Texas Instruments	0.90	0.81	3.6129	0.0804	16.00	0.04
Universal Health Sv. 'B	0.80	0.68	3.6443	0.0811	11.50	(0.56)
Universal Corp.	0.80	0.68	3.8708	0.0862	12.50	(0.42)
Varian Medical Sys.	0.80	0.69	3.8942	0.0867	22.00	0.84
WD-40 Co.	0.75	0.55	3.5149	0.0782	16.50	0.11
Werner Enterprises	0.90	0.82	3.9498	0.0879	14.00	(0.22)
Weis Markets	0.65	0.46	3.1192	0.0694	9.00	(0.89)
W.P. Carey & Co. LLC	0.90	0.80	3.5415	0.0788	15.00	(0.09)
Watson Pharmac.	0.75	0.58	3.2191	0.0717	11.50	(0.56)
Washington Post	0.80	0.67	3.4859	0.0776	7.00	(1.15)
Berkley (W.R.)	0.75	0.58	3.3727	0.0751	17.00	0.18
West Pharmac. Svcs.	0.80	0.65	3.9376	0.0877	14.00	(0.22)
Watson Wyatt	0.70	0.54	3.3237	0.0740	N/A	N/A
World Wrestling Ent.	0.80	0.68	3.3909	0.0755	31.50	2.10
Wolverine World Wide	0.80	0.65	3.9008	0.0868	17.00	0.18
Alleghany Corp.	0.85	0.72	3.2654	0.0727	6.50	(1.22)
Zimmer Holdings	0.95	0.85	3.7669	0.0839	12.50	(0.42)
Average	0.81	0.68	3.5555	0.0792		
Average for the Proxy Group of Six AUS Utility Reports Water Companies	0.77	0.61	3.5871 (4)	0.0799		
Median (5)					13.50%	
Conclusion (6)					13.50%	

See page 4 of Schedule PMA-13 for notes.

Missouri-American Water Company
Comparable Earnings Analysis
for a Proxy Group of Twenty Five Non-Utility Companies Comparable to the
Proxy Group of Eight AUS Utility Reports Natural Gas Distribution Companies (7)

Proxy Group of Twenty Five Non-Utility Companies Comparable to the Proxy Group of Eight AUS Utility Reports Natural Gas Distribution Companies (7)	VL Adjusted Beta	Unadjusted Beta	Residual Standard Error of the Regression	Standard Deviation of Beta	Rate of Return on Book Common Equity, Net Worth, or Partner's Capital: 5 Year Projection	Rate of Return on Book Common Equity, Net Worth, or Partner's Capital: Student's T Statistic
AmerisourceBergen	0.70	0.52	2.7517	0.0613	15.0 %	(0.79)
Automatic Data Proc.	0.70	0.54	2.2331	0.0497	16.0	(0.70)
Baxter Intl Inc.	0.60	0.35	2.4924	0.0555	26.5	0.23
Bard (C.R.)	0.55	0.31	2.4789	0.0552	20.0	(0.35)
Becton, Dickinson	0.65	0.40	2.5881	0.0576	20.5	(0.30)
Church & Dwight	0.60	0.35	2.6247	0.0584	15.0	(0.79)
Colgate-Palmolive	0.55	0.30	2.6663	0.0594	41.0	1.52
Clorox Co.	0.65	0.40	2.3441	0.0522	58.5 (8)	3.07
Campbell Soup	0.60	0.32	2.4069	0.0536	35.0	0.98
Erie Indemnity Co.	0.70	0.53	2.2086	0.0492	20.0	(0.35)
Hormel Foods	0.65	0.43	2.7259	0.0607	16.0	(0.70)
Hershey Co.	0.65	0.47	2.7933	0.0622	42.5	1.65
Intl Flavors & Frag.	0.75	0.58	2.4057	0.0536	21.0	(0.26)
Kraft Foods	0.70	0.48	2.4920	0.0555	10.5	(1.19)
Kinder Morgan Energy	0.75	0.61	2.5204	0.0561	24.5	0.05
Coca-Cola	0.60	0.33	2.2256	0.0495	23.0	(0.08)
Laboratory Corp.	0.65	0.42	2.6786	0.0596	19.0	(0.44)
McDonalds Corp.	0.70	0.47	2.4563	0.0547	30.5	0.58
McCormick & Co.	0.55	0.30	2.6807	0.0597	18.0	(0.53)
PepsiCo, Inc.	0.60	0.36	2.2579	0.0503	27.5	0.32
Raytheon Co.	0.75	0.57	2.6400	0.0588	17.5	(0.57)
Sysco Corp.	0.75	0.55	2.6244	0.0584	34.0	0.90
Tootsie Roll Ind.	0.70	0.52	2.5729	0.0573	8.0	(1.41)
Wal-Mart Stores	0.60	0.36	2.3459	0.0522	17.5	(0.57)
Exxon Mobil Corp.	0.75	0.60	2.4733	0.0551	21.0	(0.26)
Average	0.66	0.44	2.5075	0.0558		
Average for the Proxy Group of Eight AUS Natural Gas Distribution Companies	0.66	0.44	2.4773 (8)	0.0551		
Median (5)					20.25%	
Conclusion (6)					20.00%	

See page 4 of Schedule PMA-13 for notes.

Missouri-American Water Company
Yields on Moody's A and Baa Rated Public Utility Bonds
and Aaa Rated Corporate Bonds Since April 1990

Schedule PMA-14
Page 1 of 3
(UPDATED)

Date	Aaa Corporate Bonds	Moody's A PU Bonds	Moody's Baa PU Bonds	Spraed Between Aaa v A PU Bonds	Spread Between Aaa v Baa PU Bonds	Spread between A and Baa PU Bonds
Apr-90	9.46%	9.92%	10.13%	0.46%	0.67%	0.21%
May-90	9.47%	10.00%	10.16%	0.53%	0.69%	0.16%
Jun-90	9.26%	9.80%	9.96%	0.54%	0.70%	0.16%
Jul-90	9.24%	9.75%	9.92%	0.51%	0.68%	0.17%
Aug-90	9.41%	9.92%	10.12%	0.51%	0.71%	0.20%
Sep-90	9.56%	10.12%	10.32%	0.56%	0.76%	0.20%
Oct-90	9.53%	10.05%	10.28%	0.52%	0.75%	0.23%
Nov-90	9.30%	9.90%	10.12%	0.60%	0.82%	0.22%
Dec-90	9.05%	9.73%	9.96%	0.68%	0.91%	0.23%
Jan-91	9.04%	9.71%	9.96%	0.67%	0.92%	0.25%
Feb-91	8.83%	9.47%	9.68%	0.64%	0.85%	0.21%
Mar-91	8.93%	9.55%	9.74%	0.62%	0.81%	0.19%
Apr-91	8.86%	9.46%	9.64%	0.60%	0.78%	0.18%
May-91	8.86%	9.44%	9.64%	0.58%	0.78%	0.20%
Jun-91	9.01%	9.59%	9.79%	0.58%	0.78%	0.20%
Jul-91	9.00%	9.55%	9.69%	0.55%	0.69%	0.14%
Aug-91	8.75%	9.29%	9.47%	0.54%	0.72%	0.18%
Sep-91	8.61%	9.16%	9.34%	0.55%	0.73%	0.18%
Oct-91	8.55%	9.12%	9.32%	0.57%	0.77%	0.20%
Nov-91	8.48%	9.05%	9.28%	0.57%	0.80%	0.23%
Dec-91	8.31%	8.88%	9.07%	0.57%	0.76%	0.19%
Jan-92	8.20%	8.84%	8.98%	0.64%	0.78%	0.14%
Feb-92	8.29%	8.93%	9.09%	0.64%	0.80%	0.16%
Mar-92	8.35%	8.97%	9.16%	0.62%	0.81%	0.19%
Apr-92	8.33%	8.93%	9.11%	0.60%	0.78%	0.18%
May-92	8.28%	8.87%	9.01%	0.59%	0.73%	0.14%
Jun-92	8.22%	8.78%	8.90%	0.56%	0.68%	0.12%
Jul-92	8.07%	8.57%	8.69%	0.50%	0.62%	0.12%
Aug-92	7.95%	8.44%	8.58%	0.49%	0.63%	0.14%
Sep-92	7.92%	8.40%	8.54%	0.48%	0.62%	0.14%
Oct-92	7.99%	8.54%	8.76%	0.55%	0.77%	0.22%
Nov-92	8.10%	8.63%	8.86%	0.53%	0.76%	0.23%
Dec-92	7.98%	8.43%	8.69%	0.45%	0.71%	0.26%
Jan-93	7.91%	8.27%	8.57%	0.36%	0.66%	0.30%
Feb-93	7.71%	8.04%	8.31%	0.33%	0.60%	0.27%
Mar-93	7.58%	7.90%	8.10%	0.32%	0.52%	0.20%
Apr-93	7.46%	7.81%	8.11%	0.35%	0.65%	0.30%
Apr-93	7.43%	7.86%	8.18%	0.43%	0.75%	0.32%
May-93	7.33%	7.75%	8.05%	0.42%	0.72%	0.30%
Jun-93	7.17%	7.54%	7.93%	0.37%	0.76%	0.39%
Jul-93	6.85%	7.25%	7.59%	0.40%	0.74%	0.34%
Aug-93	6.66%	7.04%	7.35%	0.38%	0.69%	0.31%
Sep-93	6.67%	7.03%	7.27%	0.36%	0.60%	0.24%
Oct-93	6.93%	7.30%	7.69%	0.37%	0.76%	0.39%
Nov-93	6.93%	7.34%	7.73%	0.41%	0.80%	0.39%
Dec-93	6.92%	7.33%	7.66%	0.41%	0.74%	0.33%
Jan-94	7.08%	7.47%	7.76%	0.39%	0.68%	0.29%
Mar-94	7.48%	7.47%	7.76%	-0.01%	0.28%	0.29%
Apr-94	7.88%	7.85%	8.11%	-0.03%	0.23%	0.26%
May-94	7.99%	8.33%	8.61%	0.34%	0.62%	0.28%
Jun-94	7.97%	8.31%	8.64%	0.34%	0.67%	0.33%
Jul-94	8.11%	8.47%	8.80%	0.36%	0.69%	0.33%
Aug-94	8.07%	8.41%	8.74%	0.34%	0.67%	0.33%
Sep-94	8.34%	8.64%	8.98%	0.30%	0.64%	0.34%
Oct-94	8.57%	8.86%	9.24%	0.29%	0.67%	0.38%
Nov-94	8.68%	8.98%	9.35%	0.30%	0.67%	0.37%
Dec-94	8.46%	8.76%	9.16%	0.30%	0.70%	0.40%
Jan-95	8.46%	8.73%	9.15%	0.27%	0.69%	0.42%
Feb-95	8.26%	8.52%	8.93%	0.26%	0.67%	0.41%
Mar-95	8.12%	8.37%	8.78%	0.25%	0.66%	0.41%
Apr-95	8.03%	8.27%	8.67%	0.24%	0.64%	0.40%
May-95	7.65%	7.91%	8.30%	0.26%	0.65%	0.39%
Jun-95	7.30%	7.60%	8.01%	0.30%	0.71%	0.41%
Jul-95	7.41%	7.70%	8.11%	0.29%	0.70%	0.41%
Aug-95	7.57%	7.83%	8.24%	0.26%	0.67%	0.41%
Sep-95	7.32%	7.62%	7.98%	0.30%	0.66%	0.36%
Oct-95	7.12%	7.46%	7.82%	0.34%	0.70%	0.36%
Nov-95	7.02%	7.43%	7.81%	0.41%	0.79%	0.38%
Dec-95	6.82%	7.23%	7.63%	0.41%	0.81%	0.40%
Jan-96	6.81%	7.22%	7.64%	0.41%	0.83%	0.42%
Feb-96	6.99%	7.37%	7.78%	0.38%	0.79%	0.41%
Mar-96	7.35%	7.73%	8.15%	0.38%	0.80%	0.42%
Apr-96	7.50%	7.89%	8.32%	0.39%	0.82%	0.43%
May-96	7.62%	7.98%	8.45%	0.36%	0.83%	0.47%
Jun-96	7.71%	8.06%	8.51%	0.35%	0.80%	0.45%
Jul-96	7.65%	8.02%	8.44%	0.37%	0.79%	0.42%
Aug-96	7.46%	7.84%	8.25%	0.38%	0.79%	0.41%
Sep-96	7.66%	8.01%	8.41%	0.35%	0.75%	0.40%
Oct-96	7.39%	7.77%	8.15%	0.38%	0.76%	0.38%
Nov-96	7.10%	7.49%	7.87%	0.39%	0.77%	0.38%

Missouri-American Water Company
Yields on Moody's A and Baa Rated Public Utility Bonds
and Aaa Rated Corporate Bonds Since April 1990

Date	Aaa Corporate Bonds	Moody's A PU Bonds	Moody's Baa PU Bonds	Spraed Between Aaa v A PU Bonds	Spread Between Aaa v Baa PU Bonds	Spread between A and Baa PU Bonds
Dec-96	7.20%	7.59%	7.98%	0.39%	0.78%	0.39%
Jan-97	7.42%	7.77%	8.18%	0.35%	0.76%	0.41%
Feb-97	7.31%	7.64%	8.02%	0.33%	0.71%	0.38%
Mar-97	7.55%	7.87%	8.26%	0.32%	0.71%	0.39%
Apr-97	7.73%	8.03%	8.42%	0.30%	0.69%	0.39%
May-97	7.58%	7.89%	8.28%	0.31%	0.70%	0.39%
Jun-97	7.41%	7.72%	8.12%	0.31%	0.71%	0.40%
Jul-97	7.14%	7.48%	7.87%	0.34%	0.73%	0.39%
Aug-97	7.22%	7.51%	7.93%	0.29%	0.71%	0.42%
Sep-97	7.15%	7.47%	7.79%	0.32%	0.64%	0.32%
Oct-97	7.00%	7.35%	7.67%	0.35%	0.67%	0.32%
Nov-97	6.87%	7.25%	7.49%	0.38%	0.62%	0.24%
Dec-97	6.76%	7.16%	7.41%	0.40%	0.65%	0.25%
Jan-98	6.61%	7.05%	7.28%	0.44%	0.67%	0.23%
Feb-98	6.67%	7.12%	7.36%	0.45%	0.69%	0.24%
Feb-98	6.72%	7.16%	7.37%	0.44%	0.65%	0.21%
Mar-98	6.69%	7.16%	7.37%	0.47%	0.68%	0.21%
Apr-98	6.69%	7.16%	7.34%	0.47%	0.65%	0.18%
May-98	6.53%	7.03%	7.21%	0.50%	0.68%	0.18%
Jun-98	6.55%	7.03%	7.23%	0.48%	0.68%	0.20%
Jul-98	6.52%	7.00%	7.20%	0.48%	0.68%	0.20%
Aug-98	6.40%	6.93%	7.13%	0.53%	0.73%	0.20%
Oct-98	6.37%	6.96%	7.13%	0.59%	0.76%	0.17%
Nov-98	6.41%	7.03%	7.31%	0.62%	0.90%	0.28%
Dec-98	6.22%	6.91%	7.24%	0.69%	1.02%	0.33%
Jan-99	6.24%	6.97%	7.30%	0.73%	1.06%	0.33%
Feb-99	6.40%	7.09%	7.41%	0.69%	1.01%	0.32%
Mar-99	6.62%	7.26%	7.55%	0.64%	0.93%	0.29%
Apr-99	6.64%	7.22%	7.51%	0.58%	0.87%	0.29%
May-99	6.93%	7.47%	7.74%	0.54%	0.81%	0.27%
Jun-99	7.23%	7.74%	8.03%	0.51%	0.80%	0.29%
Jul-99	7.19%	7.71%	7.97%	0.52%	0.78%	0.26%
Aug-99	7.40%	7.91%	8.16%	0.51%	0.76%	0.25%
Sep-99	7.39%	7.93%	8.19%	0.54%	0.80%	0.26%
Oct-99	7.55%	8.06%	8.32%	0.51%	0.77%	0.26%
Nov-99	7.36%	7.94%	8.12%	0.58%	0.76%	0.18%
Dec-99	7.55%	8.14%	8.28%	0.59%	0.73%	0.14%
Jan-00	7.78%	8.35%	8.40%	0.57%	0.62%	0.05%
Feb-00	7.68%	8.25%	8.33%	0.57%	0.65%	0.08%
Mar-00	7.68%	8.28%	8.40%	0.60%	0.72%	0.12%
Apr-00	7.64%	8.29%	8.40%	0.65%	0.76%	0.11%
May-00	7.99%	8.70%	8.86%	0.71%	0.87%	0.16%
Jun-00	7.67%	8.36%	8.47%	0.69%	0.80%	0.11%
Jul-00	7.65%	8.25%	8.33%	0.60%	0.68%	0.08%
Aug-00	7.55%	8.13%	8.25%	0.58%	0.70%	0.12%
Sep-00	7.62%	8.23%	8.32%	0.61%	0.70%	0.09%
Oct-00	7.55%	8.14%	8.29%	0.59%	0.74%	0.15%
Nov-00	7.45%	8.11%	8.25%	0.66%	0.80%	0.14%
Dec-00	7.21%	7.84%	8.01%	0.63%	0.80%	0.17%
Jan-01	7.15%	7.80%	7.99%	0.65%	0.84%	0.19%
Feb-01	7.10%	7.74%	7.94%	0.64%	0.84%	0.20%
Mar-01	6.98%	7.68%	7.85%	0.70%	0.87%	0.17%
Apr-01	7.20%	7.94%	8.06%	0.74%	0.86%	0.12%
May-01	7.29%	7.99%	8.11%	0.70%	0.82%	0.12%
Jun-01	7.18%	7.85%	8.02%	0.67%	0.84%	0.17%
Jul-01	7.13%	7.78%	8.05%	0.65%	0.92%	0.27%
Aug-01	7.02%	7.59%	7.95%	0.57%	0.93%	0.36%
Sep-01	7.17%	7.75%	8.12%	0.58%	0.95%	0.37%
Oct-01	7.03%	7.63%	8.02%	0.60%	0.99%	0.39%
Nov-01	6.97%	7.57%	7.96%	0.60%	0.99%	0.39%
Dec-01	6.77%	7.83%	8.27%	1.06%	1.50%	0.44%
Jan-02	6.55%	7.66%	8.13%	1.11%	1.58%	0.47%
Feb-02	6.51%	7.54%	8.18%	1.03%	1.67%	0.64%
Mar-02	6.81%	7.76%	8.32%	0.95%	1.51%	0.56%
Apr-02	6.76%	7.57%	8.26%	0.81%	1.50%	0.69%
May-02	6.75%	7.52%	8.33%	0.77%	1.58%	0.81%
Jun-02	6.63%	7.42%	8.26%	0.79%	1.63%	0.84%
Jul-02	6.53%	7.31%	8.07%	0.78%	1.54%	0.76%
Aug-02	6.37%	7.17%	7.74%	0.80%	1.37%	0.57%
Sep-02	6.15%	7.08%	7.62%	0.93%	1.47%	0.54%
Oct-02	6.32%	7.23%	8.00%	0.91%	1.68%	0.77%
Nov-02	6.31%	7.14%	7.76%	0.83%	1.45%	0.62%
Dec-02	6.21%	7.07%	7.61%	0.86%	1.40%	0.54%
Jan-03	6.17%	7.06%	7.47%	0.89%	1.30%	0.41%
Feb-03	5.95%	6.93%	7.17%	0.98%	1.22%	0.24%
Mar-03	5.89%	6.79%	7.05%	0.90%	1.16%	0.26%
Apr-03	5.74%	6.64%	6.94%	0.90%	1.20%	0.30%
May-03	5.22%	6.36%	6.47%	1.14%	1.25%	0.11%
Jun-03	4.97%	6.21%	6.30%	1.24%	1.33%	0.09%
Jul-03	5.49%	6.57%	6.67%	1.08%	1.18%	0.10%
Aug-03	5.88%	6.78%	7.08%	0.90%	1.20%	0.30%
Sep-03	5.72%	6.56%	6.87%	0.84%	1.15%	0.31%
Oct-03	5.70%	6.43%	6.79%	0.73%	1.09%	0.36%
Nov-03	5.65%	6.37%	6.69%	0.72%	1.04%	0.32%
Dec-03	5.62%	6.27%	6.61%	0.65%	0.99%	0.34%
Jan-04	5.54%	6.15%	6.47%	0.61%	0.93%	0.32%

Missouri-American Water Company
Yields on Moody's A and Baa Rated Public Utility Bonds
and Aaa Rated Corporate Bonds Since April 1990

Date	Aaa Corporate Bonds	Moody's A PU Bonds	Moody's Baa PU Bonds	Spraed Between Aaa v A PU Bonds	Spread Between Aaa v Baa PU Bonds	Spread between A and Baa PU Bonds
Feb-04	5.50%	6.15%	6.28%	0.65%	0.78%	0.13%
Mar-04	5.33%	5.97%	6.12%	0.64%	0.79%	0.15%
Apr-04	5.73%	6.35%	6.46%	0.62%	0.73%	0.11%
May-04	6.04%	6.62%	6.75%	0.58%	0.71%	0.13%
Jun-04	6.01%	6.46%	6.84%	0.45%	0.83%	0.38%
Jul-04	5.82%	6.27%	6.67%	0.45%	0.85%	0.40%
Aug-04	5.65%	6.14%	6.45%	0.49%	0.80%	0.31%
Sep-04	5.46%	5.98%	6.27%	0.52%	0.81%	0.29%
Oct-04	5.47%	5.94%	6.17%	0.47%	0.70%	0.23%
Nov-04	5.52%	5.97%	6.16%	0.45%	0.64%	0.19%
Dec-04	5.47%	5.92%	6.10%	0.45%	0.63%	0.18%
Jan-05	5.36%	5.78%	5.95%	0.42%	0.59%	0.17%
Feb-05	5.20%	5.61%	5.76%	0.41%	0.56%	0.15%
Mar-05	5.40%	5.83%	6.01%	0.43%	0.61%	0.18%
Apr-05	5.33%	5.64%	5.95%	0.31%	0.62%	0.31%
May-05	5.15%	5.53%	5.88%	0.38%	0.73%	0.35%
Jun-05	4.96%	5.40%	5.70%	0.44%	0.74%	0.30%
Jul-05	5.06%	5.51%	5.80%	0.45%	0.74%	0.29%
Aug-05	5.09%	5.50%	5.81%	0.41%	0.72%	0.31%
Sep-05	5.13%	5.52%	5.83%	0.39%	0.70%	0.31%
Oct-05	5.35%	5.79%	6.08%	0.44%	0.73%	0.29%
Nov-05	5.42%	5.88%	6.19%	0.46%	0.77%	0.31%
Dec-05	5.37%	5.80%	6.14%	0.43%	0.77%	0.34%
Jan-06	5.29%	5.75%	6.06%	0.46%	0.77%	0.31%
Feb-06	5.35%	5.82%	6.11%	0.47%	0.76%	0.29%
Mar-06	5.53%	5.98%	6.26%	0.45%	0.73%	0.28%
Apr-06	5.84%	6.29%	6.54%	0.45%	0.70%	0.25%
May-06	5.95%	6.42%	6.59%	0.47%	0.64%	0.17%
Jun-06	5.89%	6.40%	6.61%	0.51%	0.72%	0.21%
Jul-06	5.85%	6.37%	6.61%	0.52%	0.76%	0.24%
Aug-06	5.68%	6.20%	6.43%	0.52%	0.75%	0.23%
Sep-06	5.51%	6.00%	6.26%	0.49%	0.75%	0.26%
Oct-06	5.51%	5.98%	6.24%	0.47%	0.73%	0.26%
Nov-06	5.33%	5.80%	6.04%	0.47%	0.71%	0.24%
Dec-06	5.32%	5.81%	6.05%	0.49%	0.73%	0.24%
Jan-07	5.40%	5.96%	6.16%	0.56%	0.76%	0.20%
Feb-07	5.39%	5.90%	6.10%	0.51%	0.71%	0.20%
Mar-07	5.30%	5.85%	6.10%	0.55%	0.80%	0.25%
Apr-07	5.47%	5.97%	6.24%	0.50%	0.77%	0.27%
May-07	5.47%	5.99%	6.23%	0.52%	0.76%	0.24%
Jun-07	5.79%	6.30%	6.54%	0.51%	0.75%	0.24%
Jul-07	5.73%	6.25%	6.49%	0.52%	0.76%	0.24%
Aug-07	5.79%	6.24%	6.51%	0.45%	0.72%	0.27%
Sep-07	5.74%	6.18%	6.45%	0.44%	0.71%	0.27%
Oct-07	5.66%	6.11%	6.36%	0.45%	0.70%	0.25%
Nov-07	5.44%	5.97%	6.27%	0.53%	0.83%	0.30%
Dec-07	5.49%	6.16%	6.51%	0.67%	1.02%	0.35%
Jan-08	5.33%	6.02%	6.35%	0.69%	1.02%	0.33%
Feb-08	5.53%	6.21%	6.60%	0.68%	1.07%	0.39%
Mar-08	5.51%	6.21%	6.68%	0.70%	1.17%	0.47%
Apr-08	5.55%	6.29%	6.81%	0.74%	1.26%	0.52%
May-08	5.57%	6.27%	6.79%	0.70%	1.22%	0.52%
Jun-08	5.68%	6.38%	6.93%	0.70%	1.25%	0.55%
Jul-08	5.67%	6.40%	6.97%	0.73%	1.30%	0.57%
Aug-08	5.64%	6.37%	6.98%	0.73%	1.34%	0.61%
Sep-08	5.65%	6.49%	7.15%	0.84%	1.50%	0.66%
Oct-08	6.28%	7.56%	8.58%	1.28%	2.30%	1.02%
Nov-08	6.12%	7.20%	8.98%	1.08%	2.86%	1.78%
Dec-08	5.05%	6.54%	8.13%	1.49%	3.08%	1.59%
Jan-09	5.05%	6.39%	7.90%	1.34%	2.85%	1.51%
Feb-09	5.27%	6.30%	7.74%	1.03%	2.47%	1.44%
Mar-09	5.50%	6.42%	8.00%	0.92%	2.50%	1.58%
Apr-09	5.39%	6.48%	8.03%	1.09%	2.64%	1.55%
May-09	5.54%	6.49%	7.76%	0.95%	2.22%	1.27%
Jun-09	5.61%	6.20%	7.30%	0.59%	1.69%	1.10%
Jul-09	5.41%	5.97%	6.87%	0.56%	1.46%	0.90%
Aug-09	5.26%	5.71%	6.36%	0.45%	1.10%	0.65%
Sep-09	5.13%	5.53%	6.12%	0.40%	0.99%	0.59%
Oct-09	5.15%	5.55%	6.14%	0.40%	0.99%	0.59%
Nov-09	5.19%	5.64%	6.18%	0.45%	0.99%	0.54%
Dec-09	5.26%	5.79%	6.26%	0.53%	1.00%	0.47%
Jan-10	5.26%	5.77%	6.16%	0.51%	0.90%	0.39%
Feb-10	5.35%	5.87%	6.25%	0.52%	0.90%	0.38%
Average	6.81%	7.36%	7.71%	0.55%	0.90%	0.35%
Median	6.90%	7.47%	7.92%	0.52%	0.76%	0.29%

Source of Information:
S&P Public Utility Index and Moody's Public Utility Bond Average Annual Yields 1928-2010, (AUS Consultants - Utility Services, 2010).