

# The Pulse of a Utility

The market-to-book ratio is a vital sign of a utility's health.

BY JAMES M. SEIBERT

Shareholders and directors of electric and gas utilities need a consistent, credible, and intuitively clear way to evaluate how management is marshalling the company's resources and to gauge management's contribution to overall results. They need a single performance measure to summarize—as well as any one measure can—how the utility is performing both in absolute and relative terms and what the owners and stakeholders should expect in the future. Like a physician with her stethoscope at the outset of a check-up, astute shareholders and directors should use the level and trend of a utility's market-to-book ratio (MtB) as one of the first vital signs they monitor and as an ongoing and leading measure of a utility's strategic health.

The market-to-book ratio is the ratio of the market value of all of the firm's capital (both debt and equity) divided by the book value of the firm's capital. The market value is determined by valuations made by the public capital markets (common and preferred share prices, debt prices, *etc.*); the book value is determined by the utility's accrual accounting value stated in the periodic financial statements.

At the most summary level, the MtB ratio offers a simple and readily accessible vital sign of what the market (*i.e.*, an external, independent arbiter) really believes the firm is worth relative to the current net investment in it. Simply put, a MtB ratio of less than 1.0 suggests management has not created, or is not expected to create, any value in excess of the net investment in the firm. A ratio of greater than 1.0 suggests management has generated or is generating returns on capital in excess of the cost of capital. Even more important is the overall trend of a utility's MtB ratio; a rising MtB and especially an MtB ratio in excess of industry average is indicative of returns greater than the cost of capital (*i.e.*, ROIC > WACC, or return on invested capital greater than weighted average cost of capital).

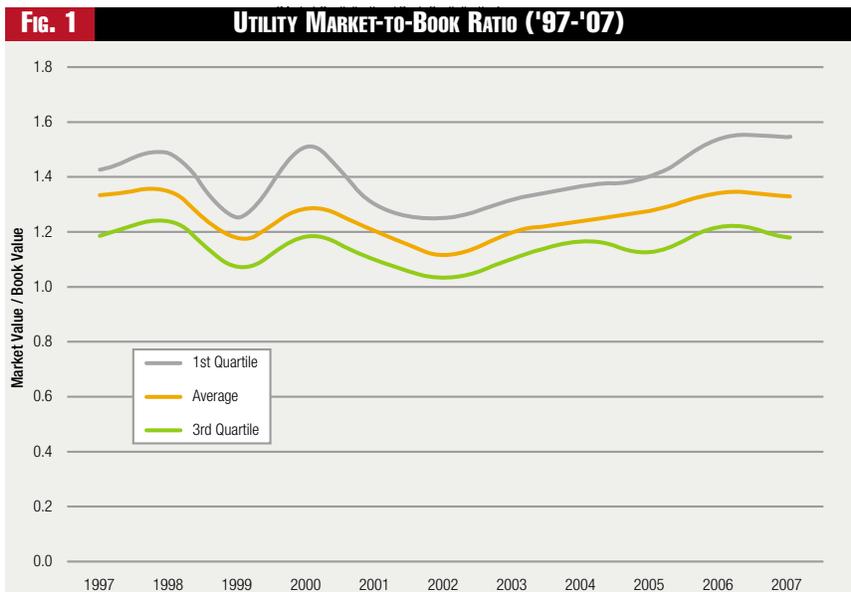
**When a utility's market-to-book ratio falls below 1.0, the market is challenging its independence as a firm.**

The MtB ratio is a key measure for any capital-intensive industrial or financial firm. It is especially useful in regu-

lated industries such as electric and gas utilities, where rate base closely approximates the book value of the firm (with some adjustments).

A perspective on the utility industry's MtB ratio trends is a necessary foundation to understand any individual utility's current performance and prospects. For example, an examination of the market-to-book ratio trends (by quartile) for the overall U.S. utilities industry (65 companies) during the period from 1997 to 2007 highlights several overall trends (*see Figure 1*).

First, the general level of the MtB ratio is relatively stable over long periods (10 years). The industry average MtB ratio at year end 2007 was 1.33 and was identical to its 1997 level. This stability is expected—the U.S. utilities industry is highly regulated and based on mature technologies. Second, a clear decline was noted in the early part of this decade, consistent with emergence of several failed deregulation initiatives in various states (notably California) and the demise of Enron, *et al.* Similarly, a clear rising trend also is apparent in recent years (2002 to 2007) as the effects of these ill-fated forays have been resolved and an era of favorable financial conditions (declining interest rates, improved



dividend tax treatment, etc.) have improved the overall utility financial environment and performance.

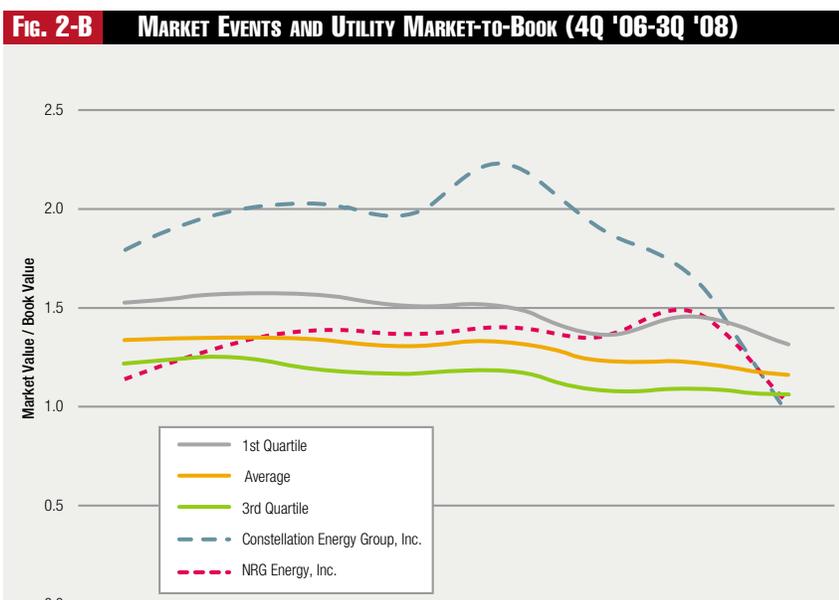
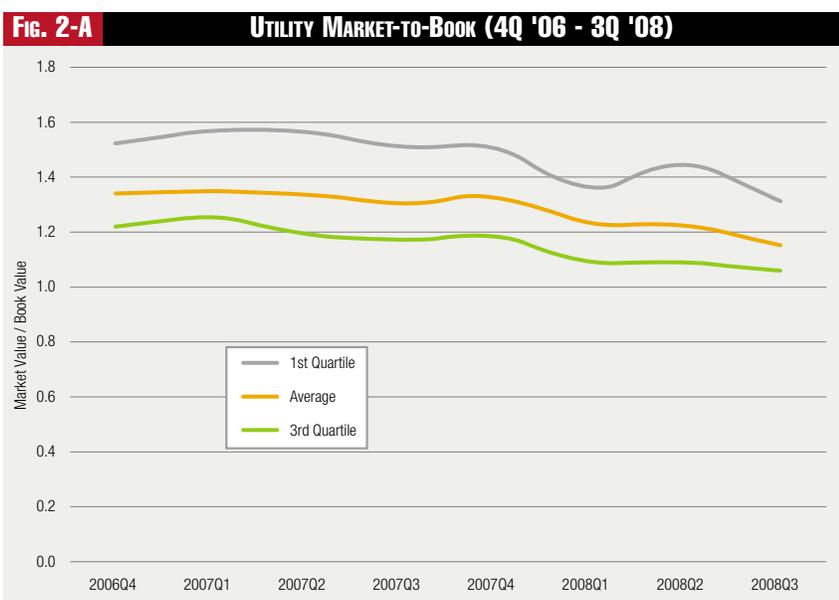
In the most recent quarterly MtB results, overall industry levels (first quartile, average, and third quartile) have declined slightly in the past two years, beginning in 2007 (see Figures 2-A and 2-B). This is no doubt related to challenging capital market conditions during the same period. However, as previously noted, the overall level is not materially different from that of 10 years ago.

It also is worth highlighting the MtB context for the recent unsolicited offers for both Constellation Energy Group and NRG Energy (see Figure 2-B). These companies saw their MtB values plummet from first- to fourth-quartile levels and to market values at or below book value. This is an open invitation for change-of-control challenges from other market participants.

### The Case for MtB

A logical and appropriate question is, “why is the MtB ratio a reliable and insightful measure?” Further, “how does the MtB ratio compare to other enterprise level performance measures?” The best way to answer these questions is to examine those characteristics that make a good enterprise level performance measure and assess how the MtB ratio performs relative to other metrics. Ideally, an enterprise level performance measure should be: externally or market-defined; stable or time-independent; comparable; and predictive.

An ideal enterprise-level performance measure should first and foremost be based on an external or market-derived value. One need only consider the quality-of-earnings challenges resulting from normal utility business activities (e.g., allowance for funds used during construction-AFUDC) to acknowledge that purely accounting-based measures such as return on assets (ROA), return on equity (ROE), and return on invested



capital (ROIC) are simply too arbitrary to be relied upon as a sole assessment of performance. These accounting-based measures are defined internally by the company and thus have no independent, external check on reality. This is not to suggest these measures (ROE, ROA, etc.) don't have a role in performance assessment and management; rather, it merely highlights their ability to be distorted by accounting and financing decisions and thus notes their limitations.

It is especially important to highlight that a related and very strong candidate for a single, enterprise level performance

measure is, in fact, the ROIC spread (i.e., ROIC-WACC). Analysts at Accenture and others have identified the power of this measure [(ROIC-WACC) > 0] as a predictor of when shareholder value is being created (see “High Performance? Your Strategy Matters,” *Fortnightly*, September 2006). Unfortunately, the ROIC spread fails in two areas. First, the company's WACC simply isn't an observable value in the market, although it can be estimated with some degree of accuracy through statistical measures. Second, and perhaps most important, many utility executives are loathe ever to

expressly measure WACC as part of their strategic planning and performance monitoring activities in the belief that regulators later will reveal these analyses with their discovery powers during rate-case proceedings and use them to the company's disadvantage in the cost of capital elements of future rate cases.

A scatter plot of the relationship

Thus, the MtB ratio captures the public's assessment of the firm's positioning and expected results—especially its expected ROIC, which is a critical driver to creating shareholder value.

### MTB Ratio Stability

The overall industry's levels and patterns for the MtB ratio are relatively stable over

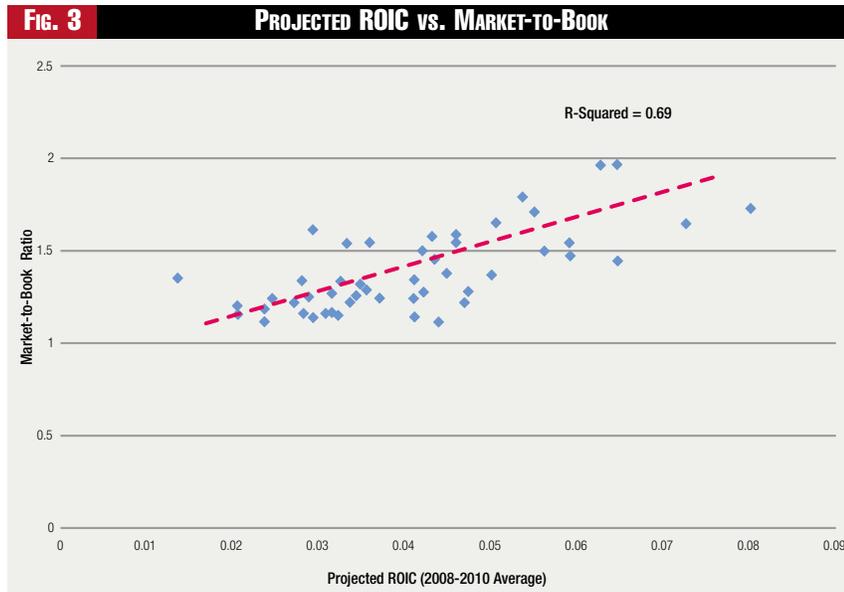
annual reports have touted superior total shareholder return (or TSR, which measures the total effect of both dividends and share price appreciation over a period) as a testament to management strength and ability. TSR certainly is a conceptually attractive performance measure and it also should be an important measure for management to monitor.

However, TSR assessments should be used with considerable caution. Virtually all recent top performers in five-year TSR are, in fact, some of the fallen angels of the early 2000s who faced severe strategic and financial challenges—even bankruptcy (see Figure 4). Thus, a leading indicator of high TSR performance is, as often as not, born from some catastrophic decline in the value of the firm's stock value in the recent past. Clearly, such events are not exemplars of keen management performance and thus challenge the entire notion of the TSR as a stable, effective measure of management performance.

Regrettably, most of the bragging rights for industry-leading TSR performance often belong in the same category as those of the latest hot mutual fund or hedge fund. The starting baseline is a key variable driving the overall reported value.

Finally, a prediction: Expect a deafening silence on TSR-related measures in annual reports (and in executive compensation models) in the years after 2007 from the very utilities that touted them in the mid-2000s. With their favorable low water mark fading into the sunset, they soon will have to develop a new, more convincing argument to demonstrate outstanding performance.

Many traditional utility managers love the classic enterprise measures—earnings per share (EPS), growth in earnings, dividend rate, dividend yield, and the like. Unfortunately, these measures either fail to offer an element of comparability for external »



between the MtB ratio of 68 U.S. utilities at year-end 2007 vs. their projected average ROIC over the next three-year period (derived from securities analysts' projections) shows a very strong correlation ( $r$ -squared = 0.69), implying the MtB ratio and the expected ROIC are deeply related measures (see Figure 3).

Here is where the logic of the MtB ratio begins to become clear. The MtB ratio offers shareholders an ideal, externally-derived measure of management's progress. The MtB ratio—unlike the WACC—is expressly observable in the market (and on a daily basis). Moreover, it is sufficiently removed from cost of capital analyses to satisfy even the most cautious regulatory regime. Simply put, without expressly measuring ROIC-WACC (for the rationale noted above), the MtB provides an excellent surrogate measure.

long periods (see Figures 1 and 2). Thus, it is possible to review any individual company's MtB ratio with a focus on its absolute level, its relative level, and its trends at any point, and thereby gain significant insight about the utility's current and future conditions.

The MtB ratio's stability and consistency of measurement is not available in other, popular enterprise measures. For example, in recent years many utility

**Expect a deafening silence on TSR-related measures in annual reports and executive compensation models after 2007.**

stakeholders (e.g., EPS) or merely reflect financing decisions (e.g., dividend-related measures) rather than effective performance. Worse, many of these measures are, in fact, indicators of the opposite of what they purport. For example, a high dividend yield is most commonly a function of a falling share price, rather than a surging shareholder payout, and a precursor to a cut in the dividend rate.

These traditional measures won't go away any time soon. They have become a sort of shorthand communication between executives and their boards of directors and between the companies and their investors. Unfortunately, although they are comfortable for their familiarity they offer very little real situational insight or relative comparison for stakeholders.

### Predictable Patterns

Finally, an ideal enterprise-level performance measure should offer key stakeholders (especially independent board members) a quick and clear sense of the company's status in terms of the

**FIG. 4 UTILITY TOTAL SHAREHOLDER RETURN**

Company	TSR Rank 5 yr	TSR Rank 3 yr
Allegheny Energy, Inc.	1	4
Reliant Energy, Inc.	2	14
Edison International	3	31
Exelon Corp.	4	6
FirstEnergy Corp.	5	2
PPL Corp.	6	5
AES Corp.	7	51
MDU Resources Group, Inc.	8	1
CenterPoint Energy, Inc.	9	13
Sempra Energy	10	8

Source: Chicago Energy Associates

key macro trends and issues it faces. As both a capital-intensive and regulated industry, here is where a utility's market-to-book ratio has very predictable patterns that offer insight into future events. Three obvious areas of this predictive power include market expectations about the future ROIC, share price performance (especially around rate case years), and governance events.

First, the MtB ratio and the market's expectations about the utility's future ROIC performance are highly correlated (0.69). Thus, the MtB ratio really is signaling to stakeholders what others expect about the future performance. Thus, a rising or falling MtB ratio

(especially changes relative to industry averages and historic levels) are noteworthy events and they warrant further examination.

Second, the regulated nature of the industry also is clearly apparent in a utility's MtB trends. For example, the periodic rate-case process is inherently a leveling one. Not only are operating costs and rate base readjusted, but allowed return on equity is reset to a theoretical industry

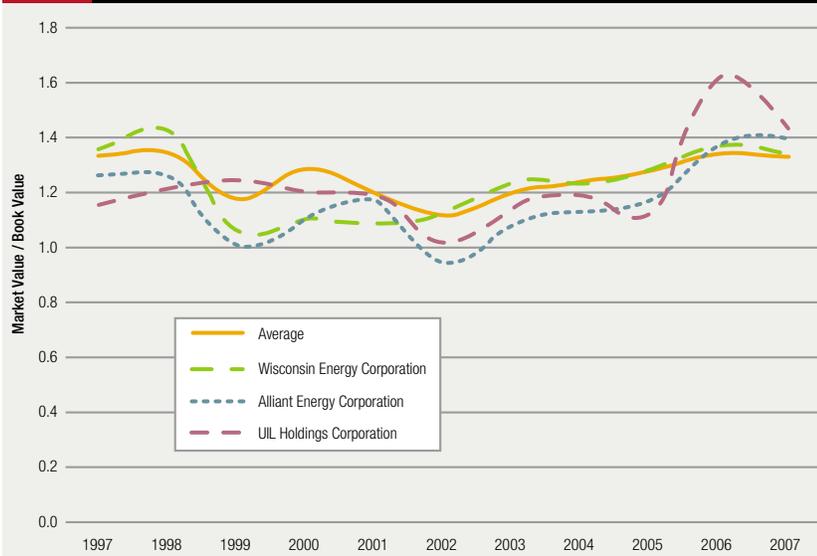
average level. Thus, astute observers would expect the MtB ratio of a utility to exhibit a clear regression to the mean pattern around the time of a rate case.

This regression to the mean is exemplified by We Energies, which has had multiple rates cases throughout the 2000s (with authorized increases through 2009) and its MtB ratio concurrently has mirrored the industry average (see Figure 5). Similarly, Alliant Energy (multiple cases since 2003), and United Illuminating (2006 through 2009) also have exhibited this regression to the mean concurrent with recent rate orders.

Last, consider the topic of change-of-control events such as survival mergers (effectively, friendly takeovers often engineered by stakeholders) or unsolicited offers or takeovers. A clear pattern results from examination of the MtB ratio of several U.S. utilities that have ceased independent operation in the past decade: All of the now-defunct utilities had MtB ratios well below 1.0 prior to their demise (see Figure 6). Performance near or below this critical 1.0 level should be a cause for alarm among executives and directors alike. Indeed, the utility's very independence as a firm openly is being challenged by the market.

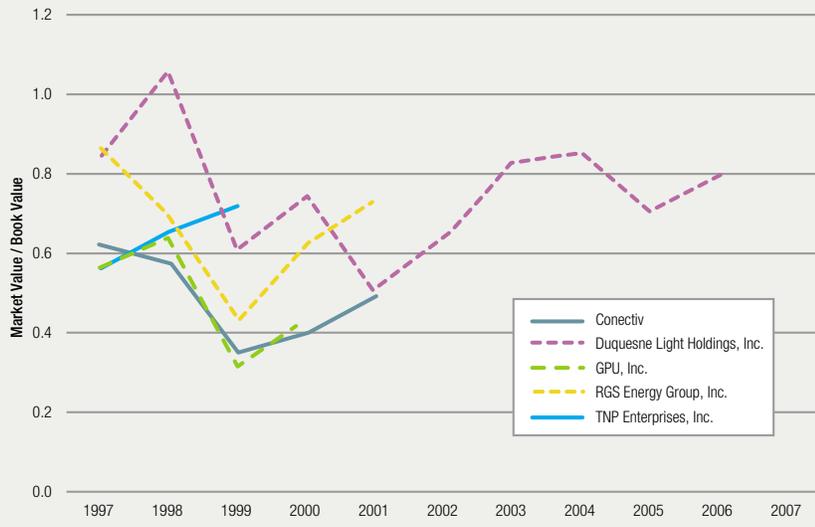
Similarly, it is axiomatic that for a successful change of control event to occur, the acquiring firm must offer the acquisition company a pre- »

**FIG. 5 UTILITY MARKET-TO-BOOK ('97-07)**



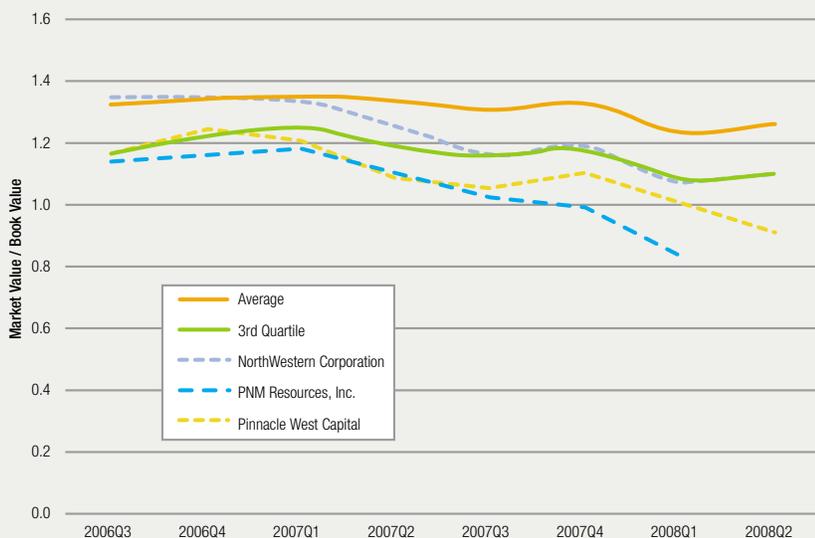
Source: Chicago Energy Associates

**FIG. 6 UTILITY MARKET-TO-BOOK BEFORE CHANGE OF CONTROL**



Source: Chicago Energy Associates

**FIG. 7 UTILITY MARKET-TO-BOOK (US EXAMPLES)**



Source: Chicago Energy Associates

mium over its then existing market price (implicitly a MtB ratio greater than current) and it also must acquire the utility at a market competitive price. Thus, transactions commonly occur at price levels around the industry average MtB ratio (e.g., 1.33 in 2007). Further, this implies the most likely target companies are those utilities with MtB ratios well below this industry value average and are more likely to yield a premium.

The key implication is that stakeholders should take notice when a utility's MtB ratio is well below industry

average (especially those below 1.0) as it is a clear signal that change of control is both feasible and more likely.

The predictive powers of the MtB

**Virtually all recent top performers in five-year TSR are fallen angels of the early 2000s.**

ratio can be seen in Northwestern Corp., whose MtB ratio already was at an industry average or better level before the company's recent ill-fated proposed sale to Babcock and Brown (announced April 26, 2006, cancelled July 27, 2007) (see Figure 7). The ultimate failure of that transaction was predictable from a MtB perspective: It was difficult to anticipate a value-creating acquisition scenario where a regulated utility already is valued at industry average MtB levels.

Similarly, PNM Resources and Pinnacle West Capital Corp. currently are struggling with significant strategic and regulatory challenges. These utilities are showing declining MtB ratio performance and performing well into the range where one could reasonably expect a change of control or a change of management event on the horizon.

The MtB ratio is an inherently stable measure that avoids the pitfalls of purely accounting based measures. It isn't biased by past events like the TSR is, and it captures the essence of when genuine shareholder value is being created (i.e., ROIC-WACC). Most important, it has some predictive power that anticipates valuation changes resulting from structural events (rate cases) and competitive threats (change of control). Best of all, it is an intuitive measure that can be understood easily without complex accounting or financial details.

Although no single measure of enterprise performance is perfect, the MtB ratio offers a concise and insightful measure of overall enterprise performance. The MtB ratio should have a prominent role in internal enterprise-level strategy and performance assessments (e.g., in balanced scorecards) and in external shareholder and other stakeholder communications. ■

*James M. Seibert is the managing partner of Chicago Energy Associates LLC. Email him at [jseibert@chicagoenergyassociates.com](mailto:jseibert@chicagoenergyassociates.com).*