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**PCA Research Brief:
Actuarial Trends in Corporate America**

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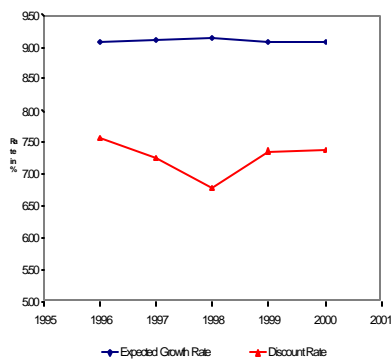
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Actuarial Trends in Corporate America

Here's a quick summary of corporate actuarial trends, courtesy of Bear Stearns' report entitled Accounting Issues – Pension and Other Retirement Benefits I published in November 2001. In the report, Bear Stearns surveyed the companies in the S&P 500 about their practices related to pension accounting. The report presents tabular information on actuarial discount rates and expected growth rates across the majority of S&P 500 constituents.

The chart below shows the average expected growth rate and the average discount rate across those S&P 500 companies that responded to the Bear Stearns survey (typically between 250 and 350 per year). With the exception of 1998, the spread between the two rates has been approximately 1.5%.

Exhibit 1:
S&P 500 Average Actuarial Growth and Discount Rates (Five Years ending 2000)



Source: Bear Stearns

The average spread itself showed a modest upward trend between 1996 and 2000 (see Exhibit 2). In 1996, the average spread was less than 150 bp, but then exceeded 150 bp through the end of 2000.

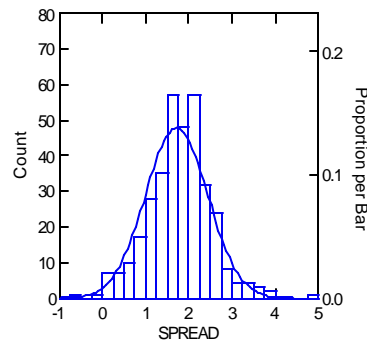
Exhibit 2:
Actuarial Growth Rate – Discount Rate Spread (Five Years ending 2000)



Source: Bear Stearns, PCA

Across all companies, as of the end of 2000, the spread was close to normally distributed, but had some interesting properties (see below).

Exhibit 3:
Distribution of Actuarial Growth vs. Discount Spread



Source: Bear Stearns, PCA

First, there are observations outside of the bell curve, particularly on the high side. One company (US Bank) had a spread of almost 5.00% between rates!

Notice how the bars tend to be higher than the line on the right side of the bell curve rather than the left side. This might be an indication that the spread is skewed higher, rather than lower.

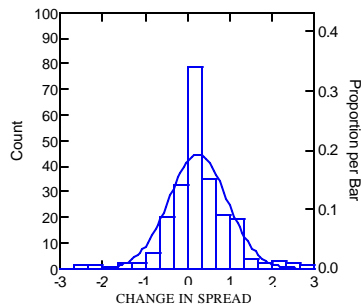
Also notice that a huge proportion of companies had spreads greater than 2.0%. Those companies with the five highest spreads, as of 2000, were US Bank (4.8%), Tektronix (3.8%), Weyerhaeuser (3.75%), Agilent (3.61%), PPG (3.6%), and Mattel (3.5%). At the other end, there were two companies that actually had negative spreads: Parametric Technologies and Air Products & Chemicals.

Another interesting finding is the *change* in spread, by company, since 1996 (see below).

these firms saw their spread rise by over 2.0% since 1996. Companies who saw large reductions in their spread include Air Products & Chemicals, Masco, Allstate, Viacom, and Mead Corp. These five companies reduced their spreads by more than 1.25% over the last five years.

Those companies with high spreads, but have not experienced significant change in spread could be considered to have a long-standing aggressive view of pension accounting. Of those highlighted, Weyerhaeuser, Agilent, PPG, and Mattel stick out.

Exhibit 4:
Distribution of the Change in Spread
1996 - 2000



Source: Bear Stearns, PCA

Again, fat tails at both ends. Companies that displayed the largest increases in their actuarial spread include US Bancorp, Alcan,

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References:

McConnell, Pat; Pegg, Janet; Zion, David; Accounting Issues: Pension and Other Retirement Benefits I—A Historical Perspective; Bear Stearns Equity Research; November 2001.

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