The Journal of Portfolio Management

Startling Facts from the Past

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As part of its celebration of the sixtieth anniversary of the *Financial Analysts Journal*, the CFA Institute has reprinted volume I, number 1, of *The Analysts Journal*, a publication launched in January 1945 by the then-eight-year old New York Society of Security Analysts.

Space prevents me from elaborating on the many fascinating features of this little journal, but I am especially impressed with "A Method of Valuing Growth Stocks," by George Mackintosh, an "industrial analyst" with Moody's. One has to allow for the passage of sixty years, but Mackintosh's analysis has a striking contemporary quality even as it provides a colorful insight into the character of the stock market in the mid-1940s.

The article lists eleven companies that Mackintosh classifies as growth stocks: Dow Chemical, Coca-Cola, Air Reduction, IBM, DuPont, Pennsylvania Salt, Hercules Powder, Union Carbide, American Can, Allied Chemical, and Sears, Roebuck. When I entered the investment management profession in the early 1950s, our firm also considered all of those growth stocks, with the possible exception of American Can.

Mackintosh calculates his earnings growth rates from 1926 to 1936. The start date and the end date were both good years but not peak years, and the choice of 1936 avoids the distortions of the World War II period. The mean annual earnings growth rate of these eleven companies over 1926-1936 was 4.2%, which sounds like a low number in today's world, but we must remember that the CPI in 1936 was 20% below the 1926 mark. Mackintosh notes that 888 industrials failed even to match their 1926 earnings. He also lists ten "non-growth" stocks, including GE, Burroughs, and Eastman Kodak! That did take me by surprise.

As we might expect from the dynamics of our economy, seven of Mackintosh's eleven growth companies have disappeared since 1945. But the Mackintosh list is revealing in a more important sense. With the exception of Sears, every company is a manufacturer, and seven of the eleven companies are chemicals.

Chemicals were the hot area for growth and the equivalent of today's high-techs for a long time. The pharmaceuticals were only just beginning to develop into the companies we know today—Pfizer, for example, had been a manufacturer of citric acid until it began working on antibiotics in the early 1950s. The electronics industry was still far off in the future (note that Mackintosh did not consider even GE a growth company). It was at chemical companies in the early post-war years that the most striking innovation was taking place.

As Mackintosh observes, "No industry can match the persistent growth of rayon [the first synthetic fiber].... demand increased from 33 million pounds in 1923 to 656 million pounds in 1943." Mackintosh's understanding of this process would be welcome today, six decades later. He tells us rayon stocks were no longer selling at high P/Es because continuing price reductions were cutting into earning power. Investors were reluctant to extrapolate the "rabbit-like" growth rates, because youthful industries are "subject to a high rate of company casualties," and such high growth rates frequently require new financing.

What did those guys know that the investors in high-tech forgot in the late 1990s?

Mackintosh's methodology for calculating appropriate price/earnings ratios also sounds remarkably contemporary. I note two features with lessons for our own time. First, the coefficient of correlation between the 1926 dividend payout ratio and the growth in earnings from 1926 to 1936 was –0.35. Without Dow Chemical, which had 13% annual growth and a 43% payout in 1926, the coefficient would have been –0.20. High levels of retained earnings are no guarantee of high future growth rates.

Second, dividend *growth* was a strongly significant factor. The correlation between the change in the stock price and the change in the dividend from 1926 to 1936 was +0.74, with a t-statistic of 3.30.

Here is one historical anomaly. Thanks to the impact of the New Deal's undistributed profits tax, the dividend payout ratio jumped from an average of 57% of earnings in 1926 to a startling 73% in 1936 (Dow was the lowest at 46%, but six companies paid out over 80%). Yet that nasty tax and the high payouts did nothing to discourage investors. The total return on the stock market in 1936 was 34%, coming on top of 48% in 1935.

There's food for thought for today's investors. But how will the perspective look thirty years from now, when our own volume 1, number 1, will be sixty years old?