



EDITOR'S CORNER

Robert D. Arnott
Editor

Dividends and the Three Dwarfs

Do dividends matter? You bet. Unless corporate managers can provide sharply higher real growth in earnings, dividends are the main source of the real return we expect from stocks. **Figure 1** contains the familiar graph of the growth of assets invested in U.S. stocks for the past 200 years. If no dividends were spent, if no taxes were taken out, and if market returns were earned without fees or expenses, \$100 in 1802 would have grown to \$766 million by the end of 2000, then cratered all the way down to \$459 million by the end of 2002. Still, \$459 million isn't bad from a starting point of \$100. Indeed, that sort of return is enough to make it worthwhile to stick around for 200 years to enjoy the proceeds.

Figure 1 also breaks the 200-year total return on equities, 7.9 percent, into its constituent parts:

- 5.0% = Return from *dividends*. Suppose an investor received only the dividend yield—no price appreciation, no growth in dividends, no inflation contributing to price and dividend growth. Then, at the end of the period, the \$100 would be worth \$1.8 million—still a pretty good return.
- 1.4% = Return from *inflation*. Suppose an investor received only the inflation return—no income, no growth in income, no rising valuation multiples. The \$100 would have grown to \$1,804—not a terrible return, but then again (by definition, because we're looking at inflation here), that \$1,804 would buy only what \$100 would have bought in 1802.
- 0.6% = Return from *falling yields and rising valuation levels*. Suppose an investor received no income, saw no growth, and

suffered no inflation but did participate in the rise of equity valuation levels. This investor would have seen the \$100 grow to \$308 because dividend yields fell to 32 percent of their 1802 levels, so price-to-dividend ratios rose to three times their 1802 levels. Price-to-earnings ratios experienced a similar increase.

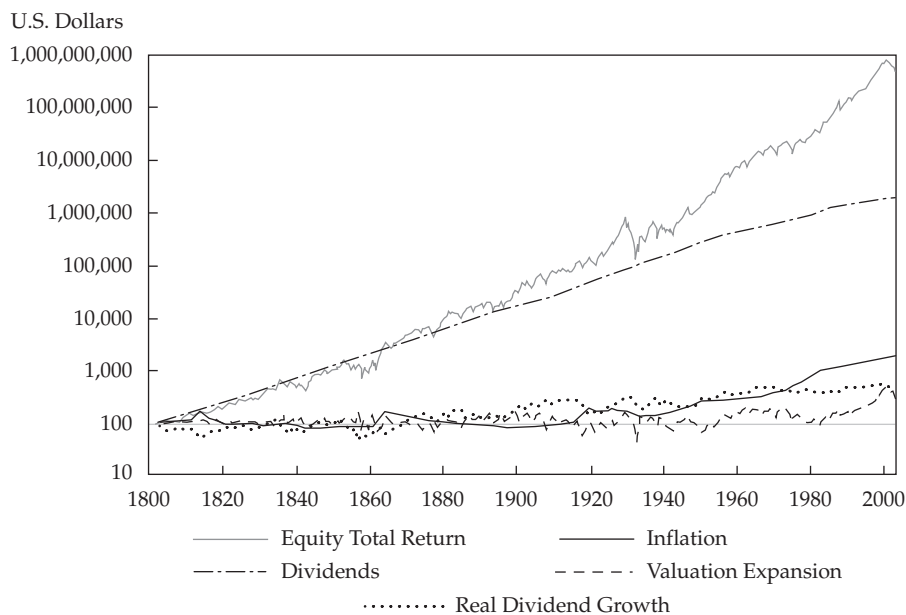
- 0.8% = Return from *real growth in dividends*. Suppose an investor gave away all his or her income, had no inflation, and did not participate in rising valuation levels but did benefit from the real growth in dividends. This investor would have had \$456 by August 2002. After 200 years. That dollar figure is way less than most people would have expected.

The importance of dividends for providing wealth to investors is self-evident. Dividends not only dwarf inflation, growth, and changing valuation levels individually, but they also dwarf the *combined* importance of inflation, growth, and changing valuation levels. This result is wildly at odds with conventional wisdom, which suggests that, while the return from bonds is wholly dependent on income, stocks provide growth first and income second. It is startling to realize that dividend growth has averaged less than 1 percent above inflation during the past 200-year period. And it is shocking that real per-share dividend and earnings growth on the S&P 500 Index since 1965 has been zero.

What does this information mean for us today? First, the yield today is 1.8 percent as opposed to the historical 5.0 percent. Second, assuming further

The Editor's Corner is a regular feature of the Financial Analysts Journal. It reflects the views of Robert D. Arnott and does not represent the official views of the FAJ or AIMR.

Figure 1. Dividends and the Three Dwarfs: Growth of \$100 Invested in U.S. Equities, 1802–2002



Sources: Based on Schwert (1990) data for 1801–1870, a blend of Schwert and Siegel (2002) data for 1871–1925, and S&P 500 Index data since 1926.

increases in valuation levels is dangerous. Third, we can't know what inflation (or deflation) has in store for us. Fourth, to get more than a 2.6 percent real return from stocks, we need faster growth than the 0.8 percent observed historically. So, when the widely disparaged dividend provides one-third the return it once did and when the dividend has historically been the dominant source of equity market real returns, only heroic growth assump-

tions can give us the real returns we want from equities.

Stock buybacks can boost the per-share growth rate, and entrepreneurial innovation and productivity gains can boost this growth. But how far? None of these supposed avenues to repeat the past real returns from stocks is plausible. We can repeat those past returns only from a starting point of past valuation levels. Dividends, unequivocally, matter.

References

Schwert, G. William. 1990. "Indexes of United States Stock Prices from 1802 to 1987." *Journal of Business*, vol. 63, no. 3 (July):399–426.

Siegel, Jeremy J. 2002. *Stocks for the Long Run*. 3rd ed. New York: McGraw Hill.