

## Dividend Futures: Five Key Things to Know



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Dividends are getting more and more into the spotlight as overall corporate earnings growth continues to face many challenges in a low inflation and relatively slowly growing world. And, a U.S. Treasury 10-year note yield of sub-2% certainly adds interest to the dividends that can be earned from S&P 500® companies. And, dividends may also provide a modest potential hedge against changes in nominal GDP growth, should the economy decelerate unexpectedly.

The principal drivers of dividends are corporate profit growth and payout ratios. From an economic perspective, the amount of dividends investors should expect for the whole economy can be defined by the following formula:

### Aggregate Dividends =

$$\begin{aligned} &(\text{Nominal GDP}) \\ &\quad \times \\ &(\text{Corporate Earnings as \% of GDP}) \\ &\quad \times \\ &(\text{Average Dividend Payout Ratio}) \end{aligned}$$

That is, aggregate dividends are determined arithmetically by nominal GDP, corporate earnings as a percent of nominal GDP, and the average dividend payout ratio.

Moreover, dividends are a key component of one of the most venerable means of valuing equity markets – the dividend discount model, which holds that equity valuations are (or should be) equal to the discounted value of future dividends.

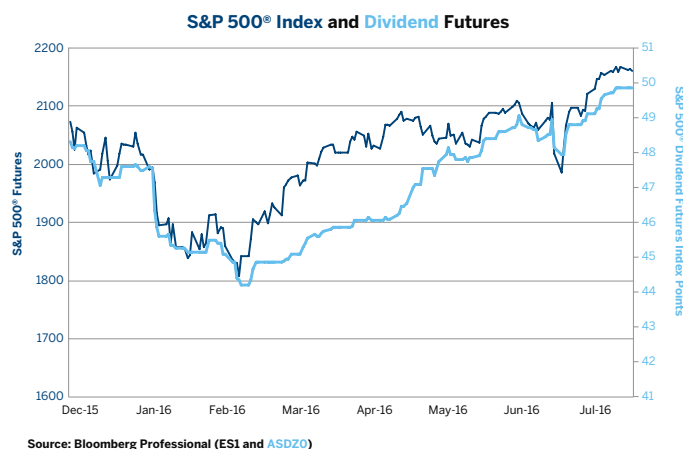
Here are five economic factors to keep in mind about dividends and dividend futures.

### 1) Markets are Pricing Slow Growth in Dividends, 2.2% Per Annum, Between Now and 2020

Let's focus first on what the market is currently pricing in term of expectations by taking a look at the information embedded in dividend futures market. The December 2020 futures price for S&P 500® dividends points to 49.85 index points versus 45.6 for December 2016. This implies a modest 2.2% annualized growth rate over the last four years of this decade. Nominal GDP might expand a little faster than that, perhaps at around 3.5% or 4% per year, assuming 1.5% to 2.0% real growth and a similar level of inflation. In turn, this implies that corporate earnings, from which dividends are paid out, will likely grow more slowly than nominal GDP.

Market participants have been revising their views on dividends and are becoming much more optimistic. Since February, pricing for 2020 dividends has risen from 44.35 index points to 49.85 – a 12% increase. This increase comes on the back of a 20% rise in the S&P 500® index as equity investors become more optimistic about prospects for firms in general (Figure 1).

**Figure 1: Equity Investors Becoming More Optimistic Over Corporate Prospects.**



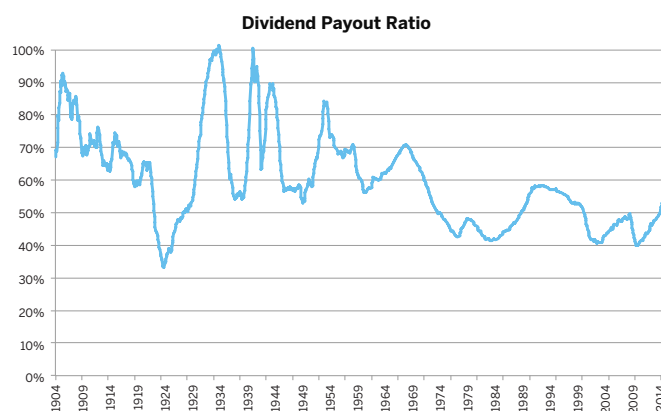
## 2) Dividend Payout Ratios Are Not Set in Stone

When corporations make profits, they have a choice: They can either reward shareholders or they can retain and reinvest the earnings. While some companies, notably fast-growing technology firms, opt to retain all of their earnings, most choose to pay out a portion in dividends. These dividend payout ratios fluctuate widely over time, though not necessarily with a strong correlation to the economic cycle. Payout ratios rose during the 1980s boom but declined during the period of strong growth during the 1990s. They also fell substantially during the 2008 recession, but rose during the most recent expansion (Figure 2).

Dividend payout ratios can also fluctuate in response to changes in tax policy. In 2003, the U.S. Congress enacted a law signed by then President George W. Bush that reduced taxes on dividend payments. This led to a marked increase in the payout ratio.

Finally, there can be structural changes in the dividend payout ratio over time as well. From 1900 to the late 1950s, dividends played a primary role in signaling corporate health, and dividend payments averaged around two-thirds of earnings while just one-third was retained. The market's reliance on dividends as the primary measure of valuation and corporate health may have been driven by mistrust of the reporting standards for earnings prior to the creation of stronger banking and accounting regulations during the 1930s. As financial analysis became more sophisticated during the 1950s and 1960s, investors began to focus more heavily on earnings statements, and dividends became somewhat less important as a barometer for corporate health. Since then, payout ratios have come down to around 40-50%, on average, but with wide variations between sectors, and companies.

**Figure 2: Payout Ratios Fluctuate Over Time; Are Structurally Lower Today than Pre-1960.**



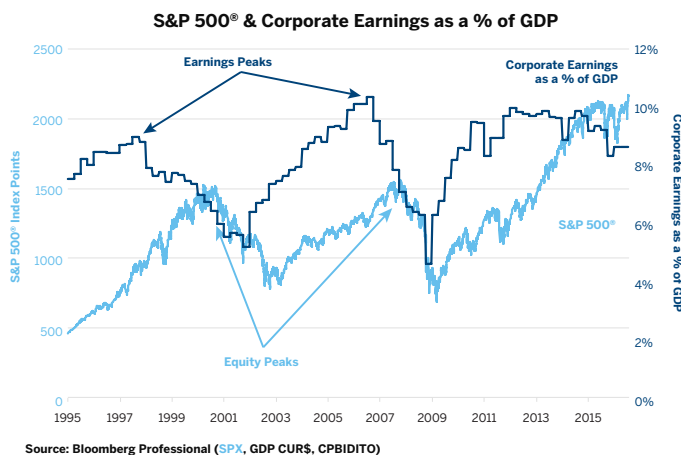
## 3) Corporate Earnings are Probably Past their Cyclical Peak

Corporate earnings rarely exceed 10% of GDP. They reached this level briefly in 2006 and hovered around 10% from 2011 to 2014. They have since dropped to around 8.5% because the labor market has tightened, wages have begun to rise while productivity growth has remained slow. All of these factors are putting downward pressure on corporate profits. The impact of declining corporate profits on dividends has been offset by two other factors:

- a) Continued growth in nominal GDP, which has been growing at around 3.5% year on year.
- b) A rising dividend payout ratio, which now exceeds 50% of earnings.

What is notable is that when corporate earnings peak as a percentage of GDP and begin to decline, equity prices can continue to rise. During the 1990s, earnings peaked as a percentage of GDP in 1997 while stocks continued to rise until 2000. During the subsequent decade, earnings peaked relative to GDP in 2006 but stocks didn't reach their highest levels until late 2007. Likewise, this time around, earnings as a percentage of GDP may have plateaued in 2011-14 and then began falling, but the S&P 500® continued upward and broke to a new record high (Figure 3). As such, a peak in earnings doesn't necessarily imply an imminent peak in equity prices. That said, post-peak earnings declines often correlate with periods of rising equity volatility (Figure 4).

**Figure 3: Earnings Sometime Peak Long Before Equity Prices Peak in Bull Markets.**



**Figure 4: When Earnings Fall as a Percentage of GDP, Equity Option Implied Volatility Tends to Rise.**



#### 4) Dividends are a great deal less volatile than stocks indices.

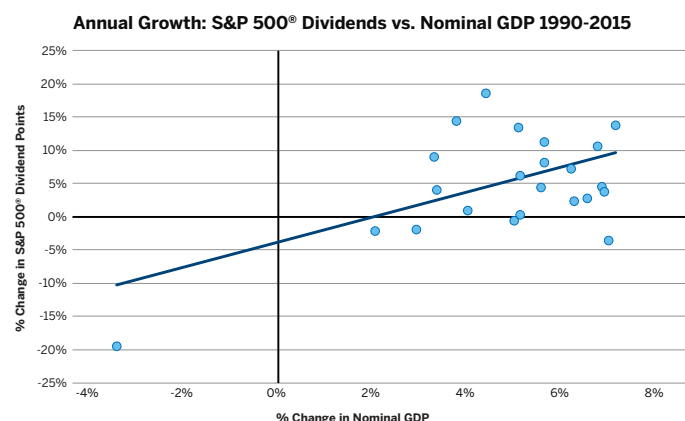
While we are on the subject of volatility, consider the following: for the 25 years from 1990 to 2015, the annual variation in S&P 500® dividend points has been 7.65%, compared to 17.4% for the S&P 500® itself. Similarly, since the inauguration of the S&P 500® Dividend future, the realized volatility of the December 2020 contract has been 6.5%, annualized, compared to 15.8% for the E-Mini S&P 500® Index future.

Dividend futures provide a less volatile means of gaining access to future corporate cash flows than investing in equity indices themselves. This may become especially interesting as we may be entering a period of declining corporate profitability amid a likely continued tightening of the labor market, rising unit labor costs and slow growth in labor productivity. If corporate earnings growth do begin to fall and if equity markets react in the same manner that they have in the past, we could be in for a structurally higher level of equity volatility over the next few years.

## 5) Dividend Futures will Likely Correlate With Changes in Nominal GDP

Although payout ratios and corporate earnings as a percentage of GDP change over time, S&P 500® dividend payments have correlated with changes in nominal GDP at around 50% since 1990 (Figure 5). This contrasts sharply with the S&P 500® itself, whose correlation with annual changes in GDP is only 0.1% over the same period. This is largely because equities anticipate future changes in GDP whereas dividends are more apt to reflect present conditions.

**Figure 5: Dividends have Grown Fairly Closely In Line with GDP Over Time.**



Source: Bloomberg Professional (GDP CUR\$ and SPXDIVAN), CME Economics Research Calculations

## Bottom Line

- The main drivers of dividends are corporate profit growth and payout ratios.
- Corporate profits vary as a percentage of GDP, and payout ratios can be influenced by the economic cycle and tax policy.
- While corporate earnings are challenged by the low inflation and sluggish global growth environment, which may lead to more stock price volatility, dividends are far less volatile than equity indices, displaying slightly less than half of the annualized variation.

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