WELCH & FORBES LLC
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Investment Implications of Dividend Reinvestment

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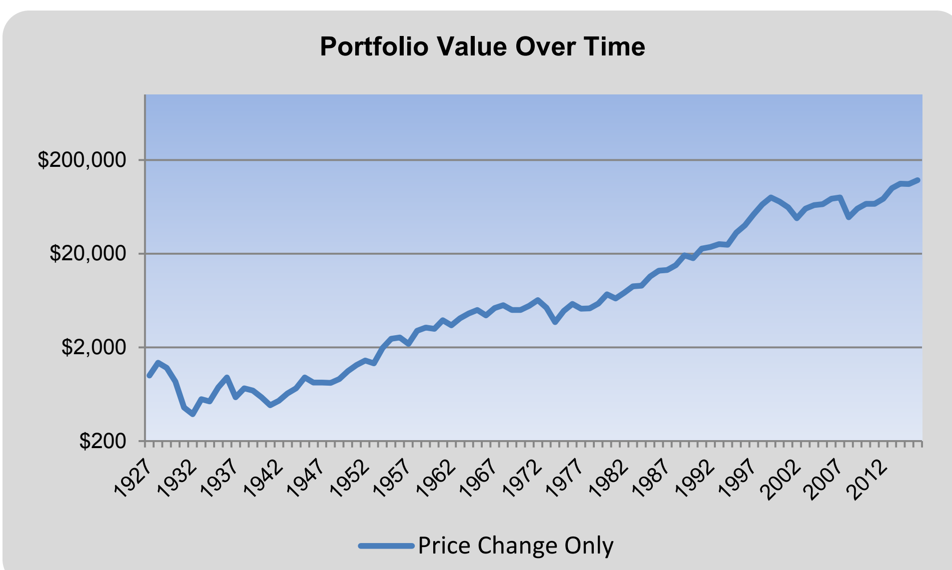
The average annual compound return of the stock market from 1928-2016 was 9.5% per year[1], while stock market prices, not including dividends, advanced at a rate of 5.5% per year[1]. Using these numbers, one might conclude that 58% of returns come from price appreciation (since 5.5% is 58% of 9.5%) and that 42% comes from dividends. However, we do not believe this is necessarily the case. In fact, dividends may account for a far larger portion of long-term stock market returns. **We attribute this to the mathematical relationship between percentage returns, dividends, and their use**. Below are details using three scenarios.

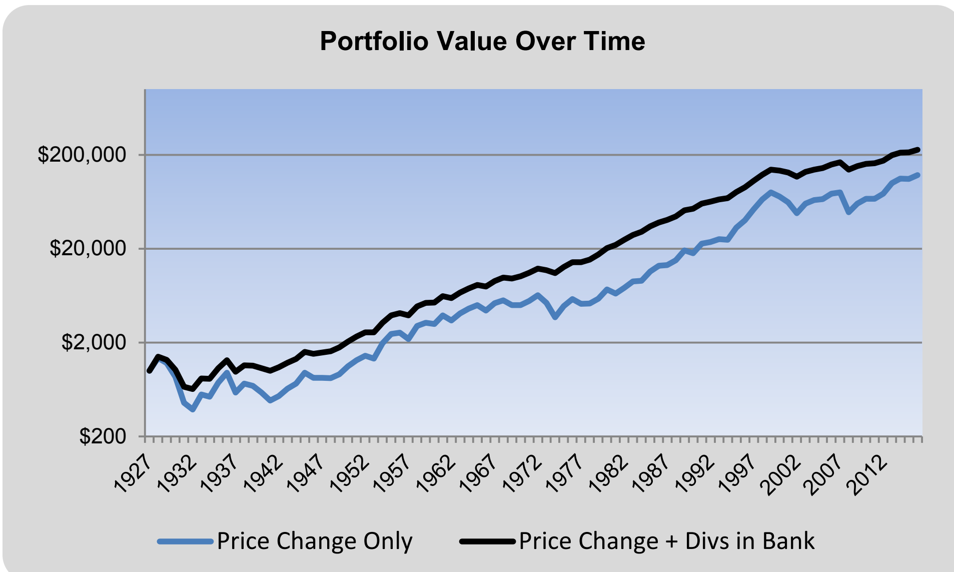
Scenario A: No Dividends

How much would an investor have if they invested $1,000 in the S&P 500 on January 1, 1928 and the stocks did not pay dividends? **At the end of 2016, the investment would be worth $121,374, a growth rate of 5.5% per year from price appreciation alone, as illustrated in the chart below**:



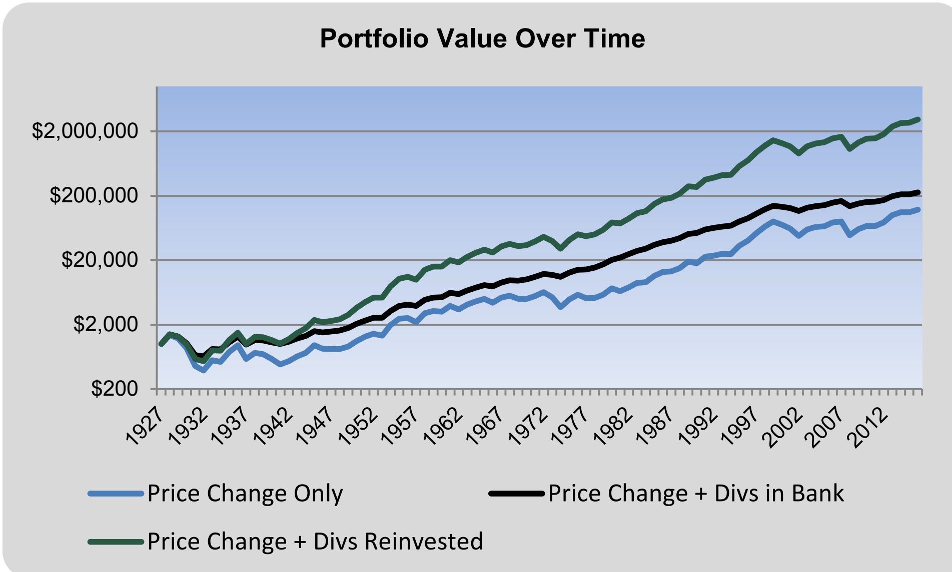
Scenario B: Dividends without Reinvestment

Using the same parameters as in Scenario A, consider an investment of $1,000 in the S&P 500 on January 1, 1928. Dividends are paid this time, but the investor deposits them in a bank account and earns interest, rather than reinvesting them in the stock market. **At year-end 2016, the total value of stock investments and cash from dividends would be $225,559, an annual growth rate of 6.3%**. In this scenario, price change would account for $121,374 of the final portfolio value, and $104,185 would come from dividends and interest:



Scenario C: Dividends with Reinvestment

Finally, consider the growth of the same $1,000 invested in 1928 but with the dividends reinvested in the stock market**.** In this example, whenever a stock pays a dividend, the investor uses that money to purchase additional shares of that stock. **Over the same 89-year investment period as the previous examples, the initial $1,000 investment grows to $3,054,255, an annual growth rate of 9.5%**. Here, when dividends are reinvested, price change on the initial investment is responsible for $121,374 of final portfolio value. Dividends, the shares that are purchased with dividends, and the price change on those dividend-funded shares represent $2,932,881 of the final portfolio value:



Long-Term Benefit

This return difference in Scenario C is a result of using the dividend income from a stock to purchase more shares of the stock year after year. Even though each share of stock in the portfolio has the same price, the resulting greater number of shares from the dividend reinvestment means that the total portfolio value would be much higher. Over 10 years, the difference is negligible. Over 25 years, it is evident. Over 50 years, the difference that can come from dividend reinvestment is significant.

Investment of $1,000 in the S&P 500[2]

Time Period: January 1, 1928 – Year-End 2016

Dividend Reinvestment	Final Portfolio Value
No Dividends	**$121,374**
Dividends without Reinvestment	**$225,559**
Dividends with Reinvestment	**$3,054,255**

Investment Implications

This analysis has the following implications:

1. The performance advantage of a dividend investment strategy may be further enhanced by investing in a portfolio of high quality dividend paying stocks which look to raise their dividend, rather than the broad S&P 500.
2. Active management may increase the impact of dividend reinvestment. An experienced Portfolio Manager may enhance returns by using the dividend from a fairly valued stock to buy additional shares of an undervalued stock, rather than automatically reinvesting that dividend in the stock that issued the dividend or across the entire portfolio.
3. Investors whose portfolios are being managed for retirement or as an inheritance for future generations may want to consider the impact of dividend reinvestment on their long-term returns.

If you have any questions or comments on this analysis, or would like a complimentary person-to-person Initial Consultation with a Welch & Forbes Portfolio Manager to discuss your investment goals and objectives coupled with a Portfolio X-Ray® to gain a clear view of your current holdings, please contact Ed Sullivan, Vice President, at 617-557-9800 or esullivan@welchforbes.com.

The Initial Consultation and Portfolio X-Ray® will provide insight into how a Welch & Forbes Portfolio Manager works with each client to outline their goals and undertake the process of managing their portfolio.

Notes:

1. Aswath Damodaran, Ph.D., NYU, Stern School of Business (http://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/histretSP.html)
2. This analysis does not consider the impact of taxes and fees.