



Dividend Reinvestment Plans (DRIPs) – Part 2

Introduction

Last time we discussed the not so obvious benefits that DRIPs bring to an investment portfolio. We learned that over time, enrollment in these plans can turn a mediocre investment into a solid one just through the automatic compounding of the reinvested dividends. Sort of like a happy April Fool's Day joke that is neither limited to one day a year nor a joke at all, but very real.

I wanted to include this information last time, but I also didn't want to bog you down with too much at once. And just like the last report, much of this analysis will be new and counterintuitive because just as the advertisement about DRIPs that was quoted in that report stated, "because no one has any vested interest in promoting them".

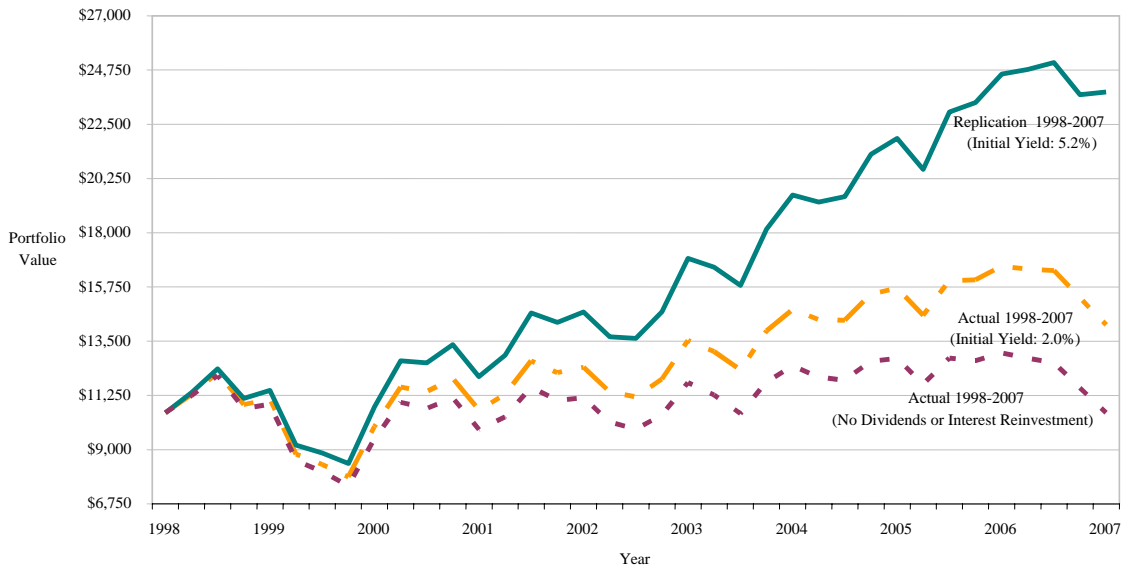
A Quick Refresher

We ended the last report *Dividend Reinvestment Plans (DRIPs) – XYZ¹ Corporation a Case Study* with Figure 4 on the following page. (The Figures will continue to be numbered from where we last left off in January). As you recall, the lower dotted red line followed an initial \$10,300 investment made in XYZ stock in October 1998 up until November 2007. Since the price of the stock was \$35.10 on the beginning and ending dates and no dividends were reinvested, the portfolio's ending and closing value were the same at \$10,530.

Then we decided to see the effect that reinvesting dividends would have on the ending portfolio value. In October 1998, XYZ traded at \$35.10 and yielded 2.0 per cent. The gold dashed and dotted line shows the effect on the portfolio's value when a growing dividend stream is automatically reinvested in the company's stock. Even though the share price is unchanged, the portfolio's closing value grew to \$14,200, giving a 3.4 per cent annualized return.

Finally we took the same historical data, including a purchase price of \$35.10, but applied it against an initial yield of 5.2 per cent. (about the same price and yield it can be acquired at today). The green solid line gave an ending portfolio value of almost \$24,000 or a 9.5 per cent annualized return. And you'll remember the kicker, the price of the shares were the same in November 2007 as they were in October 1998. The entire growth of the portfolio was from simply reinvesting the quarterly dividends.

Figure 4
XYZ Corporation
Portfolio Value with Dividends and Interest Reinvested
October 1998 - November 2007



The Coup de Grace

Now if that analysis was not convincing enough to take advantage of free DRIP programs for dividend paying stocks when the income is not needed, the following surely will.

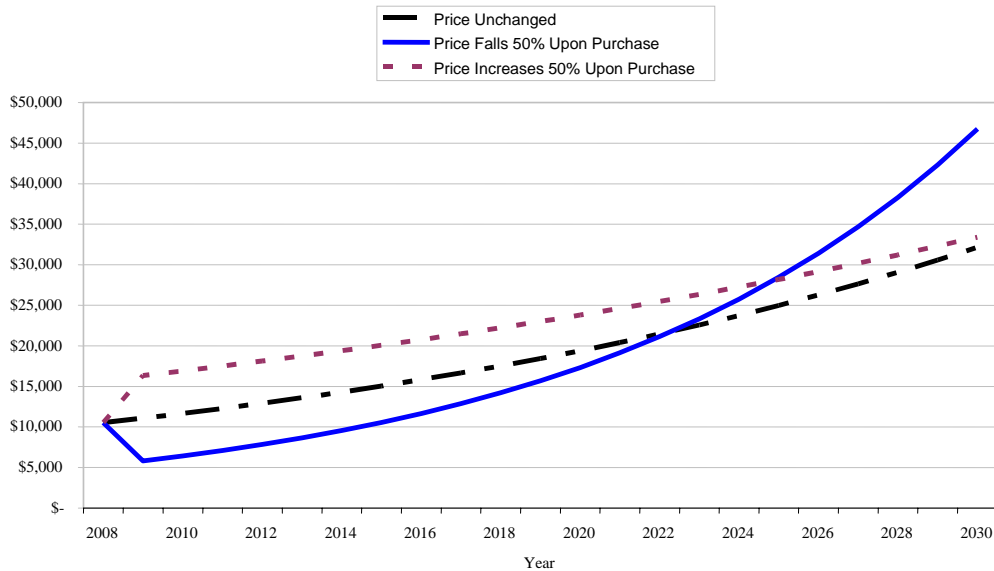
All scenarios in Figure 5 on the next page assume that XYZ Corporation was purchased at \$35.10 and pays a constant dividend of \$1.84 from 2008 to 2030 (which is 5.2 per cent on the initial purchase price). So unlike Figure 4 where the prices fluctuated and the dividend grew over the period, we’ll make the unreasonable and unfavourable assumption that the price and dollar dividend payment remains constant throughout the projected two decades.

But that’s too easy, so let’s take this one step further and compare the results of how the world’s luckiest and unluckiest investor would have made out if they had bought that same stock on the same day in 2008 at \$35.10 with it yielding 5.2 per cent. But the “lucky” investor saw the stock price immediately increase by 50 per cent on the very next day and remain at that lofty level until 2030. For the “hapless” investor, we’ll assume the opposite that the stock immediately drops by 50 per cent and stays at that moribund level for the same period.

Now let’s use Figure 5 to see how our two investors would have fared over the next 22 years. If the stock was purchased at \$35.10 and remained at that level with dividends reinvested, our neutral investor (black dash and dot line) had an ending portfolio value of \$32,200. But look at the results of our other investors. The “lucky” one (dark red dotted line) who saw his share price increase by 50 per cent in 24 hours ended up with a portfolio value of \$33,400. Not much more than our neutral investor. But look at the outcome for our so-called “hapless” investor (solid blue line) who saw his portfolio

drop 50 per cent upon purchase. Not only is his portfolio greater than the others, it is significantly so at \$46,800.

Figure 5
XYZ Corporation
Purchased at \$35.10 Yielding 5.2%
Portfolio Value With Constant Dividend Payments Reinvested
Price of Stock Increases or Decreases by 50% Upon Purchase and Remains Constant



What is the black magic behind this? Nothing new, it's just that old compounding. If you buy a stock and it drops by 50 per cent and remains at that level while the dollar dividend payment remains the same, the dividend yield doubles. So instead of annually earning 5.2 per cent, it earns 10.4 per cent. By a seeming stroke of bad luck, the portfolio's duration has been reduced significantly. So there really is short term pain for long term gain.

Similarly, the immediate euphoria accompanying a 50 per cent increase in a stock's price leads to a longer term underperformance because a doubling of the price effectively reduces the 5.2 per cent dividend yield by a third to 3.5 per cent. Now let's sit back and put ourselves in the same shoes as these investors. How would you feel if an investment increased by 50 per cent overnight? Ecstatic, perhaps compounded with a sense of investment brilliance. But say you lost 50 per cent overnight, you'd be angry and blame that "other party" who sold you on a bad investment. But as can be seen, if one really has a long term perspective and as counter-intuitive as it may seem, your reactions should be just the opposite.

Before leaving this chart let's look at one more thing that it reveals. Note the point where the unlucky investor (solid blue line) intersects with the neutral investor (black dash and dot line). That is the point where the value of the two portfolios is equal. This breakeven point occurs at about 2023 or in 15 years time. That leads us to our next section that looks at break even points more closely.

Tying This Together

Figure 6 is one of those classic charts that should be kept in a handy place for future reference. I only wish that I had thought of it myself. It originally appeared as a table on page 150 of Jeremy Siegel's *The Future for Investors*. Unfortunately, because of the non-visual presentation, I don't think many readers were able to grasp the significance of what he was trying to show. So here is the same information in graph form. Many readers may recall seeing this same chart when it appeared in the report *Be Careful What you Wish For* as Figure 2 on April Fool's Day in 2006.

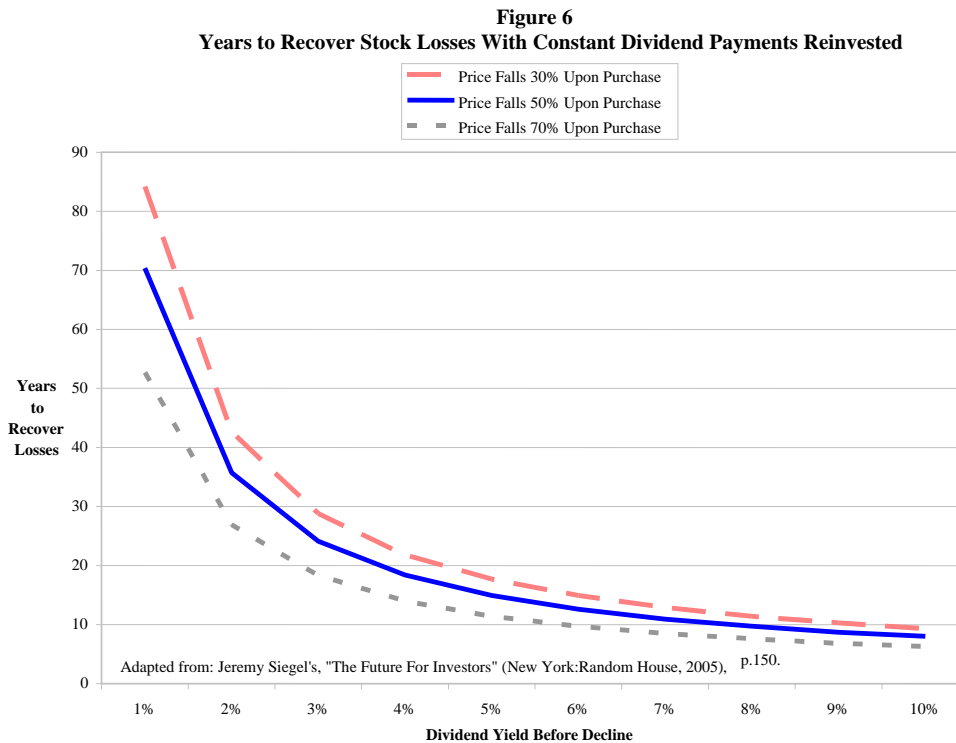


Figure 6 makes the same assumptions that were found in the previous section, namely an immediate and dramatic drop in a stock's price that then remains constant. Similarly, the initial cash dividend per share remains unchanged throughout the period under study.

Now let's examine what it tells us. Immediately we can see that no matter how draconian the immediate drop in a share price is, be it 30 per cent (red dashed line), 50 per cent (solid blue line), or even 70 per cent (grey dotted line); if the initial dividend yield before the decline is greater than 8.0 per cent, the number of years to recover from the loss and breakeven hovers around 10 regardless of the initial decline in the stock's price.

We also can generalize from this graph that the higher the dividend yield when purchased, the less time it takes the stock to break-even from a price decline. But more surprisingly, the sharper the price decline, the lesser the amount of time required to recover from that initial capital loss.

Now just to make sure we understand how Figures 5 and 6 are interrelated, let's take our previous example where we assumed that XYZ Corporation was purchased at \$35.10, yielded 5.2 per cent and saw the price immediately drop by 50 per cent just after its purchase. That is all the information we need to determine how many years it will take to recover its losses and breakeven. Referring to the 50 per cent loss line in Figure 6 (solid blue line) we find the 5.2 dividend yield on the horizontal axis, the corresponding point on the vertical axis shows that the number of years to recover that loss is about 15. The same breakeven point we previously saw in Figure 5.

That's why high dividend paying blue chip companies that at the very least maintain a constant dividend level through good times and bad are such desirable additions to any portfolio. One can be the world's worst stock picker, trader or timer, but as a long term investor, he or she will almost always come out ahead. As you saw in Figure 6, whenever a great company yields 5.0 per cent and the investor has a 12-18 year time horizon, he'll always end up ahead regardless of the initial decline. Or to take another example, if you can obtain a dividend yield of over 7.0 per cent, the breakeven point declines and narrows to 8-12 years regardless if the stock decreases by 30, 50 or even 70 per cent.

To repeat what I wrote in that two year old report, Figure 6 clearly shows that for high dividend paying stocks that can maintain their dividend payments, *the higher the dividend yield, the less the effect of price declines on the breakeven point. And the greater the stock's decline, the less time it takes to recover losses and begin outperforming.*

Once again the markets have an uncanny ability to play costly April Fool's Day jokes on us all year round. What appears to be commonsensical and reasonable doesn't necessarily make money and what is illogical and counterintuitive does. Now the only problem is, how many of us are prepared to enthusiastically welcome and celebrate the next severe market decline?

To borrow for this day an appropriate Gardner brothers' ² salutation: *Fool On!*

Endnotes

¹ XYZ Corporation is a fictitious name for a real company. All data presented is for the actual company.

² David and Tom Gardner are co-founders of the online investment newsletter and website *The Motley Fool*.

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