

Stock Market Perspective: Calendar Based Investing

I have discussed this concept several times in previous issues. Perhaps the most notorious were the annual updates of the presidential cycle that I ceased doing a few years back. This time, I will discuss several of them and provide comparative long-term performance data with buying and holding and with one of the trading methods I use for tactical asset allocation.

Making investment or trading decisions at specified times of the year has some attractive features. It is simple and the easiest approach one can take other than the advice given by many “experts” to just “buy and hold” (“forever” if you are Warren Buffet). Another advantage is that one knows when action may need to be taken so the rest of one’s time can be spent on non-investment activities if desired.

The main drawback of calendar based investing may be that, like all other methods except for hindsight, it is going

to be “wrong” some times. That can make them hard to stick to, particularly when it may be a couple of years before one has a chance to “even the score.”

The real issue is whether the approaches are worthwhile, both from investment returns and risk levels. I have looked into how three methods would have done over the past 44 years and compare them with buying and holding and with a trading model I use.

► **Presidential Cycle:** Can moving in or out of stocks every two years be a good idea? According to this approach, which has been around for quite some time it can. The basic idea, which is backed up by more than a century of data, is that stocks do better in the year before a presidential election and the election year than in the post-election and mid-term election years.

With all the data and computing power available now, finding patterns based on the calendar is not a daunting task. Before one gives it credence, there should be a good and logical reason why the method should work. With the presidential cycle, it is the nature of politics and the election schedule. A new president often will want to make changes either because he ran that way or because his thinking differs from that of the previous occupant of the Oval Office. That often means any “bad medicine” for the economy—increased taxes, reduced government spending in some areas, policies to restrain inflation or an overheated economy—are done right away while there are still almost four years until the next presidential election. Since the incumbent may want to run for re-election and will want

his party to retain the office even if he can’t, it is not unusual to see steps in the last two years designed to improve

the economy and increase employment levels. The early actions, particularly if they slow down the economy, tend to make for weaker stock prices, and the later actions can easily have the opposite effect.

It is important to realize that the historical data supports the presidential cycle effects on stocks *on the average*. There has been a very wide range of returns in each of the four types of years. That highly variable performance of stocks is one reason that it is important to look at risk measures in addition to investment returns when evaluating this and other trading methods.

2007 is a pre-election year, so now is the time to be buying stocks if one is following the presidential cycle trading method.

Calendar based trading can be hard to stay with, but it outperforms buying and holding over the long term with much less risk.

► **Own Stocks in November-April:** The old saw “sell in May and go away” (until Halloween) describes the approach which will have one in stocks half the year and out of them the other half. There are reasons behind this method although not as neat and concise as for the presidential effect. I suspect it got started because some of the most dramatic down days and short periods—1929 and 1967 being incredible examples—have been in October. Historically, November through January has been the strongest three-month period for stocks. That may be due to some extent by year-end actions such as investing bonuses received. Funding retirement accounts, either for the current year early in the year to take advantage of tax deferrals or before the usual mid-April deadline for the prior year’s contributions, can support stocks early in the year. Sales to pay taxes may come into play later in April. Warmer weather can have some thinking about vacations, outdoor activities, and not as much about investments and whether it is time to be adding to their stock holdings.

There are some variations on this method. I have seen several articles saying results can be improved by applying one technical analysis technique or another to vary the buy date within a week or two of the end of October and the sell time around the end of April. In the analysis below I keep things simple by assuming that stocks are purchased on the last trading day of October and sold on the last market day in April.

► **January Barometer:** I have discussed this approach for the past couple of years. I take calendar based investing one step further by adding a very simple decision rule. The idea is that the direction of stocks in January is a good forecaster of their performance for the rest of the year,¹ and also for the following January according to my research. This is particularly so when stocks go up in the first month of the year; performance in the other years has been

¹ April is the only other month with predictive power although not as strong as January’s. Perhaps this is due to annual planning and tax considerations.

considerably weaker. The method thus is to buy or own stocks at the end of January (or the first day of February) if the S&P 500 index is up for the month, hold stocks for next twelve months, and repeat the evaluation at the end of the next January. If that January is up, hold on for another twelve months, and move out of stocks otherwise.

There are other calendar based trading methods that I am not going to discuss. A couple of very short-term ones are based on trading around the end of every month and around major holidays. For comparison with a method not based on the time of year, I also include in the analysis a model I use to manage some accounts.

► **Triple-40:** I use this one for comparison because it has the longest history of any of the models I consider seriously. I have the data needed to evaluate the model starting with 1963. The calendar methods above could be carried back much further since all they require is a history of stock prices. However, I think the last 44 years provides enough information and insight to meet our needs.

Trading signals are based on comparisons of the S&P 500 index, the 90-day Treasury bill rates, and the 10-year T-Bond rates with their 40-week simple moving averages. As we will see, it is a highly effective risk reduction tool that produces reasonable investment returns. To see what the effects of combining the active trading method that typically has two or three round trips a year with the essentially passive calendar ones, I also combined Triple-40 with each of the three others. The best combination, with November-April, is shown in the table on the next page.

► **Investment Performance:** Before getting into the details, it is worth emphasizing that the data in the table below are *hypothetical*. Government regulators rightly want me to point out that there are important differences between these results and those from real-time actions in real money accounts. Among the differences are a) the hypothetical returns do not include

any news or other developments that may have caused me or someone else not to buy or sell as called for by the methods, b) the methods may have been developed with the benefit of hindsight², and c) it may not have been possible to make some or all of the trades³.

The table on the next page assumes buying or selling the S&P 500 index with dividends reinvested. There are several traditional mutual funds now available that do that with very low expenses as well as the exchanged traded “spiders” (ticker symbol SPY). The table values do not consider any costs such as commissions and fund expenses or any tax consequences. However, none of those things has a meaningful effect on the comparisons of the methods.

To keep the table from becoming too messy, I only show data for the entire 1963-2006 period. In that period, there was a complete secular bear market, from 1966-81 in terms of whole years, and an entire secular bull market, during 1982-99. Even taking the rising stock markets last year and for the past four years into account, it appears that period from 2000-06 is the first portion of another secular bear market. That means the 23 years during secular bear markets are slightly over half of the period shown, which makes for a reasonably unbiased comparison time frame. All of the methods shown had higher returns during the bear

² That is certainly true to some extent for all of the methods. However, all of them have been around and published for quite some time, so the more recent performance, at least the past seven years, is “out-of-sample.”

³ In particular, the earliest practical way to invest in the S&P 500 that I know about began in 1976. That is when the Vanguard Index 500 fund started.

TRADING THE S&P 500 WITH DIVIDENDS, 1963-2006						
	B&H	Pres.	Nov-Apr	Jan Bar	T-40	T-40 & Nov-Apr
Return	10.8%	12.1%	11.2%	11.8%	11.2%	10.3%
<u>Risk Measures</u>						
Exposure	100%	50%	49.2%	63.6%	41.6%	20.8%
Negative Dev.	2.6%	1.5%	1.5%	1.9%	1.3%	0.6%
Max Drawdown	-47.4%	-32.9%	-27.1%	-32.9%	-19.2%	-10.5%
date of	10/9/02	10/19/87	12/6/74	10/19/87	8/31/98	4/14/00
% down months	38.6%	16.1%	16.5%	21.8%	17.0%	6.1%
# down years	10	1	7	4	3	3
Worst Year	-26.5%	-9.1%	-13.9%	-14.5%	-11.1%	-4.4%
which one?	1974	2000	1973	2001	1990	2002
<p>Return: Compound annual return for 1963-2006 (44 years)</p> <p>Negative Dev: <i>Negative Deviation</i>, which is similar to the standard deviation of the down months only. Like the ordinary standard deviation, lower values mean less risk.</p> <p>Exposure: Percent of market days stocks are owned</p> <p><u>Trading methods</u></p> <p>B&H: Buy and hold the S&P 500 index with dividends reinvested</p> <p>Pres: Presidential cycle: Own stocks in the pre-election and presidential election years</p> <p>Nov-Apr: Own stocks for the months of November through April</p> <p>Jan Bar: <i>January Barometer</i>, which indicates stocks are to be owned for the twelve months following a January in which the S&P 500 is up and to be in cash otherwise</p> <p>T-40: Triple-40 model based on relationships of S&P 500, 90-day T-Bill rates, and 10-year T-bond rates to their 40 week moving averages</p>						

periods, 1966-81 and 2000-06 than buying and holding. In some cases, they were considerably higher. In contrast, buying and holding had higher gains during the 1982-99 bull market. All of the trading methods greatly reduced risk in all periods. The risk reduction was the greatest, not surprisingly, during the down periods. Since the trading methods will be out of the market some of the time, those methods are going to help in all regards during weak periods, reduce risk in all periods, but hurt returns during times when stocks are rising at a strong pace.

The simplest measure of risk is exposure, which is the time in the market. When stocks are not owned and the investments are in a cash equivalent instead, which is the how the table values were calculated, there is no risk from falling stock prices.

It may seem puzzling that the November-April method has exposure of a bit less than half the time. After all, that is a six month period.

However, it contains only three of the seven 31-day months and also includes February. Moreover, there are currently nine market

I consider *negative deviation*⁴ to be the single best measure of investment risk because it takes into account only the frequency and severity of the down periods, months in this case. Like the widely used standard deviation that includes up months in its volatility calculations, lower values indicate less risk.

Some other risk measures are also shown. All of them illustrate how any of the trading methods substantially lower the risk associated with buy and hold. With the exception of the combination shown in the rightmost column, all of the methods have higher long-term returns than buying and holding. The active Triple-40 model has lower risks than the calendar methods, but that may be due to having less exposure. The combination has much lower

⁴ The negative deviation is calculated by setting the months with positive returns to zero change, leaving the down months as is, and taking the root-mean-square of the modified monthly percentage changes.

holidays, and only three of them are during the summer months.

risk levels than any of the other methods shown, and the “cost” in terms of reduced returns is modest.

One comparative evaluation method widely used is to take the ratio of the returns, sometimes with the risk-free return subtracted, divided by a measure of risk. The well known *Sharpe Ratio*, developed by Nobel prize economist William Sharpe of Stanford University, takes this approach using standard deviation in the denominator. I don't like this concept because it is based on a sort of equivalence between changes in return and changes in risk. Most investors are more worried about increased risk than they are wanting higher returns, so such an equivalence can be misleading. I think it is better to use to best estimates of longer term returns and risk levels and judge the trade-off that best fits one's risk tolerances and investment returns needed to achieve financial objectives.