Hedging Sector Dividend Risk

Guilt by association cuts both ways in financial markets. We all have seen some dog stock in a sector go up sharply in price for no other reason than a competitor just got bought out, and we all have seen a currency such as the Mexican peso get trashed because of, say, Argentina's latest foray into fiscal irresponsibility. Most of us get to choose our friends, which we may do wisely or otherwise; financial assets are part of a group whether they like it or not.

This is especially true in the world of stocks. Take the financial sector, please, especially after its gruesome performance after mid-2007. Just as all fish are shaped alike and all flying birds are shaped alike, all banks have to look the same. The same applies for all insurance companies, asset managers, investment banks and so on down the line. This is true for one very simple reason: Customers demand it. Think about your expectations for a hardware store. You do not want to wander into some big-box retailer looking for a hammer and find everything but. No, you want the store to conform to your notion of what a hardware store should look like.

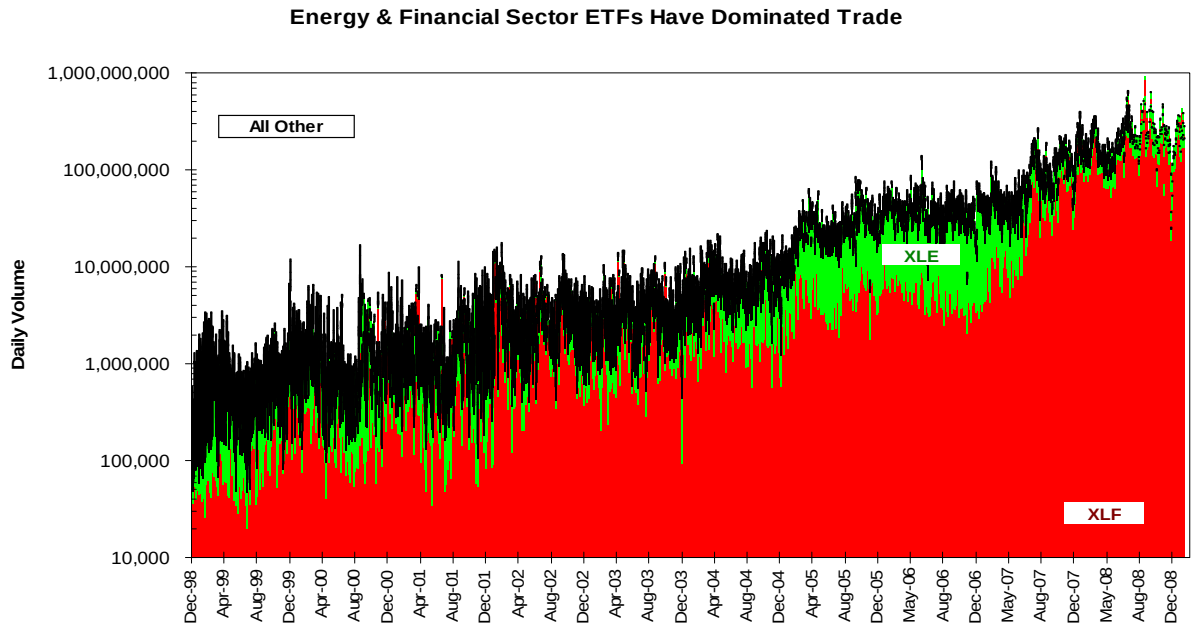
The downside to this, of course, is when the business environment changes, it affects all of the firms in one sector the same way, for better or for worse. It is natural selection at its most basic: Someone rings a bell and all the banks suffer simultaneously. Some might emerge unscathed, some might perish and others may hunker down and try to survive by cutting their dividends to conserve cash.

Sector ETFs

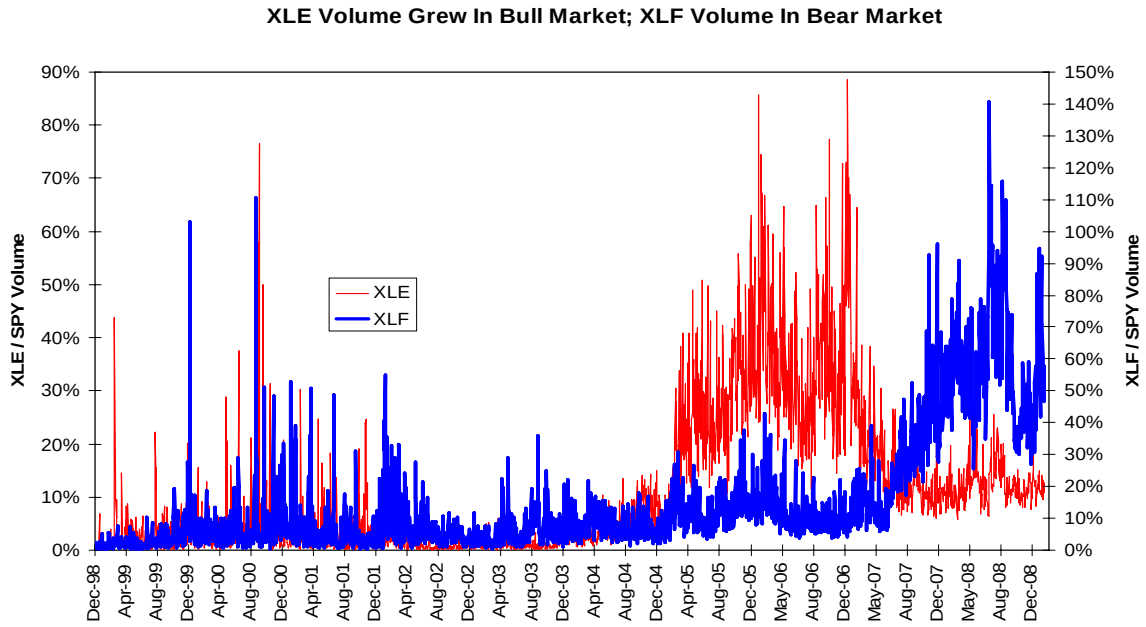
Even if one of the firms went out of its way to distinguish itself from the others, sort of like a zebra who developed spots in lieu of stripes, their stock might suffer if it is part of a sector exchange-traded fund (ETF). Standard & Poor's has been thoughtful enough to divide the world into ten economic sectors, nine of which support Select Sector SPDRs; only the telecommunications sector lacks such an ETF. These ETFs have made the purchase and sale of an entire slice of the S&P 500 easy, perhaps too easy for our own good, to do. The sectors and their associated tickers are:

Basic Materials	XLB
Energy Services	XLE
Financials	XLF
Industrials	XLI
Information Technology	XLK
Consumer Staples	XLP
Telecommunications	
Utilities	XLU
Health Care	XLV
Consumer Discretionary	XLY

The average annual growth in sector ETF volume since their introduction in December 1998 has been an impressive 63.5%. That aggregate, however, is misleading. In an Orwellian twist, some sectors are more equal than others; the growth has been concentrated in just two sectors, finance and energy. Both enjoyed impressive bull runs during this period, both have suffered equally impressive pullbacks, and both are propelled by easy-to-observe external factors such as crude oil prices and monetary policies.



It is interesting to note as well how volume was affected by trend for these two ETFs. If we normalize the trading volume by that of the S&P 500 ETF (SPY), we see how XLE volume took off with the bull market in crude oil in 2005-2006…and fell once crude oil prices began their spectacular September 2007 – July 2008 doubling. The volume for XLF took off once the credit crunch began in earnest…and then fell once the September-October 2008 crash began. It seems as if a little bullishness was good for the XLE, while a little bearishness was good for the XLF, but volume fell for both once the trends really got strong.



Enter Single Stock Futures And Dividends

If stock prices reflect the discounted stream of future dividends, a charming theory believed primarily by academicians and few others, then we should expect dividend payments tend to rise during the latter bull markets for a sector and fall during the latter phases of bear markets for a sector. Can those expectations be hedged and traded?

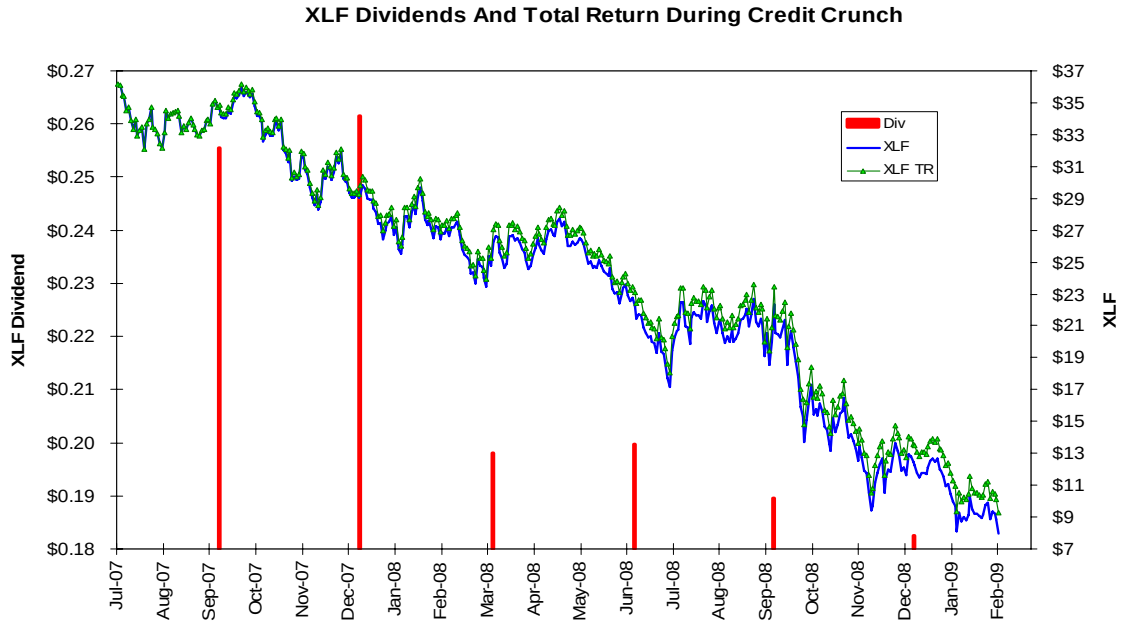
The answer is, "Yes." We can use the single stock futures (SSFs) for those sector ETFs. A SSF is a contract to make or take delivery of 1,000 shares of an ETF such as the XLF or XLE at the contract's expiration, typically the third Friday of the month. This conversion into the ETF unless the contract is offset keeps the SSF in line with the ETF.

How are these SSFs priced? First, as the interest rate carrying cost of a SSF at a 20% of current market value margin is less than that of the ETF at a 50% Regulation T margin, the long position in a SSF must reflect that saving. Second, the holder of the ETF receives the dividend and can reinvest it. As the long SSF position receives no dividend, its price must reflect that penalty. If we combine the two costs, the fair value of the SSF becomes the stock or ETF price plus the interest rate cost of carry minus the future value of the expected dividend, or

$SSF = ETF * e^{r*((t_x - t_0)/360)} - Div * e^{r*((t_x - t_d)/360)}$, where r is the short-term interest rate, t_x is the expiration date of the future, t_0 is the date of evaluation and td is the ex-dividend date.

If the market starts to bet dividends will be cut in a sector, the future value of the expected dividends will fall and the SSF will rise relative to the ETF price. This makes a calendar spread around a dividend payout date of being long the distant SSF and short the near SSF a bet on dividend reduction.

All sector ETFs receive the dividends from their component stocks continuously and accumulate those dividends in the interest-bearing cash accounts used for creating and redeeming the units. The accumulated dividends are distributed on a quarterly basis. We can see from the history of the XLF since the onset of the credit crunch the dividend payout was in fact cut significantly between the fourth quarter of 2007 and the first quarter of 2008 and then again in the fourth quarter of 2008.



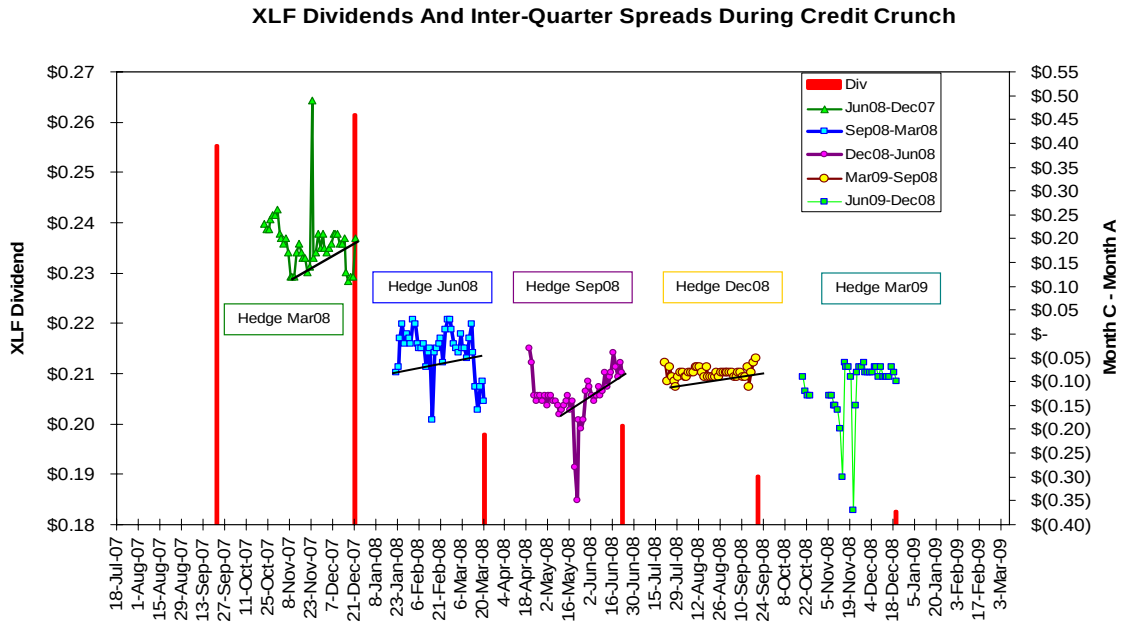
Using The Calendar Spread Trade

The XLF goes ex-dividend on the very days when the quarterly SSFs expire. This necessitates a split-quarter as opposed to a consecutive-quarter spread trade. For example, a trader standing in June 2009 and worried about the September 2009 dividend would not buy the September 2009 SSF and sell the June 2009 SSF but rather buy the December 2009 SSF and sell the June 2009 SSF.

Another decision arises. The short front-month SSF converts into a short position in the ETF upon expiration; you have to decide if you want to offset the trade by unwinding both legs of the spread, taking a short position in the ETF hedged with a long position in the SSF ("buying the exchange of futures for physicals," or EFP) or rolling the position forward by replacing the short June 2009 SSF with a short September 2009 SSF. The first choice eliminates all dividend risk; the second and third choices maintain your bet on further decreases in the ETF dividend.

How have these quarter-to-quarter trades performed over the 2007-2009 period? If we overlay the two-quarter calendar spreads over the dividend payouts, the answer seems to be you could make somewhere between $0.05 and $0.10 per trade fairly consistently at no ordinal price risk as a hedge against cuts in the March, June and September

2008 dividends. The hedge against a cut in the December 2008 and March 2009 dividends were scratch-trades; after all, this was well after most of the damage to the financial sector had been recognized.



We should emphasize as there is no such thing as a free lunch, this trade involved the risk the financial sector would increase its dividend payouts unexpectedly. If recognizing such a risk sounds silly, consider the financial sector's plight resulted from refusal to recognize low-probability, high-impact events. We do not need to emulate their hubris, do we?

You only need one opinion for this trade, and that is whether you anticipate increases or decreases in the sector's dividend payout relative to the market's expectations. If you do not have that opinion, then you should not be investing in the sector ETF at all; a broad-based index ETF such as the SPY would do just fine. But as you are an active trader as opposed to a passive indexer, why would you want to be guilty by virtue of that association?