## Proxies and Canaries-D2 in Forex

One of the lesser known qualities of Forex markets is their ability to act as proxies or "canaries" in other, ostensibly unrelated markets. The degree of correlation between forex and other markets is not widely understood. Whilst most are aware of the nexus of USD or better still the US Dollar Index to Gold, not many are aware of the relationship between the carry trade instruments and the major US Equity markets.

The "Carry Trade" is an expression that relates to cost differentials in different markets. The best known carry trades involve low and high yield currencies, but the same strategy can be applied to any markets where a sufficient cost differential exists.

One of the favourite carry trades in the recent past has been the NZD-JPY and AUD-JPY carry trades. The basis of this mechanism presented itself with the genus of ZIRP or Zero Interest Rate Policy, first adopted as an habitual policy by the Bank of Japan, as an offset to a huge savings culture that provided Japanese policy makers with an embarrassment of internally available domestic funds.

The unintended consequence (there are always unintended consequences to governments' actions) was the institutionalisation of the carry trade. Here's how it works.

From 2001 to 2007, institutions (but not you or me Sport) were able to borrow in Yen at near the official BOJ repo rate which has vacillated around zero to 0.5%. These funds were then swapped for Australian or NZ Dollars and usually invested in Sovereign Bonds. With Australia and New Zealand bonds paying between 3.5%-5.5%, the difference, called the "free carry" represents a largely fixed return, provided it is supported by appropriate hedging strategies. To make this return sweeter, the carry is often leveraged by many multiples.

Until 2007, this type of carry was thought to be an uncorrelated trade. The great surprise was that this like almost all investment classes turned out to be correlated to liquidity.



Another way to look at this carry trade chart is as the proverbial "canary in the coal mine". The understanding behind the untimely death of many canaries came, from their use as early warning indicators in coal mines, an allusion to caged canaries that mining workers would carry down into the

tunnels with them in the not so distant past. If poisonous gases such as methane or carbon monoxide leaked into the mine-shaft, the gases would kill the canary before killing the miners. Physiologically it's easy enough to understand that a tiny creature with minor body mass and appropriately sized lungs is going to be much more sensitive to lower levels of poisonous gases than would be the average miner.

In the same way, the NZD-JPY cross gives us a graphic picture of investors' risk appetite, a phrase beloved by financial journalists, tasked with explaining the intricacies of market movement in terms that the average reader, not versed in Needham's Law (Markets fluctuate; sometimes violently) can understand.

The physical characteristics underlying this particular cross add piquancy to the simile. Japan is a giant of the industrialized world. At once a colossus of banking, heavy machinery, automobiles, trucks and electronics. As the world's second largest economy its scope and fiscal resources are vast. It is a power in every sense of the word. By comparison, like the canary to the coal miner, New Zealand is a miniscule, largely rural economy, that overseas visitors often comment, looks like a vast park. In fact its most visual characteristic is a vast dairy farm.

This is an economy that relies on exports of dairy products, beef, timber, and these days to a much lesser extent, wool; but it is a small primary producer highly dependant on overseas borrowing to fund its largely housing driven fiscal imbalances. So like the canary. Such an economy is more prone to the slings and arrows of outrageous fortune. And that is its hidden value. It is a superb early warning signal of changes in risk appetite for major investors.

Consider the chart below with the NZD-JPY cross in the upper pane and the major US Equity market the S&P500 in the lower pane:



You can see that the NZD-JPY forex pair made its 2007 high a clear 3 months before the S&P topped and signaled its 2009 low in a similar fashion 2 months before the bottom in the S&P was apparent.

One of the many memorable calls for the Danielcode in 2009 was the identification of the March 2009 low in the S&P to the day and a few ticks on 03/06/09. That call was made with a number of time and price indicators to the forefront, but knowledge that this particular pair had made a firm bottom in the previous month was very much part of that mix.

For this particular set of charts we have just observed the Danielcode monthly (24 trading days) charts, but once you have seen the general pattern of these markets, we can identify the actual turning points much more closely by the use of regression channels on our DC weekly (6 trading days)

charts. Here is the 6 day chart, marking NZD-JPY breaking from its regression channel in August 2007 and then making the characteristic and common retest of the lower channel in October 2007, signaling clearly that deleveraging and reduced speculative appetite was killing our canary, just as the US broad market index the S&P500 was going on to make its over hyped and over loved high.



Here is the S&P in the lower pane to the same time scale:



In similar vein, we can see the Canary bottom in the shorter time frame with our DC weekly chart. We can and do take this technique down to daily charts, and the principles are the same. We are using information from one data set to lead us in our thinking about another data set. This methodology is usually referred to as "D2" or "Derived Data", and it's one of my favorite pieces of market intelligence.

For the short term 3 day chart of our canary, we can see this pair capitulating into its December 2008 low before breaking out of the narrow regression channel and making its retest at a lower low in early February 2009, over a month before the comparable low in S&P was made. For those interested in the proper application of regression channels, the apparently awkward phenomenon of retests being lower or higher than the original channel high/low is actually quite a normal output of what Gann called the "4<sup>th</sup> Degree". Traditionally we tend to look at charts as possessing only 2 degrees,

the vertical and the horizontal or time on the horizontal axis and price on the vertical axis. Gann averred that there was a 3<sup>rd</sup> and 4<sup>th</sup> degree to markets and as I have written before, the 4<sup>th</sup> degree is "An Angle". Once we start using regression channels, we are in the realm of the 4<sup>th</sup> degree; regression channels being a derivative of "An Angle".



If you choose to start studying regression channels as analytical tools, you will find them most rewarding and you will see the retest of the channel, necessitating an unorthodox retest at a higher chart high or lower chart low, a not uncommon occurrence if the channel is properly drawn. One of the most famous is the 2007 high in the S&P. I digress, but for the sake of edification, that now famous Danielcode Regression chart that marked the onset of the Bear market is below:



Returning to our analysis of the March 2009 low in S&P, we have already seen how our nominated canary the NZD-JPY cross was signalling a low of some sort by the end of February. With our view of this forex market as a proxy for investors risk appetite, it followed that a low in the major US Equity indices would follow if the correlation held. The important thing about long term market correlations is that they hold until they don't. Which is a fancy way of saying that the correlations are neither permanent or exact; but that's the way to bet!

That the Danielcode called the low in the S&P index at 666 to the day, in writing and in a public forum is history, and you can read more about that event in the archived articles at the Danielcode website <u>www.thedanielcode.com</u>. More importantly, my view of the NZD-JPY market as an accurate and early canary in the coal mine, has enabled me to maintain a sanguine view that the trend for this pair and for the S&P is up. That may seem simple enough when using these techniques, as the chart below shows:



But, many a money manager has been swayed by the ubiquitous perma bears and has been persuaded to position at least part of their clients' portfolios in Equity markets on the short side. From the 6 day chart above there are certainly conditional Sell signals positioned below the lower channel, but my methodology calls for a close below one of these "failure" bars and that has not happened yet. On the Equities chart, we see this market happily reconnoitring the lower reaches of its current regression channel, entirely in accordance with the meaning of its Forex proxy.



In fact markets can't change trend without breaching the limits of their regression channels. When the trend changes we shall know.

The limit of this technique is that it doesn't do a very good job in choppy markets and given that we don't like to go below the 6 day or DC weekly chart when using this technique, there is a lag, but if

you adopt the arguments I am offering here, the combination of regression channel analysis with D2 or derived data, you will avoid the fear and paralysis of constantly wondering what the major trend is and as a corollary, you can concentrate more on your trading and less of the "crash is coming" version of fiscal horror stories.

You may think that I jest, but during my speaking tour of the US last Summer, I met a large number of folks who told me that they had been so affected by the crash prophets that they simply couldn't take a long position in Equity markets.

You should heed Mr Gann's warning to be neither a bull or a bear. Use these tools and you will not only be on the right side of markets, but you will likely be aware of trend changes long before the herd.

Perhaps now you will think of the latest ZIRP exponents the USA, who ironically are adopting this Japanese Central Bank experiment for diagonally opposite reasons to those that saw it's initial iteration in the East. The West not only doesn't have a surplus of savings, but a huge overhang of unfunded debt. To mark the risk appetite of investors to this new conundrum we look at the NZD-USD cross. *And it is speaking!* 



I trust that you have enjoyed seeing how Forex markets can have wider uses than may commonly be thought, and observing that there are many inter market relationships that can be of great value to the astute observer. Remember always that whatever analytical tools you are using, signals can only be generated by price action. Ultimately, for traders and investors alike, price is everything and all. The only difference is the operative time frames.

(Tit 3:3) For we ourselves also were sometimes foolish, disobedient, deceived, serving divers lusts and pleasures, living in malice and envy, hateful, *and* hating one another.(Tit 3:4) But after that the kindness and love of God our Saviour toward man appeared,

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