Introducing the UltraCoin Cryptocurrency Composite Index

GIH: Alternative investing takes a new dimension with the introduction of 'cryptocurrencies' – designed mostly as payment systems, the value fluctuates based on customer demand, and marketplaces offer you the ability to trade your Bitcoins for USD or EUR. Whatever your opinion if this is a valid investment, if one had purchased Bitcoin near it's lows, the return would have been enormous. Have a look at a traditional analysis of risk vs. return for Bitcoin and other cyrptocurrencies:

Cryptocurrencies have been on a tear over the last 2 years, both in terms of mindshare and returns. This is particularly true of the last year, in which Bitcoin (the de facto proxy for cryptocurrencies) has heaved from $13 to $950, making a pit stop at $1200 along the way. This 7,308% return looks to be outrageously delectable to many a speculator and has even caught the eye of an institutional fund or two. The problem is, and what many novice investors have a problem conceptualizing, that astute institutional "investment" funds actually have a problem dipping their toes in the wilding appreciative yet hyper-volatile world that is cryptocurrencies.

The reason is because "investment funds" as opposed to beta chasing "trading" or "hedge" funds seek a measured return on investment. The raw returns that you see spouted for Bitcoin and the various alt.coins are actually not what the smart institutional money is looking for.

Put another way, you tend to get what you pay for. Risk is the price of reward, with risk being defined as deviation from expected return. You nearly never get a reward without bearing some risk to attain said reward. On the flip side, you should always demand a commensurate reward for the risk that you take. Measuring reward without taking into consideration the risk paid to attain such reward is akin to jumping out of the top floor of a 50 story building to revel in the exhilaration of the drop without taking into consideration what happens when you reach ground level. All in all, it tends to end ugly.

My clients are told that if you assumed $1 of risk to reap $1 of reward, then you effectively made nothing from an economic, risk adjusted reward perspective. This is difficult for the layperson to understand since those who reaped said dollar are left holding one dollar of nominal returns which looks, smells and spends like a dollar. They don’t seem to get it until that third or fourth go around when they get 30 cents back for the dollar they invested (versus an amount over a dollar, hence a negative return). You see, probabilistically, you can reap more than you sow over the short term simply out of dumb luck. Realistically, the law of averages will catch up to you and eventually (and most likely close to immediately) you will reap what you sow, or… you get what you pay for!

Similarly, if bitcoin investors/traders believed they are doing well when bitcoin jumps from $13 to $950, they may be mistaken. The reason? Bitcoin has a modified beta of roughly 673! That means that it is volatile. Very volatile! More volatile than practically any basket of currencies or stocks you can think of. This volatility means that in a short period of time it’s just as easy to be on the losing side of the trade of this asset as it is to be on the winning side. So, you’re lucky if you bought at $500 and rode it to $950, but you could have just as easily bought at $1,200 and rode it down to $500.

With these concepts in mind, you should always adjust for risk before attempting to measure reward. By doing that you will find that you can compare disparate assets, ventures and opportunities that have different reward propositions and even different horizons by measuring the risk (or the economic cost) of the investments and then adjusting the actual or expected reward desired to compensate for said risk commensurately.

Notice how, if one were to take this approach, one can see the different risk adjusted returns between the top two cryptocurrencies by market value. Bitcoin is the most popular, but Litecoin is the most profitable – even when fully adjusted for risk.

The UltraCoin team has run these calculations, among many other currencies, on every cryptocurrency with a market value over $1 million. In addition, these currencies have been aggregated to form what we have coined as the "UltraCoin Cryptocurrency Composite Index" – a basket of cryptocurrencies upon which our custom UltraCoin derivatives can trade, hedge, invest and speculate.

These indices and calculations (not to mention a bevy of other calculations to assist in trading) are part and parcel of the UltraCoin client.

The graph below depicts the outrageous raw returns had by holders of bitcoin. It also denotes the extreme volatility experienced therein, particularly from late 2013 onward. If one were to place a hurdle rate of required return to compensate for said volatility, the return curve will look somewhat different.

As you can see, all that glitters is not necessarily gold! I will be pushing for the beta release of the UltraCoin client quite soon, quite possibly at the Berlin Bicoin conference. In the meantime, for those of you who have not had a chance to play with the software, here are a few screen shots.

See http://ultra-coin.com/ to access the client when it becomes available.