

# Sporadic

## Cryptocurrencies

Through last year and so far at almost every presentation I have given this year people have asked about Bitcoin. Interest appears to have been sparked initially by pure curiosity and stories of the displacement of normal currency and banks somehow having it stuck to them. Then interest became motivated by the soaring price for this vague asset, and more latterly by the partial collapse in that price and overall volatility.

In simple terms Bitcoin is something you need if you are looking to buy military arms on the black market, drugs, or pay a ransom. Apart from that it has no use and there is nothing you need it for which you cannot also pay for with proper money.

It, along with all other cryptocurrencies, is not in fact money. The huge volatility in price means it is not a store of value (price volatility well exceeding that of gold thus eliminating it as a “safe” asset in times of global stress.) And it is not much accepted as a medium of exchange.

Bitcoin is a highly volatile expensively mined commodity which seems very vulnerable to theft from seemingly safe storehouses, and is one of many such electronic commodities. All are going through a Darwinian process of survival of the fittest in an environment which has yet to take form. What that means is that unlike birds evolving over millennia on a set of islands, the cryptocurrencies are evolving on land which is itself undergoing major tectonic change.

Specifically government and central bank-imposed rules regarding operations of currency exchanges, bank rules regarding accepting these currencies or hosting accounts, and overall central bank supervision. This latter one is the point keen enthusiasts for Bitcoin etc. don’t understand.

The key lesson of the GFC was that central banks were lax in their understanding of credit flows, risk assessments, volatility tolerances, where funds were actually flowing, and links between the financial sector and real economic activity. Currently central banks have almost zero insight into these things as they relate to Bitcoin. But they can see growing interest in the asset and over

time will impose rules and reporting requirements which will effectively vanillarise all cryptocurrencies.

And there is no guarantee that any of the current over one thousand such assets will be alive a few years from now. In fact, at this stage banks, central banks, and stable governments have yet to get in on the act of creating their own cryptocurrencies. If and when they do, the chances seem good that the synthetic currency with which we are left will end up being something created by a grouping of central banks or perhaps the likes of the IMF.

But before we get to that point there is a hugely important aspect of Bitcoin and the block chain technology upon which it sits which is only now just starting to be realised – huge energy demand.

Estimates have been made recently that there will soon be more electricity consumed mining Bitcoins in Iceland than is used by households, and that globally more electricity is used than is consumed annually by Portugal. How does this come about?

The block chain works by removing a centralised register for transfers of an asset or information and instead the information is spread across thousands of computers. Changes to any entry must be verified as accurate across a particular proportion of such “registries” before being accepted as kosher.

People love that this means defrauding the system is for all intents and purposes impossible as one would have to alter data representing something like an asset’s ownership across thousands of databases rather than just one. This technology could help wipe out the estimated US75bn trade in counterfeit pharmaceuticals for instance.

But energy use is a key problem with the block chain. Instead of having one central database we have thousands doing exactly the same thing.

This is like instead of flicking a switch causing just one light to go on in your hallway as you wobble toward the bathroom in the middle of the night, all the lights in your suburb turn on.

The block chain is extremely energy inefficient and in a world where concerns are growing about energy demand, availability, cost, and impact on the environment, it seems destructive. So, much as many companies are looking at using the block chain technology, when you meet them ask them what impact they think their action is having on the price of electricity which must be paid by all other businesses and households, and carbon emissions associated with their embrace of this energy-intensive technology. And ask them as they contemplate savings they will make from dumping their big computer system, are they willing to pay the total economic and environmental costs for each transaction now to be processed on the new block chain distributed ledger? Probably not. We call such things uncoded negative externalities. Like dairy farm runoff into streams, or storm-forced sewage dispersion on Auckland beaches.

### NZD

Just a reminder. My fundamental view on the NZ dollar is that it trends upward over the coming years. Underpinning it are factors such as

- the strong terms of trade now at a record high,
- the good state of government accounts including surpluses and low debt,
- the upside in non-dairy exports like tourism and horticulture,
- the trend shift in net migration flows to positive,
- the long-term strength expected in key sectors like construction,
- monetary policy eventually tightening from very loose settings.

This is my long-term view. Of course in the short-term anything is possible for virtually any asset price and the populist view is that the Kiwi dollar will decline because the US dollar will rise as the Federal Reserve adds to the five 0.25% funds rate rises over the past year and a half with another three or even four this year.

This sounds logical – but not necessarily if you factor in the new shift in expectations for the size of the US Federal deficits in coming years and trade deficits. US debt looks set to balloon once more,

but this time when the economy is performing well with stretched resources, not when it is very weak with doubts over banking sector robustness.

The rising risk profile for US assets implies a weaker greenback which is in fact what is happening. What this says to me is not that we can have any firm opinion on where we will end the year. But, were I an exporter I would continue to do what hopefully many did last year when the NZD/USD rate fell below 69 cents in May and November. I would boost hedging on dips.

### If I Were A Borrower What Would I Do?

This section of the Weekly Overview was always very popular so I've decided to include it in each issue of Sporadic.

At the moment we face increased chatter about and expectations of rising interest rates offshore and warnings about sharemarket turbulence feeding into higher risk premiums NZ banks will need to pay to access foreign funds. Sound familiar?

Ever since 2010 when our economy was clearly pointing upward the bias of interest rate discussion in New Zealand has been decidedly upward – as in about 95% of the time. This is because historically an acceleration in growth removes the need for unusually low interest rates, and firming of indicators of tightening resource availability such as the capacity utilisation rate and unemployment rate traditionally mean rising inflation.

But there has been absolutely zero sustained increase in NZ interest rates since 2007. Why?

We have covered this off many times over the past four years but it comes down to wages growth not accelerating much if at all in response to strong jobs growth, and inflation generally not rising despite strong consumer spending growth and pressures on business margins.

Globally we still struggle to explain exactly what things have changed enough to alter traditional relationships between growth, inflation, and interest rates. And if we can't explain it we have no hope of knowing if the change will be sustained and if not when it will revert.

That means the starting point for anyone's consideration of the appropriate strategy for trying to minimise borrowing costs has to be explicit

recognition of the unwisdom of relying upon interest rate forecasts. There is no evidence of accuracy this past decade apart from the correct calling of tightening US monetary policy for the past year and a half.

You need to adopt a structure which reflects this uncertainty. By and large that means avoiding heavy exposure to a particular fixed rate term and spreading your risk over a number of terms.

I would be hesitant to fix longer than three years given the price of doing so. But someone who believes signs of inflation in the United States and

United Kingdom will this time around be sustained may want to get some longer term cover.

Floating	5.9%
Fixed	
One year	4.39%
Two years	4.65%
Three years	4.99%
Four years	5.89%
Five years	6.09%
Seven years	6.15%

Sporadic is written by Tony Alexander, Chief Economist at the Bank of New Zealand. The views expressed are my own and do not purport to represent the views of the BNZ. To change your address or unsubscribe please click the link at the bottom of your email.

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