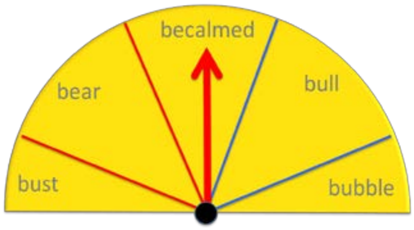
No.58 – September 2017 @AtlasPulse

Atlas Pulse Gold Report

See the facts, trade the action and ignore the noise



The Atlas Pulse Gold Dial

Jan 2013	downgrade to bull market at $1,675
Feb 2013	downgrade to becalmed at $1,663
May 2013	downgrade to bear market at $1,476
Feb 2016	upgrade to becalmed at $1,175

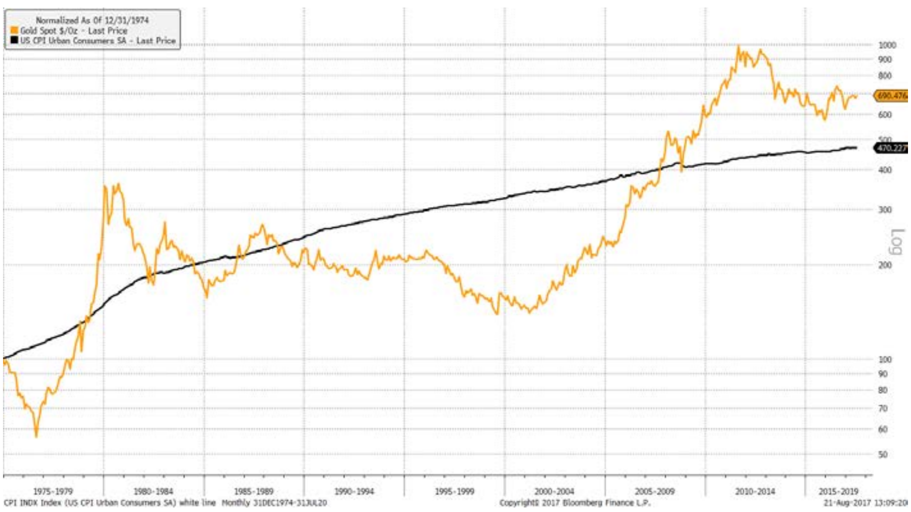
In this issue…

- **Gold is a hedge –** ***but against what?***
- **Gold scenarios –** ***both inflation and deflation can work***
- **Market update –** ***still becalmed***
- **Gold vs Bitcoin –** ***the winner in a WW III scenario***
- **Bitcoin surge –** ***what the fork?***

A hedge against what?

People often say that you should own some gold to protect yourself. You should, and in my opinion, 5% of your investable assets should be tucked away in physical form, just in case. There's nothing wrong with ETFs and futures, but they are trading vehicles that allow you to come and go cheaply and efficiently. Pile in when the outlook is bullish, and take a step back when the world's economy is in rude health. That 5% is best held outside of the system.

A long-term hedge against inflation



Over the long-term, gold maintains its value and evidence of this dates back to ancient times. If you don't believe that, then gold is not for you.

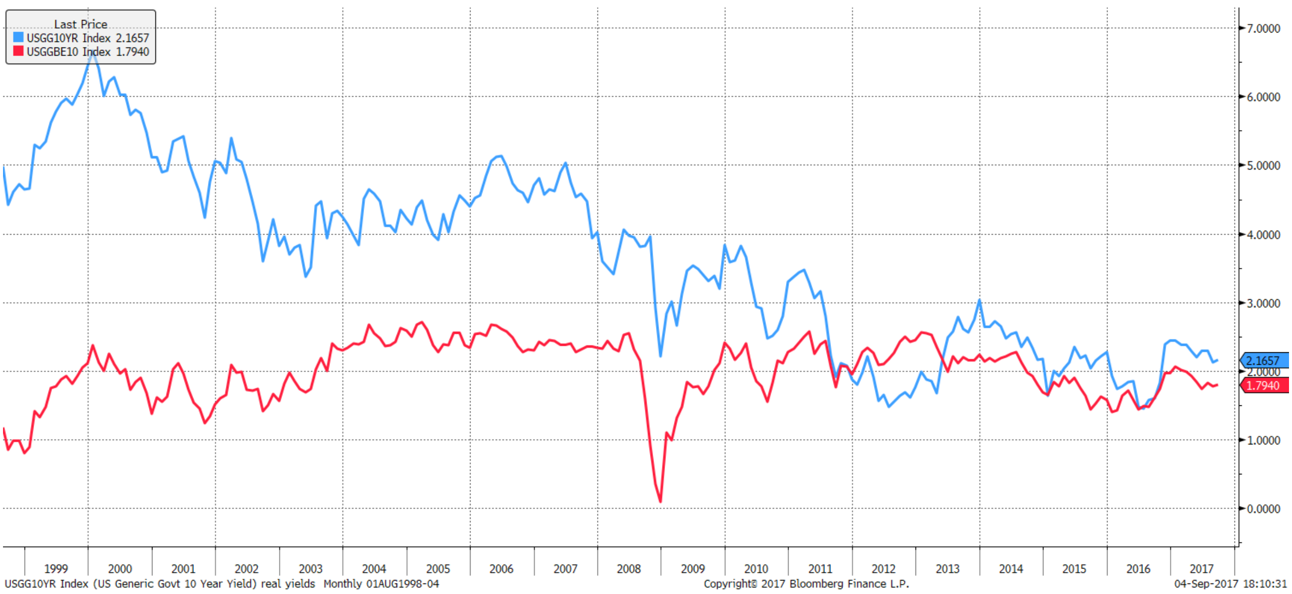
Source: Bloomberg gold in US dollars and US CPI since 1975

The trouble with being a long-term hedge against inflation is that when inflation is falling, other factors take over. For example, gold was a lousy inflation hedge between 1980 and 1999. Inflation saw the dollar lose 54% of its purchasing power. Most would assume that would be good for gold, yet it fell by 56% over the period. It's no wonder people find the gold market confusing. Yet the AP view is that it can be explained. Inflation is always a tailwind for gold, and in that sense, there's a never-ending bull market for gold in most currencies. Yet for those of us with a time horizon of weeks, months or years, a generational view is unhelpful.

The reasons, for what appear to be a random walk, are in fact crystal clear. Real interest rates and speculation are the other two main drivers of gold's returns. For the Atlas Pulse models, real rates are the 20 year bond yield less the 20 year inflation expectation (determined by the price of inflation linked bonds). Real rates drive the fair value – that is what investors should *rationally* pay for gold. Speculation is the premium or discount that shows what investors are *irrationally* willing to pay for gold.

The chart below shows rates and inflation since 1999. As the two lines compressed, gold rose. And it's no surprise that the peak came about in 2011, as the lines crossed over, and real rates went into negative territory. They reversed course in 2013, causing gold to collapse. Recently, they have been fairly stable.

Forecast the bond market and you can forecast gold



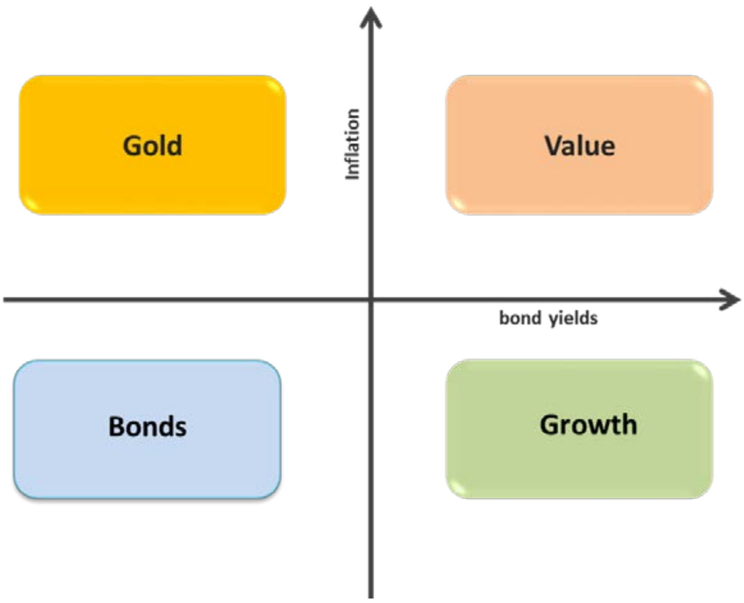
Source: Bloomberg US 10 year bond yield (blue) and 10 year inflation expectations (red)

Notice how gold's bull market since 1999 to present has been driven by falling rates rather than rising inflation expectations, which have averaged 2% over the entire period. Looking at them today, the deflation bomb seems to be overstated as the red line is a long way from negative territory.

If you consider the possibilities of what can happen to the chart above, bond yields can rise or fall and inflation can rise or fall. That gives us four scenarios. Of course, there's a fifth scenario where things remain the same. And by the way, stability lends itself to a sense of calm, which leads to overconfidence. It's the sudden shifts in the other scenarios that cause mayhem.

Putting that idea into a diagram that is familiar to Fleet Street Letter readers and Newscape clients, gold dominates the top left quadrant. The only other asset to share its place are inflation-linked bonds (ILBs). ILBs pay income, but not much at the moment. Furthermore, they aren't risk free as they depend on the government's creditworthiness. Unlike gold, governments come and go. In a low rate, high debt world, gold is a safer bet.

Gold thrives in the top left



So long as the gap between inflation and rates is falling, gold will rise. Except this diagram over simplifies extreme scenarios, as inflation is more sensitive than rates. Notice how "Growth" is the opposite of gold. Growth assets, that are expected to be larger entities in the future such as technology stocks, perform best when real rates rise. When that happens, investors shun gold and embrace assets that will compound over time.

Source: Atlas Pulse

Gold and the Nasdaq as opposites is no coincidence

Most commentators look at gold versus the S&P 500. However, I believe the Nasdaq shows this negative correlation more clearly. That is further heightened if expressed in relative terms. The stockmarket is full of noise and relative charts clean up the mess – as you strip out the stockmarket. Thus, gold and the Nasdaq relative to the S&P 500 bring it home. Gold was terrible in the 1990s when tech boomed. They turned in 2000 at the same time, and then again in 2012. This inverse relationship is highly informative.

Source: Bloomberg since 1987

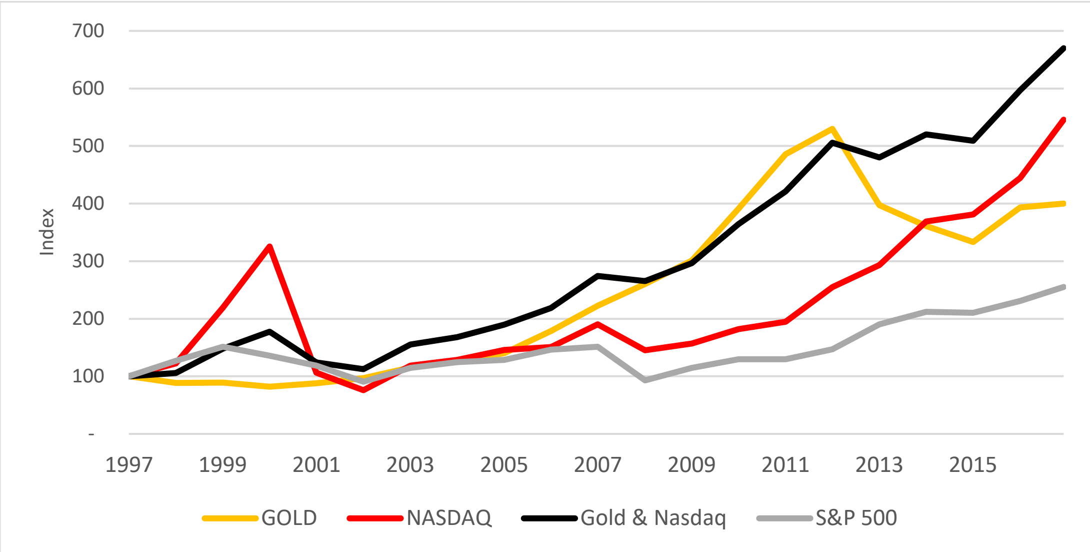
Gold and the Nasdaq are highly complementary assets. There were moments when the link was tenuous, especially after the crisis. But consider that tech stocks were cheap at that time and were growing like weeds. Even the macro headwinds couldn't hold back dotcom bubble 2.0.

Diversified portfolios

Diversification is a funny thing. Most people seek it, yet hate it at the same time. That's because investors want all their assets to be rising, all of the time. And by definition, that's not diversification – as they will all fall together.

Over the past 20 years, gold has appreciated by 4 times (with 15% volatility) and the Nasdaq by 5 times (with 30% volatility), yet both have had shocking moments at different times. A 50:50 portfolio of Nasdaq:gold, that is rebalanced annually, rose by over 6 times with 16% volatility. Beat that.

Growth and gold have been a wise choice



Source: Newscape Interns: Zain Mitha, Myles McSwiney, Mirae Tejura.

No one offers "GG" portfolios (gold and growth) but they probably should. Similarly, value & bonds would be a better combination than gold & bonds or value & growth. It's logical because if bond yields collapse, inflation will fall and value assets will depreciate. Assets will fare poorly, when cash will be king, and vice versa. That's because value assets are tangible and offer inflation protection. Examples include cement plants, mines, houses, pipelines and so on. When inflation is falling, money is desirable and when it's rising, assets are a better bet.

To illustrate how bonds and value can work together, I've taken high quality equities. In this case the US Consumer Staples Index and shown it against emerging markets - both series are relative to the world. Once again, you can see the inverse relationship. Swap quality for bonds. Or swap emerging markets for cyclical stocks and you'll get a similar outcome.

Emerging markets and consumer staples are complimentary assets

Most of the turning points on these two charts have coincided with one another. It's another good example of how different assets can be complimentary. Of course, the underlying stockmarket has a mind of its own. These relationships are relative.

Source: Bloomberg since US Consumer Staples Index (blue) and emerging markets (red) relative to the world since 1993

Now imagine how diversified a portfolio would be if it combined bonds, value, growth and gold? As it so happens, I manage one just like that.

Gold scenarios

Earlier I mentioned gold's sensitivity to bond yields as opposed to inflation. The bull market since 1999 has been all about falling yields since inflation has, on balance, remained remarkably stable in the developed world.

The table below shows bond yields and inflation with forecasts for the gold price under different scenarios. Choose your bond yield on the blue x axis and your inflation expectation on the orange y axis. And hey presto, that's the fair value of gold. The current situation has inflation of 1.9% and a bond yield of 2.5% - as seen around the grey boxes.

20 year bond yields

20 year inflation expectations	-2.0	-1.0	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0
10.0	84,671	67,544	54,018	43,307	34,804	28,037	22,638	18,320	14,858	12,077
9.0	56,268	45,000	36,078	28,994	23,356	18,859	15,261	12,378	10,061	8,195
8.0	37,425	30,004	24,113	19,425	15,684	12,692	10,294	8,367	6,815	5,563
7.0	24,911	20,020	16,127	13,021	10,538	8,546	6,947	5,658	4,619	3,778
6.0	16,592	13,366	10,792	8,733	7,083	5,757	4,690	3,828	3,131	2,566
5.0	11,058	8,928	7,225	5,860	4,763	3,880	3,167	2,590	2,123	1,743
4.0	7,373	5,967	4,839	3,933	3,204	2,615	2,139	1,753	1,439	1,184
3.0	4,918	3,989	3,242	2,641	2,156	1,763	1,445	1,187	976	805
2.0	3,282	2,667	2,173	1,774	1,451	1,189	976	803	662	547
1.0	2,190	1,784	1,456	1,191	976	802	660	544	449	371
0.0	1,462	1,194	976	800	657	540	446	368	304	252
-1.0	976	798	654	537	442	364	301	249	206	171
-2.0	652	534	439	361	297	246	203	168	140	116

Notice how the green diagonal line follows constant real interest rates. For example, a zero yield with zero inflation expectation (real rate of zero) gives us a fair value of $976 per ounce (bottom left entry). Follow the diagonal to the top right along the green line and the gold price rises significantly despite a constant real rate. Similarly, follow the blue diagonal and see real rates change. The impact on the gold price is explosive.

Source: Atlas Pulse

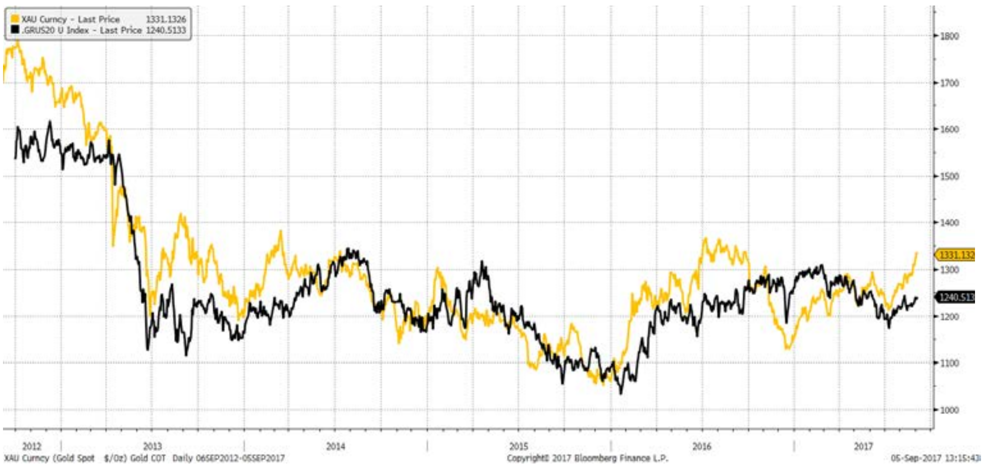
Massive inflation with negative bond yields would mean we'd gone the way of Venezuela. It's not that gold has gone up, more that money has become worthless. Below are scenarios from the past in the USA, which have actually happened. I have used rates and inflation from that time, yet under current conditions. You can see where gold would be today under similar circumstances.

Occasion	10 year yield	10 year breakeven	Real rate	Gold fair value
1999 bear end	6.0%	1.0%	5.0%	$449
2008 crisis low	2.9%	0.4%	2.5%	$645
2011 peak high	1.9%	2.8%	-0.9%	$2,032
2015 bear low	2.3%	1.6%	0.7%	$1,166
1980 peak (h)	12.5%	14.0%	-1.5%	$18,151
1980 peak (l)	12.5%	10.0%	2.5%	$4,008

The 1980s scenarios require guesswork because we don't know what inflation expectations were at that time (as inflation-linked bond didn't exist). CPI was indeed 14% but long-term expectations would inevitably have been lower. I've therefore shown high and low scenarios. Using past emerging market crises as proxies, high CPI readings tend to overstate future inflation expectations by around 20% to 40%. On that basis, maybe the low scenario is a little more realistic as to what happened in 1980. A re-run of that era might see a 50% or even 100% speculative premium on top. During a market frenzy, that is more likely than not.

It all comes down to inflation. US rates could go Japanese which would see gold chase $2,000. Alternatively, inflation could rise and gold could do well. The bear scenario for gold hinges on aggressive tightening in an inflation free world. That's not my view.

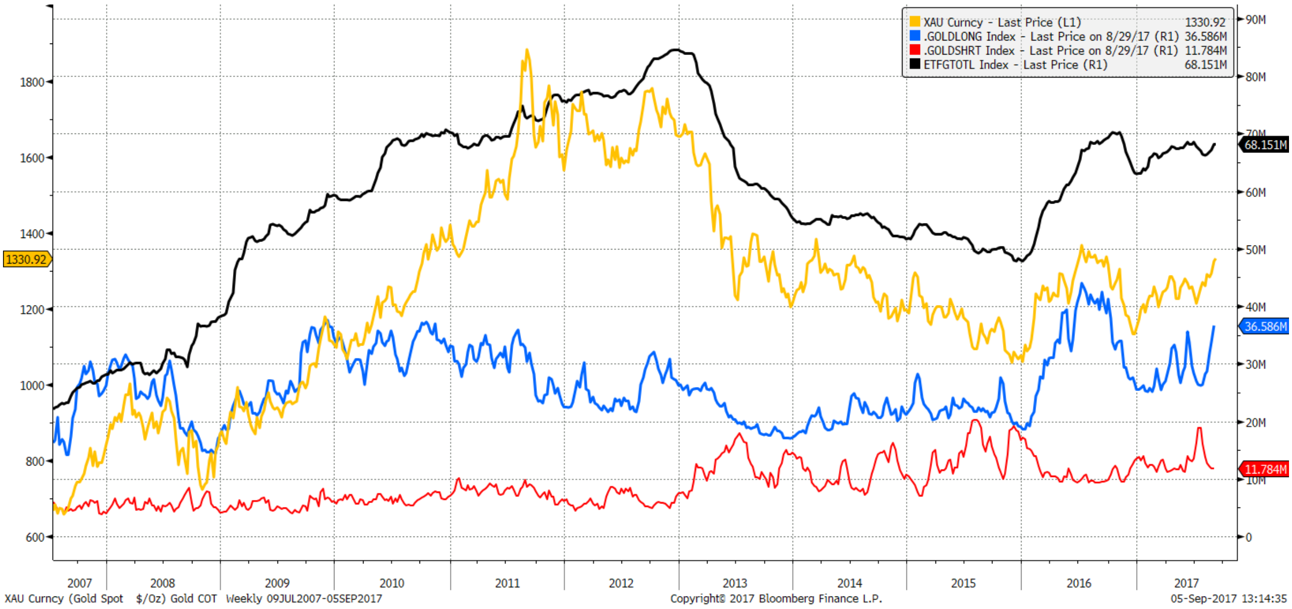
Gold is 7% rich versus the Atlas Pulse fair value



Gold's fair value stands at $1,245 compared to a price of $1,335. Recall, that the US dollar has been weak this year and so some of that strength is merely translational. For this premium to last, inflation must rise.

Source: Bloomberg Atlas Pulse gold fair value (black) versus gold in US $ since 2012

Gold speculation has risen



Source: Bloomberg Total held in ETFs (black), COT longs (blue), COT shorts (red) and gold (gold) all in million ounces since 2007

Speculative flows have risen as ETFs now hold 68 million ounces (Moz). The long futures have risen too, while closing the shorts. Total net speculative holdings are now 93 Moz which compares to a post-crisis average of 83 Moz. Speculation is slightly overdone, but not massively so.

All in all, gold is in better shape than late last year. Most scenarios are more likely to be positive rather than negative and if equities come under pressure, gold ought to benefit from capital flight. The key to it all is inflation. To my mind, that is most likely to come through commodity prices, and I'm watching oil like a hawk.

What's more, with a war of words coming from the Korean peninsula, a premium could be justified.

Gold versus Bitcoin

With North Korean tensions rising, it's worth comparing bitcoin and gold in an extreme scenario. Imagine there was a limited nuclear war, with millions of deaths in the impacted areas, but elsewhere, the majority survived. It's an exploratory question and I hope we never find out the answer, but it's useful in understanding the most important differences between gold and bitcoin.

The global economy would be shaken to its core, yet there would be places that would be physically unaffected such as New Zealand, Peru, Nepal… who knows? Under such a scenario, the economic destruction would be harsh but temporary. And as the situation diffused, a global economic recovery would slowly begin.

During the war, and in its immediate aftermath, the major cities would be evacuated as they would be prime targets. Confidence would be non-existent as their city might be next. Commerce would go into a sharp reversal and there would be widespread panic. In terms of wealth preservation under this dark cloud, which asset would fare best?

Finite supply

Sticking with the obvious, Bitcoin was designed around the idea of gold. It is a scarce asset and 79% of the bitcoins that will ever exist, already do today. The last 21% will come to be at an ever-declining rate. The rate of inflation is a mere 4.2% and will ultimately fall to zero. For gold, assuming there are 180,000 tonnes held above ground and 3,000 tonnes mined each year, the equivalent rate of inflation is around 1.6%. Since both have falling inflation and a finite supply, they are comparable and similarly scarce.

Demand

Unlike gold, Bitcoin is a growth asset and it thrives on the network effect. The more people that use it, the more valuable it becomes. I'm not so sure that's the case with gold, as the evidence suggest it is a long-term store of value, regardless of its monetary velocity. Naturally, both gold and Bitcoin will benefit from the death of the fiat system, but in subtly different ways.

Even in a limited nuclear war, it is highly unlikely that the Bitcoin network would shut down, as only one Bitcoin node needs to chug away in order for the network to survive. Given there are thousands of bitcoin nodes, and apparently one in Space, it is inevitable that the ecosystem survives the fallout. However, I question the vibrancy of the network during those dark times. I say that because Bitcoin users tend to live in great cities like Amsterdam, Sydney and Seoul – all places that will probably be evacuated.

While the people dashed to the countryside, I believe that Bitcoin's network traffic would collapse until normality resumed. However, during the subsequent peace, it would soon resume. And when the economic system *finally* normalised, it would thrive again.

It ought to be that gold will hold its value, in real terms, throughout the period. The value of money would probably fall, and monetary policy would remain easy. A speculative premium is unlikely, as people would have more immediate concerns, such as the basic necessities of life. All in all, gold should do its job and preserve wealth throughout the period. Even if the people didn't carry on trading gold, the governments would – just as they have during past conflicts.

In the aftermath, the survivors would be more cautious and sceptical than they were before. The harsh reminder of the system's fragility would make more people embrace alternative assets more readily. Both gold and Bitcoin would remain popular.

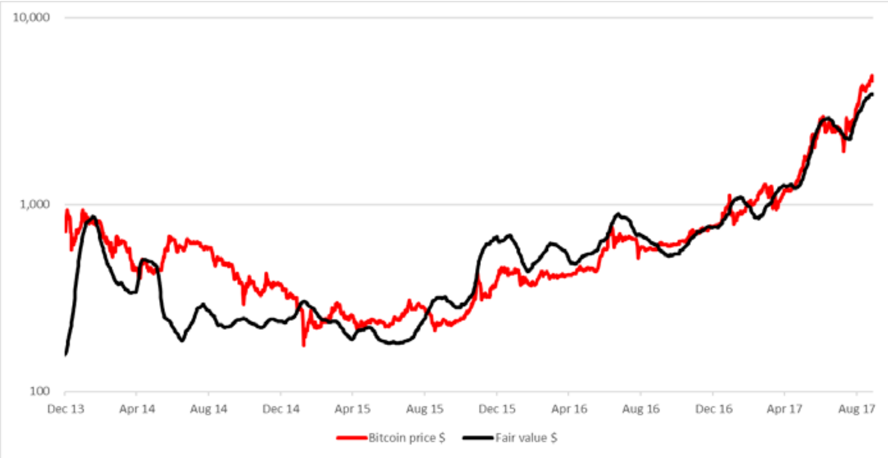
I could be wrong. And I hope there's no real life test. But it could be that the internet works like a treat throughout the war, along with mobile networks. The monetary system fails, and Bitcoin becomes the standard. I'd appreciate your views on this hypothetical doomsday scenario.

Write to me at atlaspulse@gmail.com

Valuing bitcoin

Looking at Bitcoin's network activity, the estimated fair value is $4,301 on our weekly model and $4,056 on the multi-week model. Few can argue that the surge to $5,000 has happened quickly.

Slightly ahead of events



Over the past year, the bitcoin price is 7.7x while the bitcoin traffic is up 6.7x. That has propelled the price slightly ahead of events. Yet so long as people use Bitcoin, and the network grows, it will appreciate.

Source: Atlas Pulse

At around $4,300, you shouldn't panic. Is this a great buying opportunity? Probably not, but it's not a bubble. More a welcome period of cooling off following a surge.

Summary

The gold market has woken again and investors have been reminded to diversify. I doubt the current environment leads to a surge, but I'm more confident than ever before that gold never trades below $1,000 again. The logic dispels it, as do the charts.

As for Bitcoin, my 45-month-old software project, Crypto Composite (CC), grinds on. I won't give up now, or ever. You know it doesn't work because I'm still writing Atlas Pulse. For when it does, I'll be on a beach somewhere far away from nuclear attack counting bitcoins. But if you wonder why I used to write so much on digital assets, and now so little, it's because two years ago, Bitcoin was a screaming buy. Now it's just a buy.

Thank you for reading *Atlas Pulse and make sure you watch my new TV show*.

http://www.corelondon.tv/bitcoin-digital-assets-new-asset-class-making/

Charlie Morris

Twitter: @AtlasPulse
Email: atlaspulse@gmail.com
Newscape: http://newscapegroup.com/

Charlie Morris is Chief Investment Officer at Newscape having joined in May 2016 to restructure and oversee the direct Funds business. He is the Lead Manager of the Newscape Diversified Growth Fund, the Co-Manager to the Newscape Emerging Markets Equity Fund and is a senior member of the investment committee. Prior to Newscape, Charlie spent 17 years at HSBC Global Asset Management as the Head of Absolute Return managing a multi-asset fund range with assets in excess of $3 billion. He is a familiar face in the financial media and writes frequently as the editor of Atlas Pulse and the Fleet Street Letter, Britain's oldest financial newsletter. Prior to fund management, Charlie was an officer in the Grenadier Guards, British Army.