BITCOIN, DOLLARS, GOLD:

What Is the Future of Money?

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ABC BULLION
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KEY FINDINGS

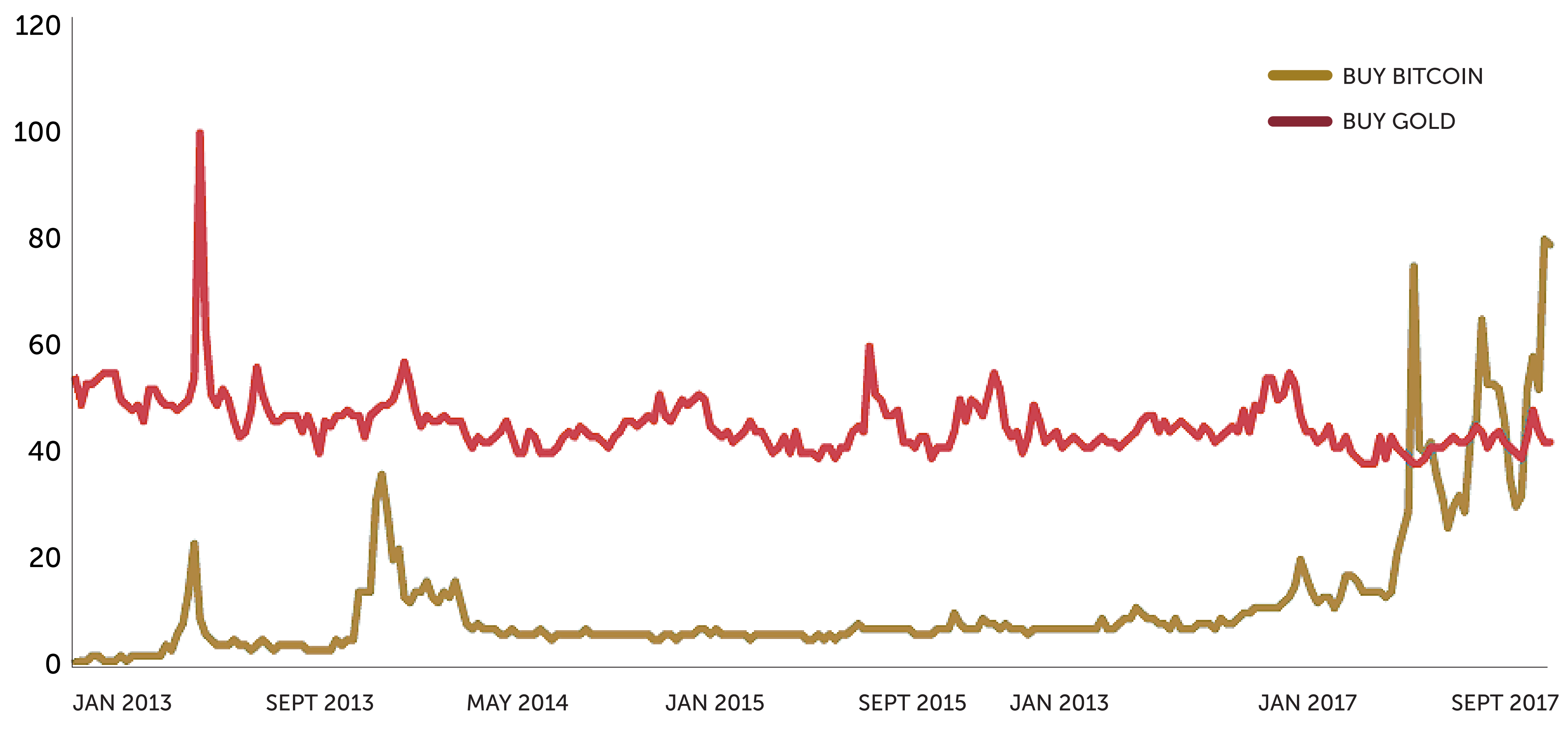
- Blockchain technology has serious real world applications – it is here to stay
- Given valuations in broader financial markets, it can make sense to speculate in the cryptocurrency market with a small portion of one’s wealth
- Cryptocurrencies like Bitcoin are money today, but whether that status will endure remains to be seen
- Physical gold remains the simplest and most effective hedge against the monetary, market, and macroeconomic risks that investors confront today

I first started following Bitcoin (BTC), and what I will call the cryptocurrency movement (CCM) several years ago.

It's been an incredible story to watch unfold, with BTC now seen as a genuine financial asset, and payment system.

It is also clearly the most popular alternative currency (for want of a better term) in the marketplace today, with searches for "buy bitcoin" now comfortably outpacing searches for "buy gold", as you can see in fig. 1.

Fig. 1: **SEARCH QUERIES FOR "BUY BITCOIN" SURGED PAST "BUY GOLD"**



Source: Valuewalk

Last but not least, BTC is dominating conversations that I've been having with existing and potential clients at ABC Bullion, though this is clearly not limited to the precious metals space alone, with a friend and colleague of mine, who works as a financial planner stating that *"I'm getting asked by everyone about BTC, not just my clients. It's peak barbeque talk."*

It's not just BTC either, with the market value of the entire cryptocurrency rising more than ten-fold this year, from USD $18.2bn in January 2017 to over USD $200bn at its peak, according to the Coin Market Cap.

That is some progress given how BTC was perceived as recently as five years ago, when it was considered a mere plaything of IT geeks and those looking for a medium to trade in illicit goods.

That perception is perhaps best captured on a Reuters headline (see fig. 2), from early April 2012.

#BUSINESS NEWS APRIL 2, 2012 / 7:18 PM / 6 YEARS AGO

Bitcoin, the financial traders' anarchic new toy

Fig. 2: Reuters Headline
Source: Reuters

By way of reference, BTC was trading at just USD $4.88 per coin when the Reuters article was published.

I'll admit it - I wish I'd gone long back then, but that is a story for another day.

In this publication, I want to elaborate on my thoughts on BTC, the CCM, and money as a whole, with the report broken down into four key areas:

- Why Bitcoin?
- The tailwinds for BTC and CCM
- Is BTC and the CCM a bubble?
- Is BTC superior to fiat currencies, or gold?

The final one, in our opinion, is the most important part of the report.

By looking at BTC and blockchain through this lens, I can best explain why I think there is tremendous potential in blockchain technology, but remain cautious about whether the monetary status of BTC and many other cryptocurrencies will endure.

I'll also highlight why I am particularly worried about prices today.

WHY BITCOIN?

It is worth reflecting on why BTC was even created in the first place.

In doing this, I am of course speculating, though given the identity of Satoshi Nakamoto remains unknown, no one can answer definitively why he/she/they released their whitepaper titled "Bitcoin: A Peer-to-peer Electronic Cash System" back in 2008.

I believe there were three primary motivations behind the creation of blockchain and BTC.

The first of these is a simple yet genuine desire to harness the technological power at our fingertips today, to do something that in a less technologically advanced society would not have been possible.

In this sense, one can look at BTC as a payment system in a similar way that one can look at businesses like Uber or Airbnb, or even Amazon. These businesses are utilising technology to disrupt bricks and mortar commerce, the taxi and hotel industries, all the while lowering costs and improving competition.

Collectively, they have changed the way citizens the world over buy goods, travel and choose accommodation.

The second motivation behind the creation of BTC was a likely frustration with the monetary (as well as economic and political) status quo, with the world still in the grip of the Global Financial Crisis (GFC) back in early 2009 when BTC was first released.

> "For the first time in a generation there are serious questions being asked about the current monetary system, with increased concern regarding the long-term viability of the current batch of fiat currencies in use around the world today."

According to Reuters, embedded in the code of first block of transaction history are the words "Chancellor on brink of second bailout for banks", a reference to a front page headline from that day (see fig. 3).

It seems clear that Satoshi (and he/she/they are not alone in this) was distinctly uncomfortable with the financial excesses that built up in the global economy and our banking system pre-GFC, and was looking to offer an alternative solution.

The final motivation behind the creation of BTC lies in a question that more and more people are asking in a world of quantitative easing and zero to negative real interest rates.

What is money?

For the first time in a generation there are serious questions being asked about the current monetary system, with increased concern regarding the long-term viability of the current batch of fiat currencies in use around the world today.

It is the right question to be asking.

THE TIMES

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Chancellor on brink of second bailout for banks

Billions [illegible] be needed as lending squeeze tightens

Francis Elliott Deputy Political [illegible]
Gary Duncan Economics Editor

Alistair Darling has been forced to consider a second bailout for banks as the lending drought worsens.

The Chancellor will decide within weeks whether to pump billions more into the economy as evidence mounts that the £37 billion part-nationalisation last year has failed to keep credit flowing. Options include cash injections, offering banks cheaper state guarantees to raise money privately or buying up "toxic assets", *The Times* has learnt.

The Bank of England revealed yesterday that, despite intense pressure, the [illegible] ter of last year and plan even tighter restrictions in the coming months. Its findings will alarm the Treasury.

The Bank is expected to take yet more aggressive action this week by cutting the base rate from its current level of 2 per cent. Doing so would reduce the cost of borrowing but have little effect on the availability of loans.

Whitehall sources said that ministers planned to "keep the banks on the boil" but accepted that they need more help to restore lending levels. Formally, the Treasury plans to focus on state-backed [illegible] a number of interventions are on the table, including further injections of taxpayers' cash.

Under one option, a "bad bank" would be created to dispose of bad debts. The Treasury would take bad loans off the hands of troubled banks, perhaps swapping them for government bonds. The toxic assets, blamed for poisoning the financial system, would be parked in a state vehicle or "bad bank" that would manage them and attempt to dispose of them while "detoxifying" the mainstream banking system.

The idea would mirror the initial proposal by Henry Paulson, the US Treasury Secretary, to underpin the American banking system by buying

Continued on page 6, col 1
Leading article, page 2

99p

Pub chain cuts the price of a pint from £1.69 to 1989 levels

Business, page 47

Fig. 3: The Times: 03 Jan 2009
Source: The Times

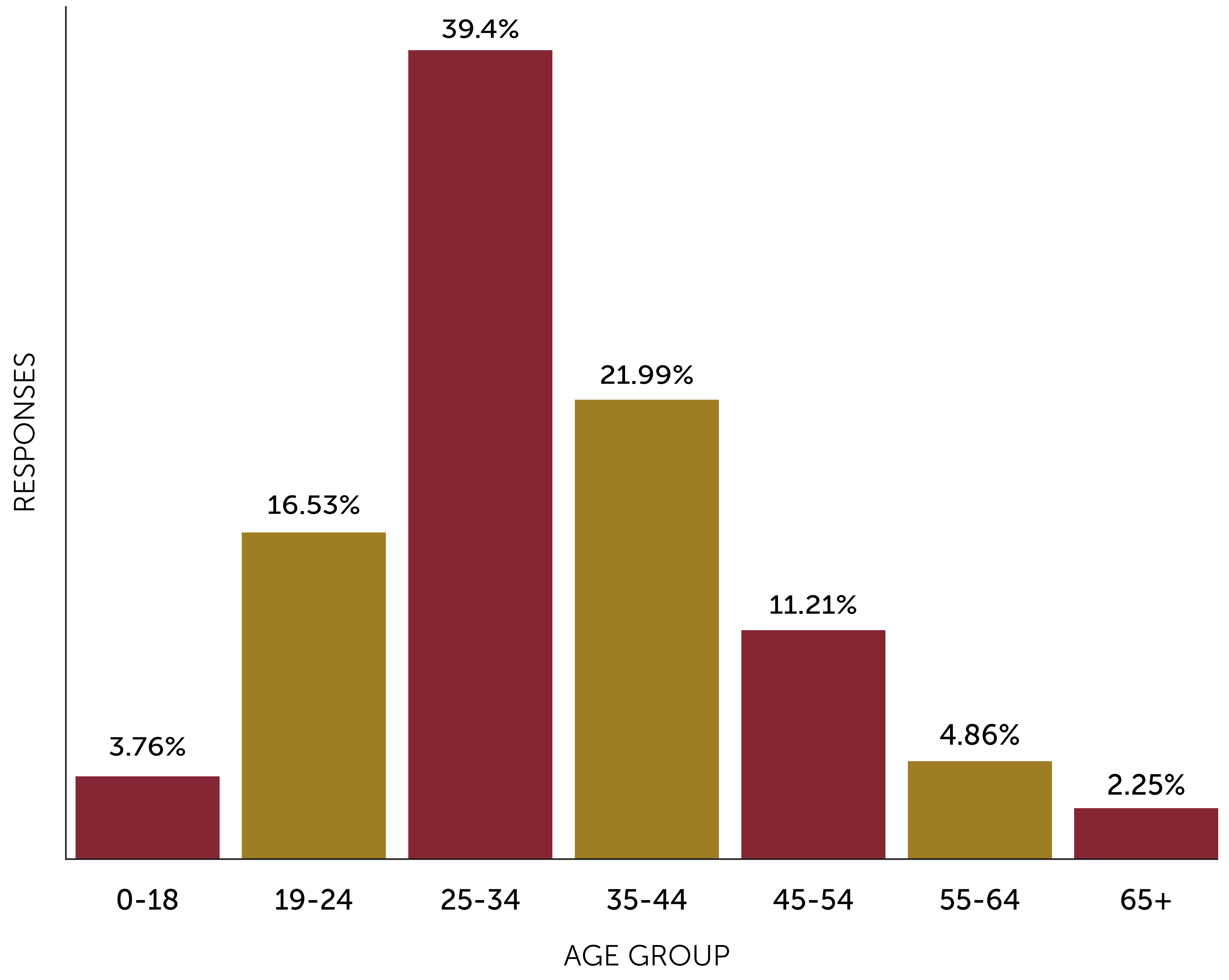
TAILWINDS FOR BTC AND THE CCM

BTC and the CCM have a lot of tailwinds supporting their growth. Explosive price gains have been met with an enormous influx of capital, not just the monetary kind, but even more importantly, the intellectual kind.

Some of the brightest minds in finance and technology are now looking at the potential that Blockchain offers, whilst for BTC specifically, the announcement that the Chicago Mercantile Exchange will soon offer a BTC futures contract is a sign that it is gaining further legitimacy as a financial asset.

Millennials, digital natives that they are, appear infatuated with BTC and the CCM, with a 2015 Coindesk report suggesting 60% of all BTC users (by which I think they mean buyers) were less than 35 years old. Less than 20% were over 45, as you can see in fig. 4.

Fig. 4: **HOW OLD ARE BITCOIN USERS?**



Source: Coindesk

These findings were largely supported by a 2016 study by bitcoinx.io, which found that over 50% of users were still less than 35 years old, whilst a staggering 87% of all users were male.

That BTC and the CCM have found such support in the millennial generation is not surprising for two reasons.

First, they have been rapid adopters of cash-less payment options, and have been in the vanguard of the digital revolution. As such, they are largely comfortable with the idea of a purely digital currency.

Secondly, it pays to remember that they've grown up in a "post" GFC world that has offered them, relatively speaking at least, limited employment opportunities.

With little to no financial wealth to start with, the central bank rally on Wall Street has almost entirely passed them by too.

Indeed, rather than partaking in the gains in stocks, bonds and certain real estate markets, they've accrued record levels of student debt (in the US at least), even though the degrees they've earned are no longer a ticket to high paying secure employment opportunities.

Given this backdrop, it is easy to understand the allure of BTC and the CCM to the millennial generation. After all, not only has it offered a chance to make life-changing gains with minimal capital outlay, but it exists entirely within their natural habitat (the digital world), one of the few if not only places they have a competitive advantage over their baby boomer and Generation X counterparts.

Kyle Russell, in an article titled "Millennial Crypto FOMO", wrote a great article on this trend, describing how, to younger generations, the American Dream (buying a house, building up a nest-egg and saving for your kids education) seems impossible nowadays.

The difficulty in building wealth the old way has, according to Russell, encouraged millennials to gamble on BTC and other cryptocurrencies, and embrace the CCM.

Dovetailing in with the comment about life-changing gains, it is unquestionable that the current price action in BTC and CCM is a major tailwind supporting the market.

As the legendary Bob Farrell of Merrill Lynch said in his 10 rules for investing "Bull markets are more fun than bear markets."

Maybe BTC and the CCM will end up crashing in a heap (a subject we'll touch on later in this report), or maybe they really are the future of the monetary system, and for the first time in six millennia, something better and longer lasting than gold is evolving in our midst.

Only time will tell, but in the meantime, it's impossible to deny that BTC and the CCM are the best party in finance right now.

Another tailwind that BTC and the CCM have going for them is that, irrespective of your view on them as "money" or "currency", the blockchain, a cryptographically secure decentralised networks, has widespread potential.

The technology is real, and is here to stay.

In a chapter from my 2016 book "Gold for Australian Investors" titled "Physical Gold and the Blockchain", we looked at one example of where we see disruptive potential for blockchain; the spreads banks charge their customers to switch Australian dollars into a handful of the worlds leading currencies.

As per that chapter, table 1 comes from an October 2014 Canstar Star Ratings report on International Money transfers, and was based on a study of 15 leading Australian Authorised Deposit Taking Institutions (ADIs), including the big 4 banks.

Table 1: **INTERNATIONAL MONEY TRANSFERS**

CURRENCY	RBA (HEADLINE RATE)	AVERAGE QUOTED RATE (SELLING RATE)	DIFFERENCE ($)	MARGIN (%)
EUR	0.706	0.675	-0.031	-4.610%
GBP	0.561	0.537	-0.024	-4.464%
USD	0.919	0.888	-0.031	-3.507%
CHF	0.853	0.817	-0.036	-4.441%
HKD	7.126	6.869	-0.257	-3.738%
INR	55.789	53.794	-1.994	-3.707%
JPY	97.463	93.127	-4.336	-4.656%
NZD	1.113	1.072	-0.041	-3.834%
SGD	1.157	1.110	-0.046	-4.183%

Source: Canstar

> "...it is easy to understand the allure of BTC and the CCM to the millennial generation. After all, not only has it offered a chance to make life-changing gains with minimal capital outlay, but it exists entirely within their natural habitat (the digital world), one of the few if not only places they have a competitive advantage over their baby boomer and Generation X counterparts."

It highlights the average RBA headline rate over a four-week period, as well as the average quoted selling rate by the ADIs over the same time period.

As you can see, there is a more than 4% spread on average to switch a monetary deposit from one currency to the other, even though, in effect, transferring currency is nothing but a few computer entries today.

Bank A in Sydney or Melbourne definitely does not need to take all of your Australian dollars out of their vault and have a logistics company securely ship them to bank B in Paris in order for you to walk into bank B and pick up a handful of Euros so you can enjoy a café au lait, a stroll down the Champs-Élysées and a trip to The Louvre.

To grasp how expensive those fees on FX transactions are, consider the fact that bullion dealers in this country often sell a troy ounce of gold (an actual physical item that needs to be found, mined, transported, refined and retailed) for a margin of closer to 2%.

Given that, is it really reasonable that banks can get away with charging 4% for a digital transaction?

I, for one, would welcome the ability of blockchain to alter this landscape (including via working with the banks as companies like Ripple aim to), with the end result being a better outcome for consumers.

Foreign exchange transfers is obviously just one example, there are many more. Without claiming to offer an exhaustive list, there is obvious potential for blockchain to be used in broader financial services, supply chain management, trade finance, cybersecurity and healthcare, to name just a few industries.

"Banking is only the Beginning: 30 Big Industries Blockchain Could Transform", an article published in late August 2017, is well worth a read to further investigate the potential that blockchain has.

The bottom line to all of this is that we expect to see a lot of very successful businesses harness the power of blockchain technology over the next few years, and best of luck to them.

A further factor that will support the continued interest and development of BTC and the CCM is the fact that commercial banks and governments love it, even if the latter will occasionally attempt to regulate activity in the space.

> "When you think about it, if you were Venezuelan right now - would you rather be long Bolivar, or long Bitcoin?"

From a commercial banks perspective – the attraction of BTC is obvious. They hate physical cash, which needs to be counted/stored/handed out, and most importantly, can't be leveraged.

A world where money is entirely digital, with no possible escape route from the banking system is obviously attractive to the banks.

The suggestion that governments also love BTC and the CCM might sound like a crazy statement given the whole argument that the intrinsic value of BTC and cryptocurrencies is their "anonymous" nature, but I still think its true.

After all, one need not be a wild conspiracy theorist to see that governments have a general dislike for cash itself these days, and prefer all transactions to have a digital footprint, where they can be tracked, and ultimately, taxed.

The movement towards a cashless society is supported by many in academia, including a handful of the world's "leading" economists, such as Willem Buiter, Kenneth Rogoff, Paul Krugman and Larry Summers.

Whilst paying lip service to the loss of liberty, and the extreme inconvenience eliminating cash will have on the world's unbanked, these economists collectively espouse the many "benefits" of eliminating cash, including the ability to crackdown on black-market behaviour, restrict criminal activity, and of course, eliminate the effective zero lower bound.

In BTC and the CCM, governments, central bankers and neo-Keynesian economists get to monitor a live experiment in purely digital currency, and one they can co-opt at a time of their choosing.

Therefore, whilst governments and regulators will for now remain largely blind to the incredibly small amount of real world commerce that is taking place utilising BTC and the CCM today, they'll allow this ecosystem to develop, all the while monitoring the "off ramps" and "on ramps" to the traditional payment system.

The final tailwind for BTC and the CCM is one I touched on briefly in the introduction, and that is the continued questioning of just what money really is today.

Everyday, it seems more and more people are losing faith in the status quo, witnessing with their own eyes a political, financial and monetary system that no longer works as they once expected.

Irrespective of whether one believes that is by design or by accident, it is undeniable that at present, more and more wealth is being concentrated in the hands of fewer and fewer people.

The monetary shenanigans embraced by central bankers the world over are at the very least a contributing factor to this trend, and many would argue they are the primary cause of this widening inequality.

Note this is doubly true in some of worst run countries in the world, as well as in some emerging markets, where citizens lack faith in their banking system and local currency.

"When you think about it, if you were Venezuelan right now - would you rather be long Bolivar, or long Bitcoin?"

The bottom line is that for as long as these monetary shenanigans continue, people will look for alternative currencies to both store and create wealth.

ARE BTC AND CCMS A BUBBLE?

It's important to point out at the start of this section that it is entirely possible to believe in the ongoing potential of blockchain technology, whilst also believing that the current price action in BTC and the CCM represents a bubble.

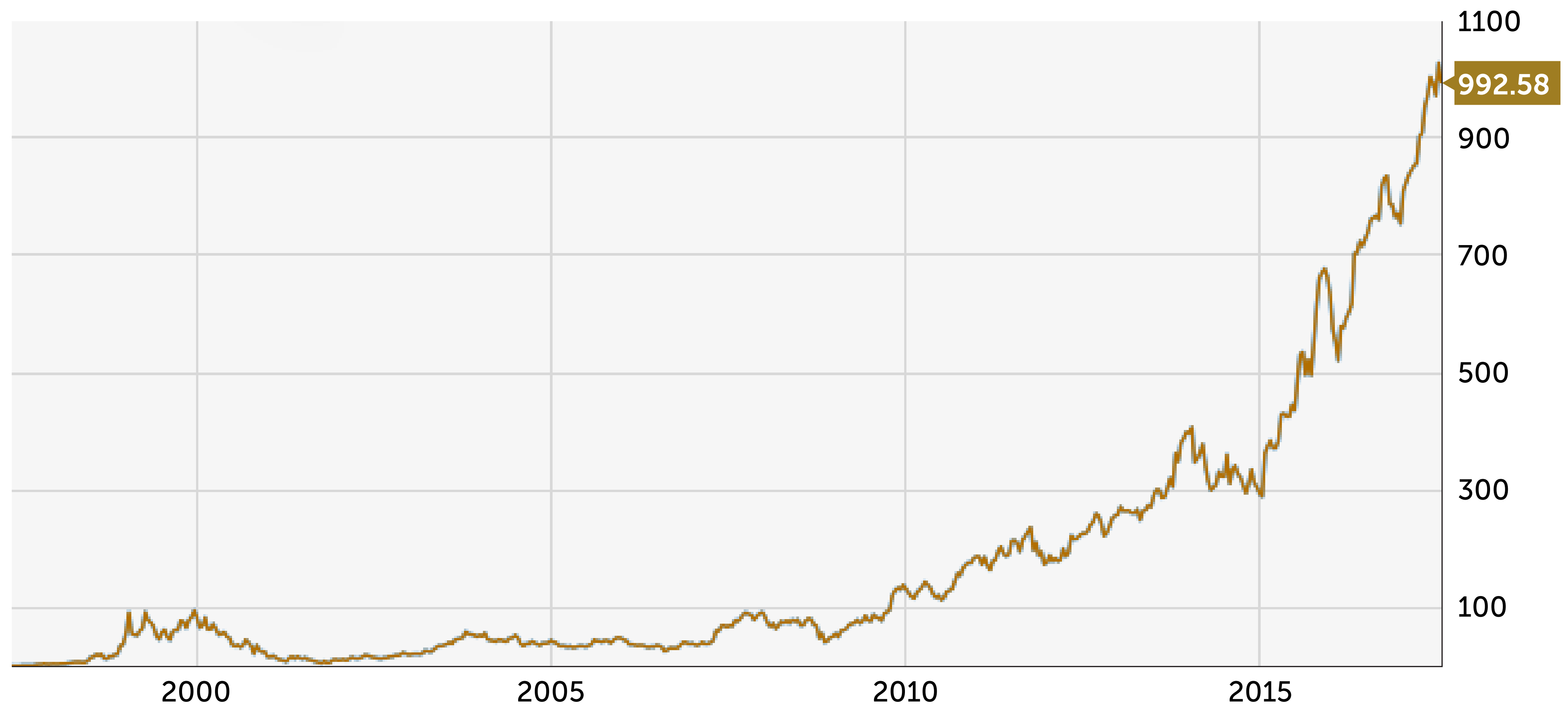
The NASDAQ boom of the late 1990s and early 2000s is a recent example of this exact phenomenon. At the height of the NASDAQ boom, the price action and extreme valuations on display at the time were a clear bubble that did indeed pop, even though the internet and technology companies as a whole have indeed changed the world in more ways than we expected.

No one company better encapsulates the broader NASDAQ story better than Amazon, whose share price chart from the late 1990s to now is included (see fig. 5).

Anyone who was bullish Amazon from the late 1990s has been proved spectacularly right, with a gain over that time period approaching 66,000%.

The company has fundamentally changed commerce along the way, upending traditional retail.

Fig. 5: **AMAZON SHARE PRICE CHART**



Source: Motley Fool

Be that as it may, the ride was hardly smooth sailing, with table 2 highlighting the major bear market corrections. Note in particular the 94% drawdown that occurred during between December 1999 and September 2001.

Table 2: **MAJOR BEAR MARKET CORRECTIONS**

TIME PERIOD	HIGH	LOW	DROP FROM HIGH TO LOW
April 1999-Aug. 1999	$105.06	$44.78	(57%)
Dec. 1999-Sept. 2001	$106.69	$5.97	(94%)
Oct. 2003-Aug. 2006	$59.69	$26.07	(56%)
Dec. 2007-Nov. 2008	$94.45	$37.87	(60%)

Source: Motley Fool

> “...the rapid increase in the price of BTC is attracting record numbers of speculators to the market, with Coinbase, one of the largest cryptocurrency exchanges in the world, adding over 100,000 users in just one day in early November.”

For what it is worth, I think something similar is likely to play out with BTC and within the broader CCM movement shortly, irrespective of its long-term potential.

There are a handful of reasons why I think the BTC and CCM market is a bubble right now, starting with the BTC price chart (see fig. 6). The chart has almost gone vertical.

Fig. 6: **BTC PRICE CHART**

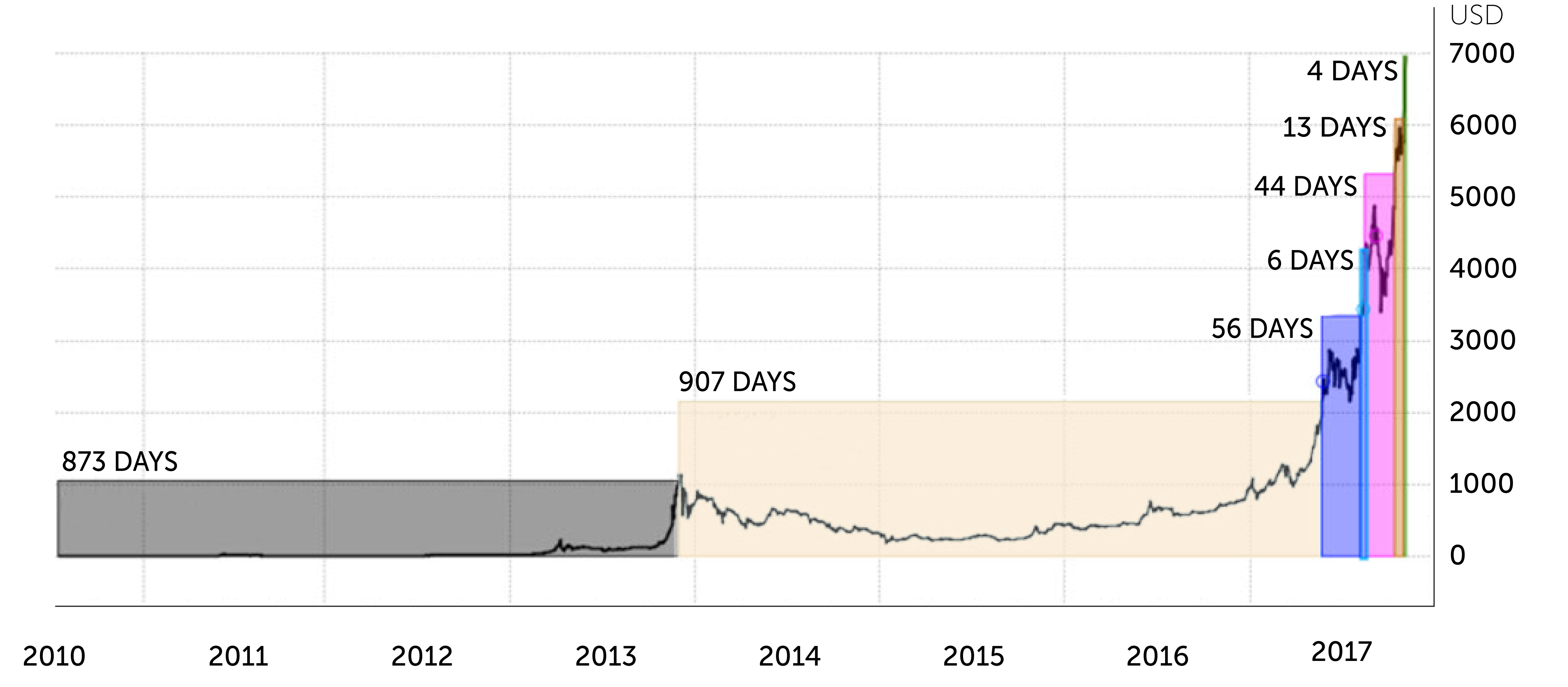
Source: goldprice.org

It's not just the chart for BTC itself that has me concerned. It is also the pace of price increases that should have investors worried.

According to Bloomberg, it took 873 days for BTC to rise from USD $0.00 to USD $1,000, and a further 907 days for the BTC to go from USD $1,000 to USD $2,000.

This is seen in fig. 7, which also shows it took just 56 days to hit USD $3,000, 6 days to hit USD $4,000, 44 days to hit USD $5,000, 13 days to hit USD $6,000 and finally, just 4 days to crack USD $7,000.

Fig. 7: **BITCOIN'S RECORD RALLY**

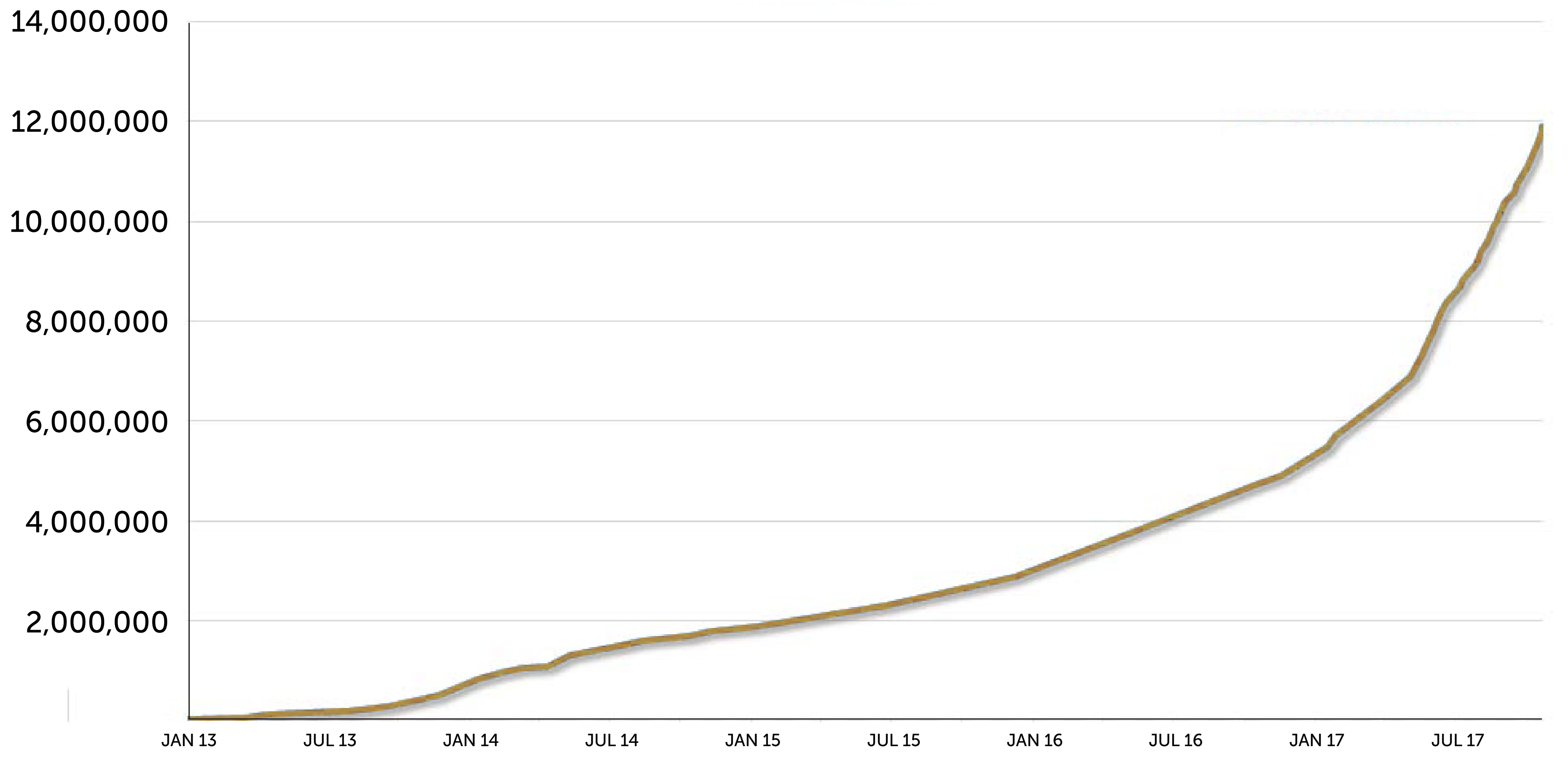


Source: Bloomberg

Not surprisingly, the rapid increase in the price of BTC is attracting record numbers of speculators to the market, with Coinbase, one of the largest cryptocurrency exchanges in the world, adding over 100,000 users in just one day in early November.

Fig. 8 highlights how their user base has grown over the last four years, more or less tripling in 2017 alone.

Fig. 8: **COINBASE USERS**



Source: Alistair Milne, Coinbase, Zerohedge

There is a clear correlation between the growth in the user base and the rising price of BTC, suggesting its speculative demand, and the desire to make a gain denominated in fiat currency, rather than a genuine adoption of a new technology and/or currency system that is driving the market.

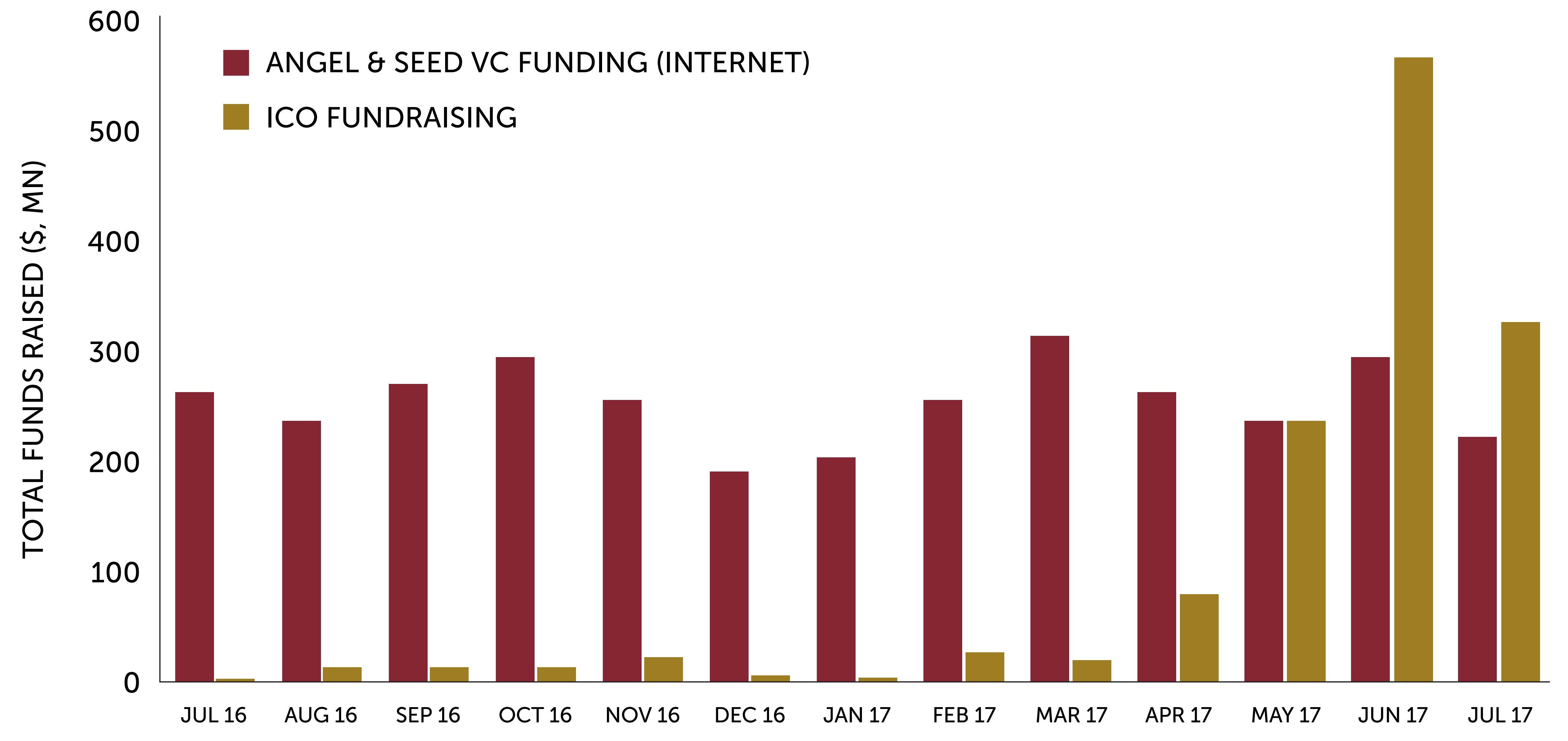
The initial coin offering (ICO) craze is also another factor suggesting we are in the midst of a bubble when it comes to BTC and the CCM.

By early November 2017, some USD $2.1 billion has been raised via ICO funding, across hundreds of projects.

By way of reference, according to an article on coindesk.com, traditional venture capital firms have tipped in only USD $670m this year, and $1.88 billion in total.

Fig. 9 gives this more context, highlighting how the ICO market has exploded in recent months, and just as importantly, how it is now clearly a more significant source of capital than the traditional venture capital model.

Fig. 9: **FUNDRAISING: ICOS VS. VENTURE CAPITAL**



Source: Marketwatch

The switch to ICOs as a source of funding is great for those who are selling the tokens, though likely not so great for the buyers, who in most cases will lack any of the protections, rights or representation that comes with owning actual stock of a company.

The Australian Securities and Investments Commission (ASIC) has gone to some length to warn investors of this, highlighting the fact that there is no one clear legal status for ICOs, and that there is almost zero protection for investors.

The final warning sign of a bubble in the BTC and CCM space is arguably the saddest, and that is the arrival of the spruikers.

As a general rule, I have loved learning about BTC and the CCM over the last few years, and am a genuine believer in the potential of blockchain.

Furthermore, as this paper stated at the outset, we can totally understand why one might wish to invest a small portion of their wealth in this exciting space that offers no end of opportunity.

There are undoubtedly a lot of very bright, earnest and honourable people working in this space, and to that end we don't necessarily have a problem with businesses that are advertising ways to invest in BTC and the CCM, or which stocks stand to benefit from the crypto boom.

There is nothing inherently wrong with telling people they should spread a few thousand dollars across a range of cryptocurrencies and see what happens, with the full disclosure that one should only invest what they are prepared to lose.

It also needs to be pointed that there are those in the BTC and CCM space who've long been talking about its potential, who are now doing their best to warn the bubbly nature of prices in the sector right now, and why buyers should beware, or at least cognisant of the risks.

Be that as it may, one can't help but feel a little uncomfortable (to put it mildly) with some of the marketing that is accompanying this crypto rally, and the "services" being offered to the investing masses.

On the first weekend of November, as part of research for this paper, I spent hours watching webinars and reading blogs on the benefits and opportunities in crypto.

Some were overly simplistic (essentially just go long), then there were those which really rubbed the wrong way.

We’ve all seen the type – the kind of promotion that highlights how the gains made in cryptocurrencies are enough to allow everyday people to retire early and comfortably, build the dream home, and of course, take the grandkids to Disneyland on that once in a lifetime family holiday.

These stories are personalised through testimonials from happy clients, all of whom are of course every day working class folk.

There were even free BTC giveaways worth hundreds of thousands of dollars, with the unsurprising takeaway from this video and others that the rally in BTC and the CCM we’ve seen so far is only just getting started.

According to what I saw, 2018 is set to offer even further riches and financial freedom, as BTC and the CCM goes truly mainstream.

My inbox is now full of stories telling me about the latest crypto that just flashed a “buy” signal (zero sell signals), and stories about the latest everyday Joe whose life has been changed by investing in this space.

Maybe the explosive gains will continue for years to come, but this kind of advertising, and the other factors at play suggest BTC and the CCM is a bubble price wise today, with a significant chance of a major collapse in the coming months.

IS BTC SUPERIOR TO FIAT CURRENCY – OR GOLD?

BTC is money today, as are the Australian and United Stated Dollar, as is physical gold. Many financial market commentators and members of the general public may disagree with that statement, but from our perspective, if enough people think it is money, and use it as money in some capacity, then money it is.

However, the fact that BTC is seen as money today is not particularly insightful, for in the right circumstances (like the inside of a prison), cigarettes can be money.

The more important question that investors need to answer is whether or not BTC, the USD or physical gold will remain money.

To help answer that question, it does pay to do a quick review of what exactly the key requirements of good money are, and the functions that it must serve.

Starting with the characteristics of money, for it to last over the long-term, it is critical that it is:

- **Durable:** Money must not fall apart, deteriorate or weather over time.
- **Portable:** Money must be easy to move around when needed, and hold a large amount of value relative to its size.
- **Divisible:** Money must be easy to separate, and the aggregate value should be the same when and if this separation occurs (i.e. the sum adds up to the parts).
- **Consistent:** Money has to be homogenous – each portion of the substance used as money should be of the same quality, so that equal weights have exactly the same value.
- **Instantly Recognisable:** Money must be easily recognisable and distinguished from other substances or items.
- **Acceptable:** People need to be comfortable taking the money as payment for a good or service, safe in the knowledge they can use it again in the future when it is their turn to consume and or invest.

- **Intrinsically Valuable:** Money should preferably be valuable in and of itself.

Next, we get to the functions that are required of money, if it is to work in the long run. The three main functions of money are that it must be a:

- **Unit of Account:** Money must be a yardstick, which allows us to easily measure value when assessing the economic transactions that we partake in.
- **Medium of Exchange:** This means that it is widely accepted as the item one essentially hands over as settlement (irrespective of how you pay – credit card, BPAY, physical cash, etc.) when purchasing a good and/or service. It is the way in which you honour a contract when buying something.
- **Store of Value:** Money should ideally hold its purchasing power over time, so that as savers and consumers, we can efficiently and easily protect our wealth, to use for future consumption and/or investment.

Let's now see how three different types of money – BTC, the USD, and physical gold – stack up against each of these measuring sticks.

Table 3: **CHARACTERISTICS OF MONEY**

	USD (FIAT)	GOLD	BTC (CRYPTO)
Durable	Y	Y	Y
Portable	Y	Y	Y
Divisible	Y	Y	Y
Consistency	Y	Y	?
Instantly Recognisable	Y	Y	Y
Acceptable	Y	N	N
Intrinsically Valuable	?	Y	?

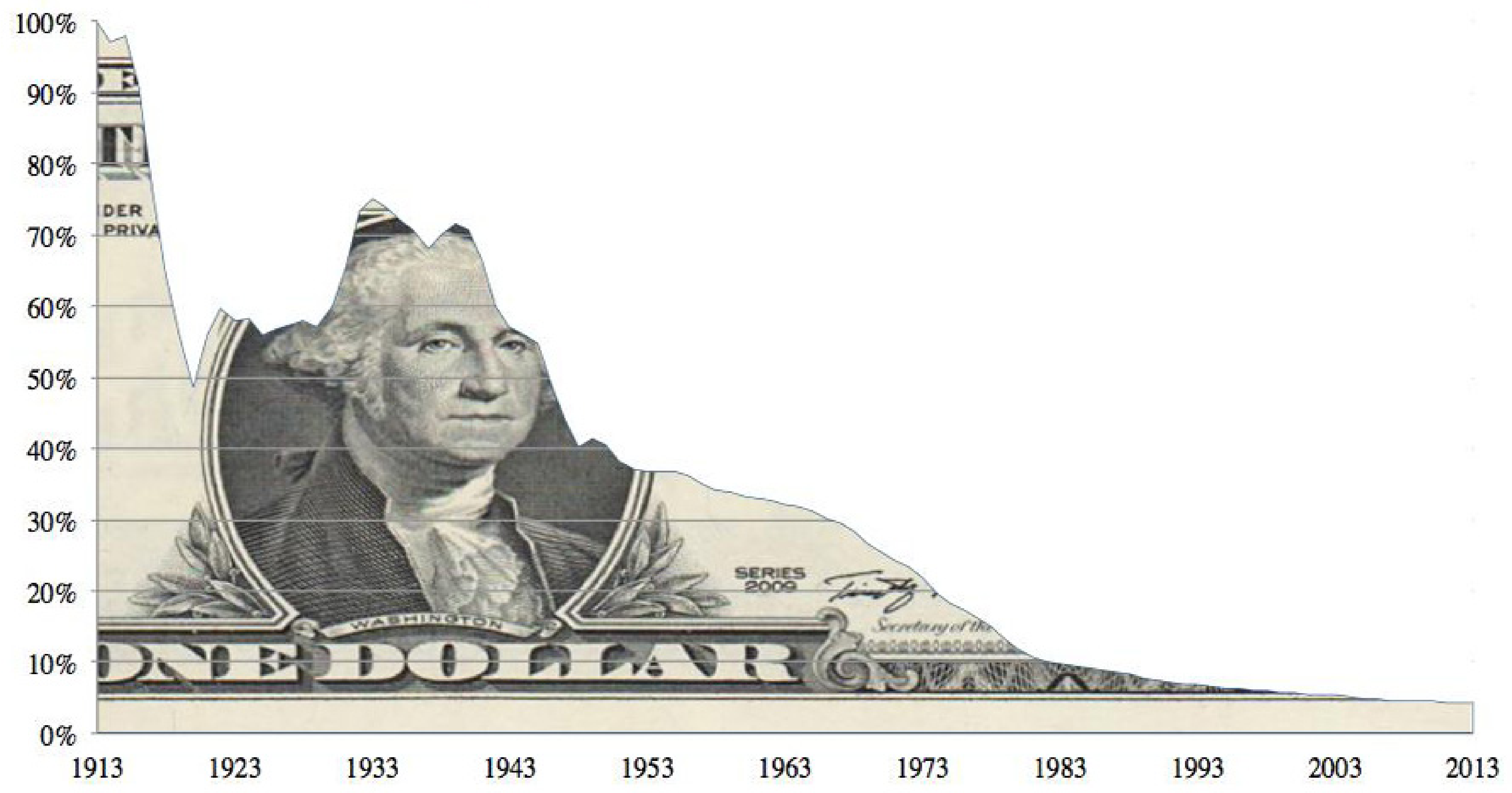
Table 4: **FUNCTIONS OF MONEY**

	USD (FIAT)	GOLD	BTC (CRYPTO)
Unit of Account	Y	N	N
Medium of Exchange	Y	N	N
Store of Value	N	Y	?

Starting with the USD (and indeed all fiat currency), it is obvious that it satisfies all of the first six characteristics of money, and the first two functions.

Hard-core gold bugs will argue that the USD is not intrinsically valuable, and this is technically true. However, from my perspective, I think a widely accepted medium of exchange and unit of account is of value to society.

Fig. 10: PURCHASING POWER OF THE US DOLLAR 1913–2013



Source: Merk Investments, Bureau of Labour Statistics

The bigger issue of course is that as a store of value, the USD, and indeed all fiat currencies, does a horrible job, with the USD having lost the better part of 95% of its purchasing power in the last 100 years, according to data from the St Louis Federal Reserve. Fig. 10 captures this loss of purchasing power neatly.

When it comes to gold, it is very clear that it meets the first five characteristics of money, as well as the last, in that it is intrinsically valuable – both as an ostentatious display of wealth (think jewellery) and in some industrial applications.

Gold also clearly satisfies one of the functions of money, in that has been an exceptional store of value over the long run. Today, it is not really used as a medium of exchange or a unit of account, which affects its acceptability in daily commerce.

BTC is clearly durable, portable, and divisible, and instantly recognisable. I think the jury is still out as to its consistency, which I expand on when commenting on the issue of Bitcoin forks.

As to its acceptability – at this point I think it is still largely a "no", as even those merchants that take it as payment are not staying long Bitcoin, but rather using a specialist payment gateway (like Bitpay) to instantly convert BTC payments into their local fiat currency.

It's true there are people accepting BTC as payment in private transactions, but that is the same for gold and silver.

Within the realms of what I'd call large scale recorded commerce, BTC is not acceptable money as yet.

As for whether or not BTC is intrinsically valuable, one could argue either side of this – but for me, just as I see some intrinsic value in the USD, so too do I see an inherent value in BTC.

When it comes to the functions of money, BTC is not used as a unit of account, and it is not a widely used medium of exchange.

Given it has not even been around for 10 years, and not gone through one full business cycle, it is also far too early too decide one way or another if it will serve its function as a store of value, though it has been a terrific speculation so far.

Now that we have done a review of BTC, physical gold and the USD, let's analyse a few of the claims that suggest BTC will in time become a superior monetary asset compared to physical gold.

According to research I've come across – proponents of BTC claim it has three advantages over gold:

- Lower shipping fees
- Lower storage costs
- Faster settlement of transactions

Let's look at each of these in turn.

LOW SHIPPING FEES

Transaction fees for transferring title (shipping) of BTC from one holder to another are low, with some research stating it's free, or very low cost (as little as forty cents).

This apparently compares very favourably to gold, which, the logic states, is very expensive to transfer physically.

We can't question that logic, but there's an important point to make here, which is that there is no rule saying you have to physically transfer gold, even if you want to transfer title to it.

Indeed, on any given day, tens of billions worth of gold are traded, with the physical gold mostly staying with trusted custodians.

LOW STORAGE COSTS

BTC, being rare data, is by all reports quite cheap to store, with some BTC proponents pointing out that it can be stored for free in paper or brain wallets.

That is no doubt true, but storing BTC on a brain or paper wallet is analogous to burying your gold, or a case full of paper money in your own backyard.

That's also zero cost, but also more or less zero liquidity, and brings it with a host of other problems. Hardware wallets for BTC storage can range from 15 to 240 Euro, according to the 2017 "In Gold We Trust" report.

That's definitely not expensive, but you can also store the better part of AUD $1 million worth of physical gold in a private vault in Australia, and that will only set you back AUD $252 per annum.

That is a storage fee of less than 0.03%, which is also hardly expensive.

Furthermore, given the rising value of BTC, all the major exchanges on which BTC are traded and held are having to devote considerable resources to ensure they aren't hacked. Cyber theft is a real threat.

It is not free to protect against it, and the owners of BTC will have to pay for that protection, just as the owners of physical gold do.

FASTER SETTLEMENT OF TRANSACTIONS

The final argument we see in favour of BTC over gold is that BTC offers faster clearance and transaction settlement relative to gold, and that BTC is far more "spendable", in that more merchants around the world will accept BTC as payment, compared to those that will accept gold.

It's worth emphasising a couple of points here. The first is that a gold trade (for example ABC Bullion buying or selling gold with a client) can be finalised in seconds, and settled quickly as well, typically within 24 hours. This is hardly slow, and will no doubt continue to speed up as the "pipelines" that support the movement of money around the economy and our banking system improve.

> "The bottom line to this is that society knows perfectly well how to make gold spendable, how to make it a unit of account and a medium of exchange, and acceptable in daily commerce."

I'm also not so sure that Bitcoin itself will ever be a widely used rapid settlement sytem, with Saifedean Ammous, author of the soon to be released book "The Bitcoin Standard" stating in a 31 October 2017 article in the Epoch Times that "*The real importance of bitcoin is not making cheap, easy payments. It's not a way of making fast payments. It's not going to allow for microtransactions or all these other use cases that we've heard are important for bitcoin.*"

Indeed, Ammous was quite certain that BTC won't lead to any great leap forward in payment efficiency, stating that "*In my opinion, there is no way that a decentralized network will be more efficient in processing transactions than a centralized network, because a centralized network needs one record of transactions and a few back-ups. A decentralized network has to record it over thousands and tens of thousands of computers. So we have to expend much more processing power, and we'll need much more time to sync all of the ledgers together, as we see with bitcoin.*"

As for spendability, whilst it is true that more merchants will accept BTC today, there is nothing to stop enterprising businesses in the precious metal industry making gold more "spendable". Bitgold, Glint, SendGold and Goldex are all examples of companies working on this.

The more important point to make regarding gold's lack of spendability in the economy today is that this fact is not due to humanity's inability to figure out how to make gold usable in day to day transactions – but rather in the US Government's fateful decision to "temporarily" suspend the convertibility of the US dollar into gold, back in 1971.

Prior to 1971, people were not walking around with bars of gold, which they had to shave off or break into pieces whenever they wanted to buy a loaf of bread or fill up the petrol tank.

Instead, they were using paper bank notes, handing over cash, or making transfers via cheque or wire transfer, with the difference being that all that money that was moving around the economy was redeemable in gold.

The bottom line to this is that society knows perfectly well how to make gold spendable, how to make it a unit of account and a medium of exchange, and acceptable in daily commerce.

Some might imagine that to be a backward kind of world, though we somehow managed to put a man on the moon in 1969, with every single Astronaut and person working in mission control at NASA effectively paid in gold.

As such, whilst I agree that there is potential use for BTC and other cryptocurrencies, and agree that BTC is relatively low cost to ship, store and spend, I'm not entirely convinced that this makes it superior to gold in any meaningful way.

Furthermore, there are a handful of other concerns regarding BTC, its status as an ongoing monetary asset, who owns it, how anonymous it is (in a practical sense), its recent forks, its return potential, and the network effect that is supposedly responsible for much of its value.

Let's review these in more detail.

CONCENTRATED OWNERSHIP

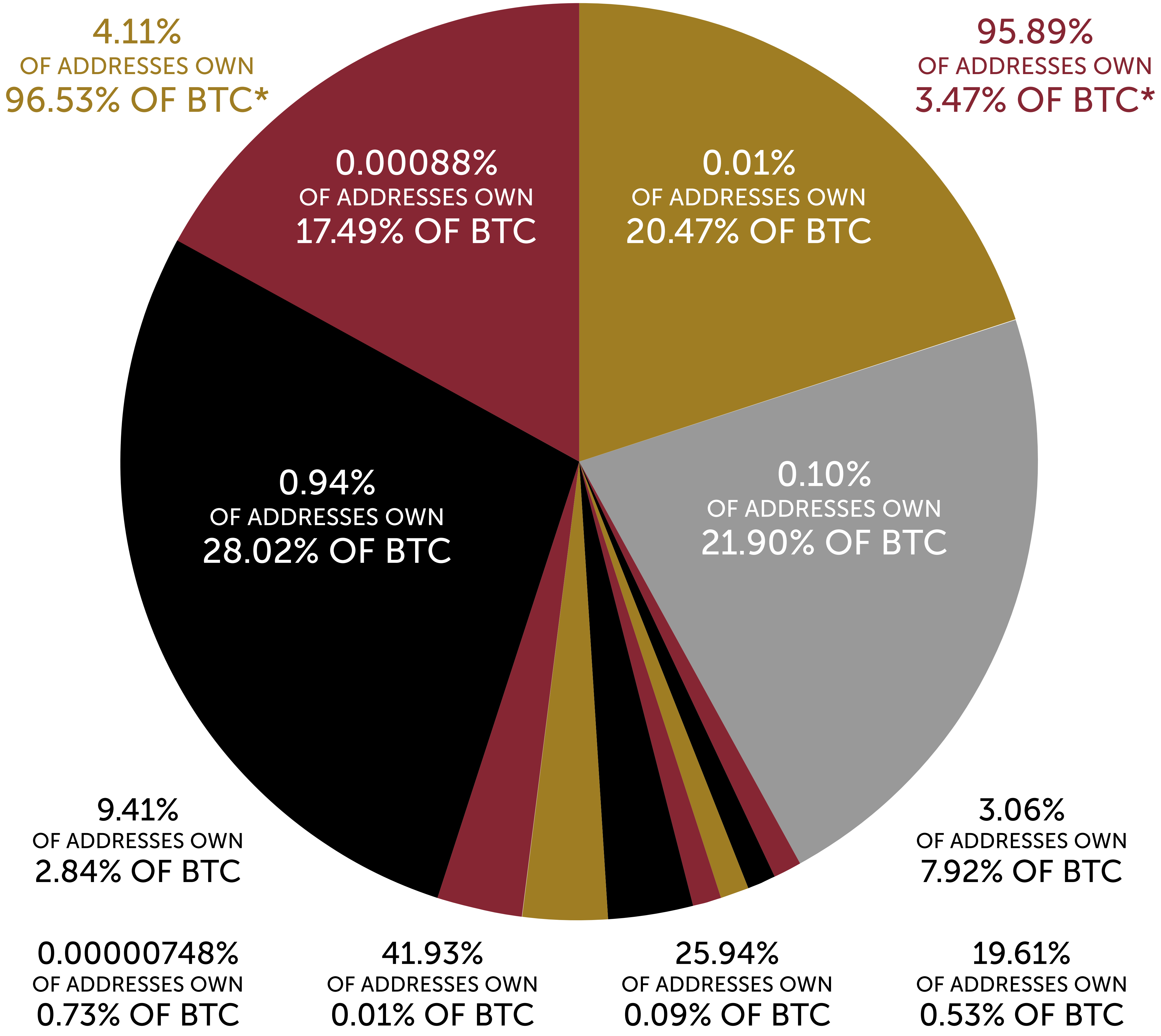
One potential issue with BTC is the extreme concentration of its ownership. Far from being a "money of the people", there are a small percentage of owners who control nearly all of the existing stock.

As you can see on fig. 11, nearly 90% of all BTC is held by just 1% of BTC addresses. A further 3% of addresses own nearly 8% of all BTC, whilst the remaining 96% of all BTC owners collectively own less than 3.5% of all BTC.

Now, part of this is no doubt influenced by the fact that many BTC holders invest through exchanges. Therefore, if the exchange holds all the BTC for its clients through one wallet (like a superannuation fund owns shares on behalf of thousands of members) then ownership will appear more concentrated than it is.

Exchange ownership of BTC brings with it a whole new set of risks for investors, as the exchanges themselves are not regulated the way traditional financial services are, with investors likely to have very little recourse if the exchange gets hacked, or loses client BTC for any reason.

Fig. 11: **BITCOIN WEALTH DISTRIBUTION**



Source: howmuch.net
* Date as of September 12, 2017

HOW ANONYMOUS ARE BTC AND CRYPTOCURRENCIES IN PRACTICE?

Alongside the capacity for fast and low cost settlement, the primary argument supporting the notion that BTC is a superior form of money to gold, and to fiat, is its supposedly anonymous nature.

Don't get me wrong, we have no doubt you can own BTC anonymously, though even here it is difficult as many of the exchanges people are buying BTC through have anti-money laundering and know-your-client requirements, or their international equivalents outside of Australia.

But the broader question to consider is whether or not it is really possible to engage in what we would consider meaningful commerce (as opposed to just buying a coffee) via BTC.

Let's consider three examples:

- Selling BTC for AUD via an exchange
- Buying a house in NSW and paying in BTC
- Buying a car and paying in BTC

In the first scenario, there is no doubt you can sell BTC via an exchange like Coinbase, and realise a capital gain denominated in AUD.

But how anonymous is this? The exchange knows who you are, and an inflow of AUD will soon hit your nominated bank account, on which (assuming you sold at a profit) you must pay tax.

In the second scenario, even if you find a person who wants to sell their property, and will take your BTC via a private wallet, you're still going to need to register your ownership of the home with the NSW state government.

They'll want stamp duty, paid in AUD, and there's every chance that ATO will find out about it, and come after you for a taxable gain on the BTC you handed over to the vendor.

This requirement to pay tax on the BTC gains, and stamp duty on the purchase of a large asset like a house is exactly what the RBA were referring to when they mentioned the monitoring of "on ramps" and "off ramps" to the traditional financial system.

Authorities around the world are clearly ramping up their monitoring too, with a recent Bloomberg article titled "Coinbase Escalates Showdown on U.S. Tax Probe as Bitcoin Surges" stating that the IRS *"said it detected a "reporting gap" between the 500,000 virtual currency users Coinbase reported between 2013 and 2015 and the less than 900 bitcoin users reporting gains or losses for each of those years."*

Finally, let's consider the case of buying a car from a private vendor. Again, you can hand over your BTC via a private wallet, but you are still going to have register it and pay stamp duty, and you're also still liable for tax on any gain on the BTC, as per the housing scenario.

But there is a bigger worry in my view. How on earth do you enforce the other side of contract? Remember – the whole value proposition of BTC is its anonymous nature. That's great if a transaction merely involves moving BTC from one wallet (owner) to another.

But there are two sides to every transaction – the movement of the monetary medium, and the provision of the good and/or service that you as a consumer want in exchange for the monetary medium.

Don't get me wrong – if you are trading BTC for a car purchased from a reputable car dealer who advertised that they took payment in BTC then you could well be protected by consumer laws and have the ombudsman or the ACCC as a possible means of recourse.

But if the whole point of BTC is to be able to trade anonymously with other individuals, then ensuring they honour their half of a contract is going to be fraught with danger.

Note that I'm very happy and would indeed welcome a rebuttal from a more cryptographically astute analyst on the above points.

THE ISSUE WITH BITCOIN FORKS

If I could pick just one issue that, more than any other, makes me question the long term potential for BTC to become the world's premiere monetary asset, it is the issue with forking.

BTC has already forked twice this year, with investors now having the freedom to invest in BTC, Bitcoin Cash (BCH), and Bitcoin Gold (BTG).

A third fork (Segwit 2x) was recently cancelled – which has seen a huge uptick in volatility in the prices of the three strands of Bitcoin.

BCH seems to have been the main beneficiary, with its price rising some 35% in a matter of days, whilst BTC, which surged originally when the fork was cancelled, dropped 7% in a day, according to a November 11 article on Business Insider.

There are four points worth making when it comes to the forking of BTC.

> "Far from being democratic, the governance around BTC development is in some ways analogous to our current fiat system, where a small group of people make decisions about monetary policy, which we all have to live with."

The first is that the decisions made regarding how the BTC network develops are concentrated in the hands of very few people.

I saw first hand evidence of this on November 9th and 10th this year, when I attended the Precious Metals Investment Symposium in Melbourne, and participated in a panel discussion on gold and cryptocurrency colliding.

During that session I asked the crowd to put up their hands if they own BTC, and roughly 50% of the room put their hands up.

I then asked them to keep their hands up if they had had any say about the BCH and BTG forks, or the recently cancelled Segwit 2x fork.

Not one hand stayed up.

Far from being democratic, the governance around BTC development is in some ways analogous to our current fiat system, where a small group of people make decisions about monetary policy, which we all have to live with.

Furthermore, it would be naive to think that the developers who are making the decisions about which BTC forks to support/not support are not doing so with their own financial interests front of mind, rather than the broader concerns of the BTC owning community.

Satoshi may well have intended to leave a gift to the world, but that doesn't mean it's incorruptible.

The second point to make regarding forking is that it highlights just how very different BTC and cryptocurrencies are when compared with physical gold.

Gold miners (indeed the whole gold industry) can come up with as many different ways of finding gold, mining gold, transporting gold, refining gold, trading gold and storing gold, but that makes no difference to the physical gold itself.

Physical gold will never fork. It will forever be chemical symbol Au, and number 79 on the periodic table, no matter what those who work in the gold industry do.

The third point about forks is that it raises a question about the "consistency" of Bitcoin. Yes, each and every new forked version of Bitcoin is consistent within the confines of that particular version of the Blockchain (each BTG is the same as every other BTG, etc.), but unless each fork really does create wealth out of nothing, you have to wonder if some of the value within Bitcoin is not being distributed to each and every new fork.

After all, a financial services business could split its wealth management and banking divisions into two separate companies, and the performance of those two companies could, and indeed would differ going forward.

Be that as it may, there is no question that at the time of forking, the value that was contained within one entity was distributed across two entities.

If BTC, BCH and BTG aren't related to each other, then how on earth did ownership of one entitle existing owners of BTC to free coins in BCH and BTG?

If they are related, then there are now three versions of Bitcoin, with the potential for more forks in the future. Given the differing performance profile of the three Bitcoins, one should at the very least wonder about about the consistency of Bitcoin as a whole.

The final point is the most important when it comes to BTC forks.

According to many BTC enthusiasts, forking, and the creation and continued development of hundreds of other cryptocurrencies is an unquestionable positive, as it gives choice and freedom to consumers.

"Let the market decide" is what they will typically say in reference to these forks.

If we were talking about software, then "forking" would be a positive, and we would wholeheartedly agree with those who see the benefit in multiple forks developing.

But we are talking about money here – so let us take a theoretical walk down the path of a market economy with multiple cryptocurrency choices. To keep it relatively simple, we will just use BTC, BCH and BTG.

For money to serve all of its functions, it needs to be a unit of account. So in this theoretical world, every business in Australia will now need to price all the goods and services it offers in BTC, as well as BCH and BTG.

"Taken to its logical extreme, a world of multiple competing cryptocurrencies, if they are to be used as a unit of account and as media of exchange, is no more sophisticated than a barter system."

As a consumer, next time you go buy your cup of coffee, you won't just see price in AUD, but in the three cryptocurrencies that your local café now needs to monitor and essentially offer their product in.

These prices will of course be fluctuating at different rates through the day (indeed in real time), as the performance of each currency is not uniform.

Every single Australian with a job will also no longer have a salary that they negotiate in AUD either, but will have the freedom to choose whether they get paid in BTC, BCH or BTG, assuming of course your employer has the necessary infrastructure in place to handle all three currencies.

Assuming you are an accountant, not only will you now need to ensure you stay abreast of all the accounting trends (which just got a lot more difficult as you now need to reconcile and report in three currencies), but for you personally, you'll have to choose which of those three currencies best suits your saving and consumption needs.

This of course could change over time, so you may need to sit down with HR and negotiate a "multiple crypto payment plan", with regular salary negotiation that is no longer just about asking for a pay rise, but also a potential change in which crypto, or batch of cryptos you want to be paid in.

The scenario described in this theoretical example is clearly absurd, and most definitely not progress. Indeed, rather than help a market economy function (which is the whole point of having a widely accepted monetary medium), it would prove a major spoke in the wheels of commerce.

Taken to its logical extreme, a world of multiple competing cryptocurrencies, if they are to be used as a unit of account and as media of exchange, is no more sophisticated than a barter system.

Ultimately, for money to serve its three primary functions over the long run, then, within the confines of any given nation state at least, there can only be one form of it.

BTC AND THE CCM - CAN IT BE THE PIPELINE AND THE OIL?

As we discussed in the section detailing the tailwinds supporting BTC and the CCM, we need no further convincing of the potential for this technology to disrupt a range of industries, including payments and financial services.

But saying that BTC, or any blockchain based payment system will be more efficient over time relative to existing payment and settlement solutions is not the same as saying BTC is a superior money that will usurp fiat currency, let alone gold.

Anyone making that argument is, if we can draw a hopefully useful analogy, mistaking the pipeline for the oil.

> "…anyone making the argument that BTC will be both the future of payments and the future of money itself is arguing that it is both the pipeline AND the oil."

After all, the way in which we transport oil has come a long way in the last century or so. It has essentially moved from:

- Horse, cart and wagons, flatboats, barges and the railroad; to
- Tanker trucks. In the 1940s these were all the rage, with the trucks originally having 40 to 50 barrel capacity, though they soon were built to hold 200 plus barrels in terms of capacity; to
- Pipelines for transport over land, with tankers the primary means of moving oil across the oceans.

Clearly, the process of moving oil from point A (production) to point B (refineries) to point C (end consumers) is now completely different, and unrecognisably more efficient compared to 100 plus years ago.

Billions of dollars of capital expenditure have been invested in this process, which is ongoing.

But at the end of the day, it's still oil that is being moved from point A to point B to point C.

The payment systems utilised by banks today, the way in which we move money around the economy and between financial intermediaries, and indeed how we consume has also undergone rapid change.

After all, it is infinitely more efficient to use a credit card to tap and pay for your morning coffee compared to counting out change that your barista then needs to walk down to their bank to deposit once the café is closed.

And as consumers, we love efficiency, so it's no surprise to see the rise of card payments with 52% of payments in Australia now made with a card, according to a recent article by Xinja, which is aiming to becoming Australia's first digital bank.

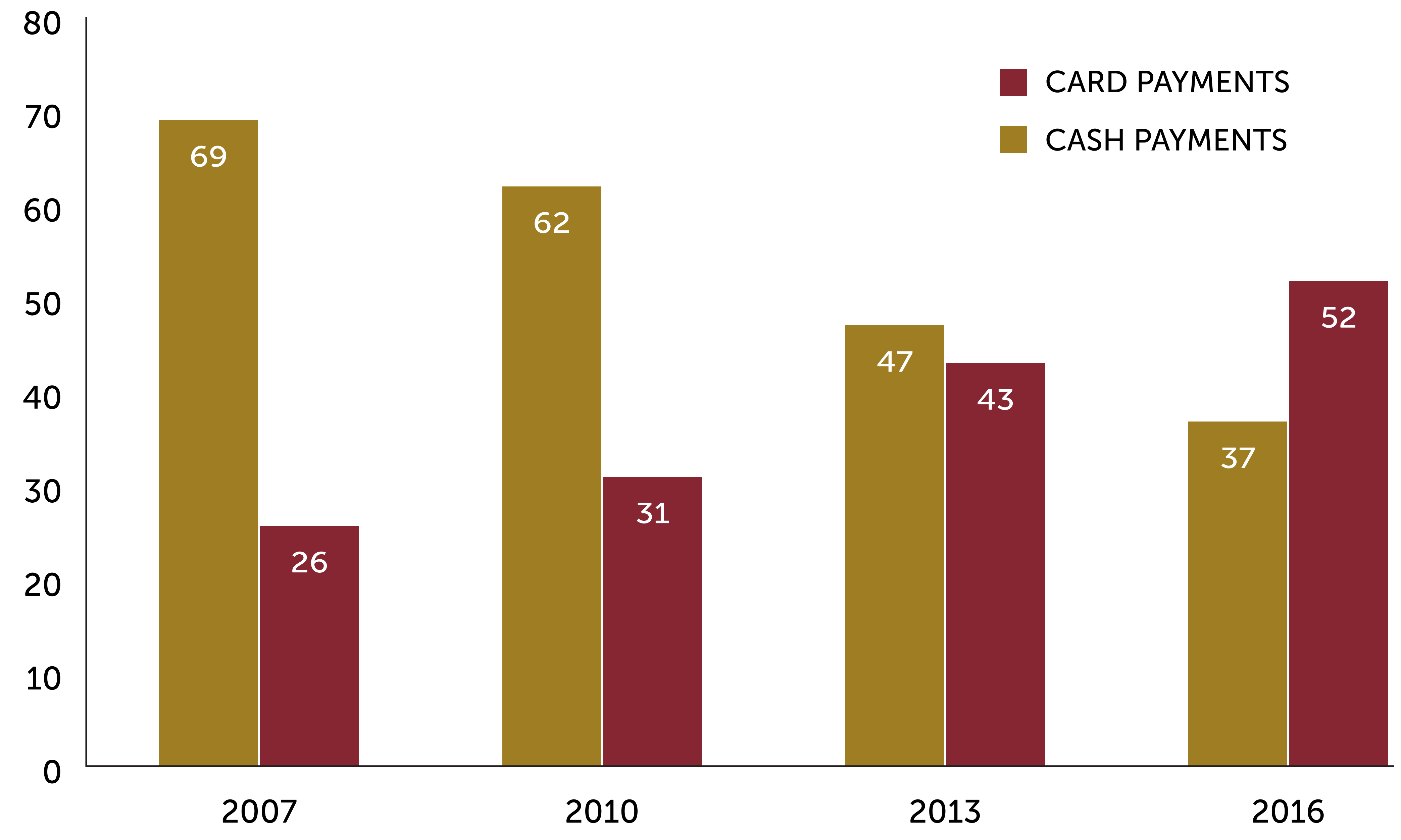
Fig. 12 highlight the changing fortunes in terms of popularity of paying by card vs. cash, and how rapidly this has changed in the last 10 years.

It's not just cards either. BPAY, bank transfer, POLiPayments, you name it – all of these solutions are better than the old days of a bank cheque.

Meanwhile, the idea of a traveller's cheque (which I still used when I went to Asia as a tourist in the early 2000s) already feels like a relic of a bygone era.

The point here is that just like oil, the pipelines used to "ship" money and help facilitate commerce, are infinitely better today than they were even a decade ago.

Fig. 12: **CONSUMER PAYMENT METHODS - % OF TOTAL PAYMENTS**



Source: Reserve Bank of Australia

But that does not change the fact that it is still fiat currencies that are being moved between these pipelines.

Therefore, anyone making the argument that BTC will be both the future of payments and the future of money itself is arguing that it is both the pipeline AND the oil.

We are open to the idea of the former, but remain highly sceptical on the latter.

THE BITCOIN NETWORK EFFECT

The network effect refers to a phenomenon whereby a good or service becomes more valuable as more people use it. Facebook, Google, Amazon – they all have it in spades.

BTC enthusiasts typically offer "the network effect" as one of the main reasons why BTC will see-off the challenge from existing and future Bitcoin forks (should they occur), as well as the 800 plus cryptocurrencies all vying for investor attention in the marketplace today.

> "Maybe crypto enthusiasts are right, and Bitcoin gold is indeed a better gold than Bitcoin. That doesn't mean it will be a better gold than gold!"

According to Bitcoin developer Jimmy Song, who on the May 15th of this year published an article titled "Why Bitcoin is different than other cryptocurrencies", the "*main advantages of Bitcoin are network effect and proven security.*"

According to Song, these two attributes give Bitcoin a "*nearly insurmountable advantage*" relative to other cryptocurrencies, as BTC has a large lead as a store of value as it has "*existed 8 years without failure.*"

There is even some academic research backing up Song's claims, with a study published at the journal of Electronic Commerce Research and Applications suggesting there is indeed a network effect when it comes to Bitcoin.

I have no argument with this line of thinking per se, and am quite willing to believe that Bitcoin may well be superior to all other cryptocurrencies, though we lack the technological background to say that with any clarity.

But we can't help but think that when it comes to money itself, nothing comes close to the network effect that physical gold has.

Fig. 13: Bitcoin image
Source: Shutterstock

For evidence of the network effect of gold, consider fig. 13, or any of the thousands of images you'll find on Google when you type in Bitcoin. It is no coincidence that those coins look like gold.

It's not just the images of BTC either. Consider again Saifedean Ammous, author of "The Bitcoin Standard", who claims that Bitcoin *"is a digital equivalent of gold."* He is of course wrong in that judgement, not only as their supply profiles (fixed for Bitcoin, stable for gold) are fundamentally different, but for a host of other reasons we've discussed in this report.

But it is notable nonetheless that this is the claim BTC enthusiasts make. That Bitcoin is like gold.

And it's not just Ammous talking about BTC itself either. This desire to equate BTC with gold also shows up when we look at recent Bitcoin forks, with Jimmy Song stating that the aim for Bitcoin Gold was to become *"a better gold than Bitcoin."*

That's worth repeating: *"A better gold than Bitcoin."*

> "Note that this doesn't mean gold is perfect, but it would appear that humanity has, to paraphrase Churchill, decided that even if gold is the worst of all monies, it's better than all the rest."

Maybe crypto enthusiasts are right, and Bitcoin gold is indeed a better gold than Bitcoin. That doesn't mean it will be a better gold than gold!

The bottom line is that as a monetary asset, gold has a 6,000 year headstart on BTC, and has survived each and every period of turbulence that humanity has gone through over that time period.

The network effect of gold as a monetary asset has seen it ingrained as humanity's premiere store of value and display of wealth, irrespective of race, religion or creed.

Albert Gallatin, US Treasury Secretary from 1801 to 1814 described the worldwide network effect of gold beautifully, when he stated that "*Nations, differing in language, religion, habits, and on almost every subject susceptible of doubt, have, during a period of near four thousand years, agreed in one respect; that gold and silver have, uninterruptedly to this day, continued to be the universal currency of the commercial and civilized world*."

Said another way, what Gallatin is trying to say is that "the market" has decided which form of money it prefers, and the answer is gold.

Note that this doesn't mean gold is perfect, but it would appear that humanity has, to paraphrase Churchill, decided that even if gold is the worst of all monies, it's better than all the rest.

BTC on the other hand hasn't even gone through one market cycle, having existed only in a period of rising risk assets, extreme monetary largesse and declining volatility.

> "If it were possible to simply hold one's wealth in gold (money) over the long run, and earn a rate of return that exceeded the gains that can be made by engaging in private enterprise (i.e. providing goods and services to consumers), then no one would bother with the latter."

THE LONG-RUN RETURN ON MONEY?

There is one final thing that BTC enthusiasts get wrong in my view when it comes to its monetary status – its return potential.

To help explain that, consider that many who believe in the importance of owning precious metals and investing/saving in gold today, love giving the example of the fact that during the Roman Empire, 1 troy ounce of gold would have bought you a very nicely tailored toga, with the fancy sandals thrown in as well.

As the story goes, today, a couple of thousands of years later, that 1 troy ounce of gold will buy you a very nicely tailored suit, as well as the belt, tie, and leather shoes to go with it.

It is a simple story, and it does illustrate the point that physical gold has no peer when it comes to protecting purchasing power over long time periods, and why it has been humankind's preferred choice of money for millennia.

Flip the story on its head and what it also tells you is this; that the return on gold, or the return on money, has been more or less zero over that entire time period.

And when you stop to think about it, how could it be any other way?

After all, physical gold is a highly liquid, zero credit risk asset with infinite duration. It is precisely these qualities that have led to human beings choosing it as money.

If it were possible to simply hold one's wealth in gold (money) over the long run, and earn a rate of return that exceeded the gains that can be made by engaging in private enterprise (i.e. providing goods and services to consumers), then no one would bother with the latter.

The end result would be less prosperity, not more, as society actively chooses to produce less.

Keith Weiner, the CEO of Monetary Metals, who has written many good articles about Bitcoin, referred to this phenomenon in an article titled "Tragedy of the Speculations", which pointed out that "*A monetary system is supposed to enable greater productivity, not reduce it.*"

The bottom line is that money's role is to preserve wealth. Hard work, and hard work alone is what creates it.

Therefore, if BTC is to indeed usurp both physical gold and fiat currencies to become humanity's premiere monetary asset, then its long-run return is likely to disappoint a lot of the bulls.

CONCLUSION

As I hope this paper has communicated, that despite the bubble-like price action in BTC today, I am supportive of blockchain technology, the creation of BTC, and the broader CCM.

BTC's ability to make its way into mainstream finance, and just as importantly, become a barbeque conversation amongst the broader public, is helpful if for no other reason than it helps facilitate a broader and necessary conversation about the nature of money itself.

That more and more people are having that conversation today is timely, as an article published in October 2017 by famed JPM quant Marko Kolanovic made clear.

The article, titled "What will the next crisis look like?" pointed out that the financial and economic imbalances we see in the world today are "*likely to result in social tensions similar to those witnessed 50 years ago in 1968*."

If what followed that period teaches us anything, then wealth protection, and looking after the money one has earned in their life so far, should be priority number one in the decade ahead. For as Kolanovic pointed out, in the aftermath of 1968 "*Inflation rapidly increased, and equities produced zero returns for a decade.*"

Just as importantly, Kolanovic also pointed out that in that decade of zero real returns for equities, "*Monetary systems were completely revamped.*"

"BTC's ability to make its way into mainstream finance, and just as importantly, become a barbeque conversation amongst the broader public, is helpful if for no other reason than it helps facilitate a broader and necessary conversation about the nature of money itself."

Crucially, this need not mean investors and savers have to choose just one monetary basket, and put all their wealth into precious metals, fiat currency or cryptocurrencies.

If history is to repeat, or even just rhyme, then investors and savers should be on the lookout for a major change to our monetary system in the coming years. More importantly, they should do their best to ensure their portfolios are sufficiently robust to weather that change, and take necessary action if required.

Crucially, this need not mean investors and savers have to choose just one monetary basket, and put all their wealth into precious metals, fiat currency or cryptocurrencies.

For me personally, I'm still keeping substantial portions of my own wealth in fiat currency, as it is what I'm paid in, what my day to day expenses are charged in, and it provides optionality should risk assets correct to what are historically more attractive valuations.

Secondly, whilst it's not for me at current prices, I can see the attractiveness of investing a small portion of one's wealth in either BTC, or one of the range of cryptocurrencies available.

Finally, and most importantly, I'm also keeping a significant holding in physical gold (and silver), as precious metals are likely the best and, just as importantly, simplest means of protecting my family's wealth through the difficult market environment we all face in the years ahead.

REFERENCES

INTRODUCTION

Reuters article on Bitcoin. https://www.reuters.com/article/us-traders-bitcoin/bitcoin-the-financial-traders-anarchic-new-toy-idUSBRE83108120120402

Internet searches for “Buy Bitcoin” and “Buy Gold”. http://www.zerohedge.com/news/2017-11-07/bitcoin-rebounds-sharply-after-gartman-predicts-drop

Millennials Driving Bitcoin. http://www.valuewalk.com/2017/11/millenials-driving-bitcoin/

Coin Market Cap. https://coinmarketcap.com/

WHY BITCOIN?

Satoshi Nakamoto Whitepaper. https://bitcoin.org/bitcoin.pdf

Physical Gold and the Blockchain. https://www.abcbullion.com.au/investor-centre/pdf/physical-gold-and-the-blockchain#.WgE3q5GCwds

TAILWINDS FOR BTC AND THE CCM

CoinDesk Survey on Bitcoin Usage. https://www.coindesk.com/new-coindesk-report-reveals-who-really-uses-bitcoin/

Bitcoin Users - Demographic Breakdown. https://news.bitcoin.com/bitcoin-user-demographics-european-males-age-25-34/

Willem Buiter on the “Death of Cash”. https://ftalphaville.ft.com/2015/04/10/2126212/buiter-on-the-death-of-cash/

RBA warns on cryptocurrencies. https://www.macrobusiness.com.au/2017/10/rba-warns-cryptocurrencies/

Physical Gold and the Blockchain. https://www.abcbullion.com.au/investor-centre/pdf/physical-gold-and-the-blockchain#.WgE3q5GCwds

Canstar report on International Money Transfers. https://www.canstar.com.au/wp-content/uploads/2014/10/international-money-transfer-2014-report.pdf

Millenial Crypto FOMO. https://medium.com/@kylebrussell/millennial-crypto-fomo-4425ee7dd713

Banking is only the Beginning: 30 Big Industries Blockchain Could Transform. https://www.cbinsights.com/research/industries-disrupted-blockchain/

ARE BTC AND THE CCM A BUBBLE?

Amazon Stock's History: The importance of patience. https://www.fool.com/investing/2016/06/26/amazon-stocks-history-the-importance-of-patience.aspx

Coinbase Adds 100,000 users in a day. https://cointelegraph.com/news/bitcoin-exchange-coinbase-adds-100000-users-in-24-hrs-shows-surging-interest-in-crypto

Bloomberg chart on the BTC rally. http://www.zerohedge.com/sites/default/files/images/user3303/imageroot/2017/11/04/20171104_btc1.jpg

We need to talk about Bitcoin. https://www.moneymorning.com.au/20171103/need-talk-bitcoin.html

Article on the ICO craze. https://www.coindesk.com/1-6-billion-all-time-ico-funding-climbs-as-record-500-million-invested-in-july/

Marketwatch article on fund raising for ICOs. https://www.marketwatch.com/story/initial-coin-offerings-now-outvalue-early-stage-venture-capital-funding-in-2017-2017-08-08

ASIC on ICOs. http://www.smh.com.au/business/markets/asic-weighs-in-on-ico-craze-20170928-gyqh4a.html

IS BTC SUPERIOR TO FIAT CURRENCY, OR GOLD?

St Louis Fed on Characteristics and Functions of Money. https://www.stlouisfed.org/education/economic-lowdown-podcast-series/episode-9-functions-of-money

The Characteristics of Good Money. http://www.economicsdiscussion.net/money/top-8-qualities-of-an-ideal-money-material/609

Mistaking the pipeline for the oil. http://www.goldindustrygroup.com.au/news/2017/6/19/market-update-gold-and-bitcoin

Concentration of BTC ownership. https://howmuch.net/articles/bitcoin-wealth-distribution

Xinja on Australia going cashless. http://www.xinja.com.au/news/2017/digital-payments-will-australia-become-cashless-or-just-less-cash/

RBA on How Australians Pay. https://www.rba.gov.au/publications/bulletin/2017/mar/pdf/bu-0317-7-how-australians-pay-new-survey-evidence.pdf

Business Insider on Bitcoin Volatility. https://www.businessinsider.com.au/bitcoin-price-crashes-money-goes-to-bitcoin-cash-2017-11?r=US&IR=T

Simon Black on the benefit of competing cryptocurrencies. https://www.sovereignman.com/trends/500-years-later-the-revolution-is-just-beginning-22563/

St Louis Federal Reserve on US Dollar Value. https://fred.stlouisfed.org/series/CUUR0000SA0R

Loss of Value of US Dollar image. http://www.freegrab.net/Decline%20in%20USA%20Dollar%20vs%20Gold.htm

In Gold we Trust. https://ingoldwetrust.report/en/news/in-gold-we-trust-report-2017/

Interview with Saifedean Ammous, Author of The Bitcoin Standard.
https://www.youtube.com/watch?v=ukjDCeuNK3Y&app=desktop

https://m.theepochtimes.com/bitcoin-as-digital-gold-2_2341417.html

Image of Bitcoin. https://www.crypto-news.net/bitcoin-history-2008-to-2009/

Keith Weiner on Bitcoin. https://monetary-metals.com/tragedy-of-the-speculations-gold-silver-report-10-sep-2017/

Bloomberg on Coinbase, the IRS, Bitcoin and Tax. https://www.bloomberg.com/news/articles/2017-11-09/coinbase-escalates-showdown-on-u-s-tax-probe-as-bitcoin-surges

Jimmy Song on Bitcoin. https://medium.com/@jimmysong/why-bitcoin-is-different-than-other-cryptocurrencies-e16b17d48b94

Academic Research on Bitcoin. http://www.trustnodes.com/2017/06/25/bitcoin-ethereum-follow-metcalfes-law-network-effects-new-study-says

CONCLUSION

Marko Kolanovic on “The Next Crisis”. http://www.mauldineconomics.com/outsidethebox/what-will-the-next-crisis-look-like

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