**Bitcoin Buyers Beware – some say it could be a Bubble. I agree.**

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At the time of writing the Canadian dollar price of one Bitcoin is $22,204.96. On this same day last year, the [Canadian Bitcoin Index](https://www.cbix.ca/) reported an average Bitcoin price of only $1168.98. How many of us are now thinking coulda, woulda, shoulda?!

The Bitcoin fascination has grabbed our collective attention. Media are routinely covering the meteoric rise in the price of this crypto-currency. With increasing frequency, entrepreneurs are buying computing power to create or “mine” this commodity-currency. Is Bitcoin money? Is it an asset? Whatever Bitcoin may be otherwise, it has every indication of being a bubble. And bubbles burst.

**The Trouble with Bubbles**

The defining characteristic of a bubble in financial markets is a large and usually fast price increase followed by a precipitous drop in the price. The problem we face is that no one can predict that turnaround point. No one can predict when the “bubble” will burst.

On the way up, speculators reap considerable gains, buying low and selling for much higher. If I buy Bitcoin now for about $22,000 and the price increases quickly to $24,000, I can make an easy $2000 on my $22,000 investment. If I buy then sell it inside a month, that’s a solid annualized return of about 109%, which sure beats the 0.5% return I can earn on my savings account. But wait … what if the price goes even higher the following month? Maybe I should buy it and hold on to it and get even more money!

On the other hand, if I buy at $22,000 but then the market drops and the price of Bitcoin starts to fall, then what? Yikes! Maybe I should sell it before the price falls further? Or should I hold on to it in case the price turns around and starts to rise again? Oh, what to do, what to do? Later buyers in a bubble market will be left holding a considerably devalued asset. Buying from my neighbour at $22,000 but then facing a market price that has fallen to say $1000 means I lose $21,000. I paid $22,000 but now can only sell it for $1000.

No one, of course, would knowingly pay $22,000 for something that would be worth only $1000 a short time later. No one. Not one person. And herein lies the trouble with bubbles. Bubbles – and more importantly, when they will burst – are only ever confidently identified in hindsight.

So how can I know if the price will continue to rise? Will it reach a price tag of $30,000 – or even $300,000 - $400,000, as [Ronnie Moas](https://twitter.com/RonnieMoas?ref_src=twsrc%5Egoogle%7Ctwcamp%5Eserp%7Ctwgr%5Eauthor) of Standpoint Research [predicted](https://www.cnbc.com/2017/12/17/bitcoin-price-ronnie-moas-sees-cryptocurrency-at-300000-400000.html) a few days ago Or is it a delusion and we can expect to see it drop to $1000 (or lower)? Often what attracts people, especially novices, to a fantastic speculative opportunity is counting how much they would have made if they had only bought the asset last week, last month, last year.

I must have some basis on which to predict that the demand for Bitcoin will continue to rise. How do I do that? Some might simply use the past price increase to predict the future price increase. If last year’s increase from 1169$C to 22,205$C is rolled forward, then this time next year, Bitcoin could be trading at nearly $400,000! Or I could rely on the predictions of successful analysts who say a price in excess of $300,000 plus is possible and perhaps even likely. If I believe them, I buy Bitcoin.

If I do buy Bitcoin for $22,000 using my credit card and I can’t pay off that balance within the [interest-free grace period](https://www.canada.ca/en/financial-consumer-agency/services/credit-cards/credit-card-work.html?wbdisable=true), my financial risk is increased. If the price drops before I can sell my Bitcoin, I still must pay off my credit card balance at the full purchase price of $22,000 even though its not worth that any more. If the price drops before I sell, now I have lost not only the money I spent to buy the Bitcoin, but I owe interest charges as well. If I must borrow $22,000 for a year at the going Canadian credit card rate of 21%, that’s over $4600 in additional costs. Now, the total loss of my venture is the loss from the Bitcoin price drop *plus* the cost of the borrowed money.

But…then again, what if the price does rise…oh how is one to know? Here is where we need to look more deeply into what, exactly, is Bitcoin? Does it have any intrinsic value to us other than as something to buy and then sell for hopefully a much higher price?

**Is Bitcoin a currency?**

Bitcoin is touted as a currency. Indeed, some [on-line retailers](http://www.ebay.com/gds/100-Companies-That-Accept-Bitcoins-As-Payment-/10000000206483242/g.html) have started accepting Bitcoin in payment for goods and services. Whatever else currency as money might mean to a nation, it is importantly a means for breaking the double coincidence of wants in barter trade. Rather than trading goods for goods, services for services, goods for services, I work producing something, get paid in Canadian dollars and then use those Canadian dollars to buy other things I need and want. To be an effective means of payment, the money must be generally and widely accepted. It won’t do me much good to pay me in Bitcoin since the suppliers of the things I need to buy don’t accept Bitcoin in exchange.

To be generally accepted as a medium of exchange it must be recognizable and stable in value. Bitcoin is becoming increasingly recognizable, if still poorly understood. The spillover effect of the Bitcoin craze is an increasing awareness of Bitcoin and the idea of a crypto-currency. But crypto-currencies are very different from currency as we know it in Canada.

In Canada (as in many countries), our currency is issued and backed by a state-owned bank. The [Bank of Canada](http://www.bankofcanada.ca/), issues our bills and backs our Canadian dollar. Bitcoin was created instead in 2008 by an anonymous person (or group of people) under the pseudonym of [Satoshi Nakamoto](http://nakamotoinstitute.org/bitcoin/). Where it is the Bank of Canada which works hard to prevent counterfeiting of our currency, the novelty of Nakamoto’s design is in the way coding and processing that prevents the counterfeiting and double spending of what is essentially a string of zeroes and ones.

Is there anything real “backing” the Bitcoin? No, but then there is nothing of tangible value backing the loonie either. The loonie is only an otherwise fairly worthless piece of metal alloy (now brass plated steel) valuable simply because I know it has value in exchange. I think it is valuable as a medium of exchange simply – but importantly – because you think it is too. Same goes for the polymer (bills) that come in different denominations issued by the Bank of Canada. We collectively think our currency is valuable in exchange because the government has legislated it as such. The government under the [Currency Act](http://laws-lois.justice.gc.ca/eng/acts/C-52/page-1.html) deems loonies and toonies issued by the [Royal Canadian Mint](http://www.mint.ca/store/template/home.jsp) and bank notes issued by the Bank of Canada as [legal tender](http://www.bankofcanada.ca/banknotes/bank-note-series/past-series/) or money approved by the government for the payment of debts.

What if you refuse to accept my Bitcoin in payment for your good or service, do I still owe you money? Yes. Bitcoin is not legal tender and so if you refuse to accept it, I still owe you money for the good or service. If you refuse to accept my Canadian currency (with some limits applicable to smaller denominations, e.g., no more than $0.25 of pennies), then my debt to you is wiped out.

What if I want to deposit my Bitcoins into my chequing account? No can do – the Canadian banks and credit unions won’t (yet) buy Bitcoins. I must first sell my Bitcoin on the Bitcoin market, receive Canadian dollars in exchange and then “deposit” the Canadian dollars into my bank account. An act of “depositing” Canadian currency into my chequing account is, however, technically converting one form of money into another form of money at a conversion price of $1=$1. Indeed, the currency in circulation is a very small (~5%) fraction of the total amount of Canadian money used for exchange purposes.

So, is there anything backing the Canadian dollars in my chequing account? Again, nothing tangible - nothing I can experience with my senses, nothing I can touch. Most of Canada’s money supply has long been nothing more than electronic entries in a private, for-profit company’s ledger. What does make the dollars in my chequing account balance safer and more secure than Bitcoins in my internet account is that the Government of Canada through the Crown Corporation of the [Canadian Deposit Insurance Corporation](http://www.cdic.ca/en/Pages/default.aspx) promises to reimburse me up to $100,000, $1 for $1 (no discounting) if my bank goes bankrupt.

So, is Bitcoin an effective currency? Not in Canada. Is it widely accepted otherwise? Not really. Is it stable in value? Clearly not.

**Is Bitcoin an asset?**

An asset is anything that generates a flow of income or services over an extended period of time. A house is an asset since it generates accommodation services (or rent if you let someone else pay you for using the house) over many years. A bond is a financial asset (really a formalised marketable contract or record of my debt to you) that generates an income in the future for you in the form (most often) of the interest payments I pay to you on the principal amount I borrowed. If I borrow $1000 from you for one year at an interest rate of 10%, I must repay you $1000 next year plus $100 interest. A Guaranteed Investment Certificate (GIC) issued by a bank or credit union works much in the same way, except that I am the lender and the bank is the borrower.

Assets, be they real assets such as houses, or financial assets such as bonds and GICs, will earn income and may appreciate in value. Keeping true to principle of demand and supply, the asset will appreciate in value if the investor’s demand for the asset outstrips the producer’s supply. Why might houses increase in value? Quite simply because more people want houses than are available for sale. This may be because there are just more people and more people need more housing. In this case the price increase is due to a rise in the underlying reason for having housing in the first place. The price increase will signal the need for more housing. Developers seeking a profit will look to supply more houses. Eventually, if or when supply catches up to the demand, housing prices will level off. Of course, anyone living in Toronto, Vancouver or Ottawa, may be wondering if the above scenario really captures what is going on and they right to question just what is driving the house price increases in these cities. It appears that, beyond the real value of a “roof over our heads,” people are speculating in Toronto real estate in the same way they are speculating in Bitcoin. Buying houses and Bitcoins simply and solely for the capital gain (or loosely speaking the profit) they expect to receive when they sell the asset at a price higher than what they paid for it. The one key difference is that houses will always offer accommodation services in addition to their speculative gain possibilities. Bitcoin does not.

Bitcoin is not a productive asset like a house. If offers no real value. It is a thing. An intangible thing. An unreal thing. Like currency in some respects but not stable enough in value to act as currency and not widely accepted enough to work as a medium of exchange. It’s only purpose is as an object of pure speculative gain. It is, I think, no different than any other pyramid scheme. Pyramid schemes work simply by charging members a fee for participation. The fee I pay to join is used to fund an income paid to the earlier members. If someone else joins after me, I get some of my money back. If lots of people join after me, I get my money back and then some. But … if no one joins after me, I lose all the money I paid in. Should I have known better? In hindsight, of course. Because I didn’t, because I was too hopeful (too greedy?), others may now consider me to be the “greater fool.” If I buy Bitcoin and others are willing to pay an even higher price, I win. But if no one else wants to join the Bitcoin party for a fee of $22,000, I will lose.

**Are there any side benefits to the Bitcoin craze?**

[Derek Thompson](https://www.theatlantic.com/business/archive/2017/11/bitcoin-delusion-conquer-world/547187/) writing for The Atlantic a few days ago pointed readers to Daniel Gross’ book [*Pop!*](https://www.harpercollins.com/9780061850103/pop) Gross argues that there are significant side benefits to bubbles; that bubbles “often fertilize the next generation’s breakthrough technologies.” As I argue in my own (definitely less entertaining) book, [Financial Crises: socio-economic causes and institutional context](https://www.routledge.com/Financial-Crises-Socio-Economic-Causes-and-Institutional-Context/Visano/p/book/9780415632379), speculative enthusiasm can fuel and has fuelled all sorts of spillover investment effects that alter the underlying value of associated real assets. Such investments do indeed have the potential to hatch, fertilize or otherwise spawn new technological development. In the case of Bitcoin though, much of the investment is going into the computers people are buying to mine their own Bitcoins. Producing more of a speculative object in and of itself has no hope of promoting research and development. Moreover, the amount of energy needed to “mine” the Bitcoin is insane. As CBS reported recently, [Bitcoin mining consumes more energy than 159 countries](https://www.cbsnews.com/news/bitcoin-mining-energy-consumption/)! Derek Thompson argues that there may be increased R&D in crypto-currencies prompted by the Bitcoin craze and that may yet reap benefits. I find it hard to imagine how the crypto-currency can improve upon what we can already do with electronic funds transfers, at least in the foreseeable future. But perhaps this is merely the limits of my own imagination.

So, Bitcoin is not a currency. It is not a productive asset. On the contrary, it appears to be a most environmentally destructive object. The likelihood that it is past price performance exciting the current market activity suggests that Bitcoin is now nothing more than the object of a speculative frenzy – a frenzy that has every indication of being a bubble.

Will I buy Bitcoins? As with all speculative ventures, if I am prudent I will only buy what I can afford to lose. And I for one do not want to risk losing $22,000 on a gamble. If I am wrong and the price reaches hundreds of thousands of dollars, well so be it. For me losing a remote opportunity to get rich quickly is still easier to live with than losing $22,000.