

Bitcoins, blockchains and bubbles

There's a lot to learn from previous examples of irrational exuberance from tulips to dot-coms

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OPINION

In the immortal words of Yogi Berra, "It's déjà vu all over again." Throughout human history, there have been bubbles in markets.

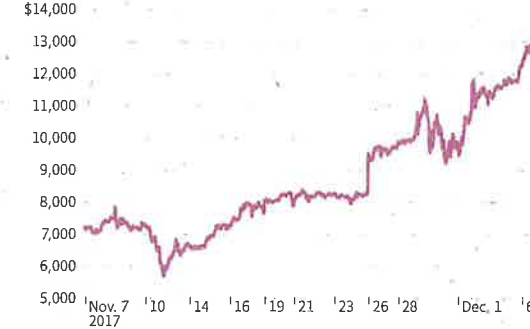
"Tulipmania" in the Netherlands in the 1600s saw, at its peak, a single tulip bulb selling for 10 times the annual wage of a skilled craftsman.

The South Sea bubble in England in the early 1700s was created after the British government gave out the rights to trade with South America to one company. Frenzied trading of shares in the company, despite insignificant profit, led to a bubble that eventually burst and ruined many. Even Sir Isaac Newton, arguably one of the most brilliant minds the world has seen, lost money in the bubble and ruefully remarked, "I can calculate the motion of heavenly bodies, but not the madness of people."

The dot-com bubble in the late 1990s and early 2000s grew from new internet ventures being floated on the stock market with no revenue or prospect of revenue that often doubled in price in the first trading days. One example is Garden.com, an online gardening-products retailer that went public in September, 1999, and saw its share price go from \$12 (U.S.) at launch to \$20 within days. By November, 2000, its share price was 9 cents and the company shut down.

Today, we may be witnessing another bubble in the making — bitcoin. The digital currency was created in 2009 by an

Bitcoin price
In U.S. dollars



THE GLOBE AND MAIL, SOURCE: BLOOMBERG

BITCOIN BREACHES \$13,000 AS FUTURES MOVE CLOSER TO REALITY

Bitcoin on Wednesday topped \$13,000 (U.S.) for the first time, pushing this week's gains to more than 30 per cent amid speculation the widespread use of futures will help lead to digital currencies being viewed as a legitimate asset class for mainstream investors.

The largest cryptocurrency by market value has soared from less than \$1,000 at the start of the year as optimism climbs for the distributed ledger technology known as blockchain that is at the heart of bitcoin. The price surge has been accompanied by a growing chorus of warnings that the speculative frenzy is an asset bubble poised to burst.

Cboe Global Markets Inc. has said it will start trading bitcoin futures on Dec. 10, while CME Group Inc.'s contracts are set to debut on Dec. 18.

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unknown individual using the pseudonym Satoshi Nakamoto. Among the advantages claimed for bitcoin are that it is:

- Digital, so no physical transfer of currency is needed;
- Decentralized, since bitcoins are not issued by a central bank and thus insulated from the macroeconomic risks that affect traditional currencies;
- Verified, despite not being overseen by traditional banking systems. Any commercial transaction involving parties requires trust or a contract, or a neutral party to provide the confidence to both parties — that the exchange will happen as contemplated — as banking systems do for currencies. Perhaps the most compelling part of the bitcoin story is that the verification is handled by blockchain technology, a complex mathematical protocol that ensures the safety, legitimacy and transparency of the exchange.

Bitcoin prices have surged from less than \$1,000 at the end of 2016 to more than \$12,000 this week — an increase of more than 1,100 per cent. To put that in perspective, at the height of the dot-com bubble, the tech-heavy Nasdaq index had a trailing price-to-earnings (P/E) ratio of 175; according to

Bloomberg, bitcoin's current valuation gives it an equivalent trailing P/E of 708.

Why might this be a bubble?

Currencies, unlike gold, are not even a store of value. But even gold is not an investment per se — there are no returns associated with holding gold, and there certainly isn't with holding bitcoins. Generally speaking, stocks provide dividends, bonds provide interest, rental properties provide rental income. The only return that holders of gold, or bitcoins, can achieve is if they can sell it for a higher price than they bought it for.

Selling bitcoins at a higher price relies, to a large extent, on the scarcity factor. Apparently, the supply of bitcoins is tightly controlled. But for such a high valuation to be sustainable there can't be any close substitutes.

So, for example, Uber commanded a significant premium as the first entrant in the ride-sharing market; but as Lyft and other competitors gain market share, Uber can only maintain its valuation if the overall market grows at the same pace or if it gains market share. For bitcoin to be able to sustain its valuation, the market has to continue growing (and eventually squeeze out traditional currencies) and bitcoin has to outcompete potential digital competitors. The question may well be: When does the Swiss National Bank, the U.S. Federal Reserve or the Bank of Canada decide they want a piece of the action and issue their own digital currencies? And if that happens, what does it do to bitcoin's price?

Is there a bandwagon effect taking place in the market? In

all past bubbles, the peak was marked by the average person in the street talking about the investment and everyone piling in for the fear of missing out.

Are we there yet? Consider that Coinbase, the leading U.S. platform for trading bitcoin, had 11.6 million users in October, compared with 10.6 million brokerage accounts at Charles Schwab. According to Nobel prize-winning economist Robert Shiller, the man who called the dot-com bubble, "the best example [of a bubble] right now is bitcoin." John Bogle, the founder of Vanguard, advises avoiding bitcoins like the plague, "Bitcoin may well go to \$20,000 but that won't prove I'm wrong. When it gets back to \$100, we'll talk."

To be clear, blockchain technology is proving to be quite promising and, down the road, there may well be successful

companies that exploit that technology. But there is a lot to learn from the dot-com experience: The early hype cost retail investors a lot of money; but when rationality returned to the market, the survivors built their businesses and today we have the Amazons of the world. The underlying technology (internet or

blockchain) may well be revolutionary; it doesn't mean that the first companies to exploit them will be winners in the long run.

George Santayana, the philosopher, said that "those who cannot remember the past are condemned to repeat it." Sadly, many bitcoin investors might not remember that bubbles always burst.

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