Is Bitcoin Breaking Up?

Rift widening over how to deal with the size limits within the virtual currency's ledger of transactions

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A prominent bitcoin developer has labeled the currency a failed experiment, widening the rift over an arcane but critical technical issue that has divided the community for nearly a year.

"The fundamentals are broken, and whatever happens to the price in the short term, the long-term trend should probably be downwards," developer Mike Hearn wrote on the blogging platform Medium. "I will no longer be taking part in bitcoin development and have sold all my coins."

The fight stems from growing congestion on the bitcoin network caused by size limits within the currency's ledger of transactions. If the limits aren't raised, the result could be debilitating bottlenecks. But fixing it requires altering a system that has been profitable for those that use heavy computer power to record transactions.

Mr. Hearn has been a vocal proponent for expanding the size limits. The problem is bitcoin is open-source software, so any change has to be approved a majority of the community, and it hasn't been able to agree.

This isn't the first time somebody has written bitcoin's obituary. What is different is this obit was being written by a prominent insider, and it hit a raw nerve in the community. The price of bitcoin, which had been stable for months, dropped sharply, down 20% last week to \$358. The price regained some ground over the weekend, and many are still defending the currency in the wake of Mr. Hearn's comments.

"Bitcoin has long experienced extreme debates and misunderstandings," said Sean Neville, the president of wallet-services startup Circle. "And it's another misunderstanding that blockchain technology can fail simply because governance and technical debates grow more difficult as bitcoin matures."

Bitcoin has always had a divisive edge. Believers laud it as a currency that is free from central banks and a transaction system that works outside the normal financial system. Skeptics see it as a kooky currency whose values soar and crash unpredictably, a casino for computer nerds. Governments can't even agree whether it is a currency or a commodity.

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The current split, however, undermines what many investors see as bitcoin's most promising invention: the decentralized "blockchain" ledger for maintaining a record of who owns what.

Individual transactions are packaged into blocks and confirmed by a highly complex mathematical "race." Winners of the race collect a newly minted bitcoin as a reward.

Bitcoin's code limits the size of those blocks to one megabyte. Changing it requires consent from the so-called miners who have amassed the computing power to handle all the transactions. Mining already is so expensive that it takes company-sized investments to participate. Incumbents fear changing the size limit could affect their economics in unpredictable ways. Not making a change has ramifications as well. Congestion is already creating long delays in confirming some transactions as the growing network bumps up against the size limit.

In August, Mr. Hearn and Gavin Andresen, one of bitcoin's core developers, formally proposed raising the limit on the block size via an alternative version of bitcoin called Bitcoin XT, with higher size limits. This was an attempt at what is called in

software circles a "hard fork"—creating a new version of a system that forces users to move to a new version.

The fight between backers of XT and the original version, now called Core, has been ugly. It has raged on Reddit and social media, users have been tossed off message boards, and there have been anonymous cyberattacks on users and companies. XT started off strongly, but hasn't gotten near gaining a consensus for change.

This stalemate is what finally convinced Mr. Hearn that bitcoin was fatally collapsing in on itself. Others are more hopeful. Yet another proposal, this one called Bitcoin Classic, has emerged from the ashes of the XT/Core debate. It is a version of bitcoin that would allow for a two-megabyte limit, with rules put in place to raise it over time. It appears to be quickly winning support.

"Sometimes it takes a crisis to get everyone in a room," said <u>Fred Wilson</u> of Union Square Ventures, a venture-capital firm with bitcoin investments, in a philosophical blog post. "That may be how the block-size debate gets settled."