

Will crypto prices recover?

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¹Economy Monitor

April 28, 2020

Market observers tend to use price action as a reference point to assess the likelihood of future movements. So inevitably, the current regime will be compared to the exuberant period of December of 2017, when bitcoin prices peaked at around 20,000 in USD terms. And much is being said about market manipulation using the facilities of cryptocurrency in exchanges— what is less evident, is the actual behavior of investors before a price movement occurs. What we learned after studying daily user activity at thousand of the services that crypto investors used, and the sources of information they were exposed to, during 2017 and 2018 is that there is a boundary after which prices become unpredictable. And, wittingly or unwittingly, the operators of some of these services had the power to manipulate markets without even be present at the exchanges— just by *hacking* attention.

We begin by looking at user behavior at a mining pool with several million users, one of the largest players. Miners are key stakeholders in the crypto ecosystem (with an above average degree of sophistication among market participants), each click they make is a tell.

While most signals are highly correlated with price, a few are remarkable in their short life. Some of those shown in the figure are recognized scams that were launched probably to take advantage of early signs of public interest— but because of the mass scale of their advertising campaigns (a reach of hundreds of thousands, and sometimes even millions of highly qualified leads) those could have had a trigger effect in the events that unfolded later. These can easily be identified in the figure as *impulses*, a single peak with no lifespan.

Usage of other services peaked with prices, but then gracefully declined until reaching a baseline level, those are traditional services used as part of the key infrastructure of the economy, such as wallets and some particular crypto investor communities.

Let's remember: the AI picked up just a handful of signals out of hundreds, because of their predictive power. While the combination of those does a good job at roughly predicting next day closing prices, some days are simply a toss-up. Those are shown as red outliers below.

These structural constraints persist even if the population is made more diverse to include not only miners, but also traders and other market participants.

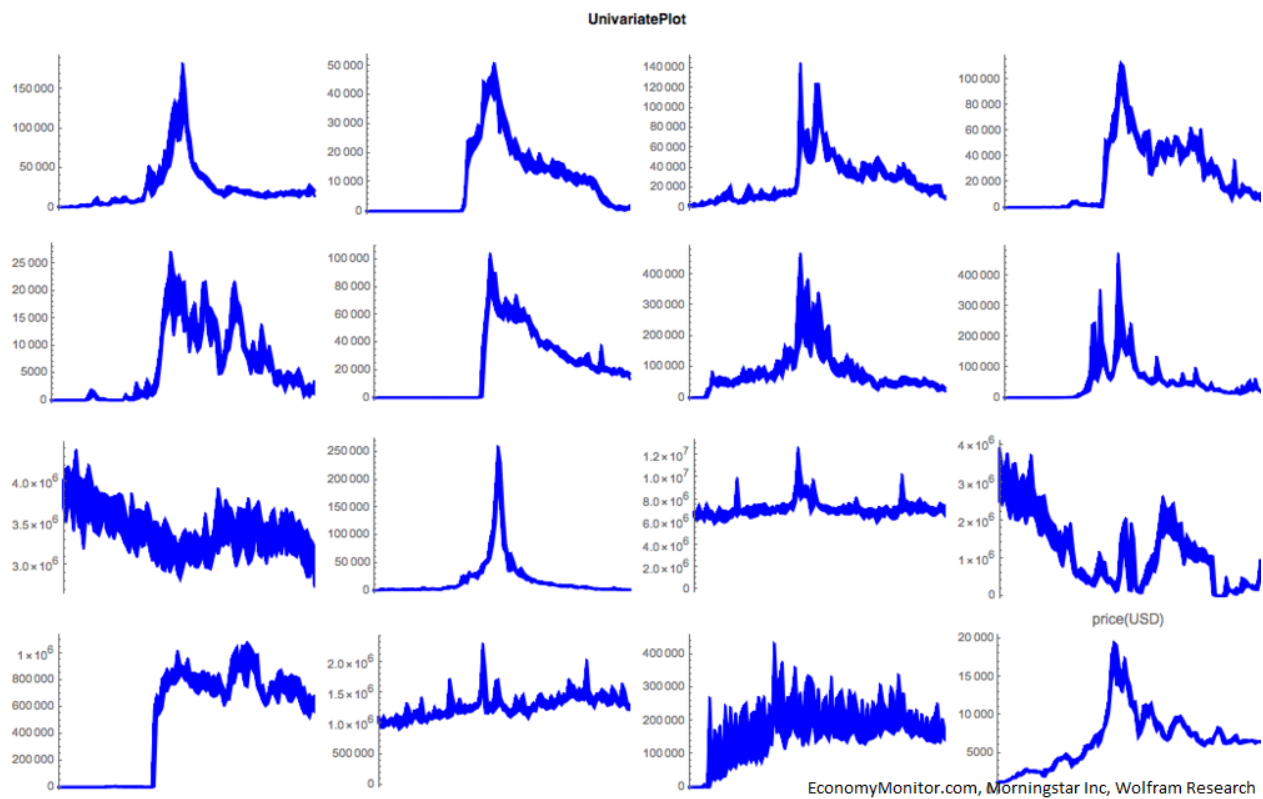


Figure 1: Behavioral signals and BTCUSD price

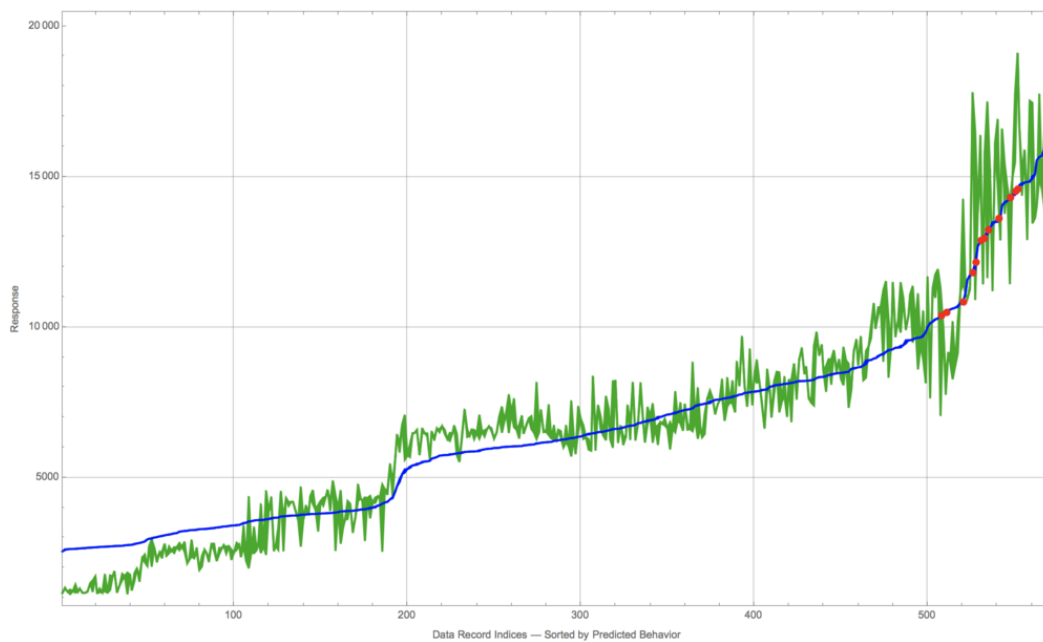


Figure 2: Predictive model, next day BTC price, audience specific

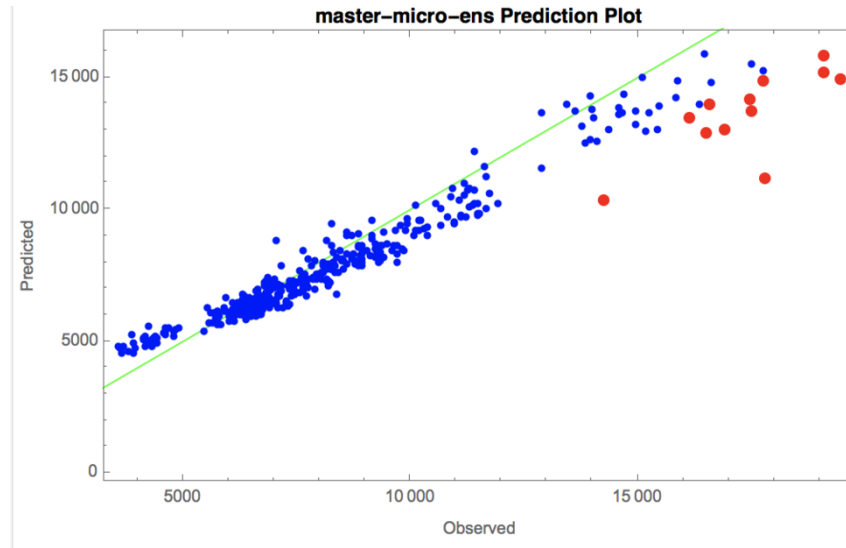


Figure 3: Predictive model, next day BTC price, basket of attention sources

And even the retail market and the general public, although in those two cases uncertainty increases.

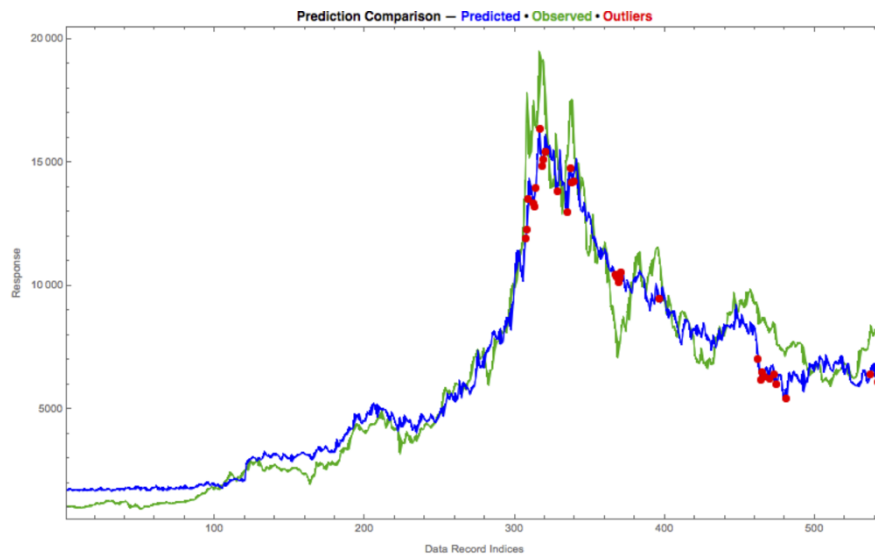


Figure 4: AI predictive model, next day BTC price, retail market

The AI is effectively using an information crowdsourcing approach to gauge the drivers of price directly from the market and the public. While in most cases this approach gives us foresight of the movement of the market, there are transitions that appear fundamentally unpredictable –and still, manipulable. By controlling attention flows at the driving nodes of the networks connected to the blockchain, actors have been able to move prices to unthinkable levels before –and it may happen again.

EconomyMonitor.com, 2018

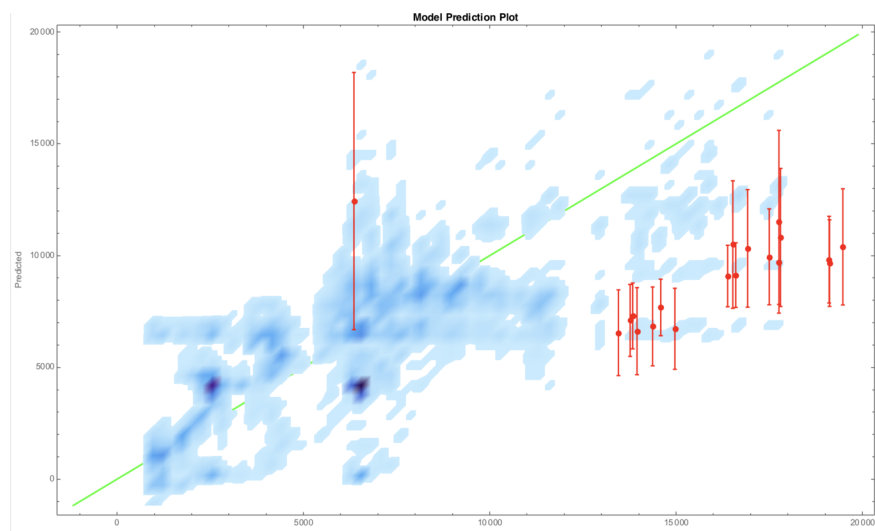


Figure 5: Group of predictive models, next day BTC price, demand for price news