



AN AGENT BASED MODEL OF THE BITCOIN PRICE

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Influences of the Bitcoin price

- Technology factors (Kristoufek, 2015)
- Financial and macroeconomic factors
 - To short-term changes in the US inflation, the money supply and interest rates (Li & Wang, 2017)
 - Positively to the FTSE Index (Dyhrberg, 2016)
 - VIX (-) (MacDonell, 2014)
 - Traditional stock markets (+) (Panagiotidis et al. 2019)
 - Decreasing influence of popularity (Google and Wikipedia search) (Panagiotidis et al. 2019)



The Model

Speculator

Increasing Number of
Traders (Order)

Signal =1

$P_t > P_{t-1}$

Investor

Order=0.058

Signal=5

$VIX_t < VIX_{t-x}$

Hedger

Order=0.05

Signal=7

$Gold_t > Gold_{t-y}$

02.01.2015 - 03.05.2020, n=650

Efficiency

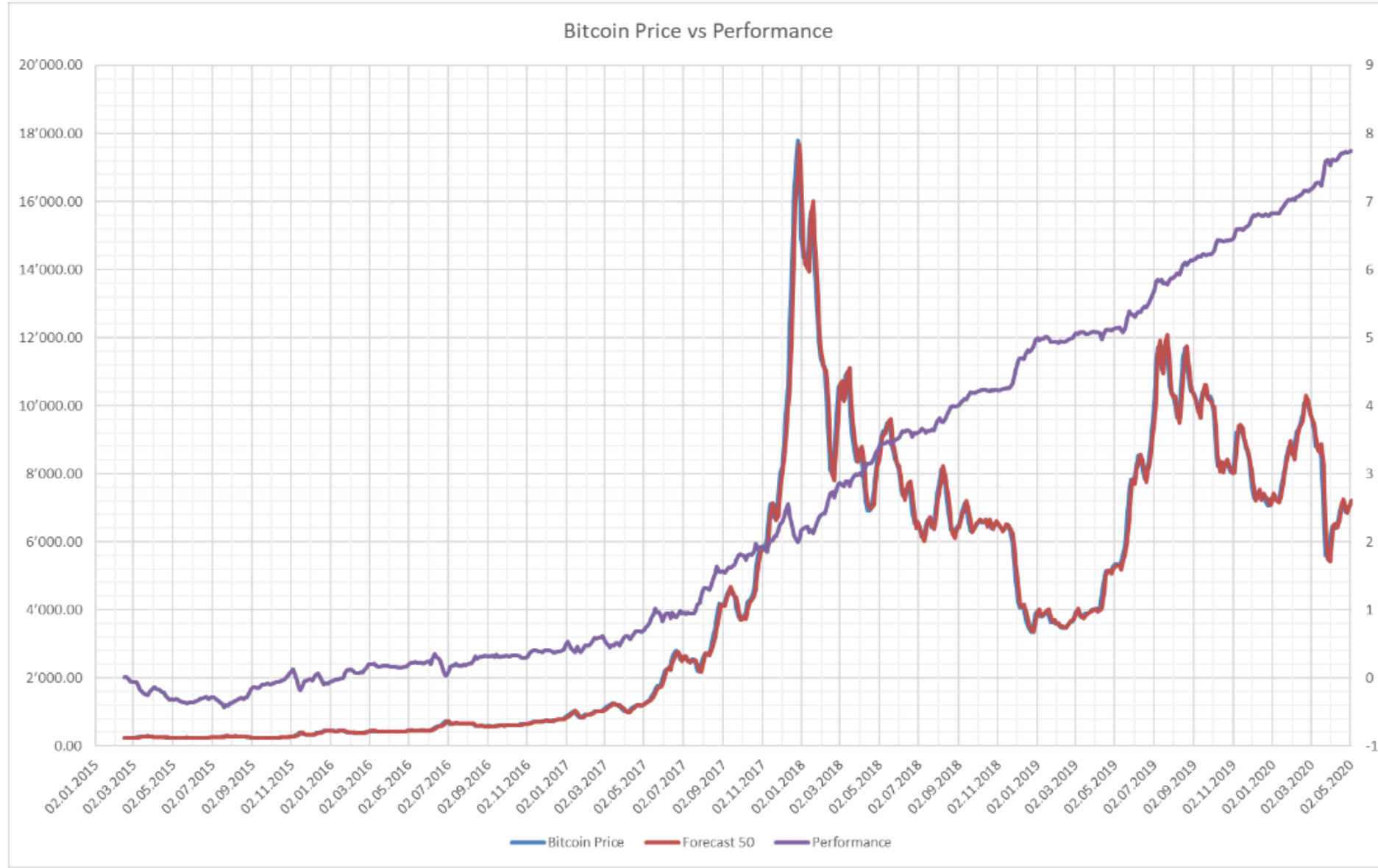
40.80%

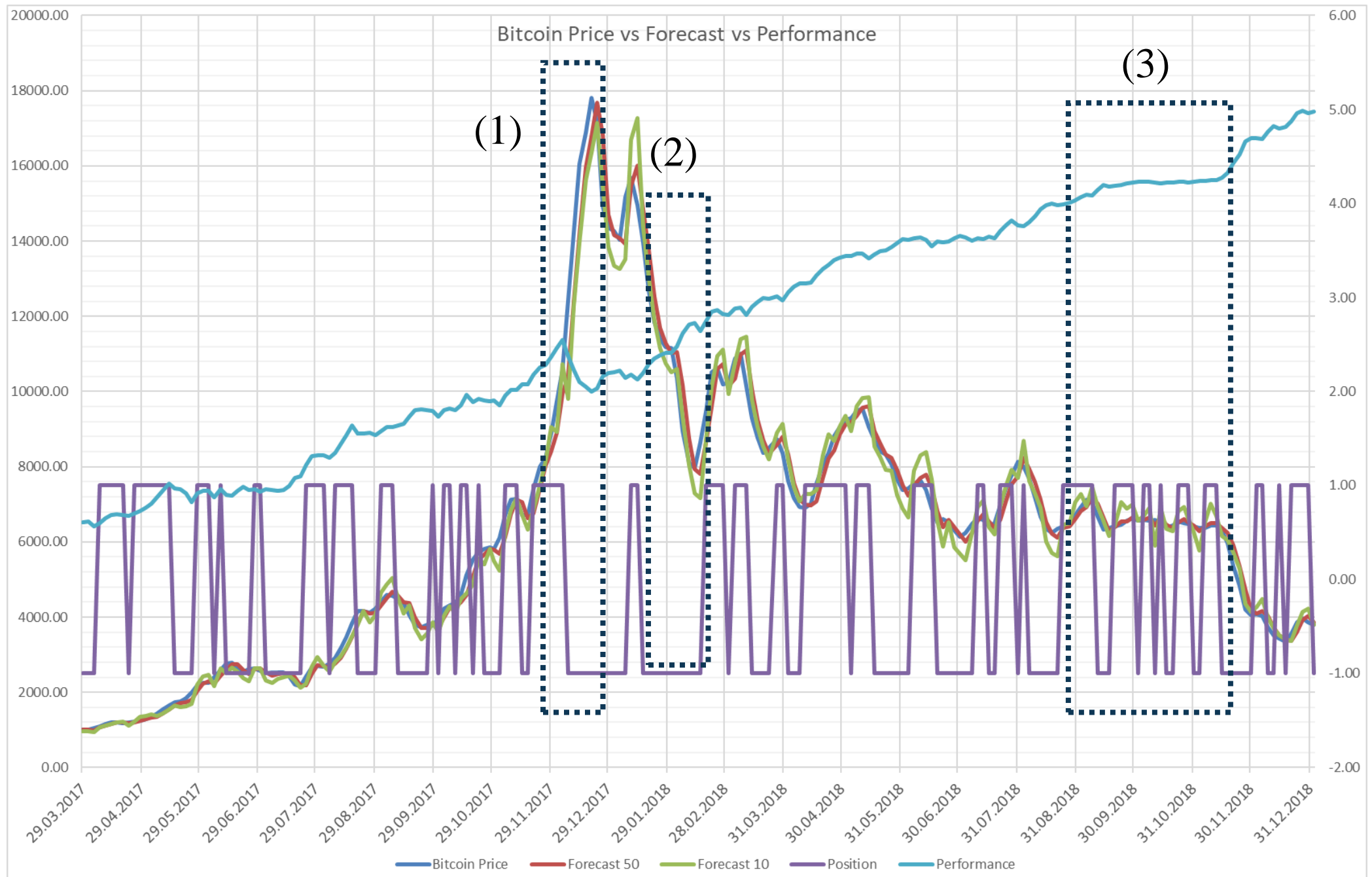
Drawdown

55.33%

Hit Rate

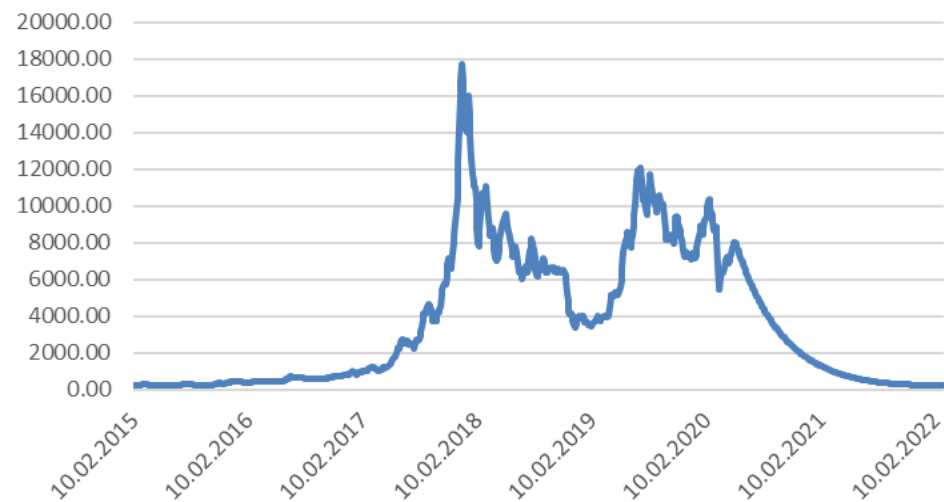
62.79%



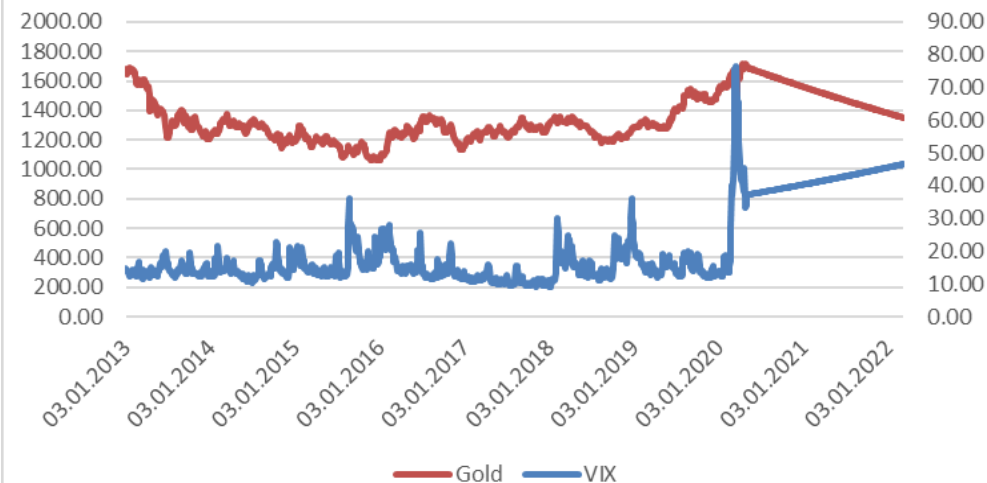


Forecast

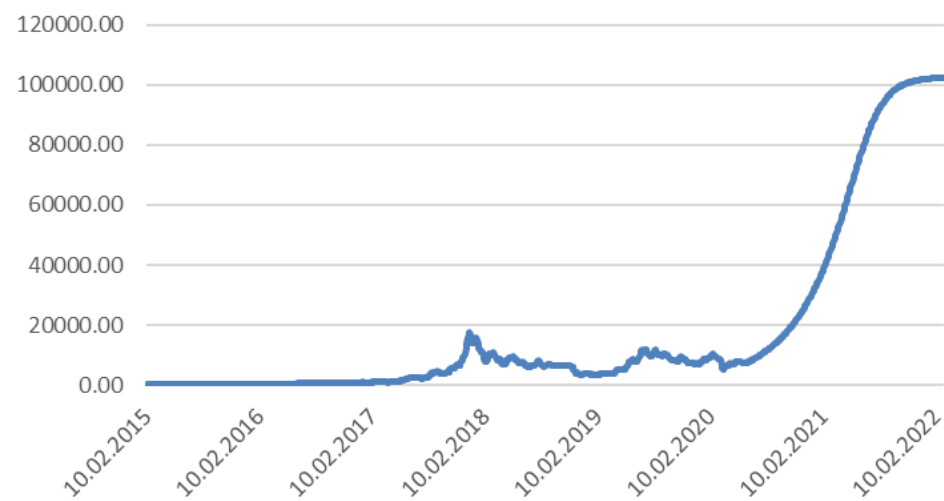
Increasing VIX & Decreasing Gold



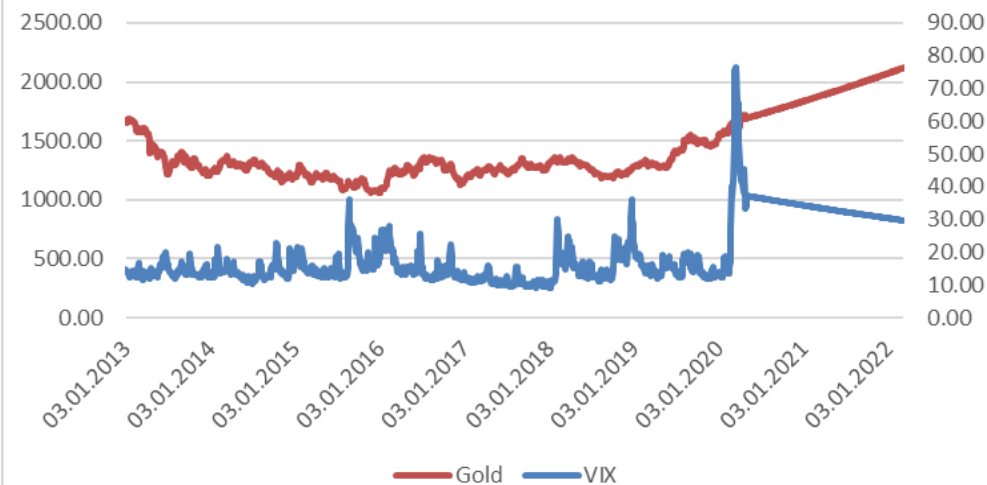
Increasing VIX & Decreasing Gold



Decreasing VIX & Increasing Gold



Decreasing VIX & Increasing Gold



**Thank you for your
Attention.**

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