

I. Sherifi , O. Lebid , O. Goncharova , S. Drobyazko , I. Sidko **Financial Risks of Business Management of Cryptocurrency Operations** / I. Sherifi, O. Lebid, O. Goncharova and other // TEM Journal. -2024. - Volume 13. - Issue 1. – P. 355-364.

Abstract – Bitcoin is an asset with high risks, and a significant part of its volatility can be explained by the speculative component. Parametric variance-covariance (VaR) methods are not applicable for assessing the risks of bitcoin investment, since log returns are not distributed according to the normal law. Autoregressive risk assessment models (such as ARIMA-GARCH) for bitcoin volatility overestimate risks at times of sharp exchange rate changes and they underestimate them at times of less significant rate changes compared to historical volatility. The grid search for the smoothing parameter in the exponentially weighted moving average method is potentially interesting for modeling the risks of bitcoin investment. This makes it possible to fully take into account the autocorrelation of the bitcoin rate to the levels of previous periods and the volatility of the asset. As a conclusion, there are currently no econometric models that can explain and forecast the volatility of bitcoin in the medium and short term, considering the available factors in the market.

Keywords – Financial risk, cryptocurrencies, business management, volatility, asset.