

Analysis and Forecasting of Bitcoin Price Using Exogenous Data

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Abstract : Extracting and interpreting information from Big Data represent a stake for years to come in several sectors such as finance. Currently, numerous methods are used (such as Technical Analysis) to try to understand and to anticipate market behavior, with mixed results because it still seems impossible to exactly predict a financial trend. The increase of available data on Internet and their diversity represent a great opportunity for the financial world. Indeed, it is possible, along with these standard financial data, to focus on exogenous data to take into account more macroeconomic factors. Coupling the interpretation of these data with standard methods could allow obtaining more precise trend predictions. In this paper, in order to observe the influence of exogenous data price independent of other usual effects occurring in classical markets, behaviors of Bitcoin users are introduced in a model reconstituting Bitcoin value, which is elaborated and tested for prediction purposes.

Keywords : big data, bitcoin, data mining, social network, financial trends, exogenous data, global economy, behavioral finance

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