This paper examines statistical properties of crypto-currencies' price variations in comparison with statistical properties of price variations in common financial markets. Price data of Bitcoin, ripple and Litecoin have been directly compared with price data of euro currency and stock index S&P500. Additionally, and compared with set of stylized facts of asset returns. The properties in scope of this work include an autocorrelation of day-to-day returns, a shape of return distributions, a volatility clustering, a leverage effect and a volume/volatility correlation. To answer the question of this thesis, we have tried to find unique differences in the way prices of crypto-currencies behave. After every point of the data analysis has been checked, we have concluded that the only major difference is in the shape and the significance of autocorrelation in day-to-day returns. While crypto-currencies seem to autocorrelate, there has been no such a cross-autocorrelation found in the benchmark values. Therefore, we argue that it is the most distinctive sign of crypto-currencies and the reason for crypto-currencies to be regarded as separate asset class.