

Information Content and Predictability of Extreme Prices in Financial Markets

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Abstract: Extreme prices are still uncharted territory. By defining extremes as maximum and minimum prices during a pre-specified time interval, this research sheds new light on when, how and why high and low prices occur. We investigate a representative asset for currency, stock and bond markets across different time granularities (hours, days and months). Some relevant stylised facts emerge. First, the occurrence of extreme price clusters at the beginning and end of the month. Their intraday timing, however, is less regular and more dependent on microstructure and behavioural issues. Second, extreme prices are sticky. Highs, lows and range are thus significantly auto-correlated and cross-correlated. Third, high and low prices are cointegrated. We find that pre-scheduled announcements of major macroeconomic news bulletins are a significant primitive source for extreme price occurrences. Using a vector autoregressive model with error correction, we provide evidence on the predictability of extreme prices.

Keywords: high and low prices; extreme prices; range; autocorrelated returns; VAR; cointegration; predictability; resistance levels; technical analysis; news impact.

JEL Classifications: G10; G12; G13; G14; C32; C53.