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Researchers find central bank tone affects asset prices

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The researchers found that stock prices increase when central bank tone becomes more positive and decrease when the tone becomes more negative. Positive tone changes are also associated with increasing bond yields, lower implied equity volatility, lower variance risk premia and lower credit spreads. Overall, these results suggest that changes in central bank tone affects the risk appetite of market participants.

These results are based on press conferences by the European Central Bank (ECB) which are broadcast live so market participants can absorb and respond to the information imparted in real time.

To evaluate and quantify the tone of an ECB statement, the researchers used textual analysis methods and a financial dictionary that identifies negative words. The prevalence of these words was then assessed, and a score assigned to the statement quantifying its tone. The sample covers 185 press conferences between January 1999 and October 2014.

Dr Maik Schmeling, Cass Business School said:

"Central banks regularly communicate their assessment of the economic landscape and their views on future developments and monetary policy. They set great store by these communications, as they have realised how increasingly influential they can be,

"Our results demonstrate a strong link between the tone of the ECB announcements and equity returns. On the day of the press conference, a more positive tone (when compared to the previous press conference), is associated with increasing stock prices, and a more negative tone is associated with a fall in prices. The effect is statistically significant, economically sizeable, and persists over the cycle to the next press conference,

"A more positive ECB tone appears to increase equity prices and bond yields because it reassures market participants and lowers their risk aversion. Our research also suggests that tone changes are significantly related to asset prices that are very sensitive to changes in risk aversion, such as variance risk premia and corporate credit spreads. Overall, the results suggest that the ECB, and other central banks, can to some extent, manage market expectations and risk appetite through the tone of their communications."

Dr Schmeling said the research found that U.S. equity and Treasury markets also react to changes in the Fed Chair's tone in Congressional Testimonies suggesting that the effect of tone on asset prices is not specific to the ECB but also extends to other central banks.

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