

Title: Do Macro News Surprises of the US Affect Forex Implied Volatility? The Evidence of Japanese Yen in 1997-2015

Michael CS Wong^{1*} and Wei Li²

*1*Department of Economics and Finance, City University of Hong Kong, Hong Kong, China *2*Citigroup Global Markets Asia, 50/F Citibank Tower, Central, Hong Kong

Abstract

His paper aims to provide an updated research on how macroeconomic news announcements affect forex option implied volatility (IV). Forex options are actively traded and used by corporations and financial institutions for risk management, arbitrage and speculation. According to Bank of International Settlement, forex options make up the second largest segment of the global OTC option market [1]. At the end of 2014, the notional amount of outstanding foreign exchange option contracts is totaled at US\$15 trillion. Given the important role of IV in options pricing, risk management, trading, investment and forex transaction services, it is worthwhile to explore how IV is affected by macroeconomic news. Implied volatility (IV) as important market information Many previous studies analyze how a realized volatility can be predicted by news surprises, information embedded in forex options IV and econometrics models. For instance, Andersen conclude that historical volatility in the forex market is more powerful than predicted volatility obtained from GARCH-related models in forecasting future realized volatility [2-5]. Bush applies heterogeneous autoregressive (HAR) model suggested by Corsi and demonstrates that IV remains to be useful to predict future volatility if it is considered with together jump components in the forex market [6,7]. However, in the crude oil futures market, Agnolucci finds that GARCH-type models seem to outperform IV in predicting realized volatility [8]. Hese studies focus mainly on realized volatility and ignore a fact that IV itself is a collective perception on risk and a fundamental input for derivatives pricing. As information on risk, IV itself can affect how market makers manage their quotes. For instance, studies on bid-ask spreads, such as Bollerslev and Melvin and King, find that spreads tend to be higher when IV increases [9,10]. Traders may consider IV as a pre-condition of specific hedge fund strategies. Studies on currency carry trades, such as Egbers and Swinkels, suggest that carry-trade strategies tend to suffer serious lose when IV turns sharply higher [11]. His may explain why traders tend to

reverse their carry-trade positions aier increased IV see, Menkho [12]. All these indicate that IV, regardless of its association with realized volatility, is important market information for asset pricing and trading. How market participants form their risk perception and determine the IV is an interesting research area.

Speaker Biography:

Michael CS Wong¹ and Wei Li², *1*Department of Economics and Finance, City University of Hong Kong, Hong Kong, China *2*Citigroup Global Markets Asia, 50/F Citibank Tower, Central, Hong Kong

Abstract Citation:

Vascular Dementia Congress 2020, 16th world congress on vascular dementia and neurodegenerative disorders;- May 18-19,2020

[16th world congress on vascular dementia and neurodegenerative disorders](#); - May 18, 2020.