# **Online Appendix**

### Online Appendix to Chapter 1

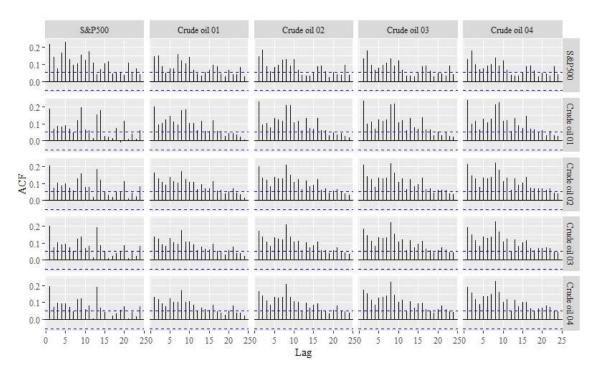


Fig: ACF of S&P500 and crude oil futures squared return series

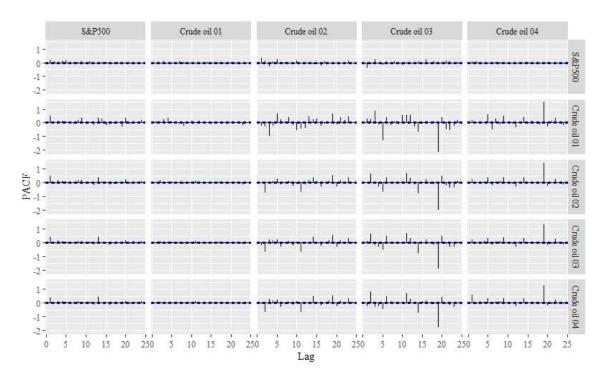


Fig: PACF of S&P500 and crude oil futures squared return series

### Various linkage among variables:

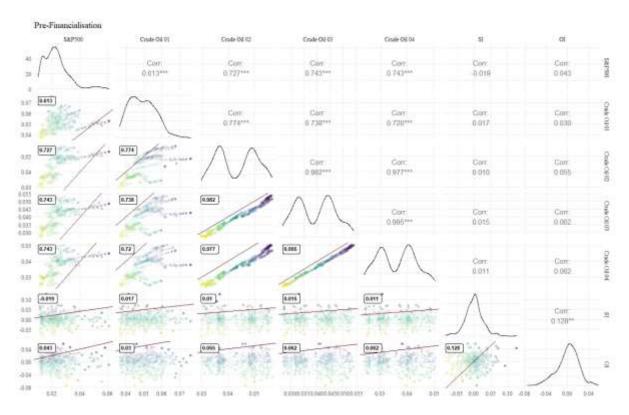


Fig: Correlation between conditional volatility, speculation index and open interest (Pre-Financialisation)

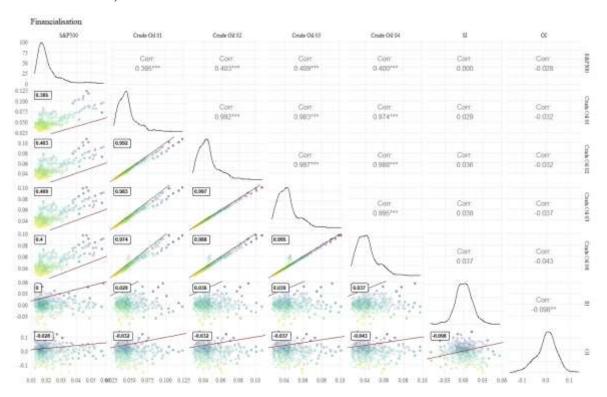


Fig: Correlation between conditional volatility, speculation index and open interest (Financialisation)

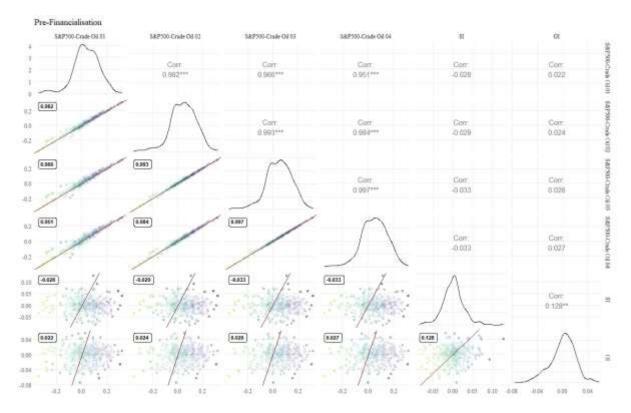


Fig: Correlation between conditional correlation, speculation index and open interest (Pre-Financialisation)

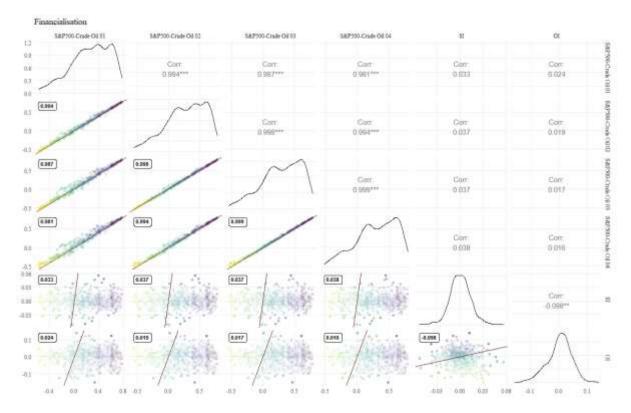


Fig: Correlation between conditional correlation, speculation index and open interest Financialisation)

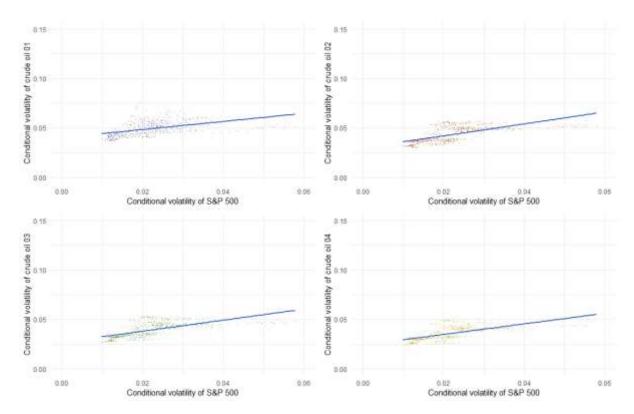


Fig: Conditional volatility of S&P500 vs conditional volatility of crude oil futures (Pre-Financialisation)

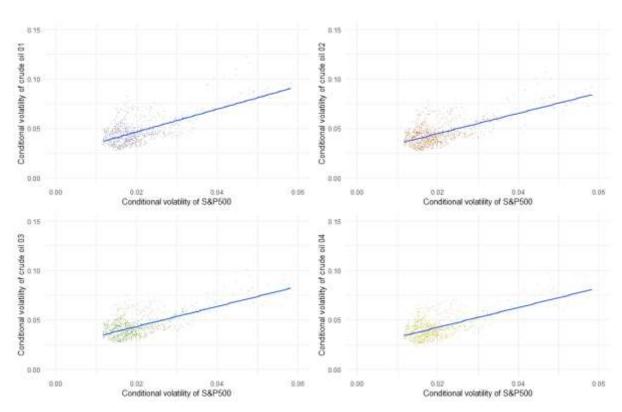


Figure: Conditional volatility of S&P500 Index vs conditional volatility of crude oil futures (Financialisation)

### Online Appendix to Chapter 4

# **Energy Index**

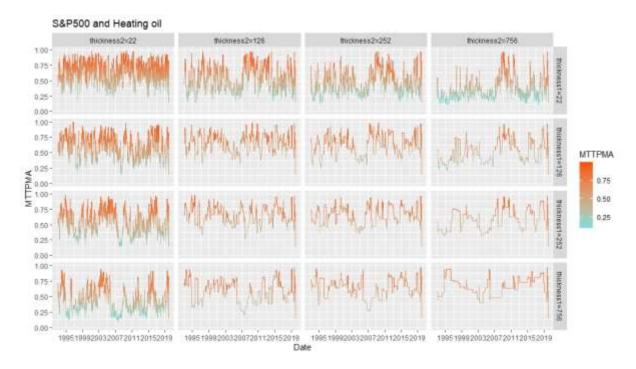


Figure: TPMA and MTTPMA of S&P500 Index and heating oil

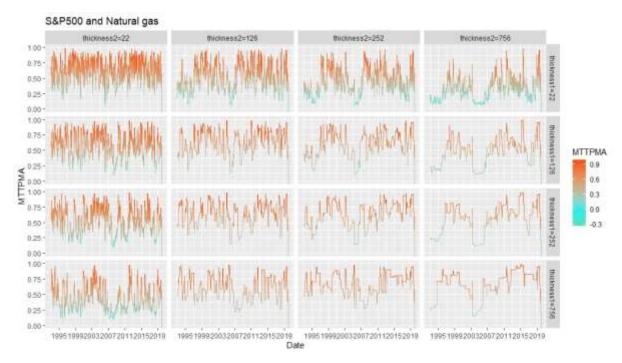


Figure: TPMA and MTTPMA of S&P500 Index and natural gas

### **Non-energy Index**

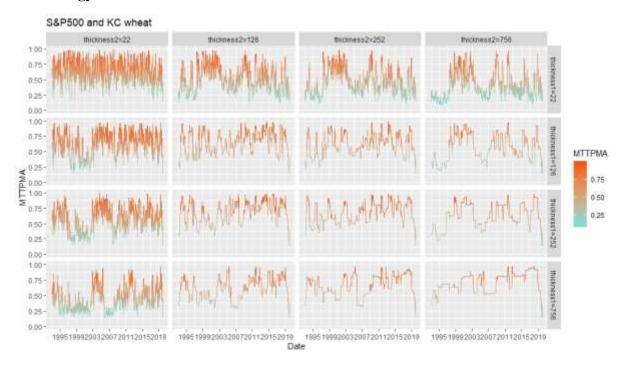


Figure: TPMA and MTTPMA of S&P500 Index and Kansas City wheat

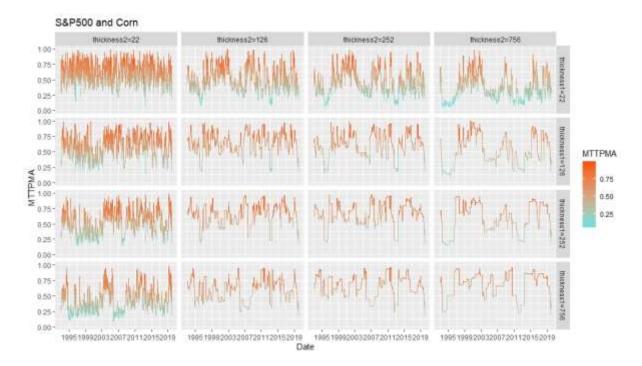


Figure: TPMA and MTTPMA of S&P500 Index and corn

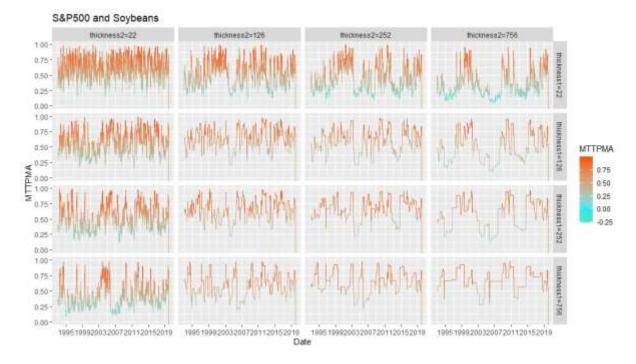


Figure: TPMA and MTTPMA of S&P500 Index and soybean

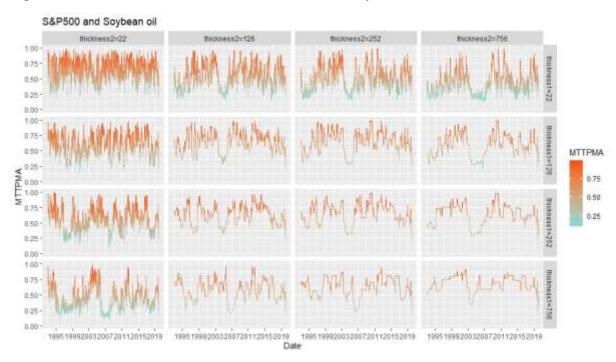


Figure: TPMA and MTTPMA of S&P500 Index and soybean oil

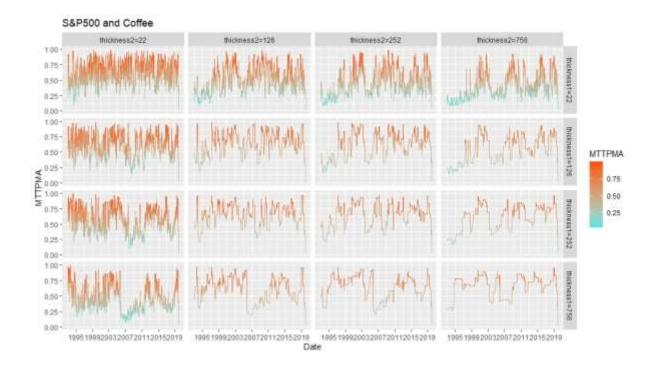


Figure: TPMA and MTTPMA of S&P500 Index and coffee

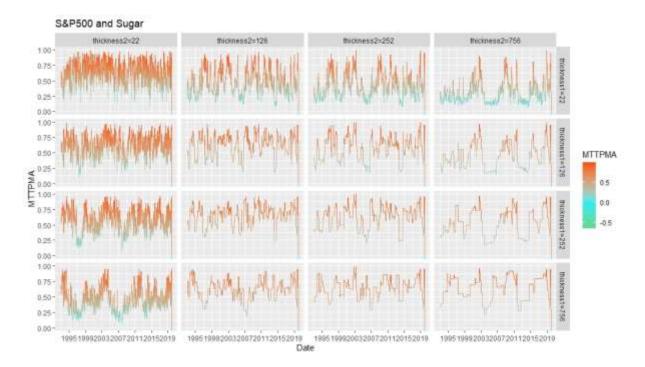


Figure: TPMA and MTTPMA of S&P500 Index and sugar

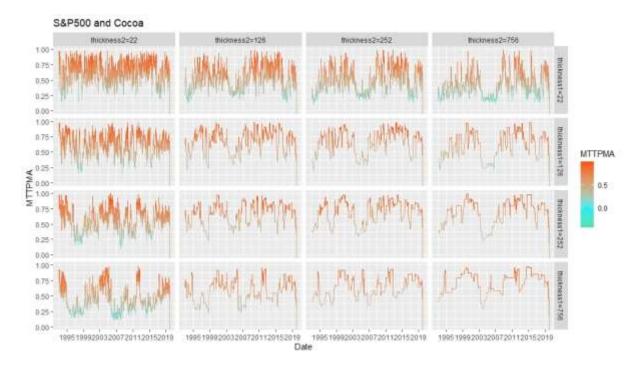


Figure: TPMA and MTTPMA of S&P500 Index and cocoa

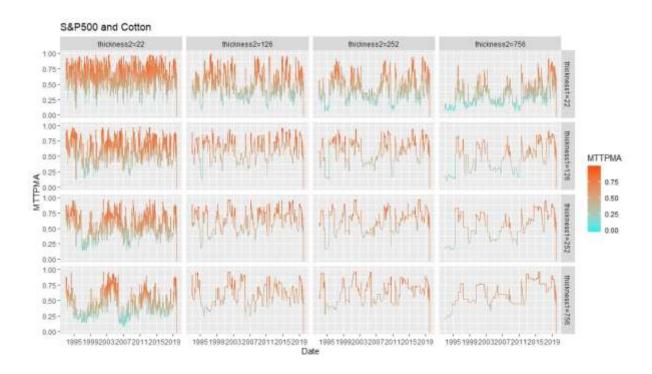


Figure: TPMA and MTTPMA of S&P500 Index and cotton

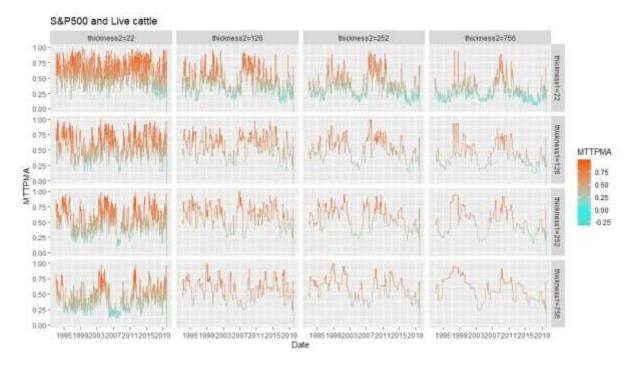


Figure: TPMA and MTTPMA of S&P500 Index and live cattle

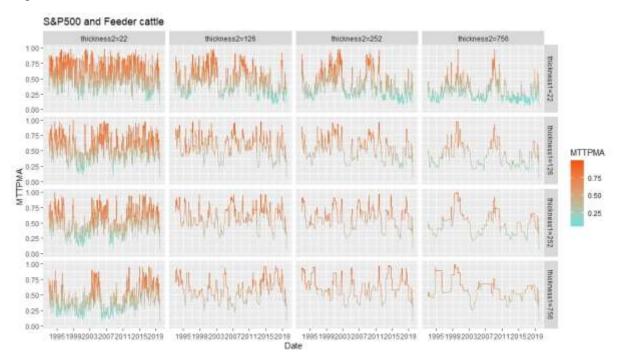


Figure: TPMA and MTTPMA of S&P500 Index and feeder cattle

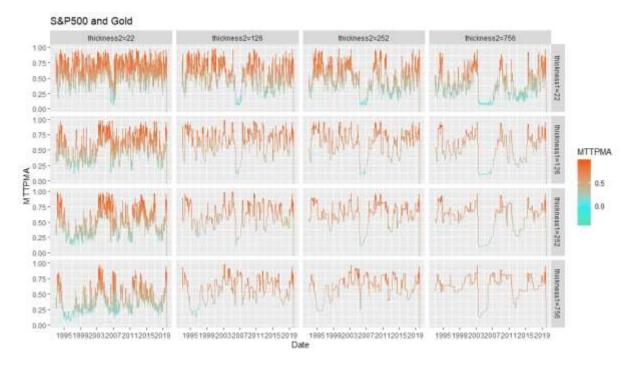


Figure: TPMA and MTTPMA of S&P500 Index and gold

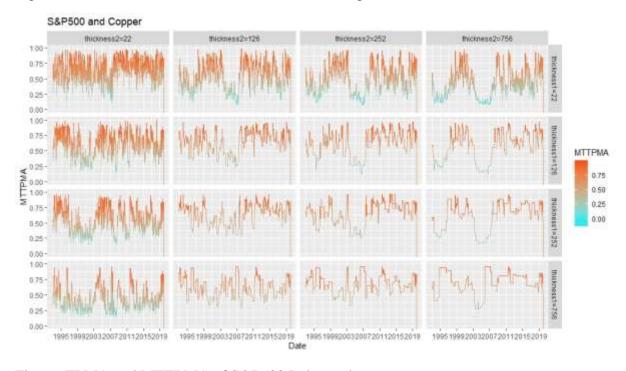


Figure: TPMA and MTTPMA of S&P500 Index and copper

#### **Off-index:**

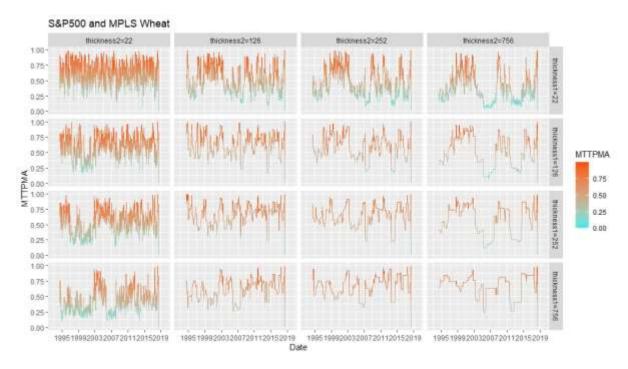


Figure: TPMA and MTTPMA of S&P500 Index and Minneapolis wheat

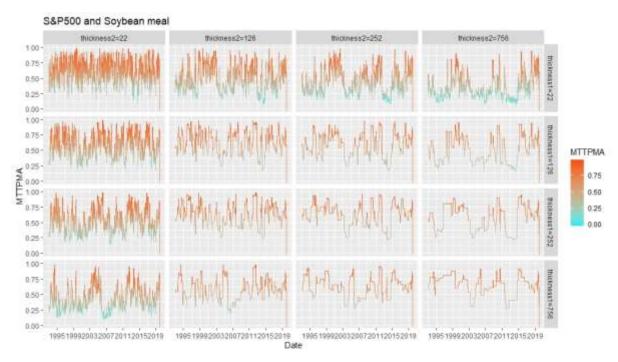


Figure: TPMA and MTTPMA of S&P500 Index and soybean meal

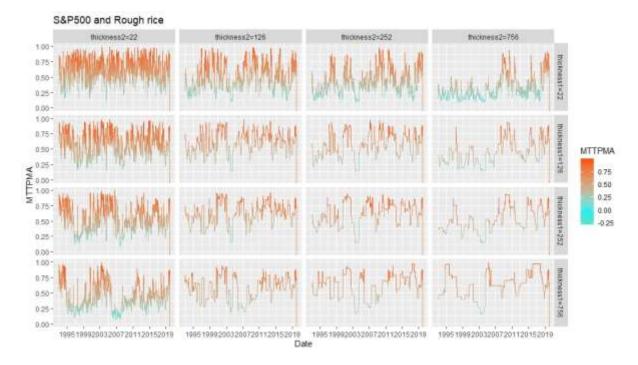


Figure: TPMA and MTTPMA of S&P500 Index and rough rice

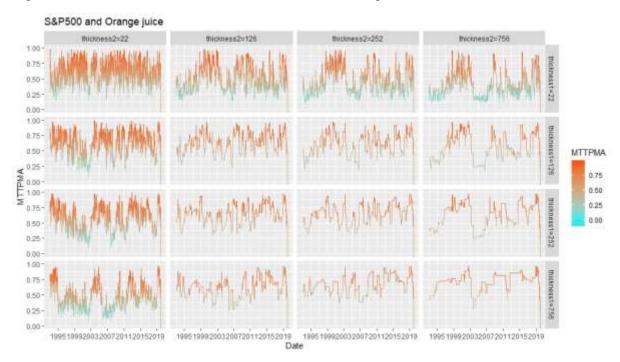


Figure: TPMA and MTTPMA of S&P500 Index and orange juice

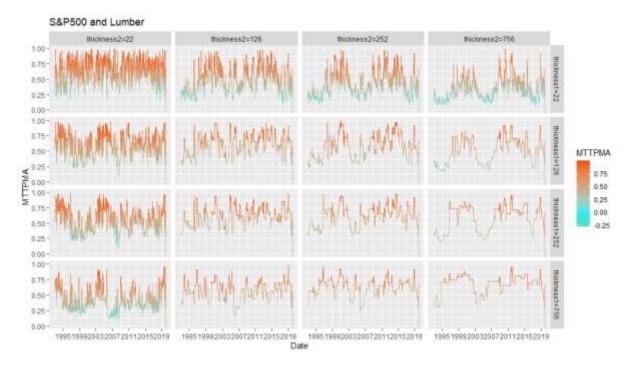


Figure: TPMA and MTTPMA of S&P500 Index and lumber