

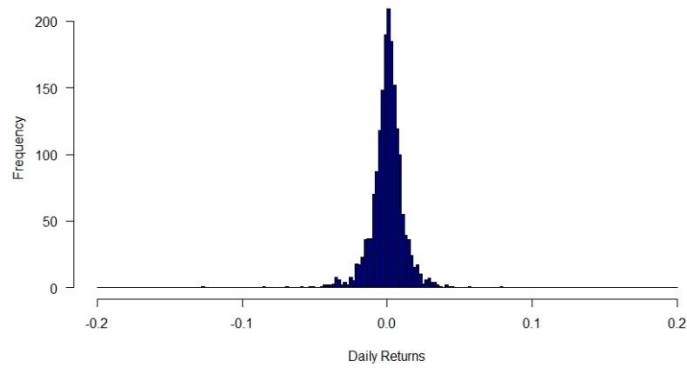
1.1. TABLE WITH DATA

Variable	Data Link Shortcut	Variable Type
Euronext 100	^N100	Endogenous
NASDAQ	^IXIC	Endogenous
National Stock Exchange of India (NIFTY 50)	^NSEI	Endogenous
São Paulo Stock Exchange (IBOVESPA)	^BVSP	Endogenous
Hang Seng Index	^HSI	Endogenous
Interest Rates	Long-Term Interest Rates	Exogenous Low Frequency (Monthly)
House Pricing	House Pricing-OCED	Exogenous Low Frequency (Quarterly)
Brent	Brent	Exogenous High Frequency
Corn	CORN	Exogenous High Frequency
Volume	Volume for each Endogenous variable on the links above	Exogenous High Frequency

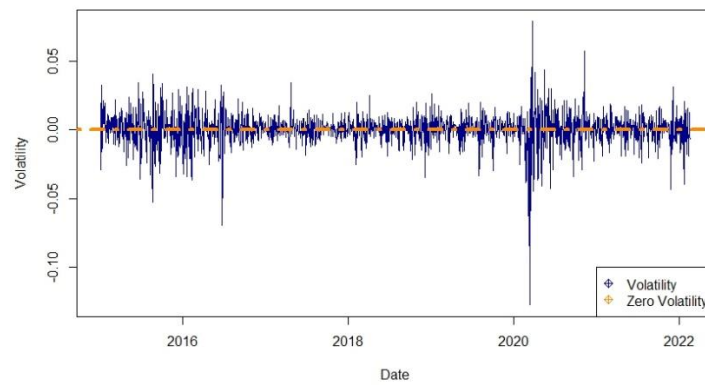
1.2. PRELIMINARY ANALYSIS BY INDEX



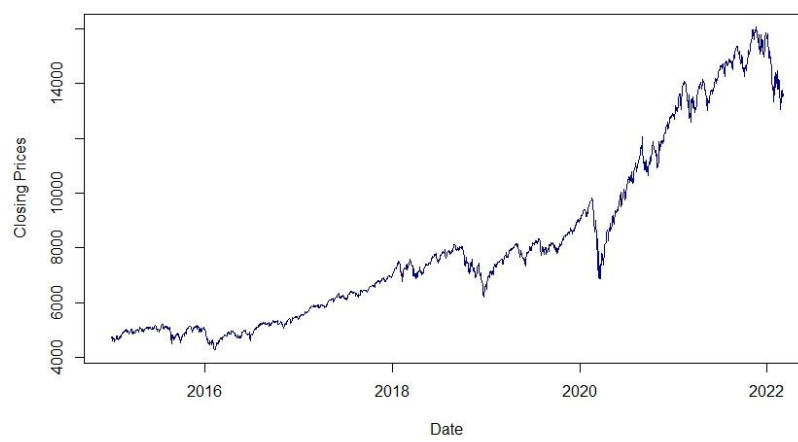
Euronext 100 Returns from 01-01-2015 until 20-02-2022



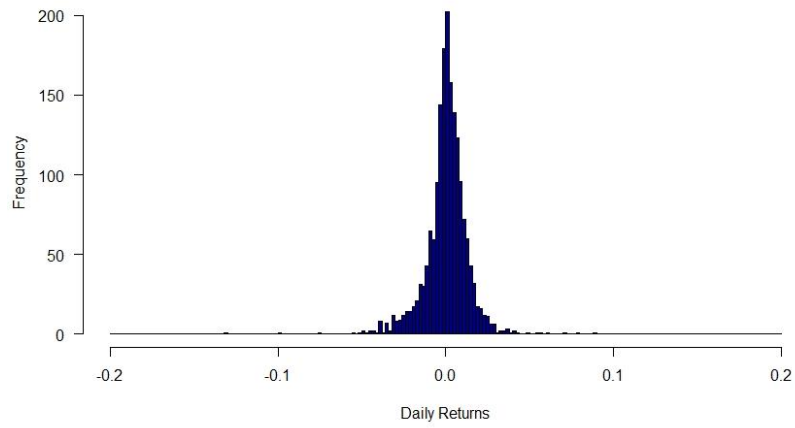
Euronext 100 Volatility from 01-01-2015 until 20-02-2022



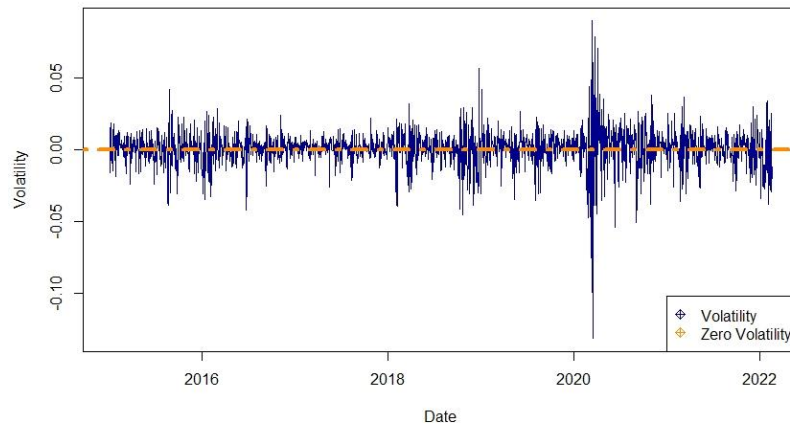
NASDAQ Daily Prices



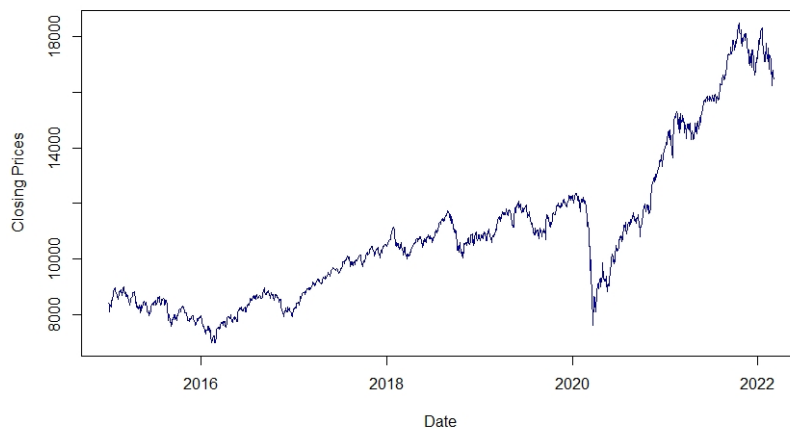
NASDAQ Returns from 01-01-2015 until 20-02-2022



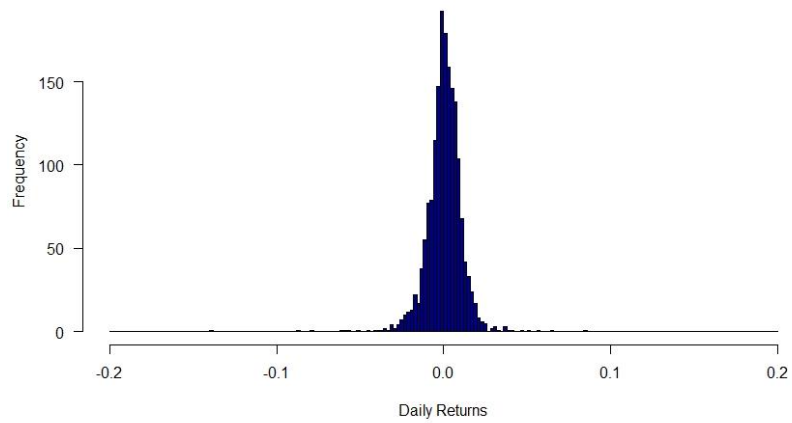
NASDAQ Volatility from 01-01-2015 until 20-02-2022



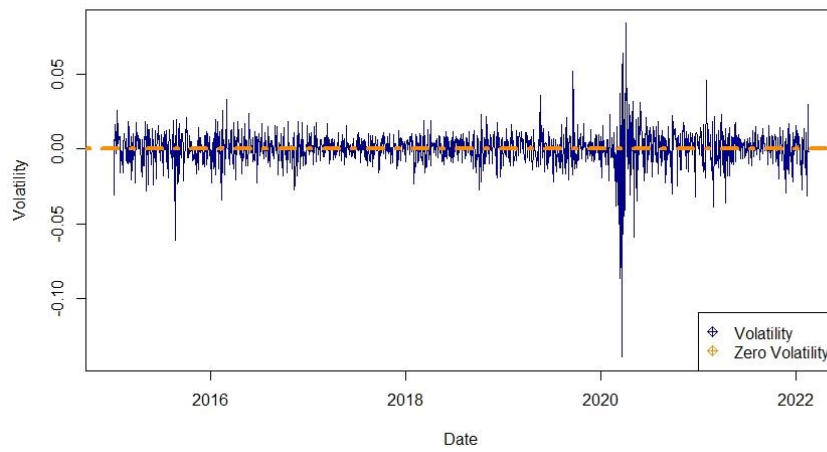
NIFTY 50 Daily Prices



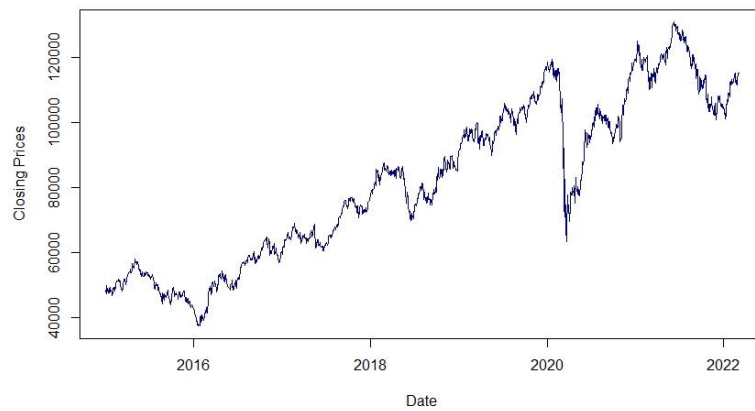
NIFTY 50 Returns from 01-01-2015 until 20-02-2022



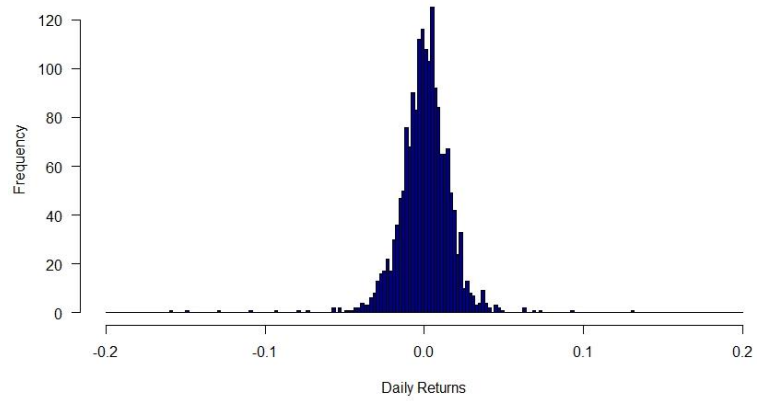
NIFTY 50 Volatility from 01-01-2015 until 20-02-2022



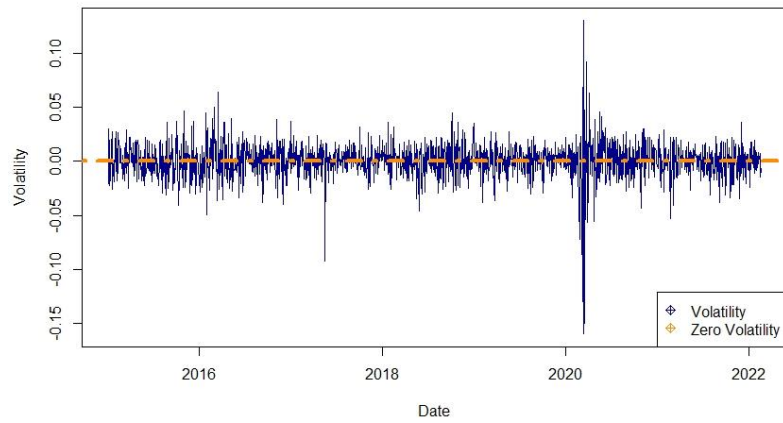
IBOVESPA Daily Prices



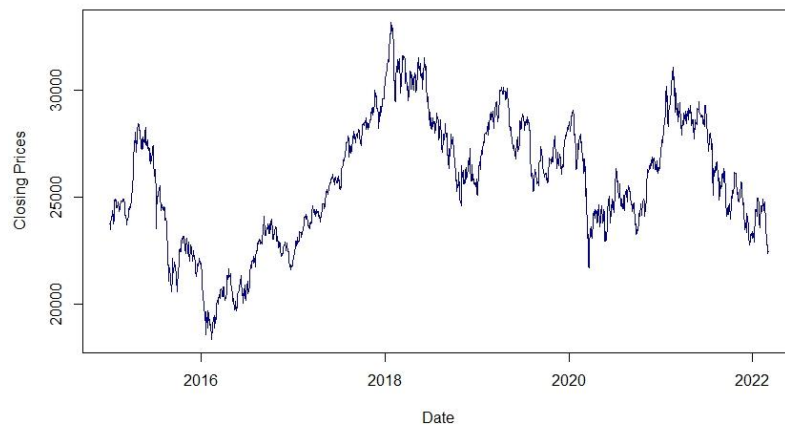
IBOVESPA Returns from 01-01-2015 until 20-02-2022



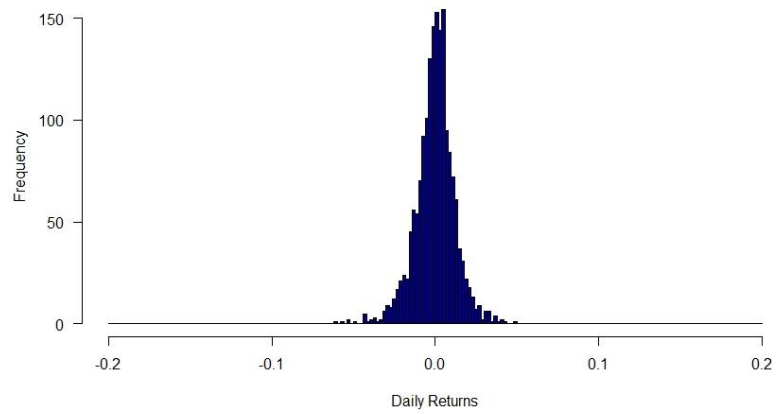
IBOVESPA Volatility from 01-01-2015 until 20-02-2022



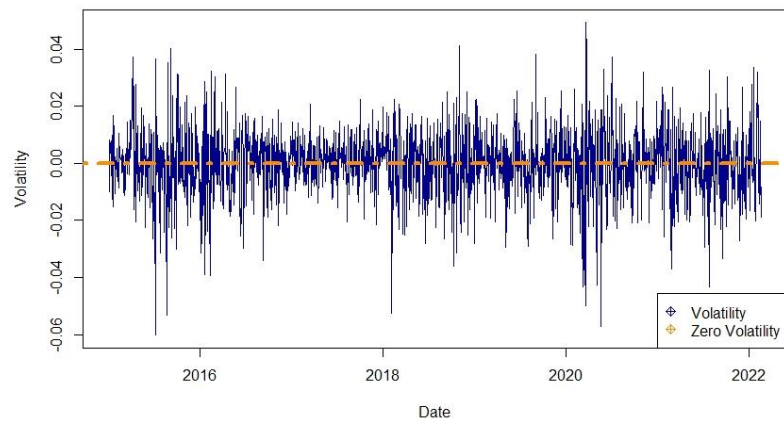
Hang SengDaily Prices



Hang Seng Returns from 01-01-2015 until 20-02-2022

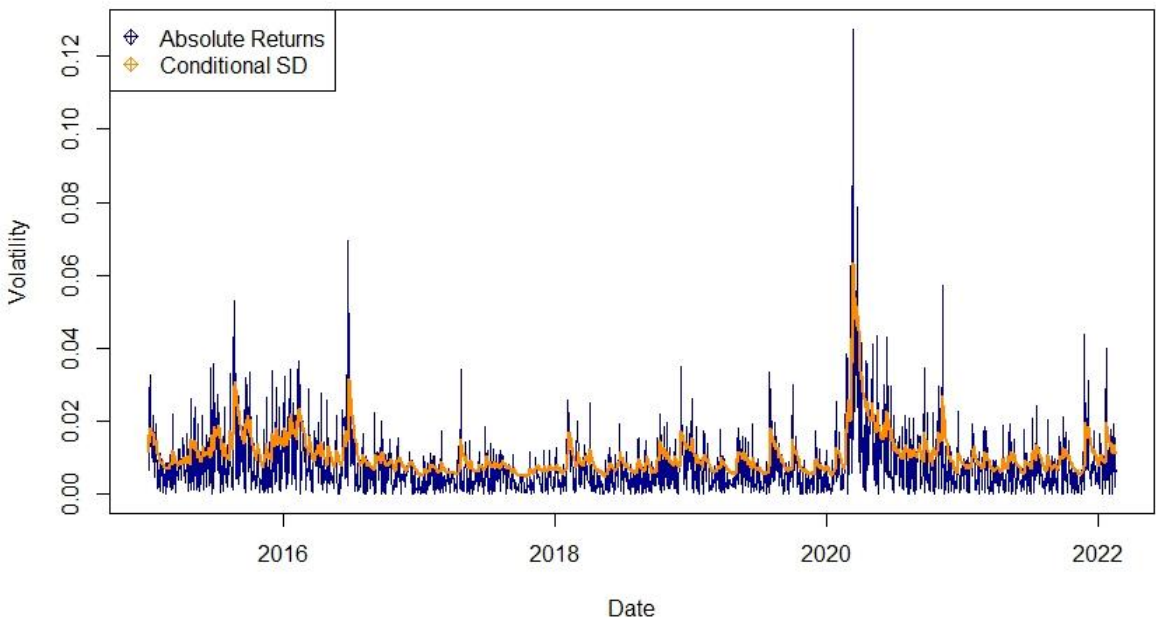


Hang Seng Volatility from 01-01-2015 until 20-02-2022

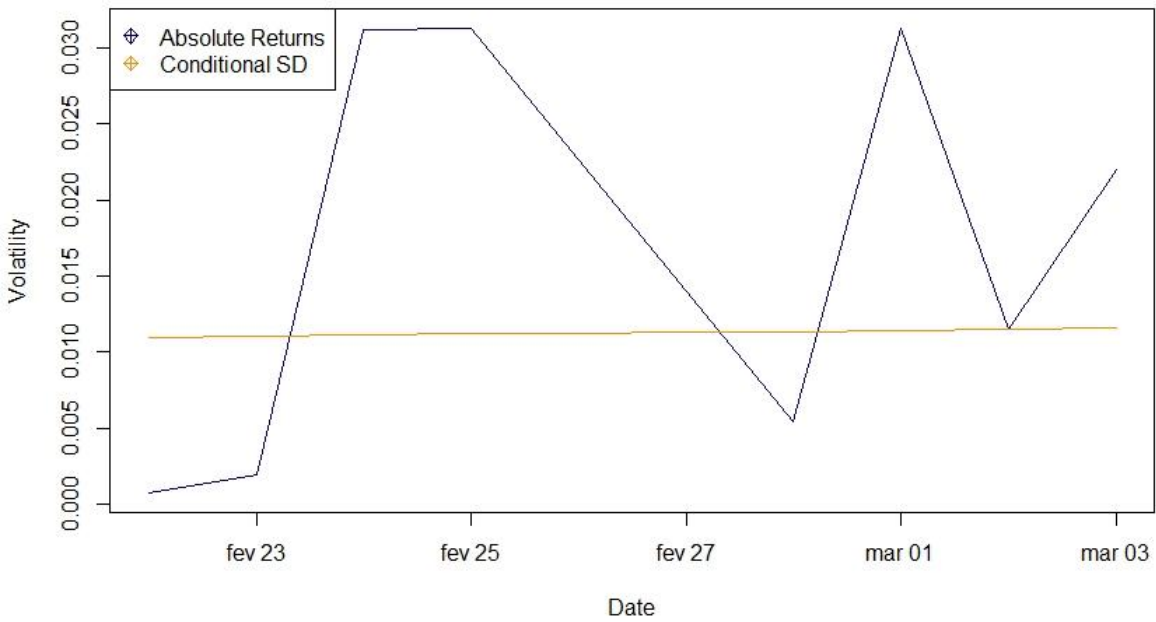


1.3. GARCH BY INDEX

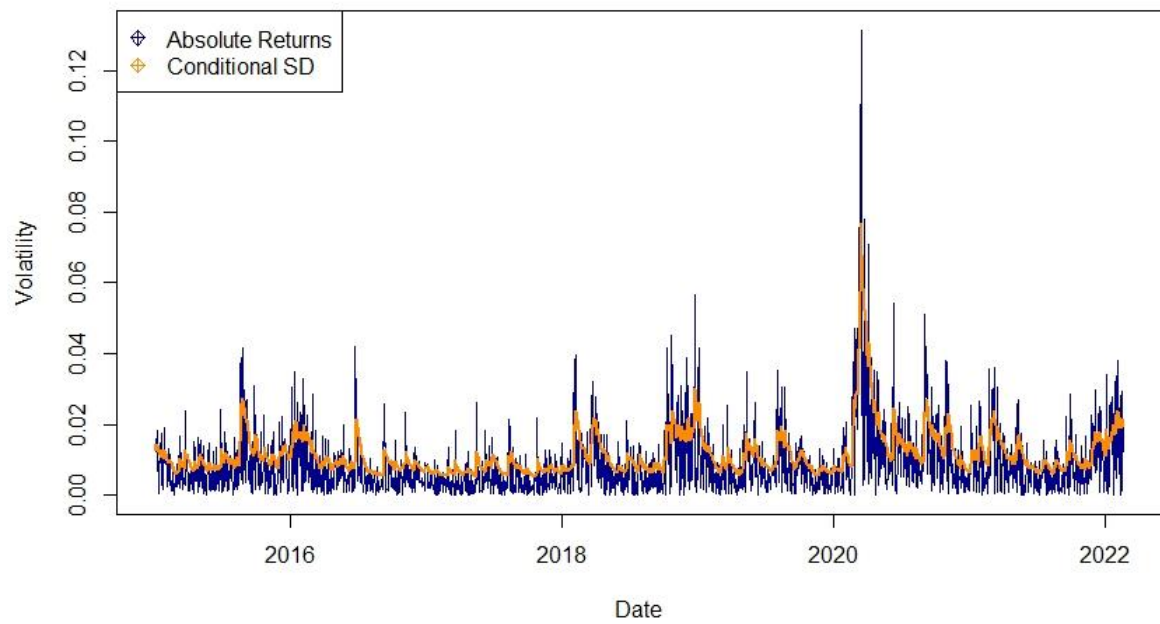
Euronext 100 GARCH (1,1) Training Dataset



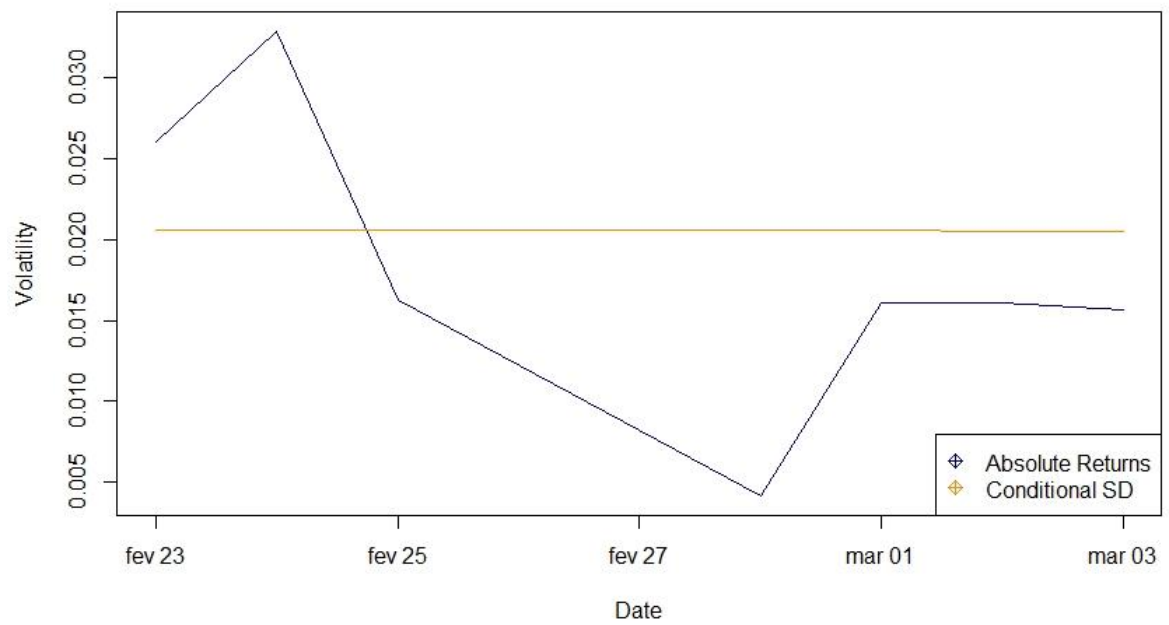
Euronext 100 GARCH (1,1) Test Set



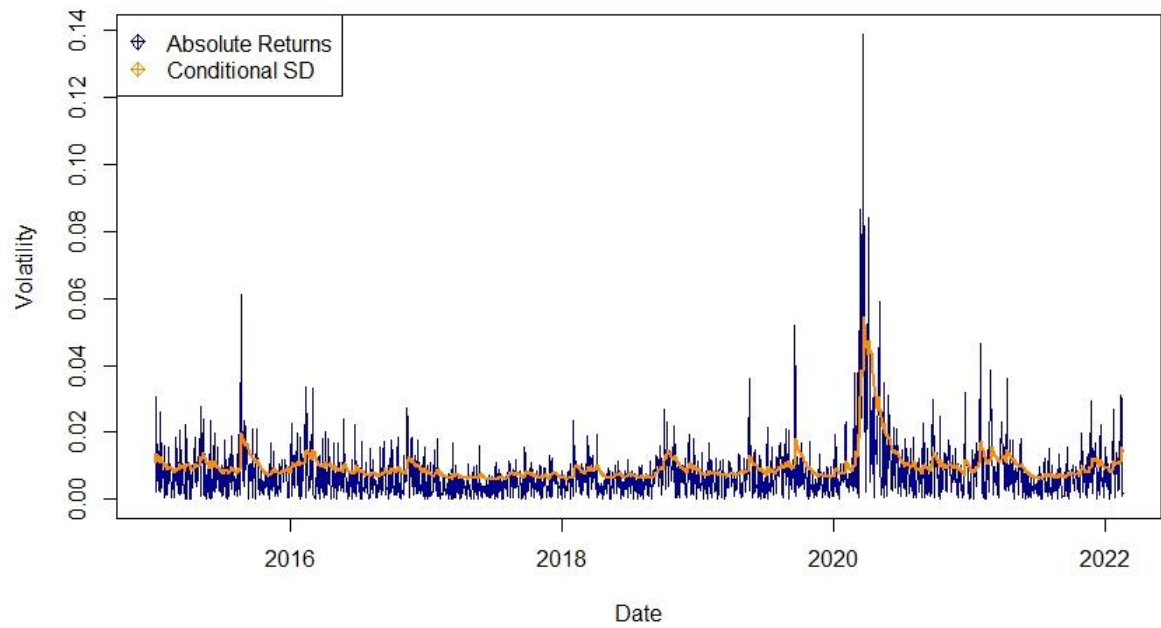
NASDAQ GARCH (1,1) Training Dataset



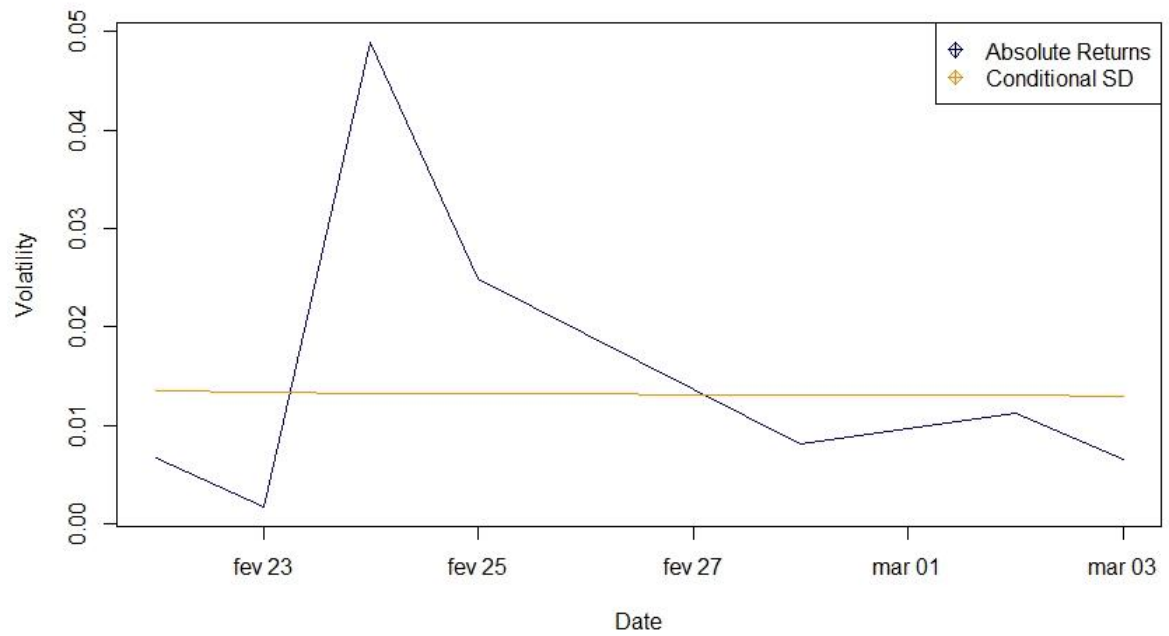
NASDAQ GARCH (1,1) Test Set



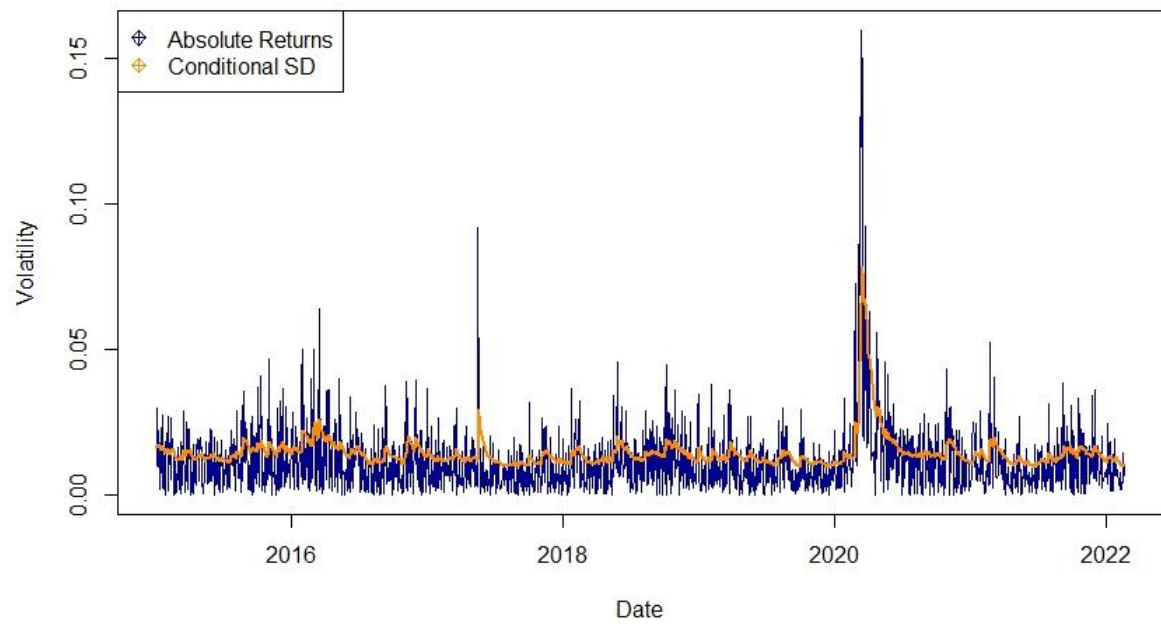
NIFTY 50 GARCH (1,1) Training Dataset



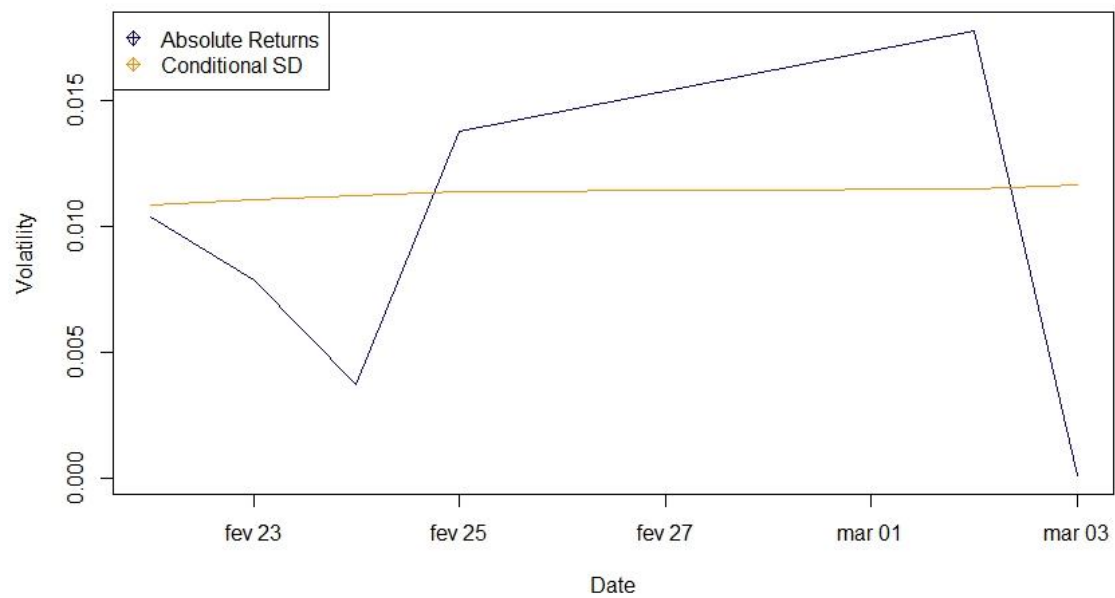
NIFTY 50 GARCH (1,1) Test Set



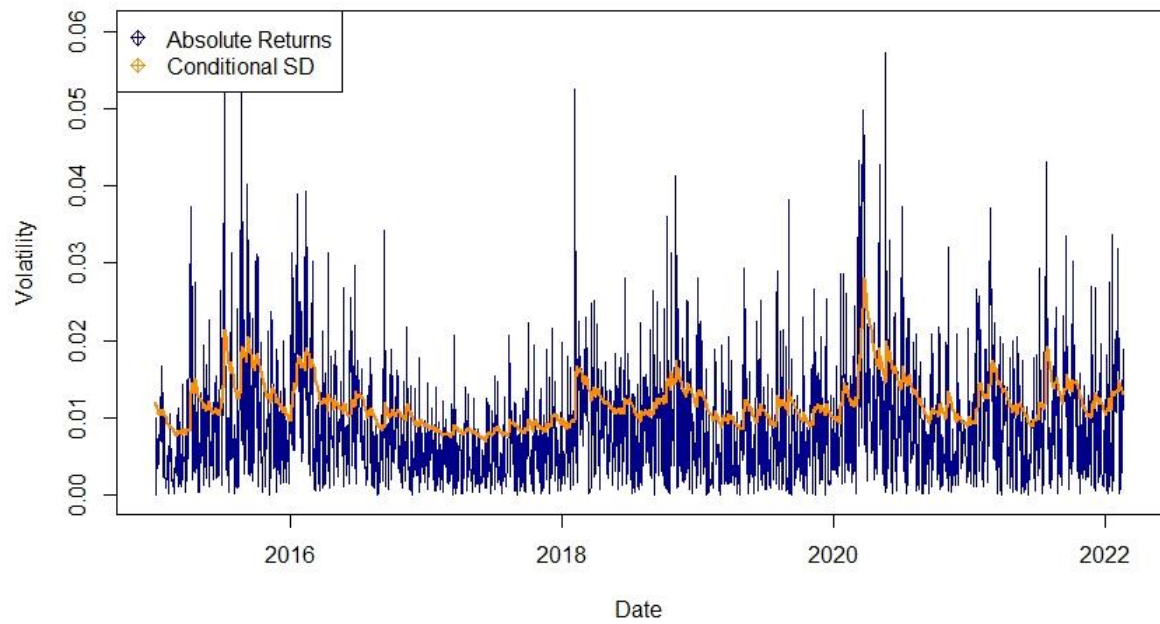
IBOVESPA GARCH (1,1) Training Dataset



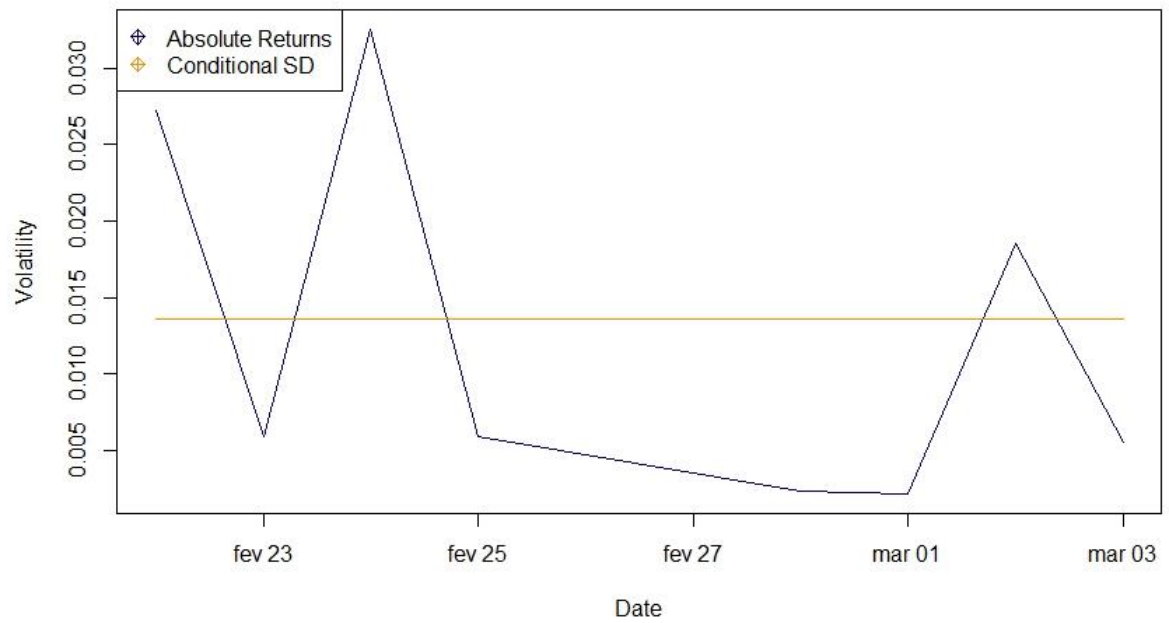
IBOVESPA GARCH (1,1) Test Set



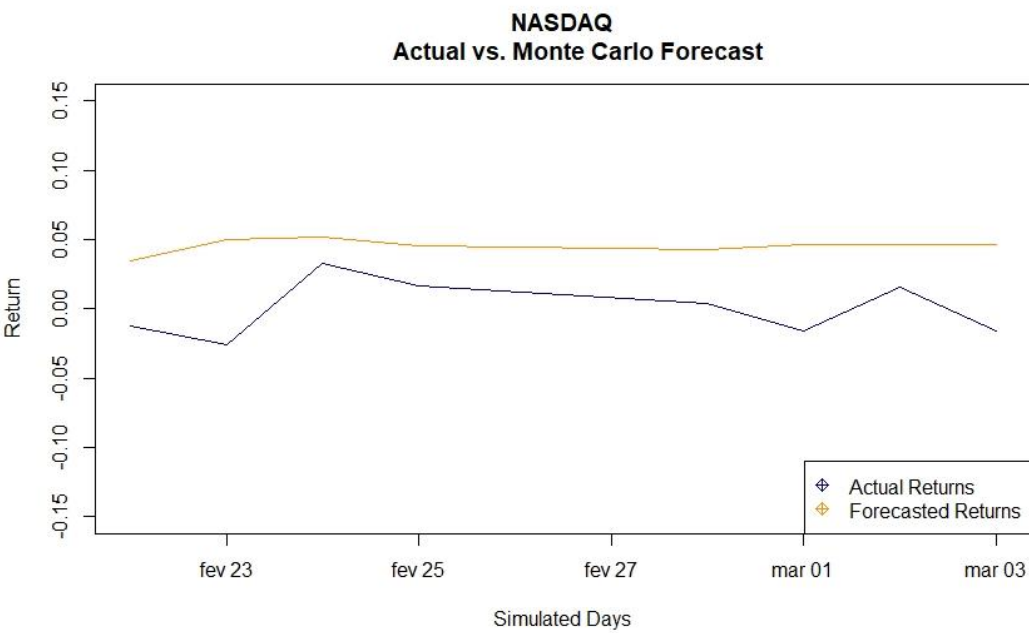
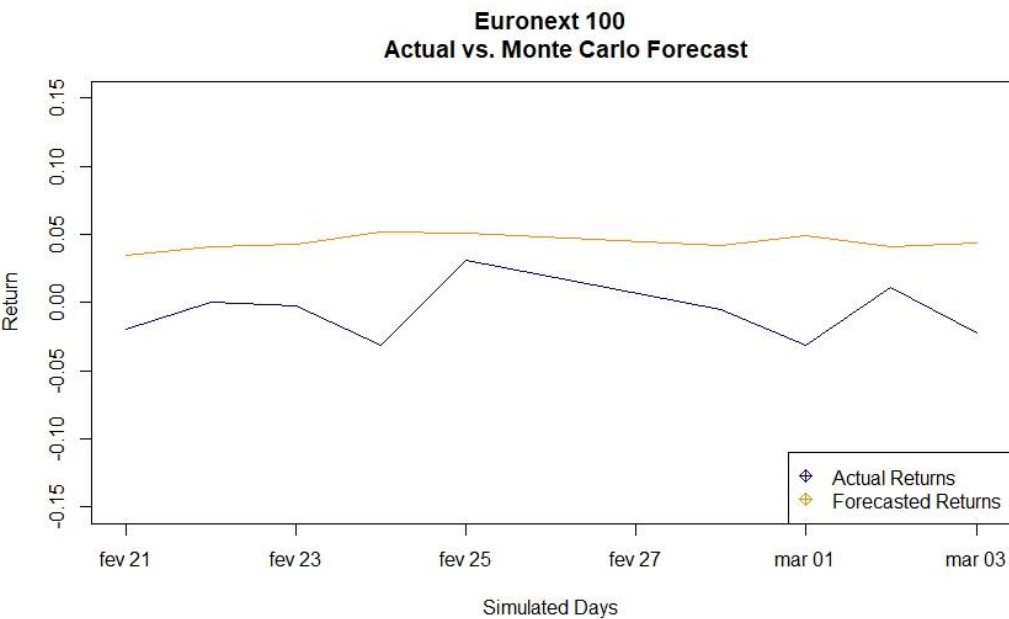
Hang Seng GARCH (1,1) Training Dataset

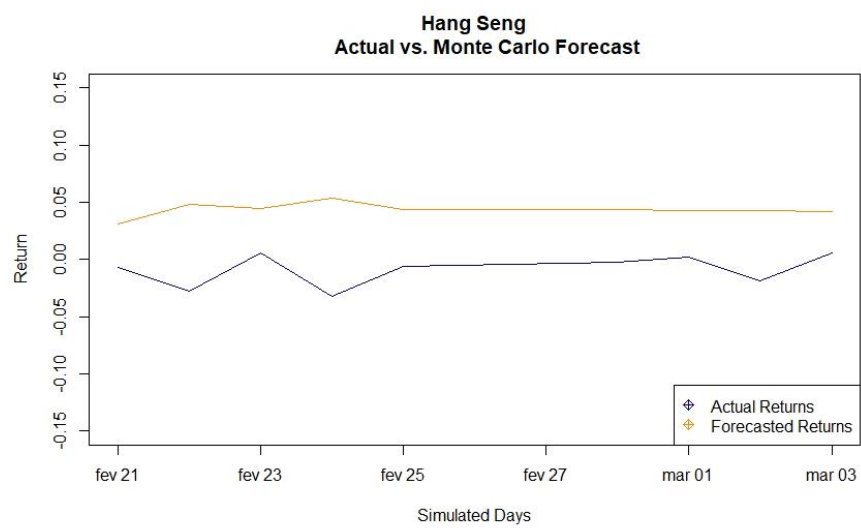
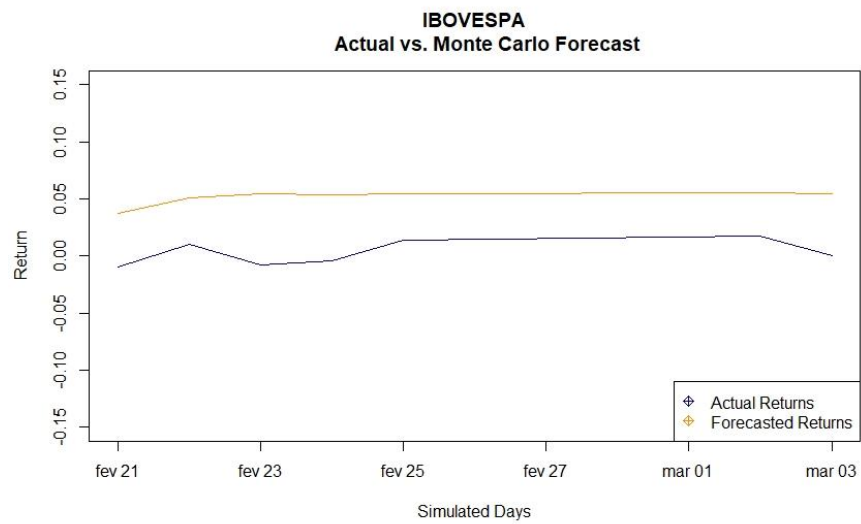
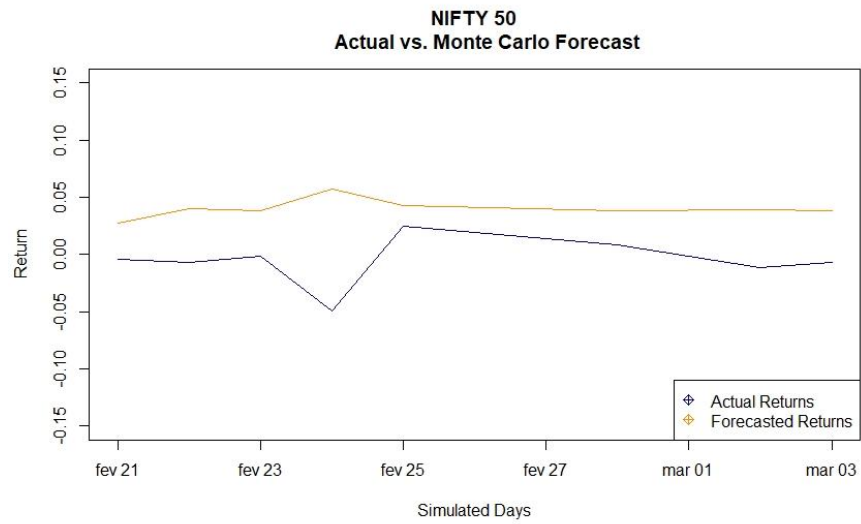


Hang Seng GARCH (1,1) Test Set



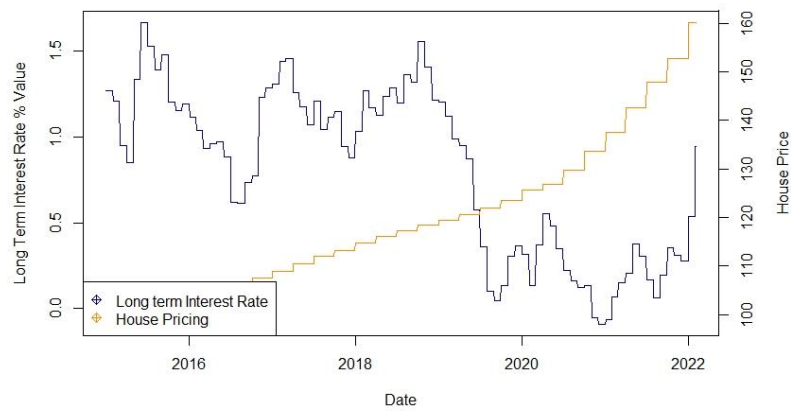
1.4. MONTE CARLO BY INDEX



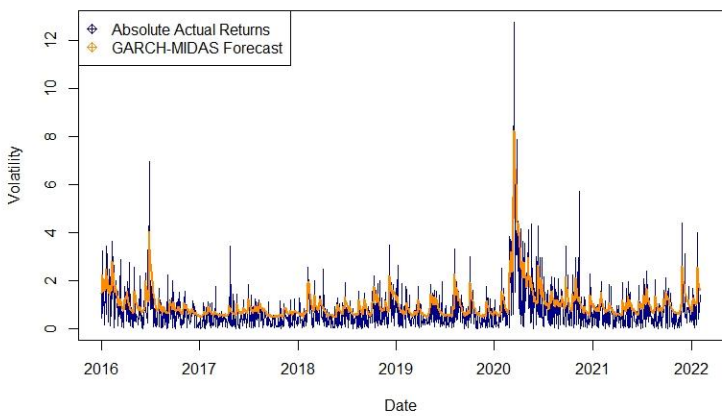


1.5. GARCH-MIDAS BY INDEX

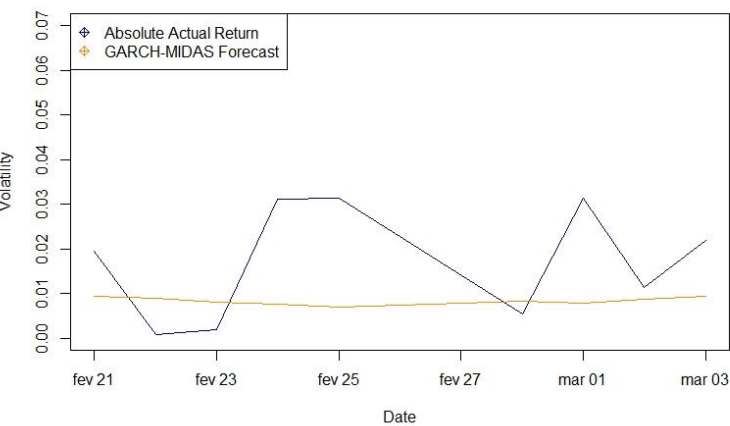
Eurozone Long Term Interest Rate and House Pricing



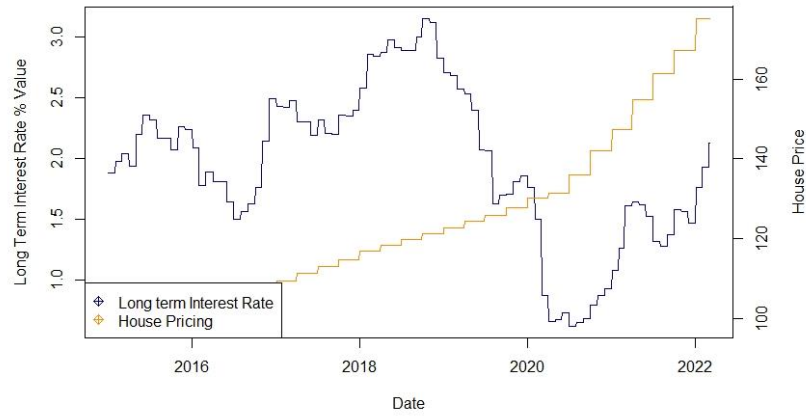
Euronext 100 GARCH-MIDAS Training Dataset



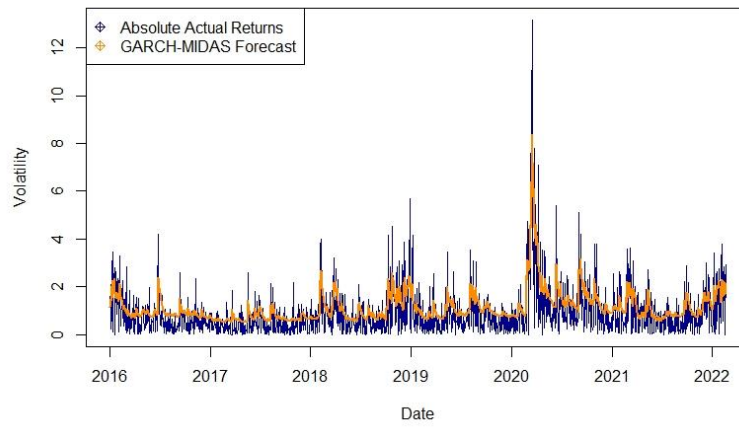
Euronext 100 GARCH-MIDAS Test



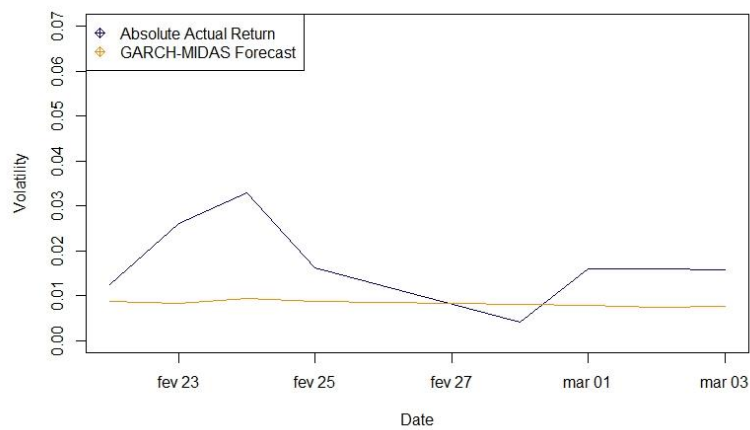
United States of America Long Term Interest Rate and House Pricing



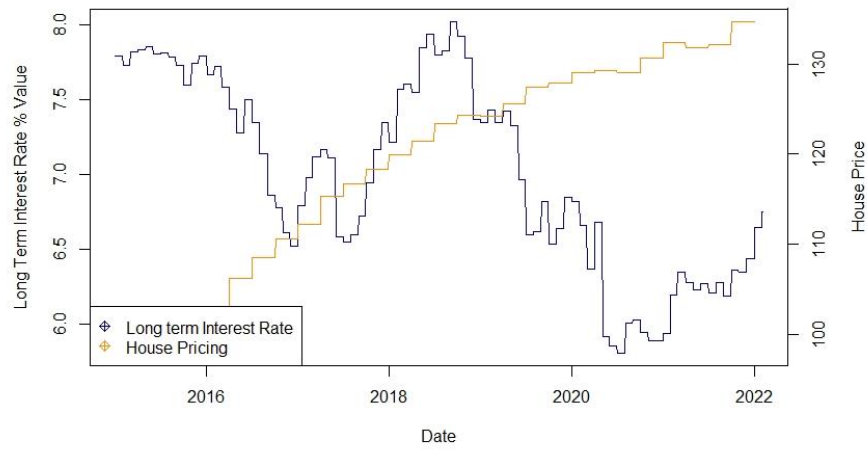
NASDAQ GARCH-MIDAS Training Dataset



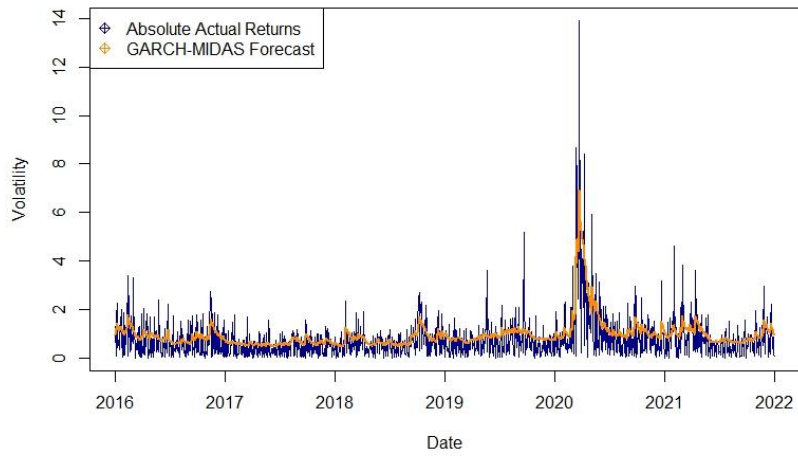
NASDAQ GARCH-MIDAS Test



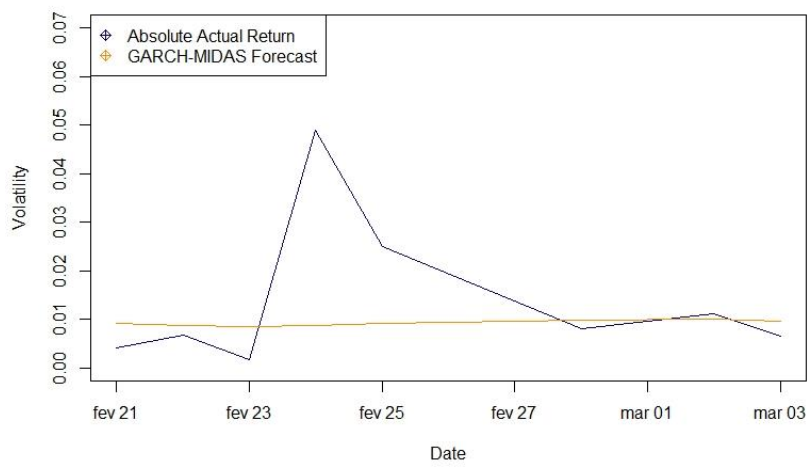
India Long Term Interest Rate and House Pricing



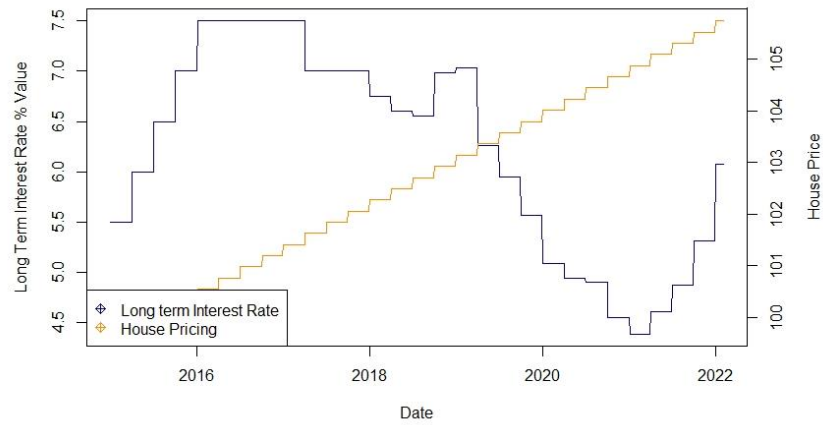
NIFTY 50 GARCH-MIDAS Training Dataset



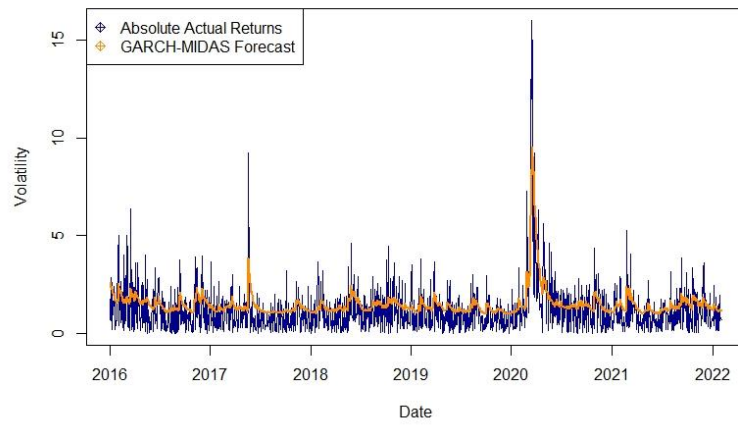
NIFTY 50 GARCH-MIDAS Test



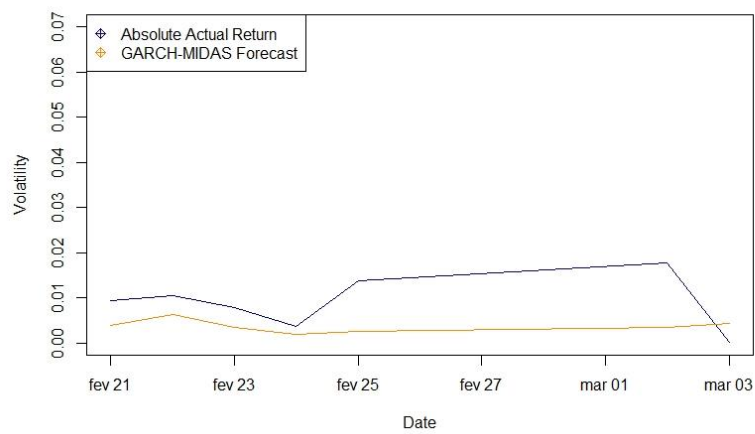
Brasil Long Term Interest Rate and House Pricing



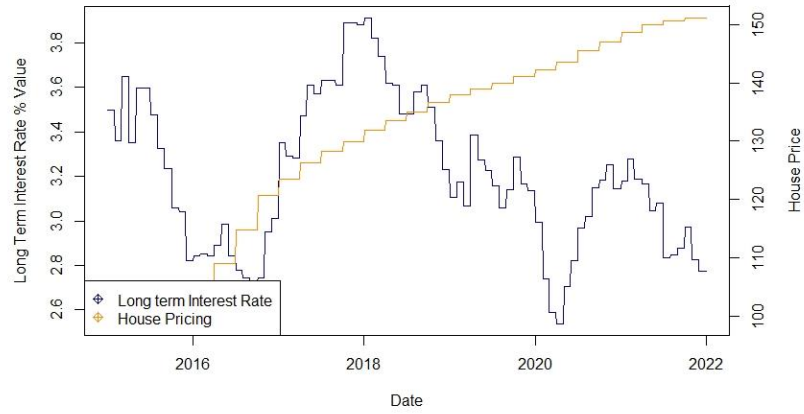
IBOVESPA GARCH-MIDAS Training Dataset



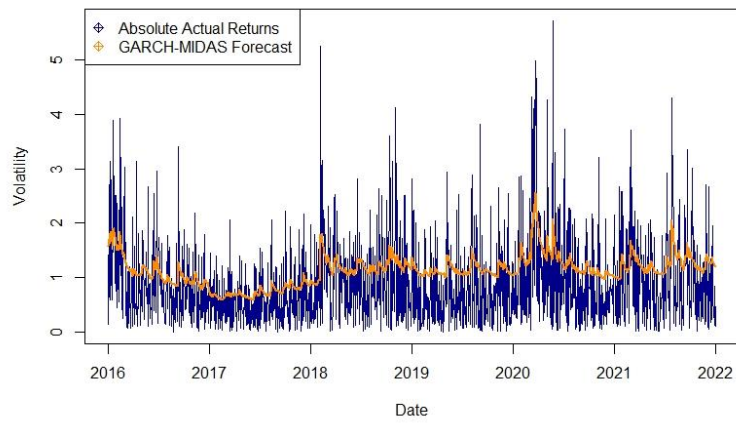
IBOVESPA GARCH-MIDAS Test



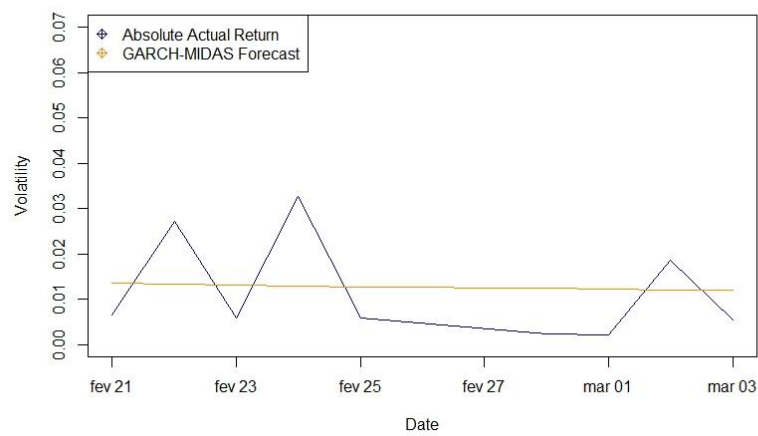
Hong Kong Long Term Interest Rate and House Pricing



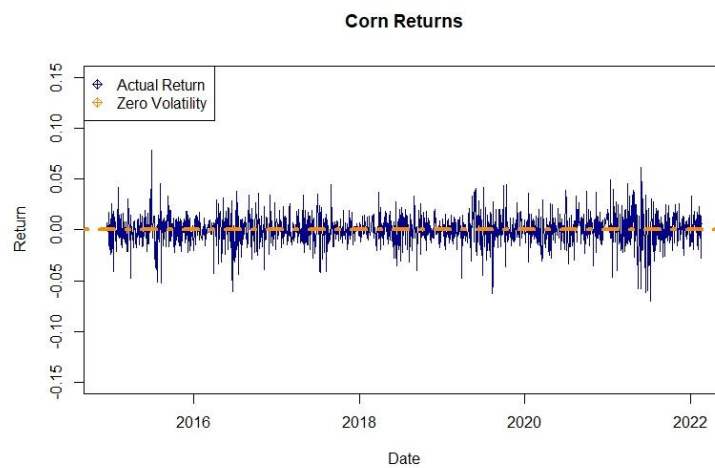
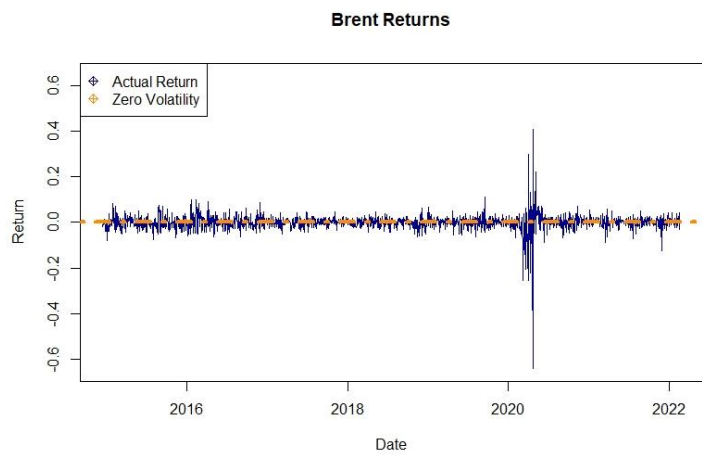
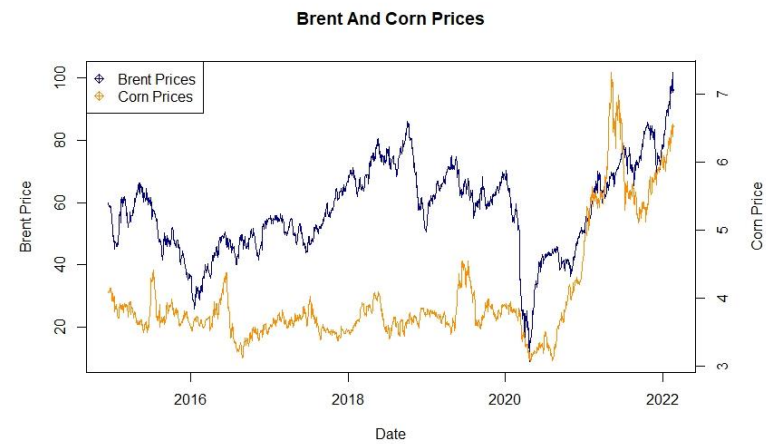
Hang Seng GARCH-MIDAS Training Dataset



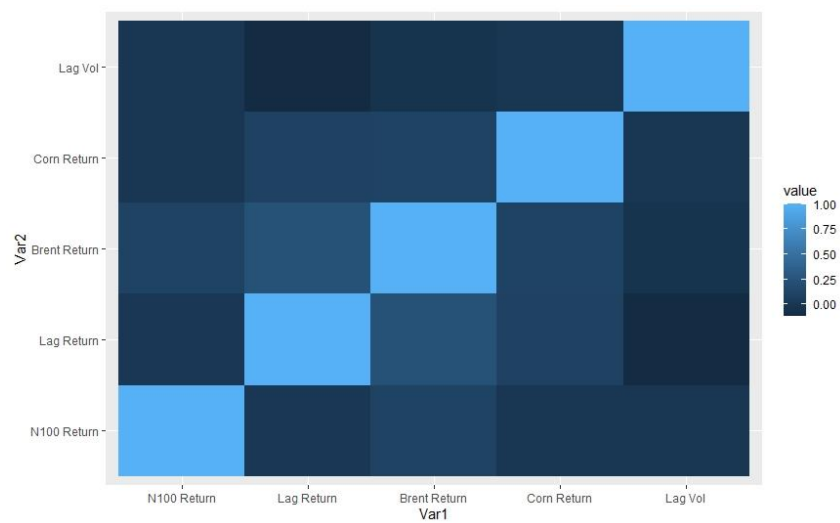
Hang Seng GARCH-MIDAS Test



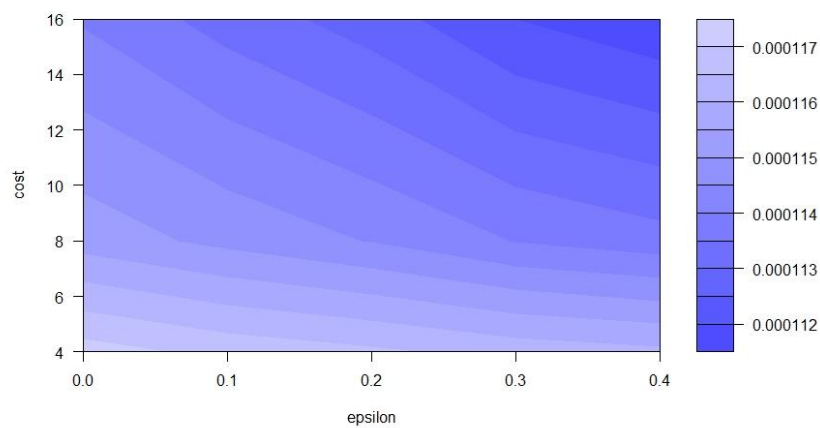
1.6. SUPPORT VECTOR REGRESSION BY INDEX



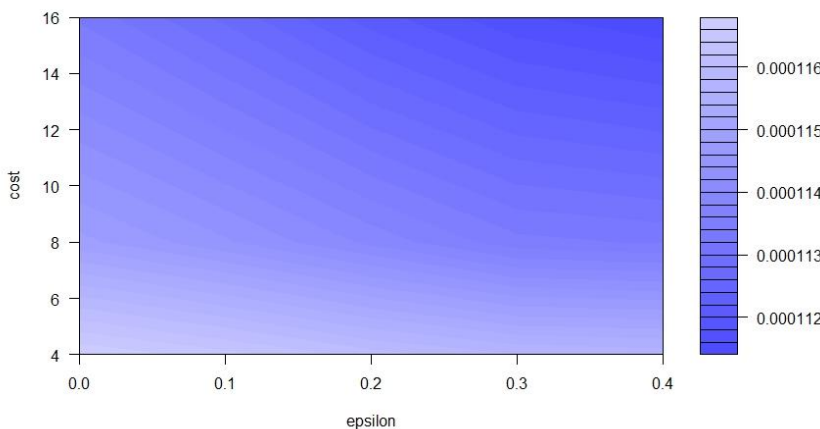
1.6.1. Euronext 100



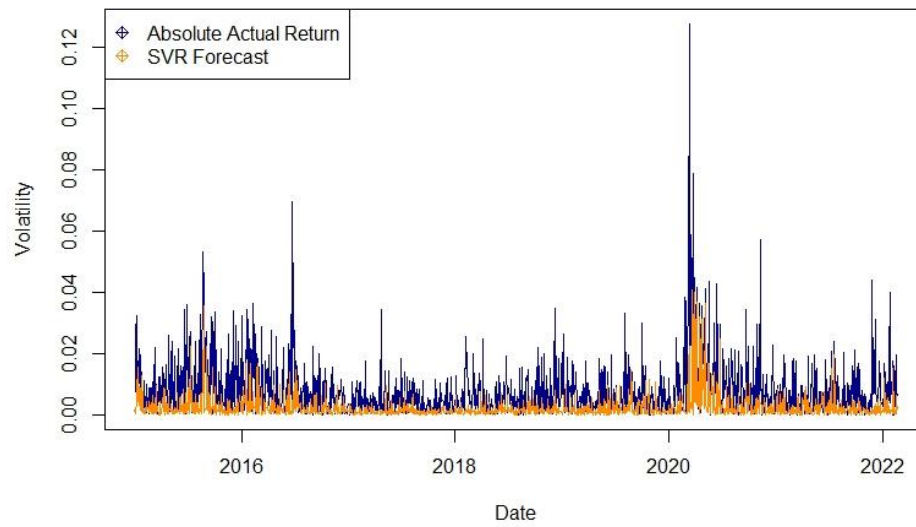
Euronext 100 SVR Model Performance on Training Dataset



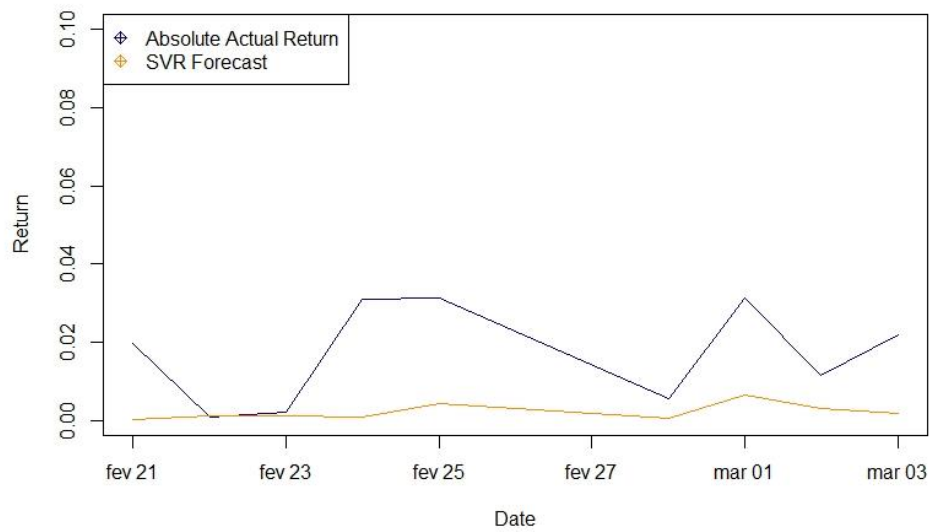
Euronext 100 SVR Model Performance Test Dataset



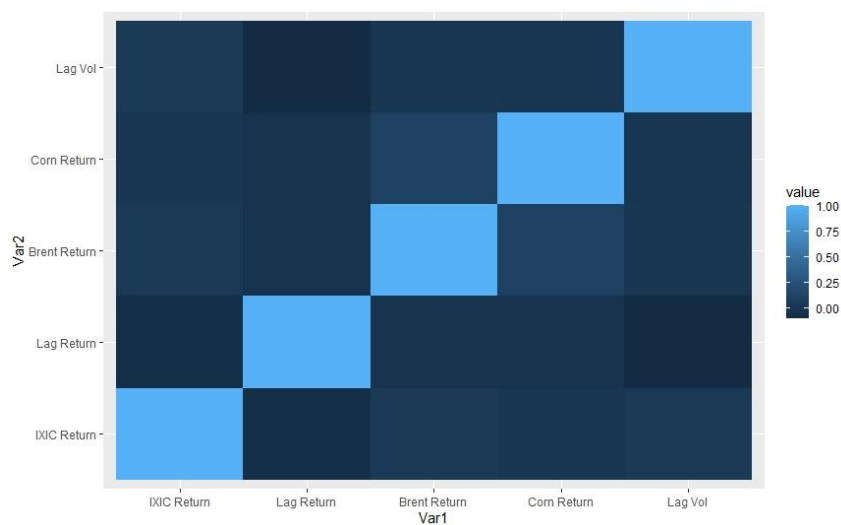
Euronext 100 SVR Training



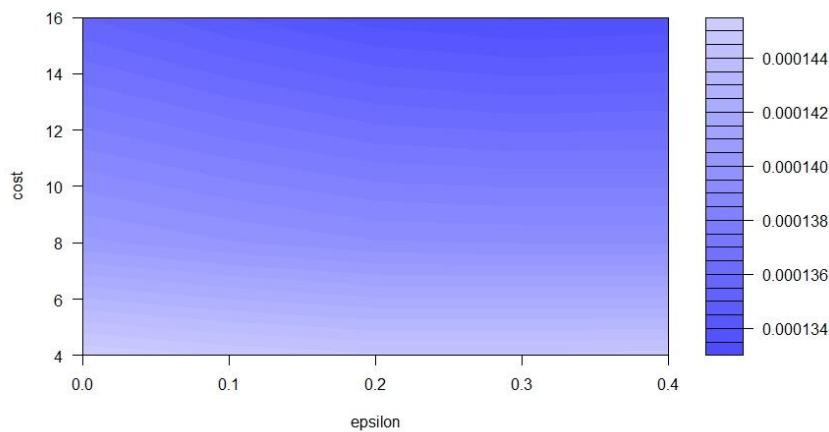
Euronext 100 SVR Test



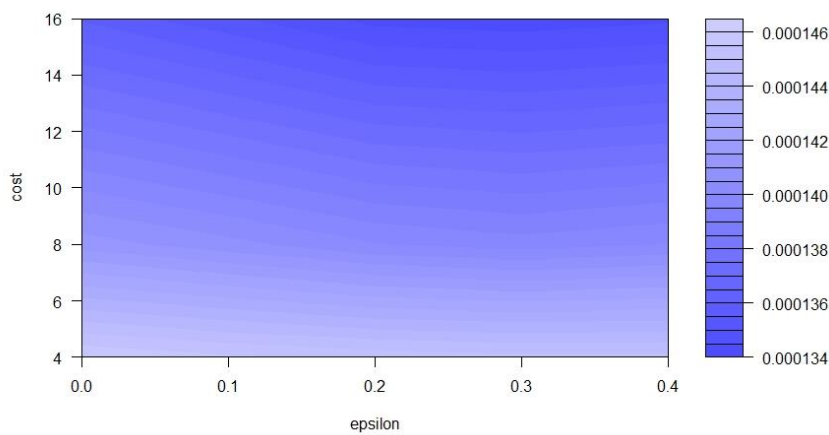
1.6.2. NASDAQ



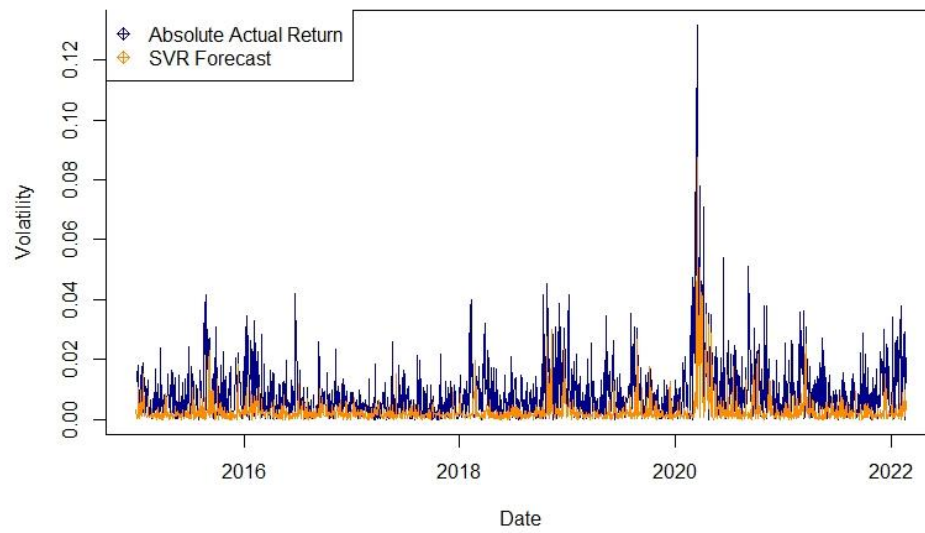
NASDAQ SVR Model Performance on Training Dataset



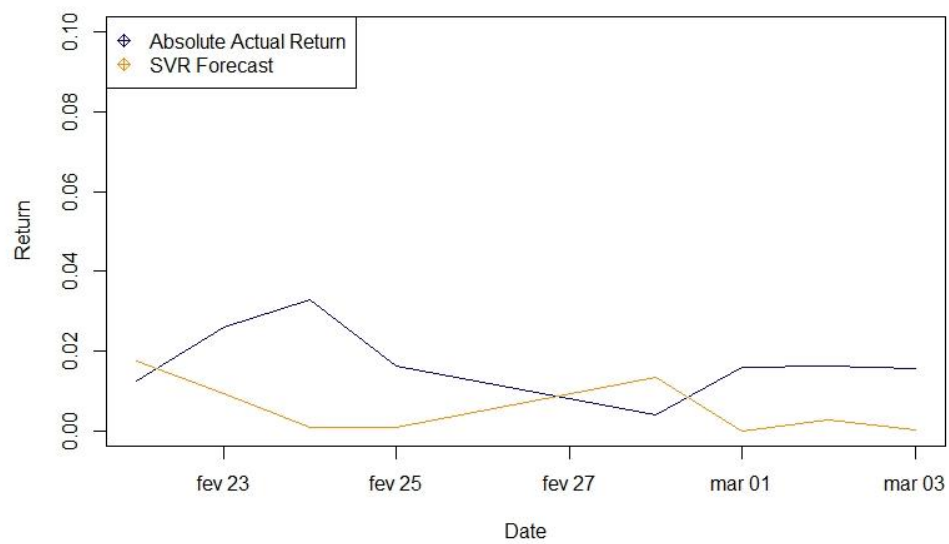
NASDAQ SVR Model Performance Test Dataset



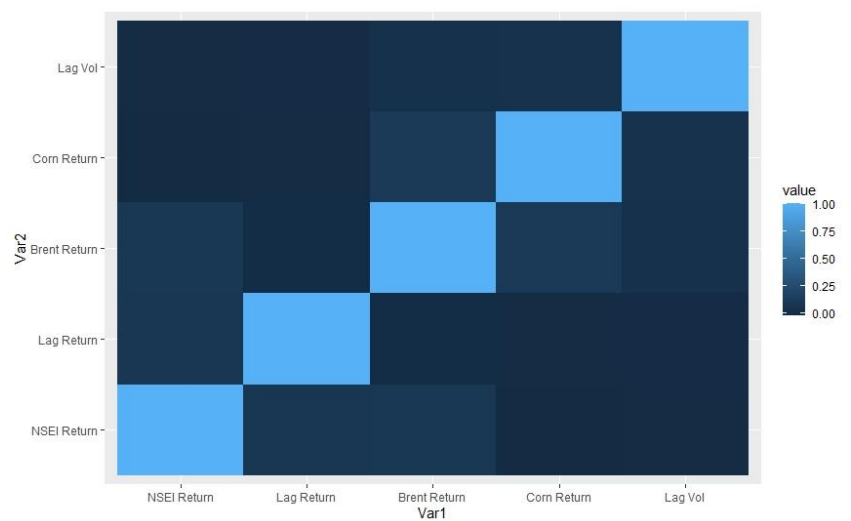
NASDAQ SVR Training



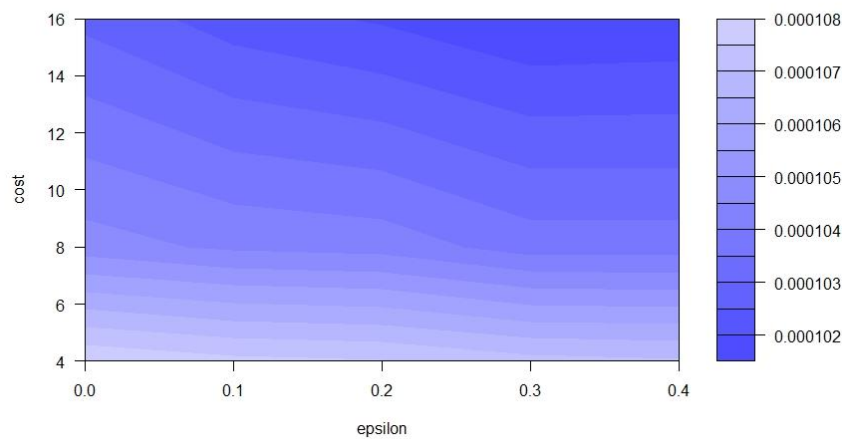
NASDAQ SVR Test



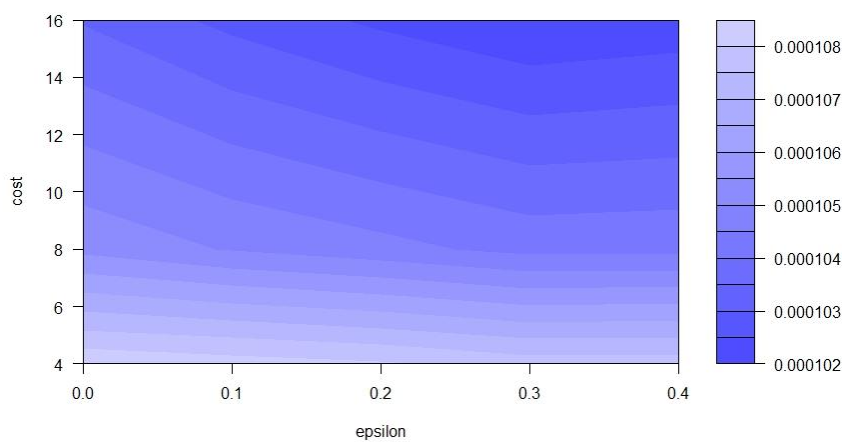
1.6.3. NIFTY 50



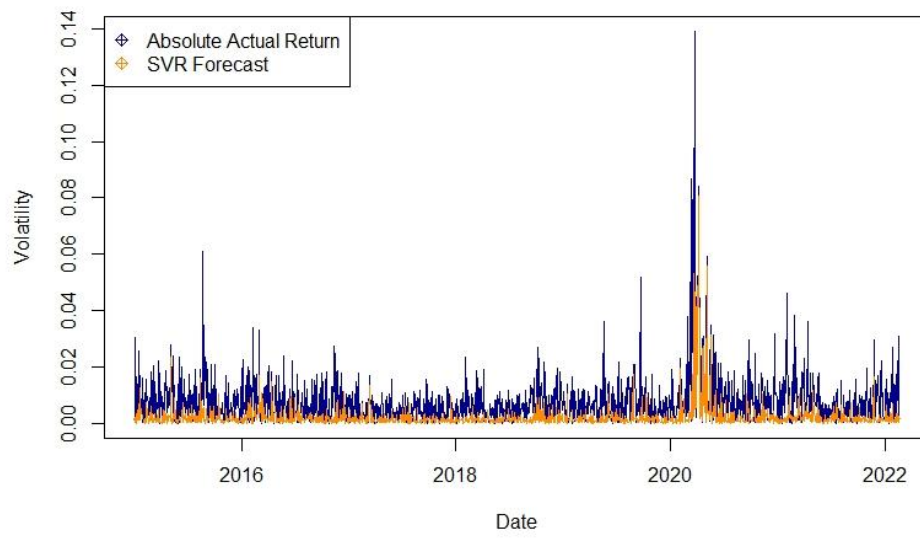
NIFTY 50 SVR Model Performance on Training Dataset



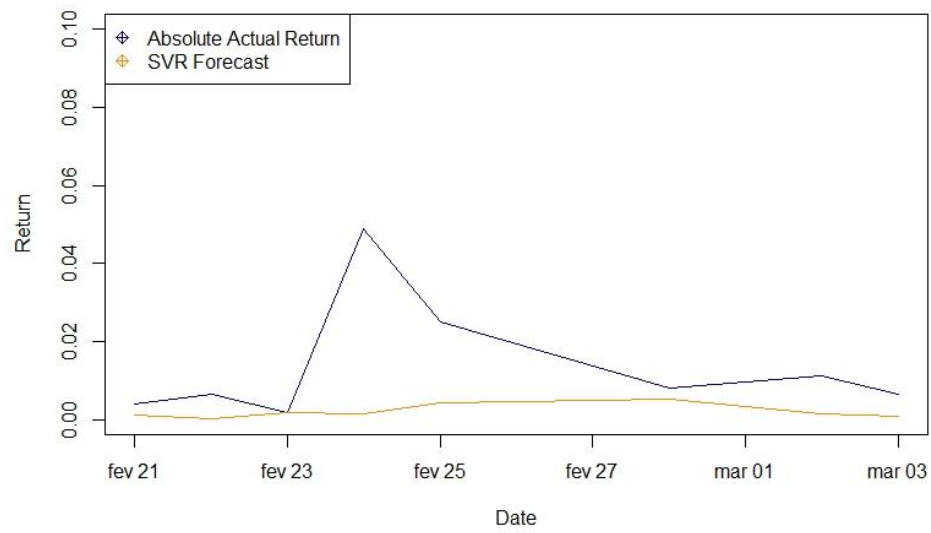
NIFTY 50 SVR Model Performance Test Dataset



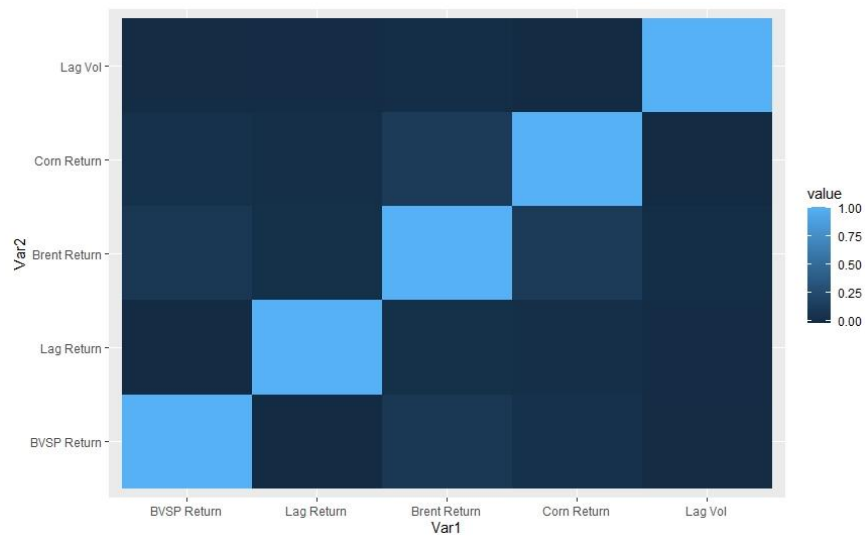
NIFTY 50 SVR Training



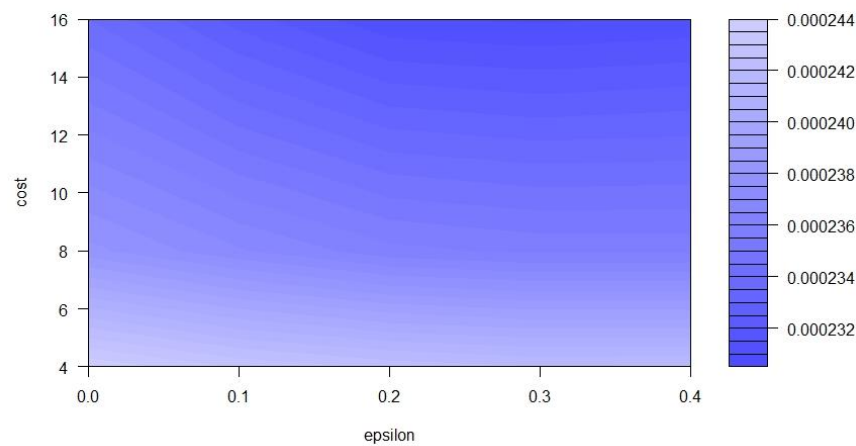
NIFTY 50 SVR Test



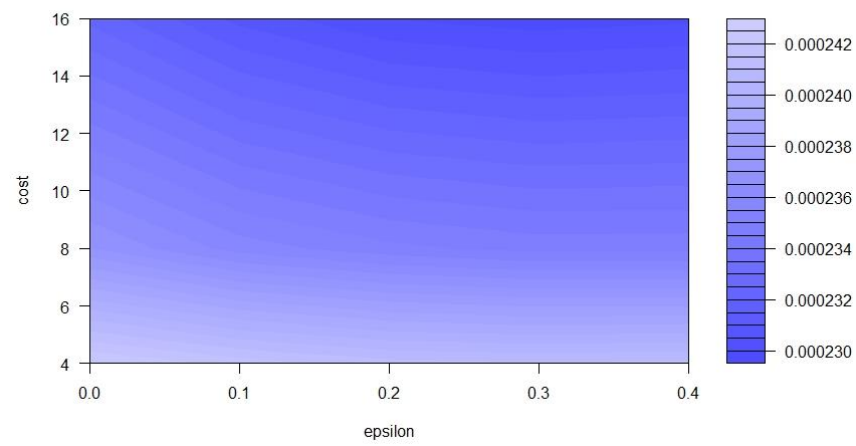
1.6.4. IBOVESPA



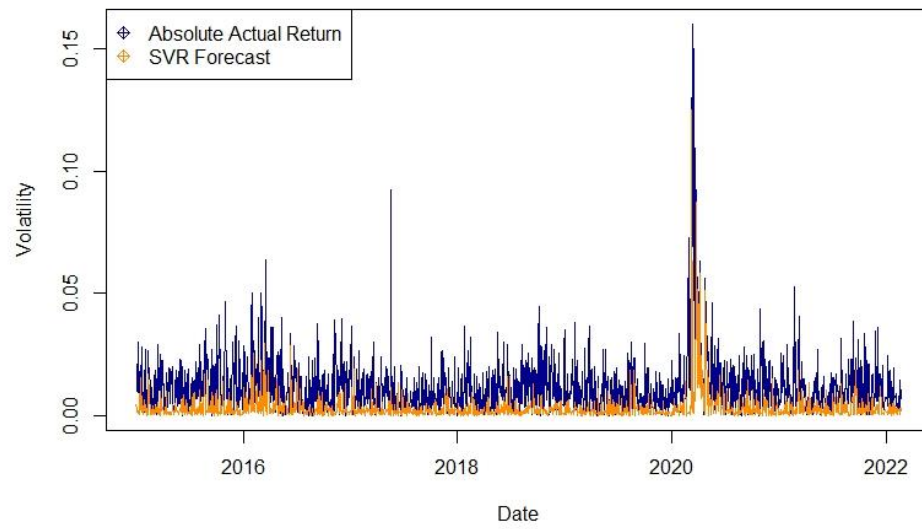
IBOVESPA SVR Model Performance on Training Dataset



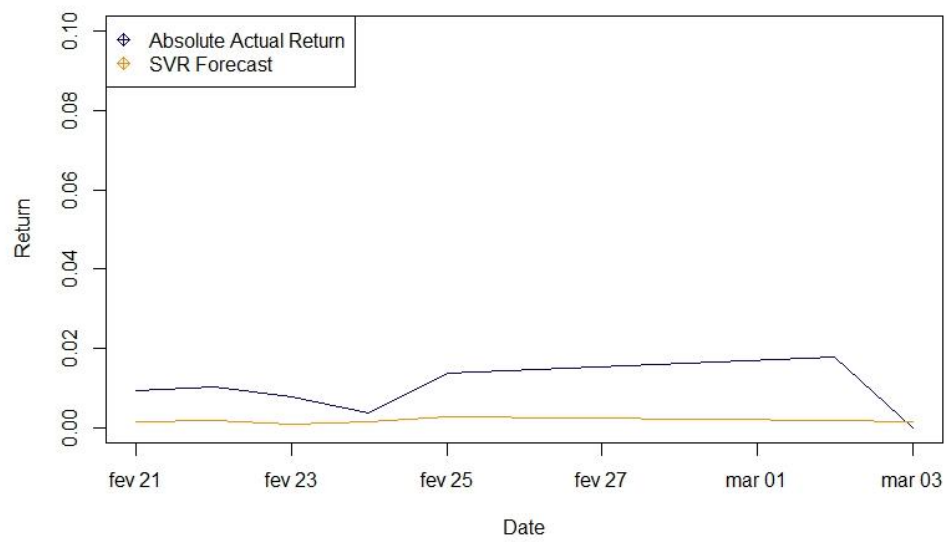
IBOVESPA SVR Model Performance Test Dataset



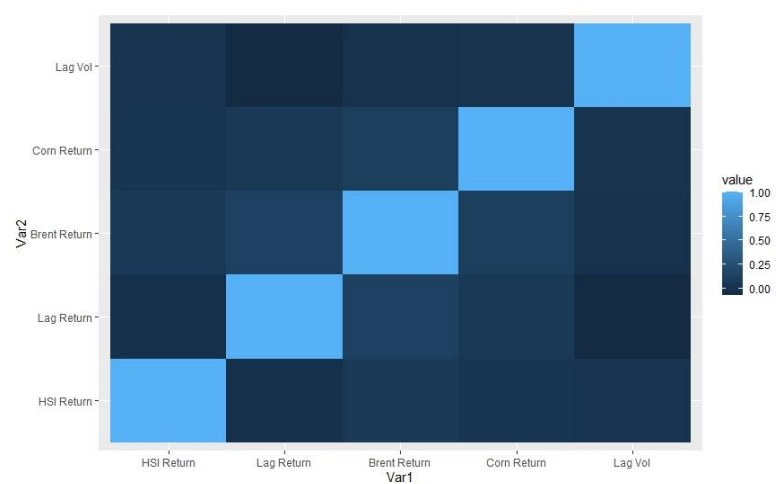
IBOVESPA SVR Training



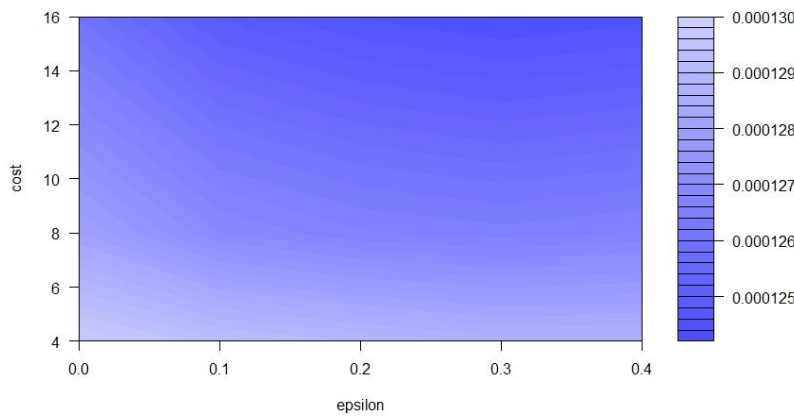
IBOVESPA SVR Test



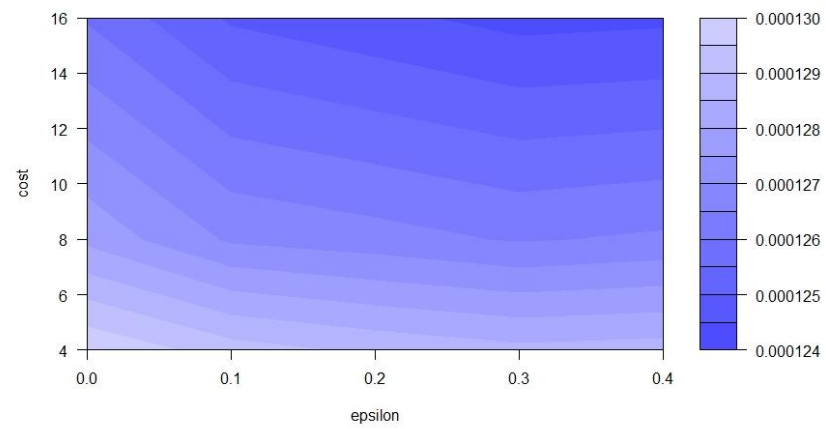
1.6.5. Hang Seng



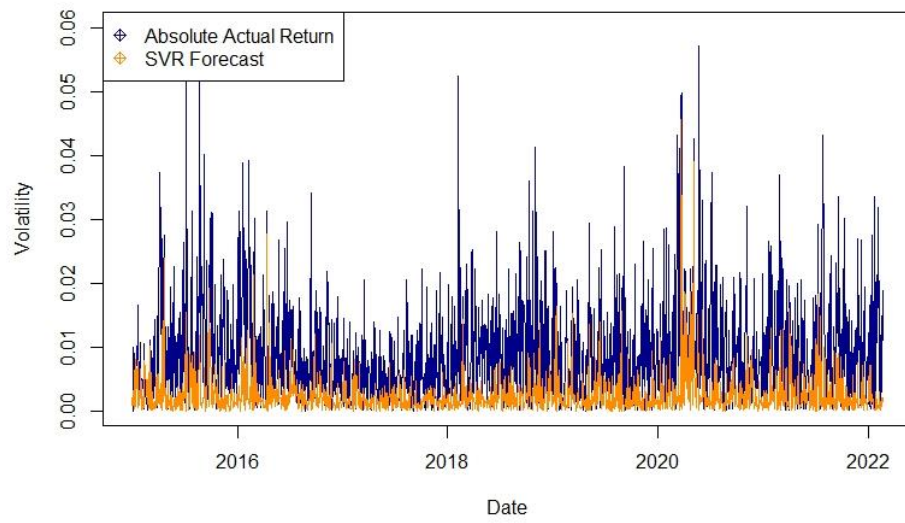
Hang Seng SVR Model Performance on Training Dataset



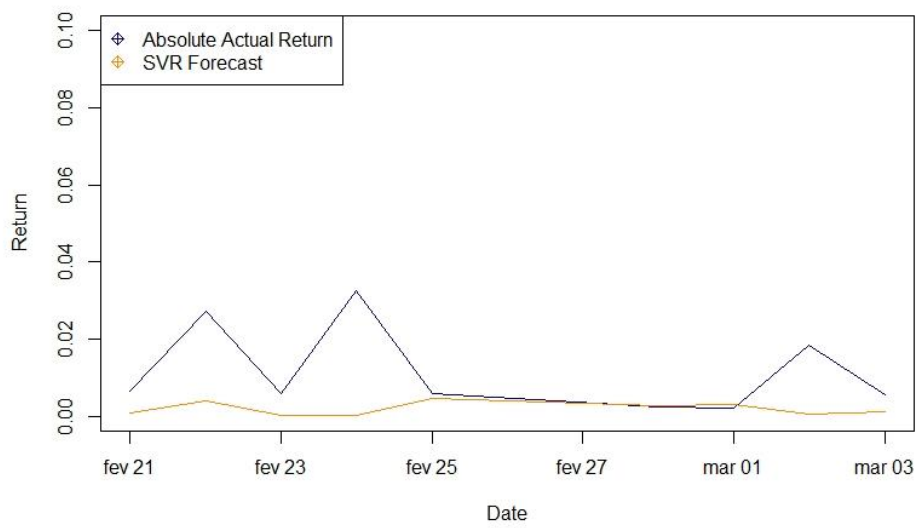
Hang Seng SVR Model Performance Test Dataset



Hang Seng SVR Training

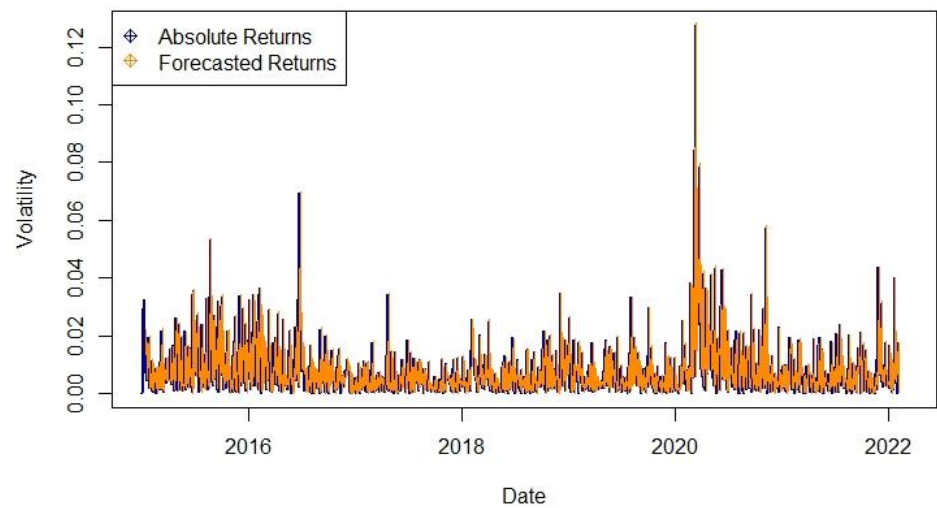


Hang Seng SVR Test

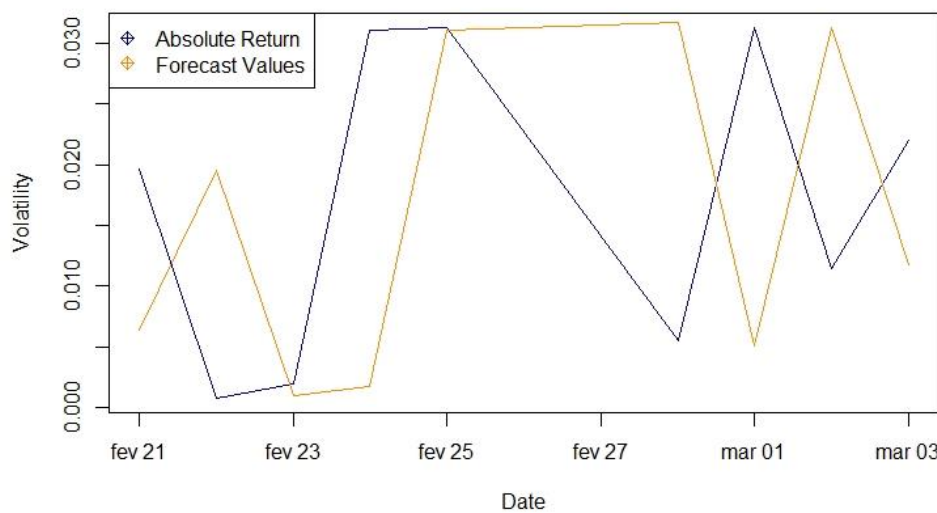


1.7. LONG SHORT-TERM MEMORY BY INDEX

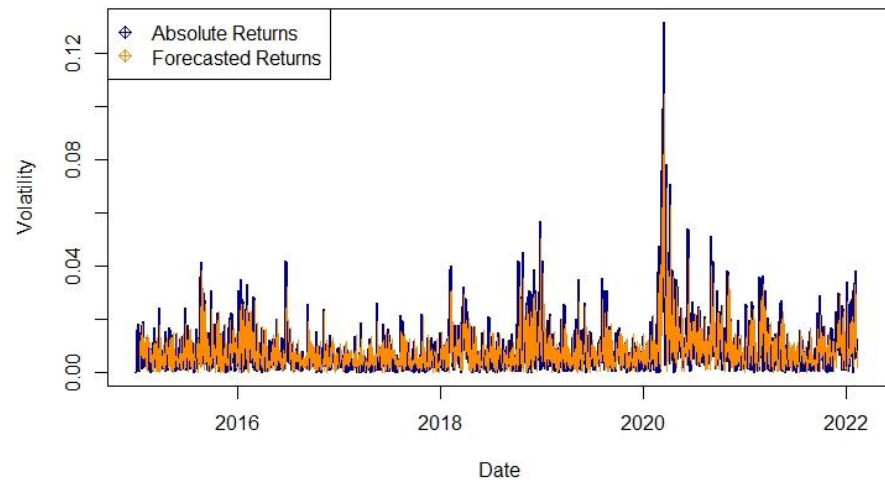
Euronext 100 LSTM Training



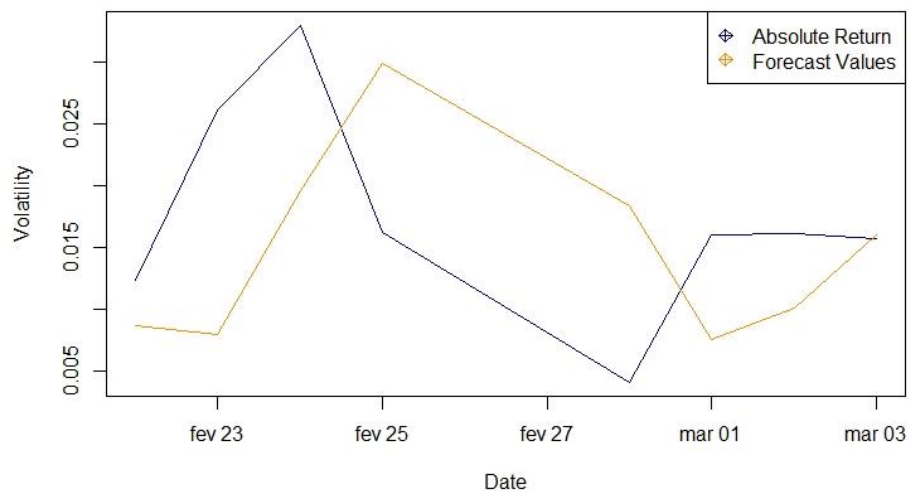
Euronext 100 LSTM Test



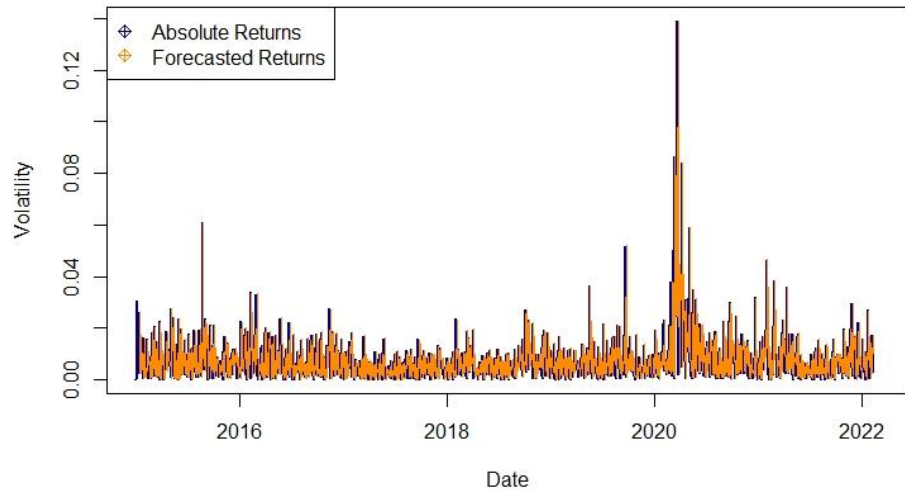
NASDAQ LSTM Training



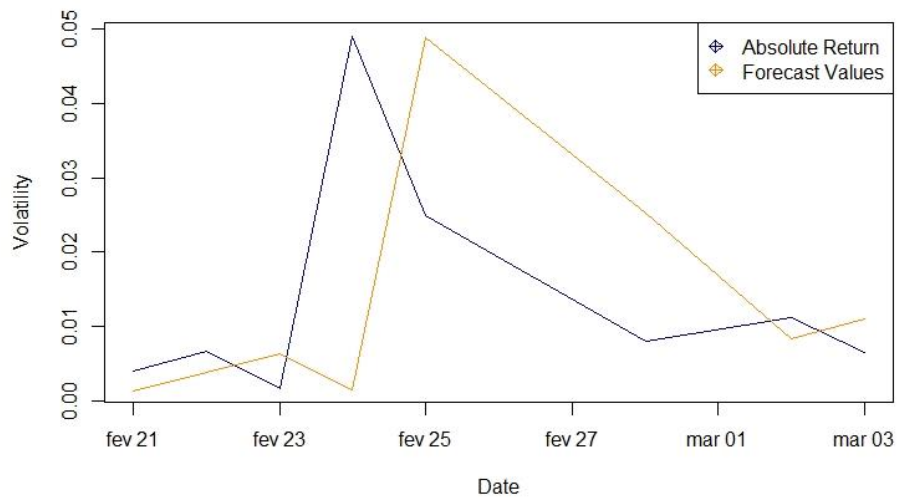
NASDAQ LSTM Test



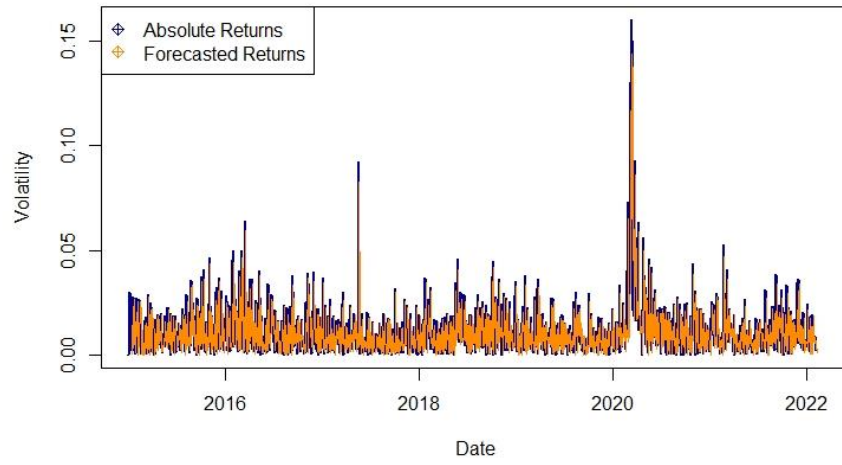
NIFTY 50 LSTM Training



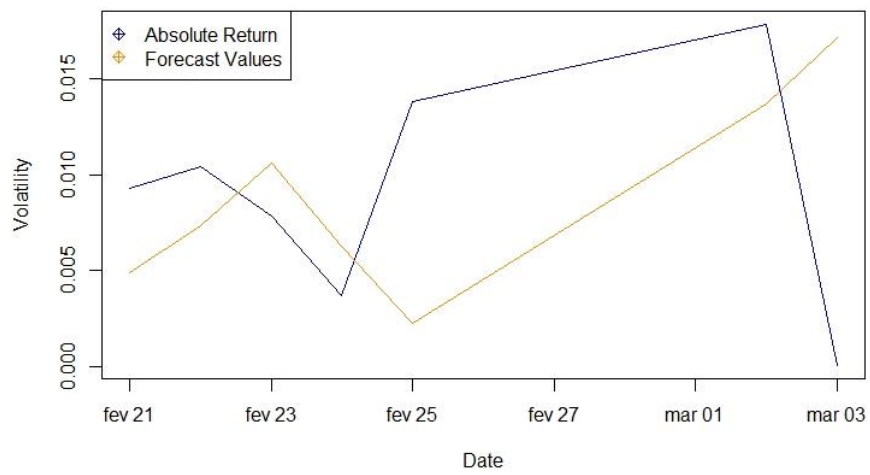
NIFTY 50 LSTM Test



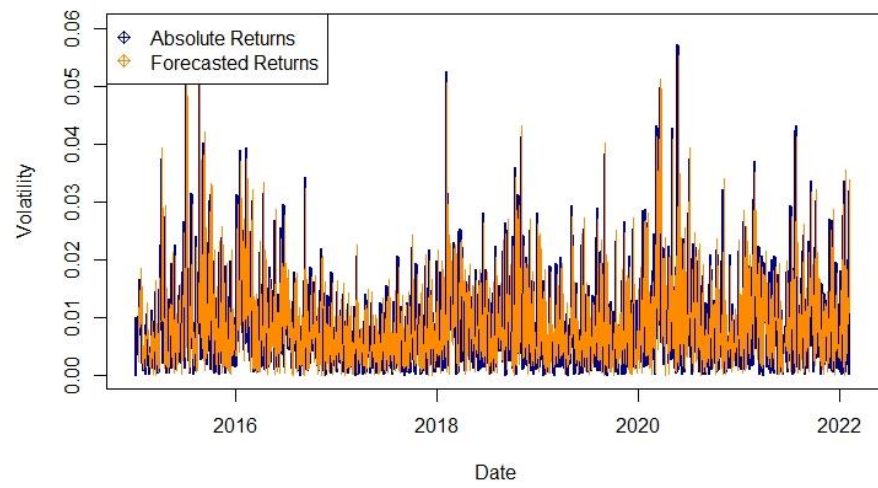
IBOVESPA LSTM Training



IBOVESPA LSTM Test



Hang Seng LSTM Training



Hang Seng LSTM Test

