

1)

Identify relevant regimes in the data

 $K = 2$ regimes (high volatility vs. low volatility)Alternative approaches: Multivariate
Clustering using additional variablesClassical approaches: Univariate
econometric modelling (benchmarks)

Markov Regression/Switching

Variable	Thematic area	Category
EUR/USD spot exchange rate	FX theory	spot exchange rate (NER)
log first diff of EUR/USD spot rate	FX theory	spot exchange rate log return
rolling volatility of log first diff of EUR/USD spot rate	FX theory	spot exchange rate log return volatility
Central Bank Policy rates	FX theory	interest rate
Central Bank Policy rates differentials	FX theory	interest rate <u>differential</u>
3M Interbank lending rates	FX theory	interest rate
3M Interbank lending rates differentials	FX theory	interest rate <u>differential</u>
WTI Oil	Energy commodity	spot price
Natural Gas	Energy commodity	spot price
rolling volatility of log first diff of WTI Oil	Energy commodity	rolling log return volatility
rolling volatility of log first diff of Natural Gas	Energy commodity	rolling log return volatility
Futures Trading Open Interest	Degree of Financial Integration	Open Interest
Futures Trading Volume	Degree of Financial Integration	Trading Volume
VIX Index	(Market-) Volatility	Volatility Index

B1

Variable	Thematic area	Category
log first diff of EUR/USD spot rate	FX theory	spot exchange rate log return
Central Bank Policy rates differentials	FX theory	interest rate <u>differential</u>
rolling volatility of log first diff of WTI Oil	Energy commodity	rolling log return volatility
rolling volatility of log first diff of Natural Gas	Energy commodity	rolling log return volatility

B2

Variable	Thematic area	Category
log first diff of EUR/USD spot rate	FX theory	spot exchange rate log return
Central Bank Policy rates differentials	FX theory	interest rate <u>differential</u>
rolling volatility of log first diff of WTI Oil	Energy commodity	rolling log return volatility
rolling volatility of log first diff of Natural Gas	Energy commodity	rolling log return volatility