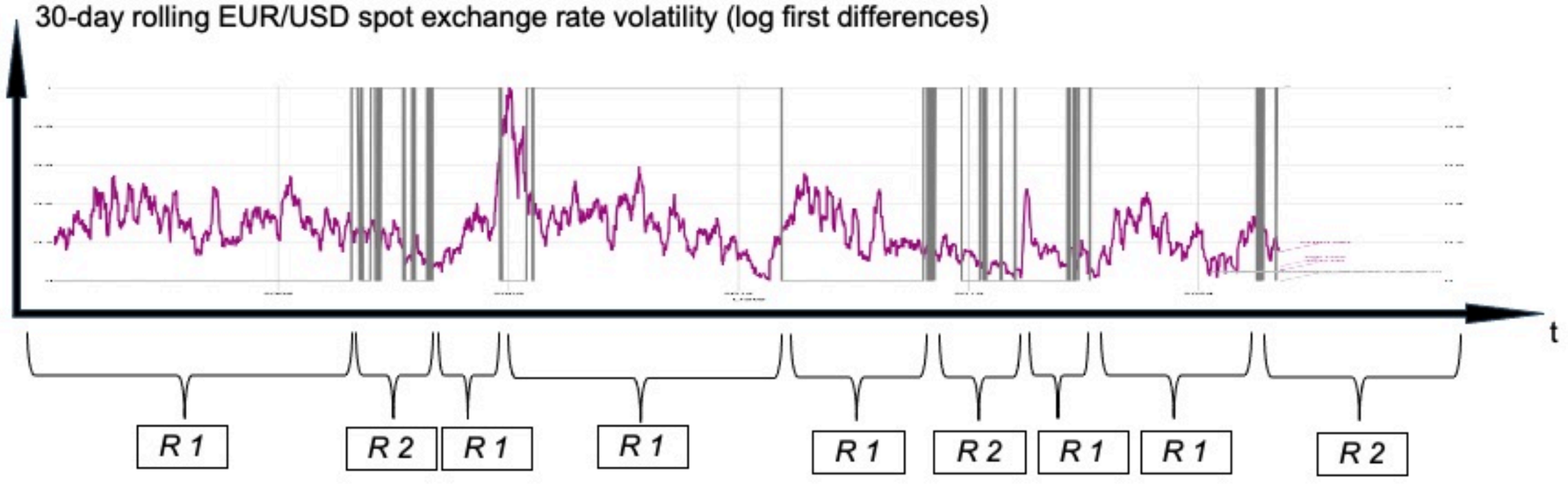
1) Identify relevant regimes in the data

K = 2 regimes (high volatility vs. low volatility)

Alternative approaches:
Multivariate Clustering using additional variables

Classical approaches:
Univariate econometric modelling (benchmarks)



2) Analyze and compare the regimes

Evaluation metric	Source package (version)	Category	Value range	Interpretation
Silhouette Score	scikit-learn (1.7.2)	Clustering Scores	[-1, 1]	1 being best, -1 being worst, values near 0 indicate overlapping clusters.
RCM	[AB98]	MSM-Score	[0, 100]	0 (perfect regime classification), 100 (failure to detect any regime classification)
Crisis overlap percentage	Own calculations	Combined	[0, 100]	Percentage overlap ranging from 0% - 100%

3) Test for UIP conditional on regimes

$$Regime1: \mu_{1t} = \alpha_1 + \beta_1(i_{t-1} - i^*_{t-1});$$

$$Regime2: \mu_{2t} = \alpha_2 + \beta_2(i_{t-1} - i^*_{t-1});$$