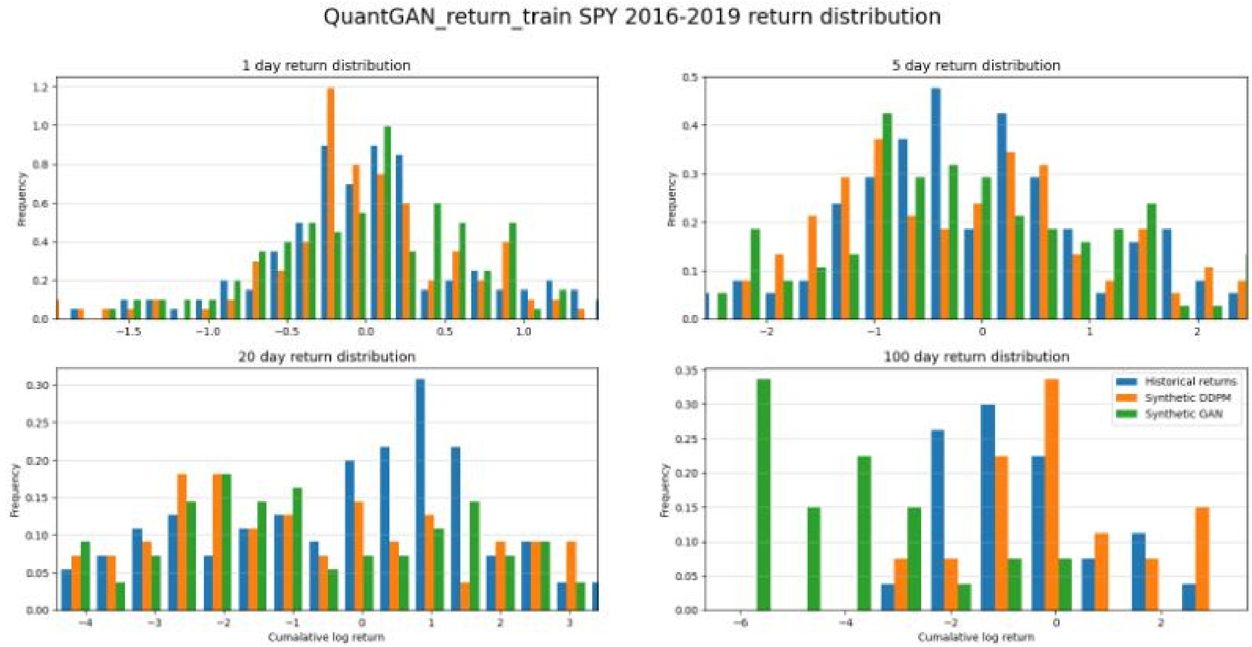
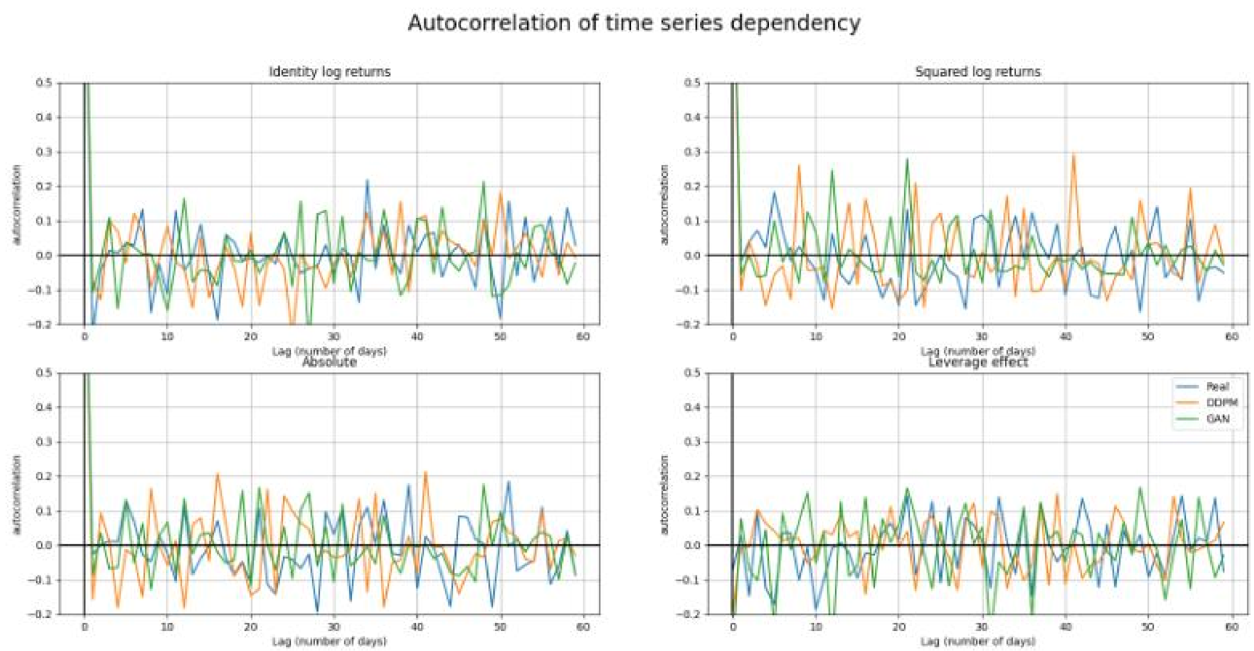
Results - Modelling Financial Time series data

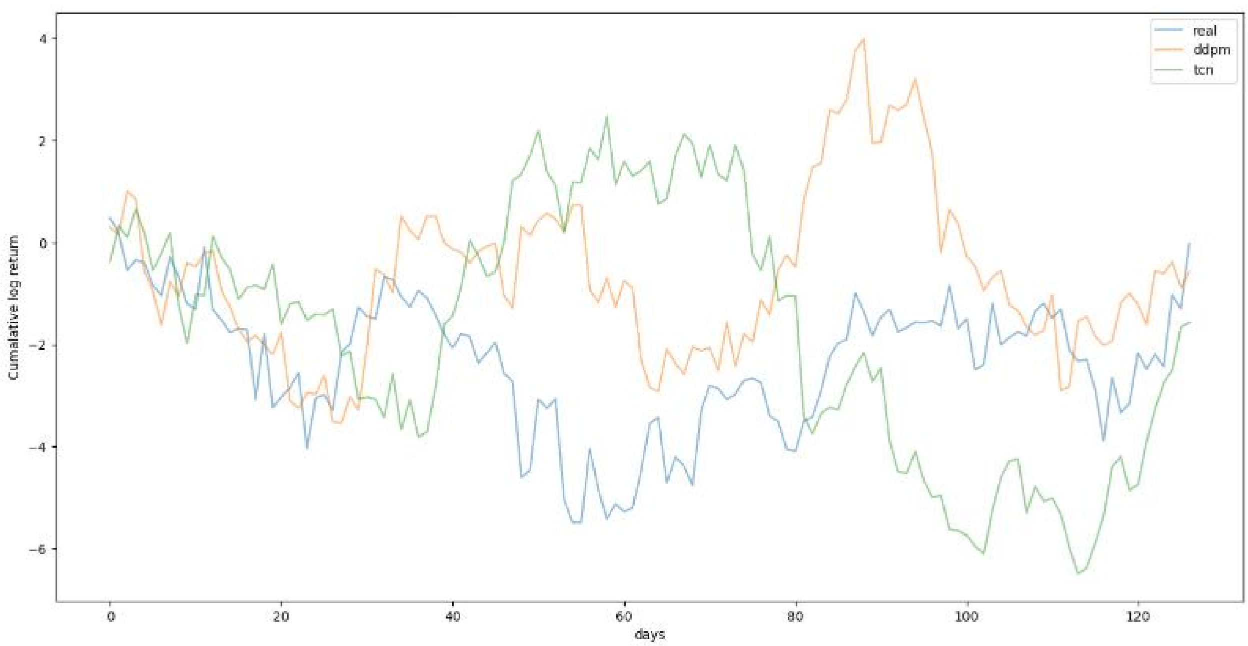


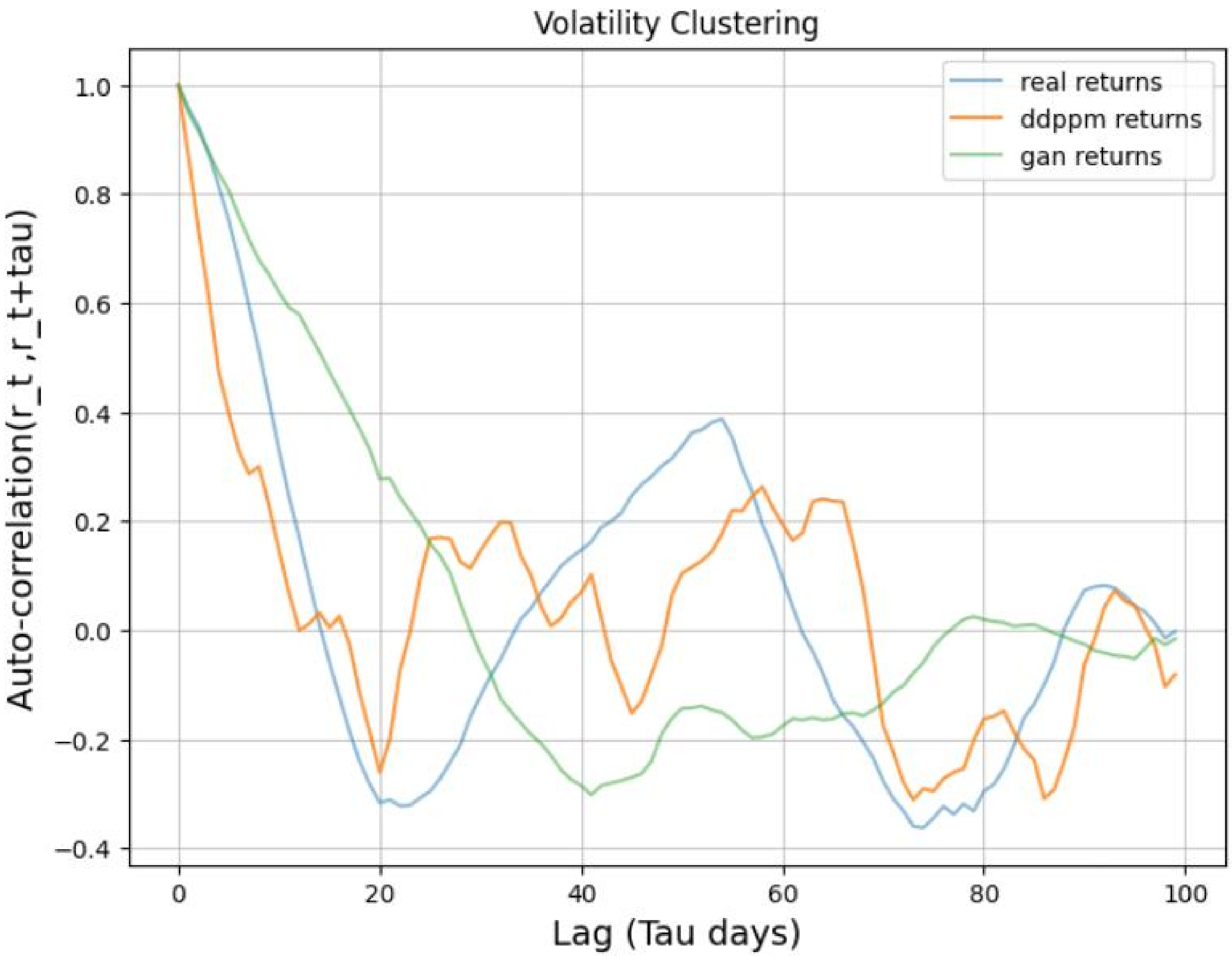


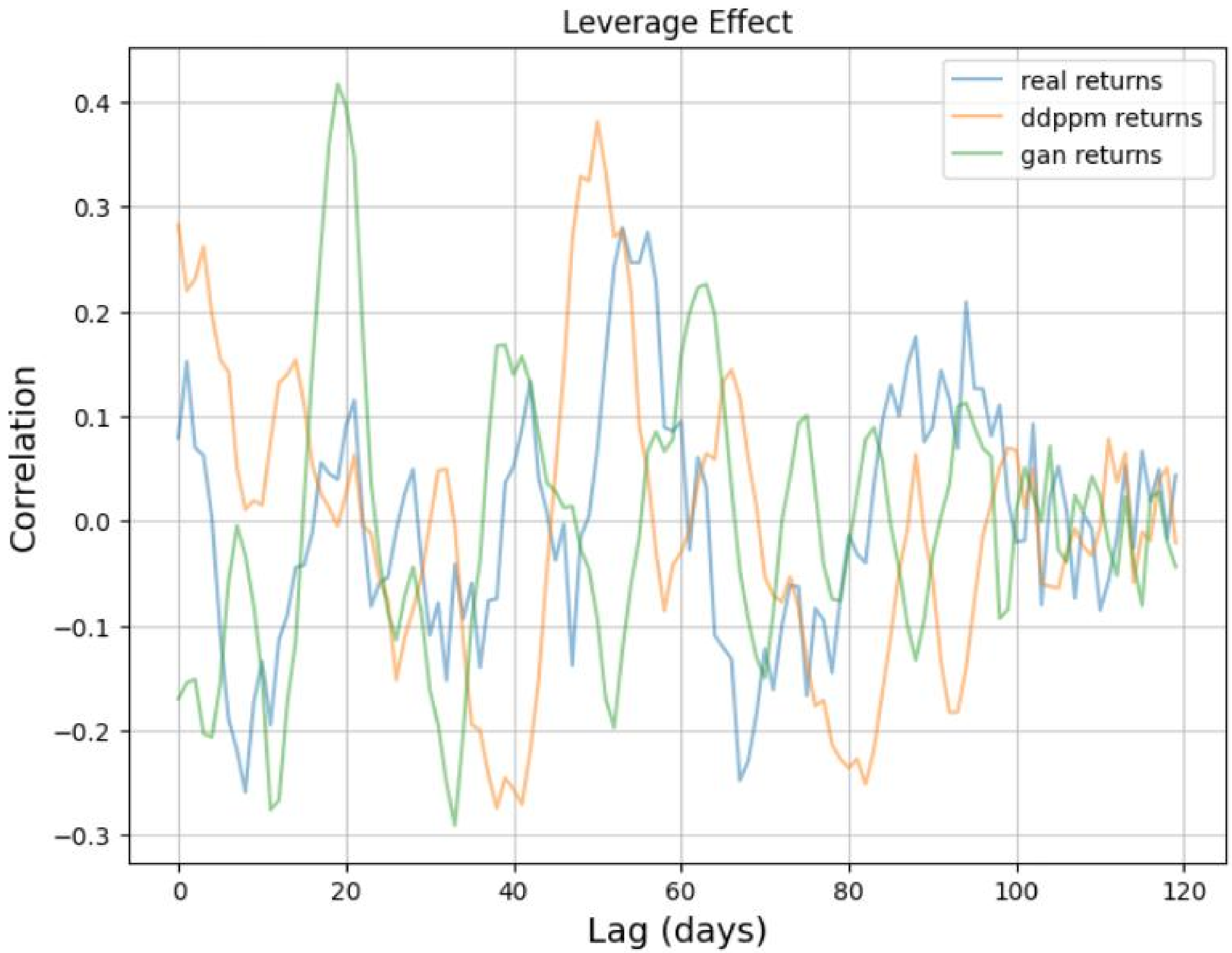
Stock Metrics

	QuantGan	TabDDPM
EMD(1) ↓	8.033986e-04	**4.403211e-04**
EMD(5) ↓	2.058422e-03	**1.818781e-03**

EMD(20) ↓	1.072807e-02	**8.936049e-03**
EMD(100) ↓	1.269983e-01	**2.054403e-02**
K-S Test (p-value) ↑	42.455190%	**96.380698%**
ACF(·) ↓	1.211521e-01	**1.056656e-01**
ACF(| · |) ↓	**1.115744e-01**	1.326045e-01
ACF((·)^2) ↓	**1.027946e-01**	1.374898e-01
Leverage Effect ↓	1.310409e-01	**1.083866e-01**
ACF Score ↓	**2.342331e-01**	2.437218e-01




Volatility Clustering
real returns
ddppm returns
gan returns
1.0
0.8
0.6
0.4
0.2
0.0
−0.2
−0.4
Auto-correlation(r_t ,r_t+tau)
0
20
40
60
80
100
Lag (Tau days)



Leverage Effect
real returns
ddppm returns
gan returns
Correlation
Lag (days)
0.4
0.3
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
20
40
60
80
100
120