Tourism Data Analysis

31 July 2019

Log Transformation with 100 observations of training window (Average MSE calculated over 140 replications)

R.method	Bias	Unbiased (Method 1)	Unbiased (Method 2)
Base	4.47	4.43	4.51
Bottom-up	6.36	5.26	8.06
MinT(Shrink)	4.32	4.16	4.61
OLS	4.34	4.31	4.36
WLS	4.82	4.38	5.43

Log Transformation with 180 observations of training window (Average MSE calculated over 60 replications)

R.method	Bias	Unbiased (Method 1)	Unbiased (Method 2)
Base	4.89	4.78	5.08
Bottom-up	9.71	6.97	12.70
MinT(Shrink)	4.75	4.63	5.35
OLS	4.67	4.60	4.81
WLS	6.33	5.22	7.58

BoxCox Transformation for $\lambda \in (-0.5, 2)$ with 100 observations of training window (Average MSE calculated over 140 replications)

R.method	Bias	Unbiased (Method 1)	Unbiased (Method 2)
Base	4.59	4.52	4.78
Bottom-up	6.21	5.31	7.46
MinT(Shrink)	4.29	4.17	4.54
OLS	4.46	4.40	4.63
WLS	4.77	4.42	5.23

BoxCox Transformation for $\lambda \in (-0.5, 2)$ with 180 observations of training window (Average MSE calculated over 60 replications)

R.method	Bias	Unbiased (Method 1)	Unbiased (Method 2)
Base	4.61	4.58	4.72
Bottom-up	9.17	7.00	11.43
MinT(Shrink)	4.50	4.53	4.82
OLS	4.43	4.43	4.52
WLS	6.24	5.45	7.11