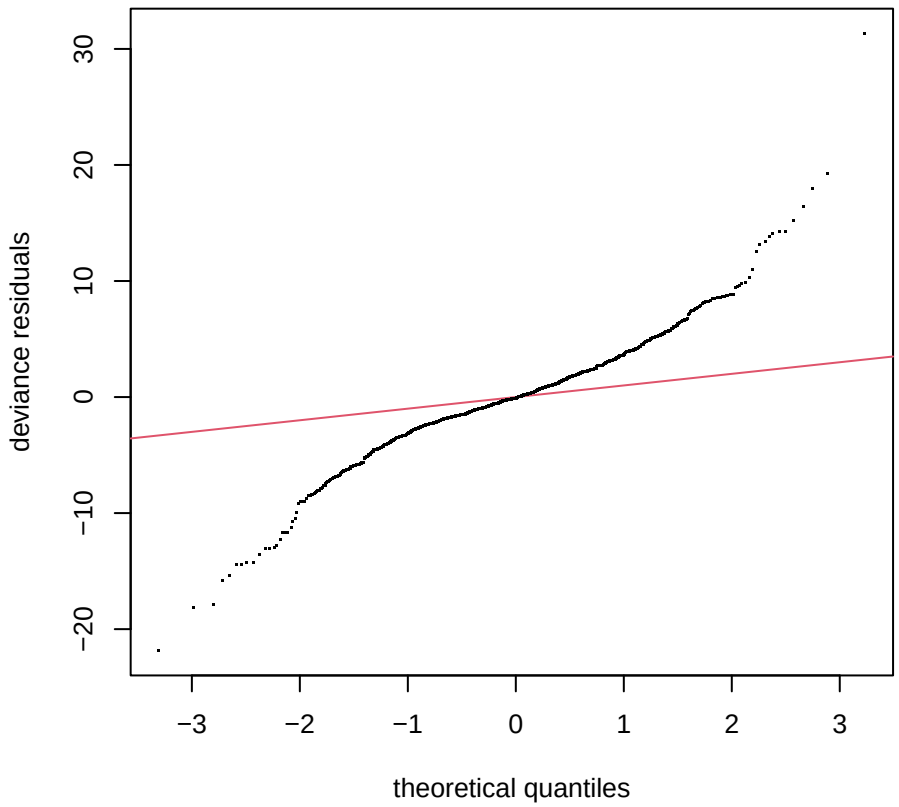
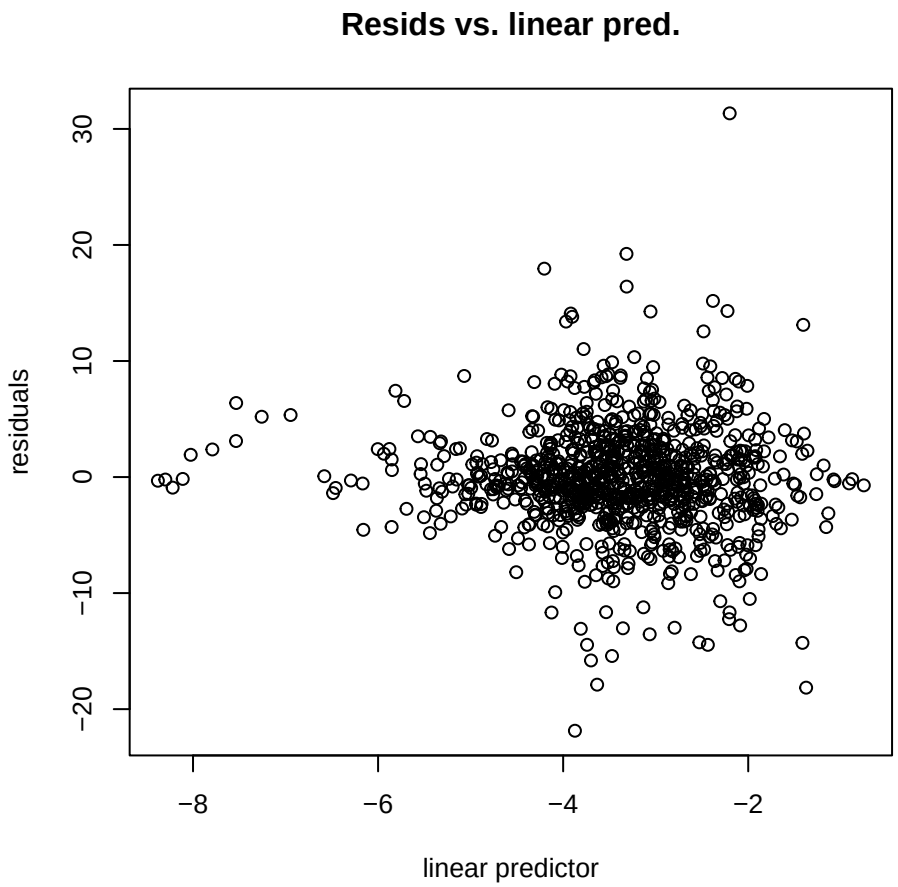
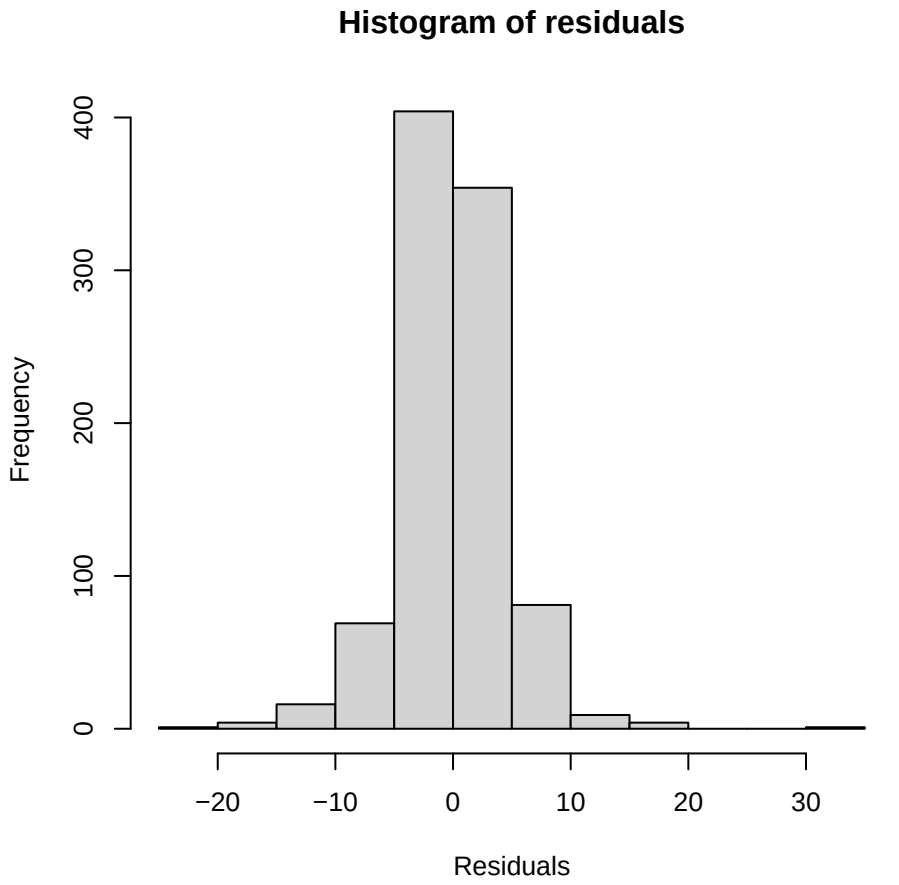
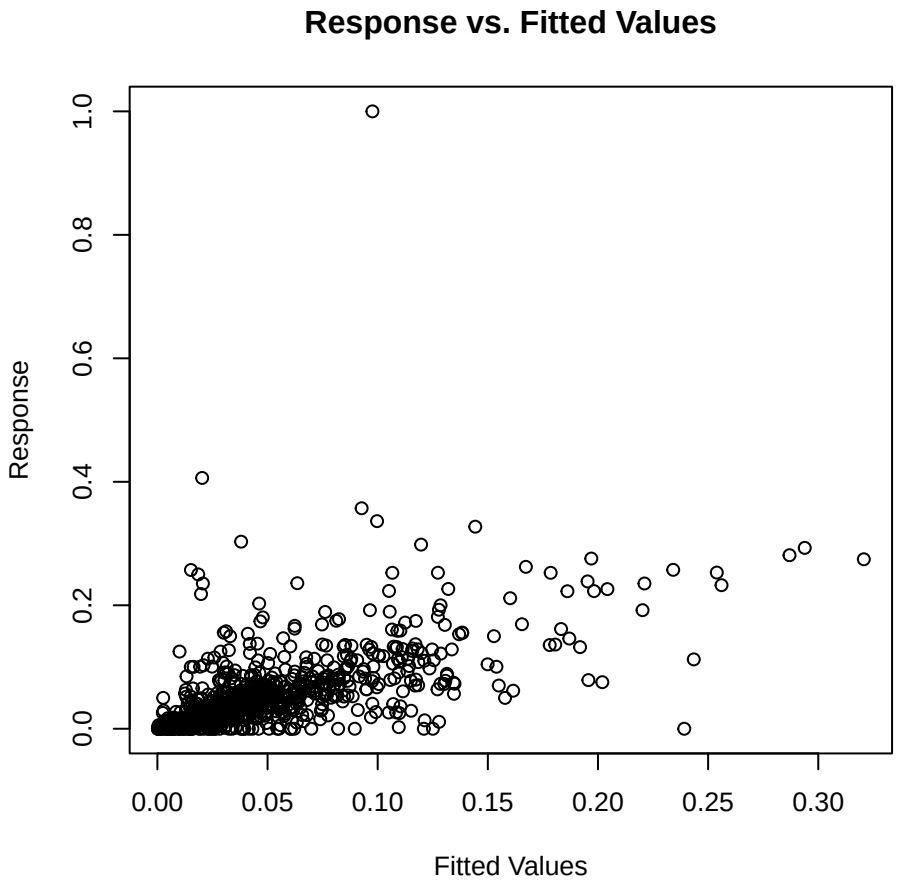
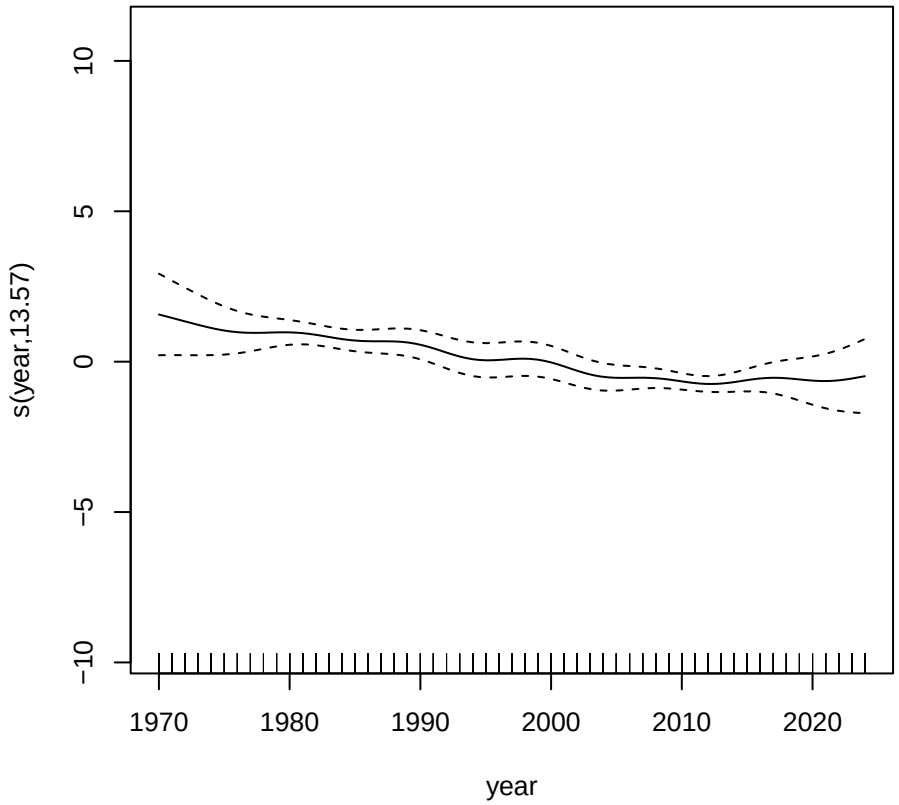
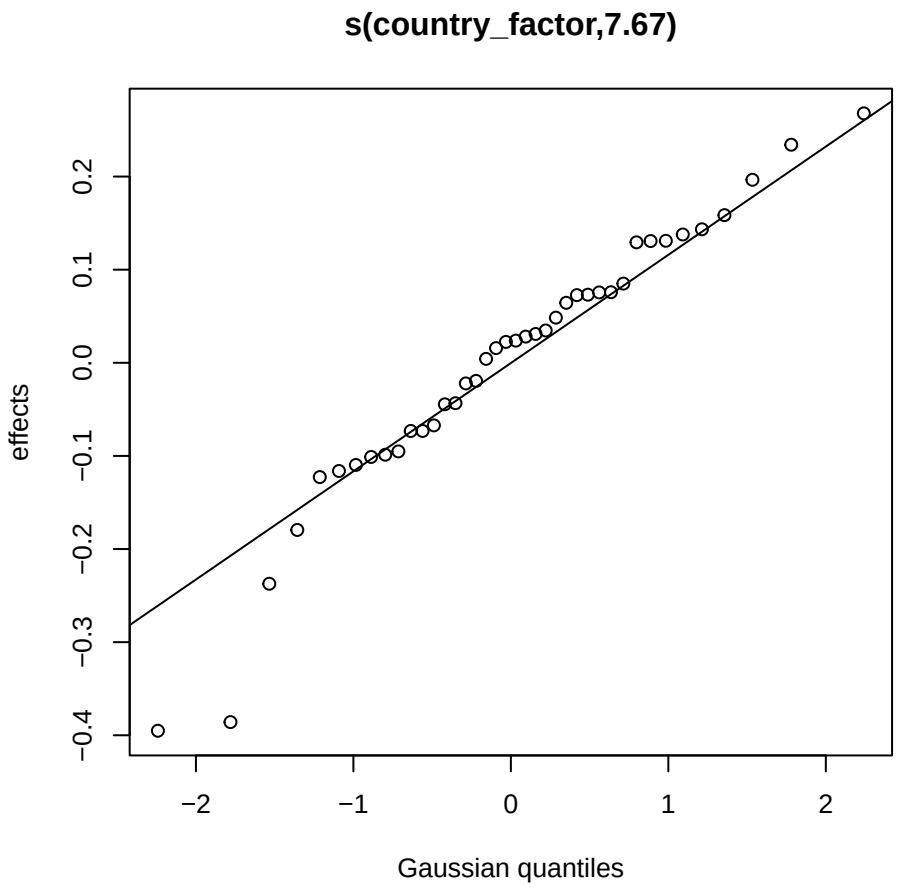

deviance residuals
30
20
10
0
−10
−20
−3
−2
−1
0
1
2
3
theoretical quantiles

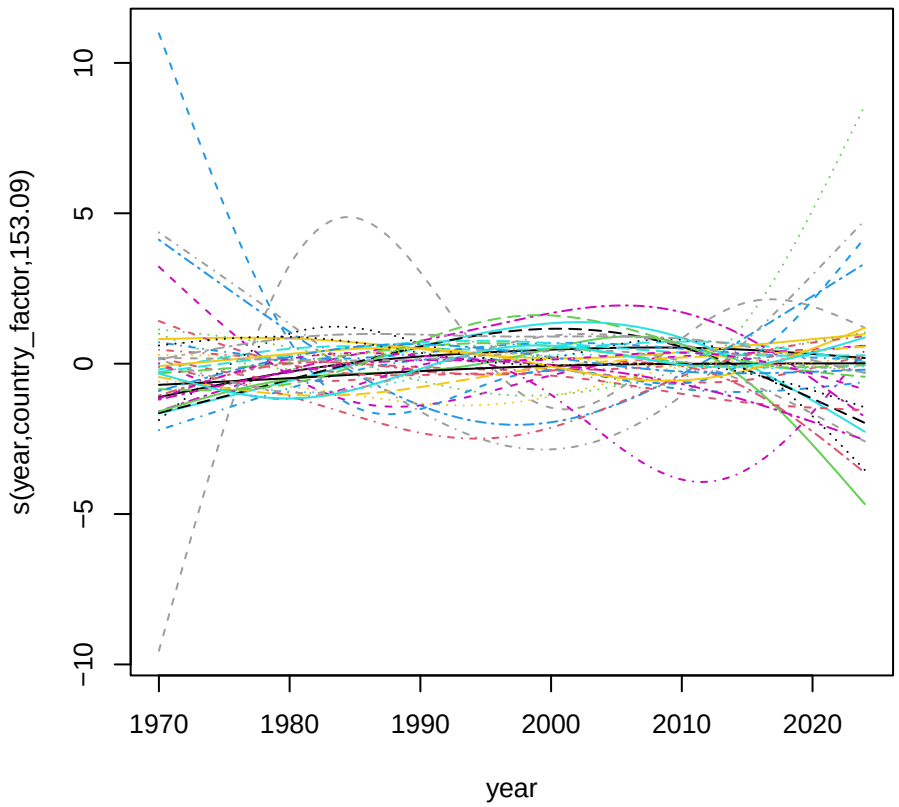

Resids vs. linear pred.
residuals
30
20
10
0
−10
−20
−8
−6
−4
−2
linear predictor


Histogram of residuals
Frequency
400
300
200
100
0
−20
−10
0
10
20
30
Residuals


Response vs. Fitted Values
Response
1.0
0.8
0.6
0.4
0.2
0.0
0.00
0.05
0.10
0.15
0.20
0.25
0.30
Fitted Values


s(year,13.57)
10
5
0
−5
−10
1970
1980
1990
2000
2010
2020
year


s(country_factor,7.67)
effects
0.2
0.1
0.0
−0.1
−0.2
−0.3
−0.4
−2
−1
0
1
2
Gaussian quantiles


s(year,country_factor,153.09)
10
5
0
−5
−10
1970
1980
1990
2000
2010
2020
year