Corrigendum

Supplemental Appendix

STADL Up! The Spatio-Temporal Autoregressive Distributed Lag Model for TSCS Data Analysis—CORRIGENDUM

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The regression coefficient estimates, standard errors, and measures of fit given in Tables 1 and 2 in the published version of this article are incorrect because the observational ordering of the data-frames and spatial weights matrices were not properly matched. To automate correct matching both the `make_ntspmat` and `ntspreg` functions were updated. Specifically, `make_ntspmat` now returns a list that includes a reordered data-frame that matches the $NT \times NT$ spatial weights matrix, and `ntspreg` takes this reordered data-frame as an input. These changes to the code lead to the following corrections to the "tscsdep: A New R Package" section of the Supplemental Appendix.

CHANGES

1. In the text, on page 15, the updated description of `wm` is: "`wm` stores the output, a list that includes the weights matrix."

2. In the text, on page 16, the penultimate sentence before the "Infant Mortality Reanalysis" section becomes "`lmobj` is the same `lm` object used to generate `wm`, which is included as the second and final argument in the function.

3. The text on page 19 that describes how to extract the weights matrix is no longer correct. It should read: "In the chunk of code below, we run the function `ntspreg` to estimate a STADL in first differences. The function returns a list of output from the function `lagsarlm`, which is a part of the `spatialreg` package. The nearest-neighbors weights matrix is automatically row-standardized by `ntspreg`.

4. The code on page 19 is incorrect. It should be:

```
sar <- ntspreg(reg,wm)
summary(sar)
```

5. The listed results on page 20 are incorrect. They should be:

Call:spatialreg::lagsarlm(formula = formula, data = df, listw = listw, method = "eigen", zero.policy = TRUE, tol.solve = 1e-10)

Residuals:

Min	1Q	Median	3Q	Max
-8.761477	-0.335787	0.023384	0.335023	27.886466

Type: lag

Coefficients: (asymptotic standard errors)

	Estimate	Std. Error	z value	Pr(>|z|)
(Intercept)	-15.5779925	2.0650769	-7.5435	4.574e-14
lag_inf	-0.0193584	0.0016502	-11.7309	< 2.2e-16
Accountability	-0.1865289	0.0378847	-4.9236	8.497e-07
aid	0.0134832	0.0032790	4.1120	3.923e-05
loggdp	0.8047175	0.0848228	9.4870	< 2.2e-16
gdp_grow	-0.0191182	0.0025153	-7.6008	2.953e-14
resourcesdep_hm	0.0130752	0.0022949	5.6974	1.216e-08
gini2	0.0047701	0.0033124	1.4401	0.1498471
lnpop	0.8057912	0.1752400	4.5982	4.261e-06
urban_cow	0.0225415	0.0030169	7.4718	7.905e-14
violence_domestic	-0.0090026	0.0137463	-0.6549	0.5125232
rx_infant	0.0111137	0.0024396	4.5556	5.223e-06
communist	-0.7406452	0.1729015	-4.2836	1.839e-05
v2x_corr	-0.1471632	0.2030568	-0.7247	0.4686122

Rho: 0.19537, LR test value: 83.458, p-value: < 2.22e-16

Asymptotic standard error: 0.021074

    z-value: 9.271, p-value: < 2.22e-16

Wald statistic: 85.951, p-value: < 2.22e-16

Log likelihood: -5763.802 for lag model

ML residual variance (sigma squared): 0.84375, (sigma: 0.91856)

Number of observations: 4311

Number of parameters estimated: 207

AIC: 11942, (AIC for lm: 12023)

LM test for residual autocorrelation

test value: 11.91, p-value: 0.00055831