Residuals from ARIMA(0,0,1) with non-zero mean 12 **-**8 -4 -0 -2014 2010 2012 2016 2018 2008 20 **-**0.2 -15 df\$y 0.0 10 -5 --0.2 **-** $\Pi\Pi$ 10 5 -5 15 3 6 12 18 9 Lag residuals