Where the DGP for Y is the error correction model and X is a simple autoregressive process as follows:

$$\Delta Y_t = \lambda_1 + \lambda_2 \Delta X_t + \gamma(Y_{t-1} - \beta X_{t-1}) + \varepsilon_{1t}$$

and

$$X_t = \rho X_{t-1} + \varepsilon_{2t}$$

with $\varepsilon \sim MN(0, \Omega)$