Variable set consist of y_t'=[i^* y π i Δe], foreign interest rate (US three month treasury bill rate in our case), domestic output, domestic inflation, domestic interest rate and change in exchange rate respectively.

My model looks in terms of $\epsilon_t = S\mu_t$.Where ϵ_t is the reduced form residual and μ_t is the structural residual.

$$\begin{bmatrix} \epsilon^{i^*} \\ \epsilon^{y} \\ \epsilon^{CP} \\ \epsilon^{MP} \\ \epsilon^{ER} \end{bmatrix} = \begin{bmatrix} x_1 & 0 & 0 & 0 & 0 \\ x_2 & x_3 & 0 & 0 & 0 \\ x_4 & x_5 & x_6 & 0 & 0 \\ x_7 & x_8 & x_9 & x_{10} & x_{11} \\ x_{12} & x_{13} & x_{14} & x_{15} & x_{16} \end{bmatrix} \begin{bmatrix} \mu^{i^*} \\ \mu^{y} \\ \mu^{CP} \\ \mu^{MP} \\ \mu^{ER} \end{bmatrix} \tag{1}$$

I want this strcuture of $\sum_\mu$

$$\sum \quad {}_\mu = \begin{bmatrix} 1 & 0 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 1 & x_{17} \\ 0 & 0 & 0 & x_{17} & 1 \end{bmatrix} \tag{2}$$

I want to put long run restrictions to exactly identify the model that domestic monetary shock doesn't affect the domestic output and exchange rate in the long run. basically I want to solve for $\sum_\epsilon == S\sum_\mu S'$ given the above structure of $\sum_\mu$and S and two long run restrictions. I am also looking for the fact that what kind of restrictions can be imposed on $\sum_\mu$ so that model would be globally identified.