

1 The System of Contemporaneous Equations

The China block is defined as $x_1 : \{m_2, i, xr, y, \pi, rrr\}$ and the US block is $x_2 : \{FFR^*, \pi^*, y^*, pc^*\}$. Variables are defined as (levels and indices changed to log diff):

- M2 is M2 in China
- i is Chinese benchmark lending rate
- xr is RMB/US exchange rate
- y is Chinese Industrial Production
- π is Chinese inflation
- rrr is Chinese reserve requirement
- FFR^* is US Fed Funds Rate
- π^* is US Inflation
- y^* is US Industrial Production
- pc^* is an index of global commodity prices

$$\begin{bmatrix} e_{ms} \\ e_{md} \\ e_{xr} \\ e_y \\ e_\pi \\ e_{rr} \\ e_{y^*} \\ e_{\pi^*} \\ e_{FFR^*} \\ e_{pc^*} \end{bmatrix} = \begin{bmatrix} a_{11} & a_{12} & a_{13} & 0 & a_{15} & a_{16} & 0 & 0 & a_{19} & a_{110} \\ a_{21} & a_{22} & 0 & a_{24} & a_{25} & 0 & 0 & 0 & 0 & 0 \\ a_{31} & a_{32} & a_{33} & a_{34} & a_{35} & a_{36} & a_{37} & a_{38} & a_{39} & a_{310} \\ 0 & 0 & 0 & a_{44} & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & a_{54} & a_{55} & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & a_{66} & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & a_{77} & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & a_{87} & a_{88} & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & a_{97} & a_{98} & a_{99} & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & a_{107} & a_{108} & a_{109} & a_{1010} \end{bmatrix} = \begin{bmatrix} \epsilon_{m2} \\ \epsilon_i \\ \epsilon_{xr} \\ \epsilon_y \\ \epsilon_\pi \\ \epsilon_{rr} \\ \epsilon_{y^*} \\ \epsilon_{\pi^*} \\ \epsilon_{FFR} \\ \epsilon_{pc^*} \end{bmatrix} \quad (1)$$