test

$$y_t = c + \Phi_1 y_{t-1} + \dots + \Phi_6 y_{t-6} + B \eta_t$$
, where  $y_t = \begin{bmatrix} X_t \\ AHV_t \end{bmatrix}$ ,  $B = \begin{bmatrix} b_{11} & 0 \\ b_{21} & b_{22} \end{bmatrix}$ ,  $\eta_t = \begin{bmatrix} \eta_t^X \\ \eta_t^{AHV} \end{bmatrix}$