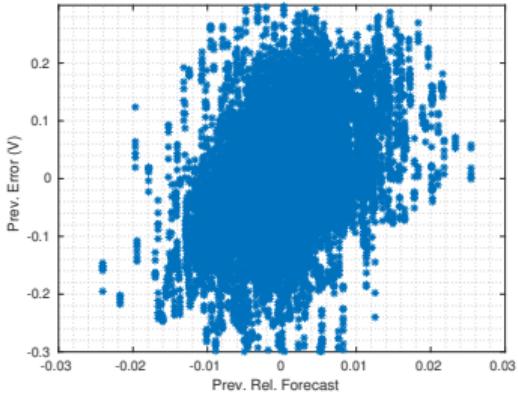
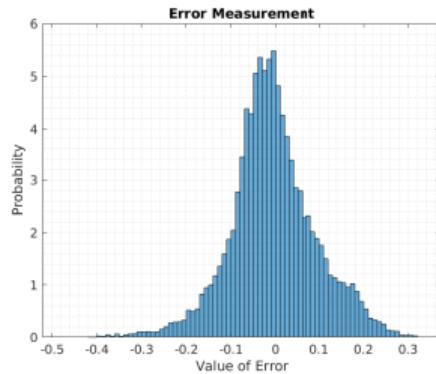
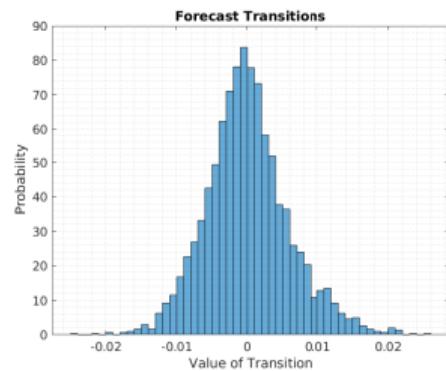


Error SDE (Z_t) moments

Renzo Miguel Caballero Rosas

April 3, 2020

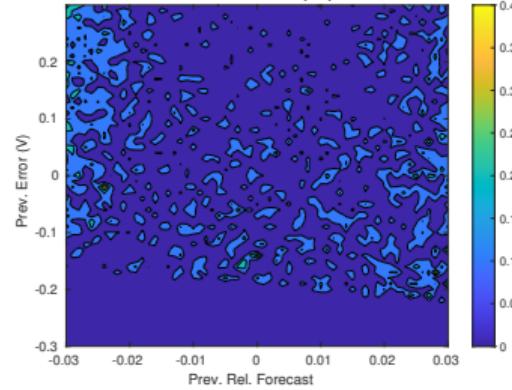
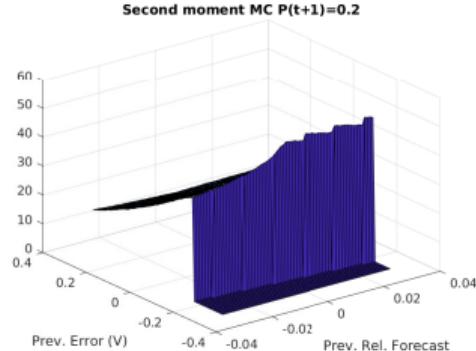
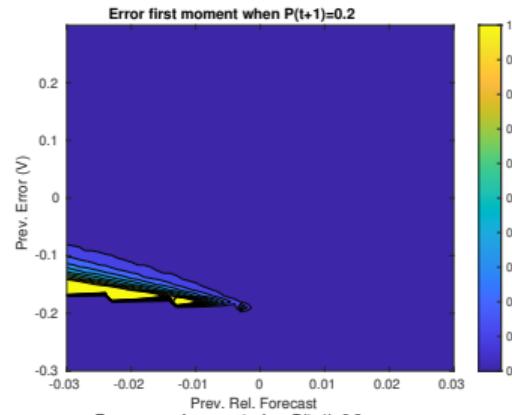
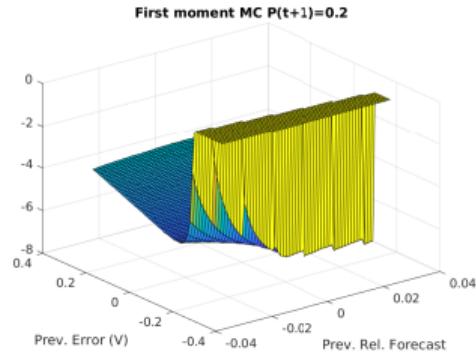
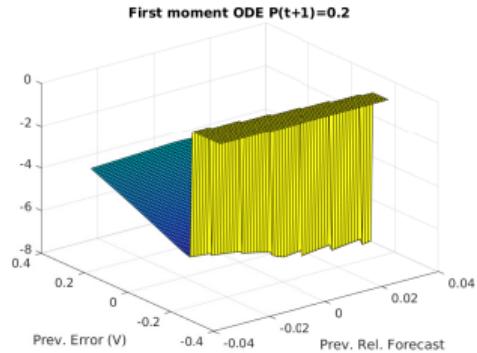
Data histograms:



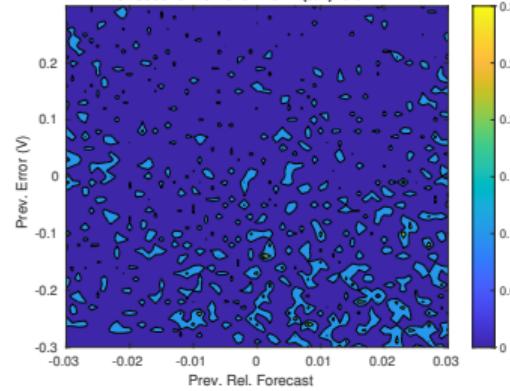
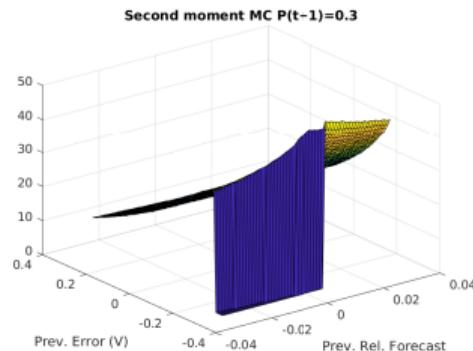
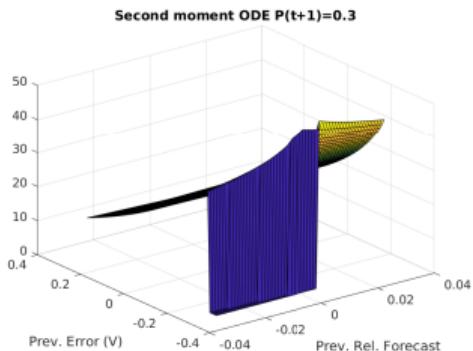
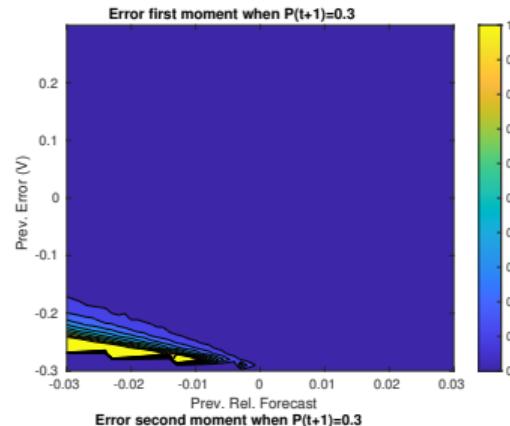
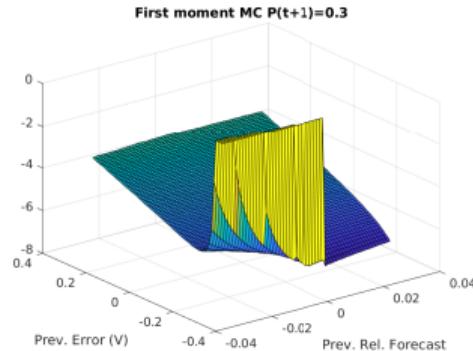
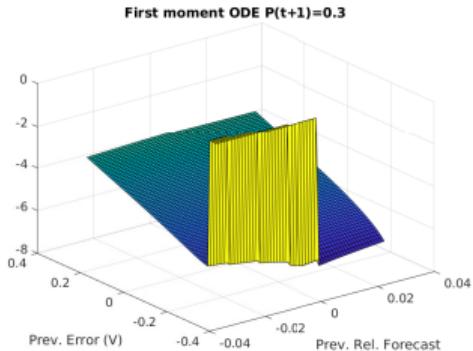
From here we can see that the error transitions are approximately in the interval $[-0.3, 0.3]$, and the forecast transitions in the interval $[-0.03, 0.03]$.

Then, we want to ensure that the moments are well approximated in the rectangle $[-0.3, 0.3] \times [-0.03, 0.03]$ (for $\Delta V \times \Delta p$).

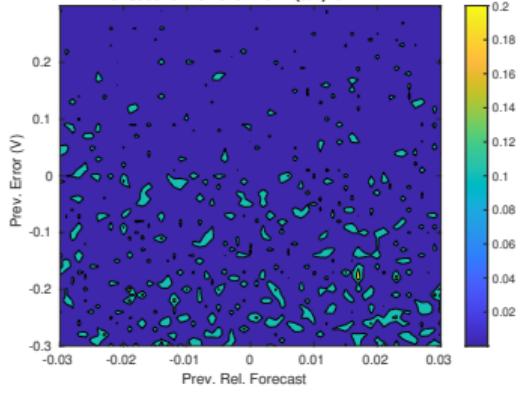
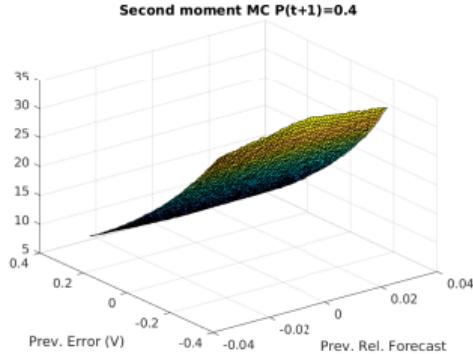
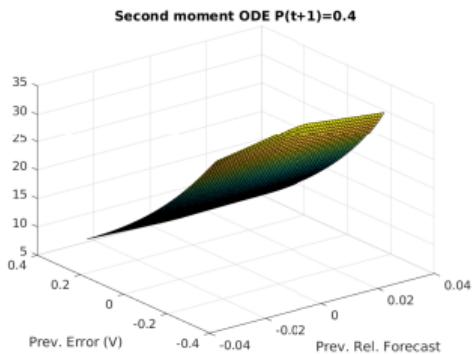
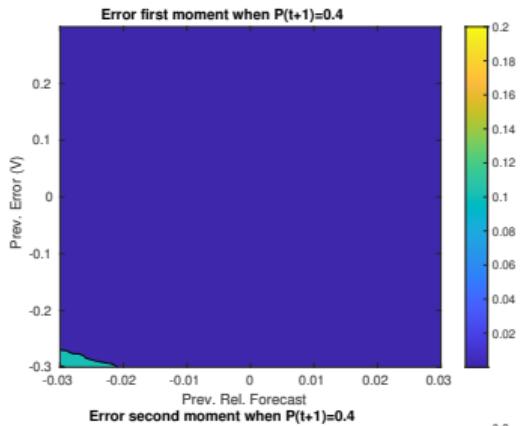
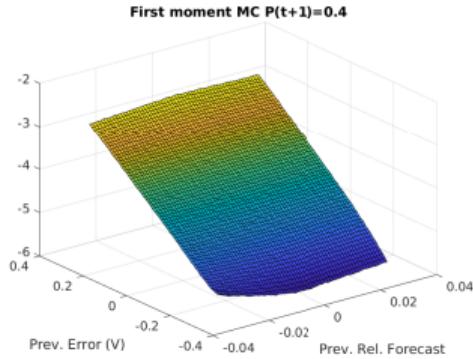
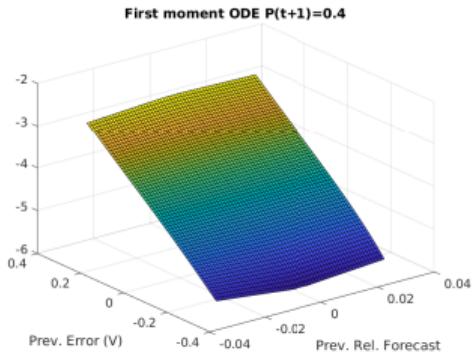
Approximated moments for Z_t :



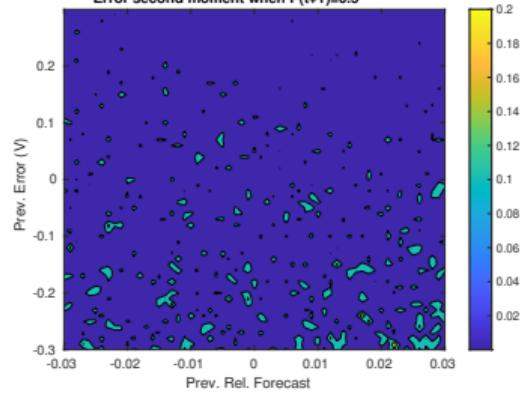
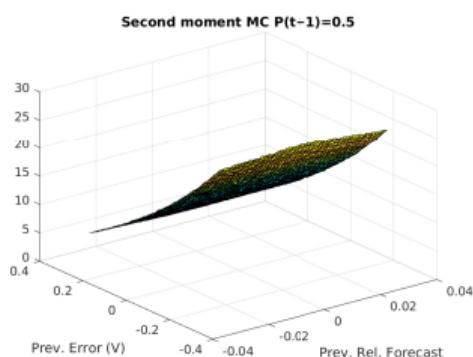
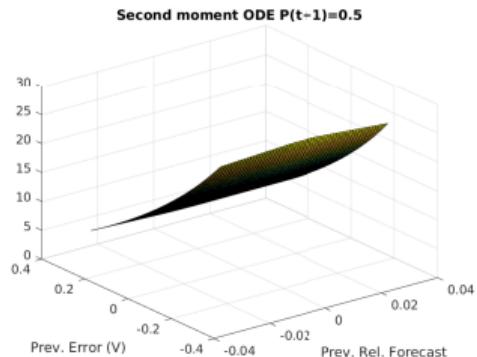
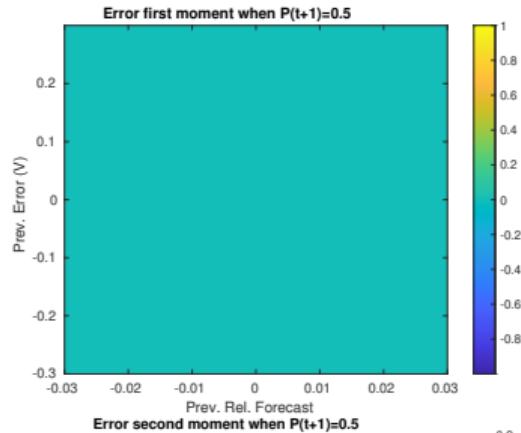
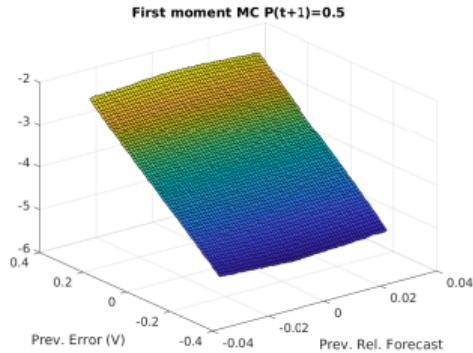
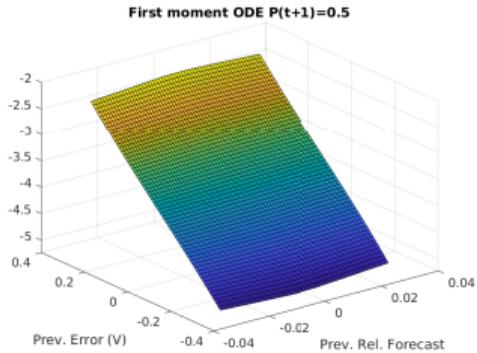
Approximated moments for Z_t :



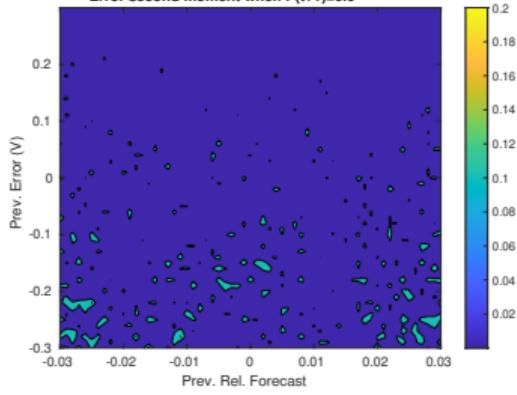
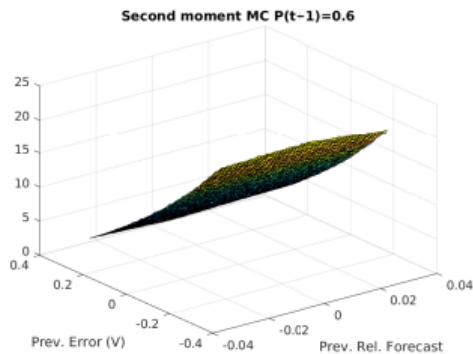
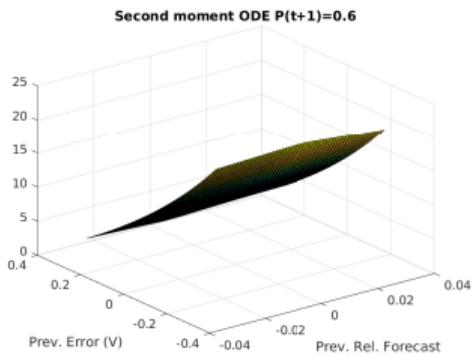
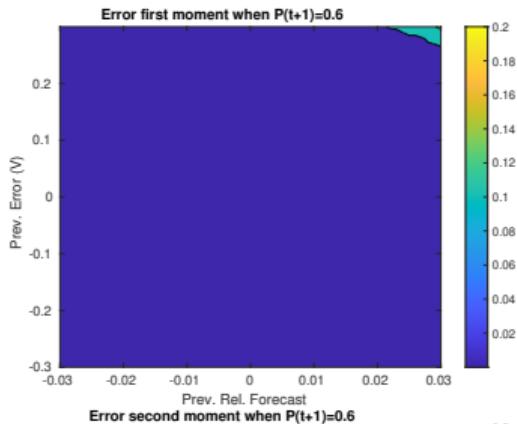
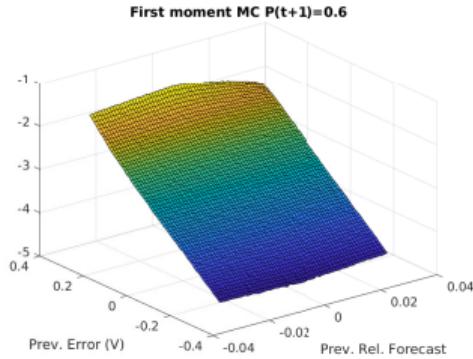
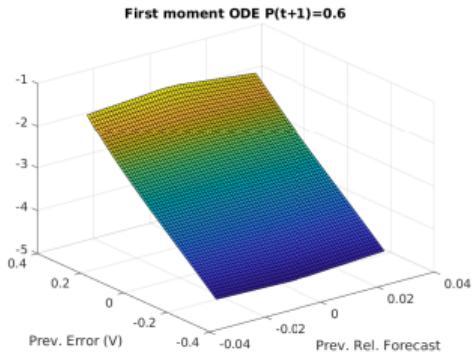
Approximated moments for Z_t :



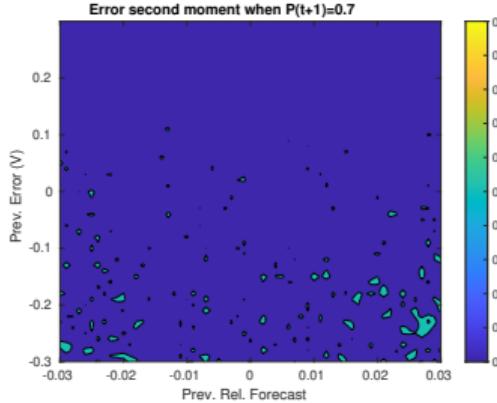
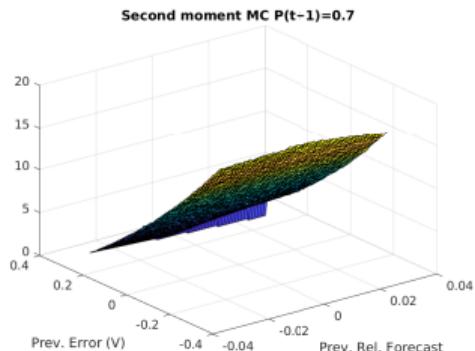
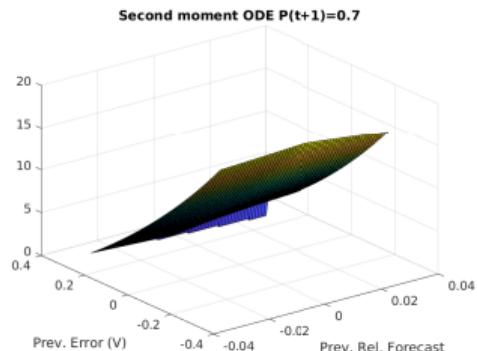
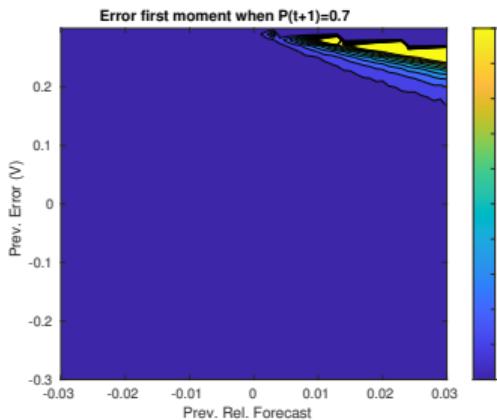
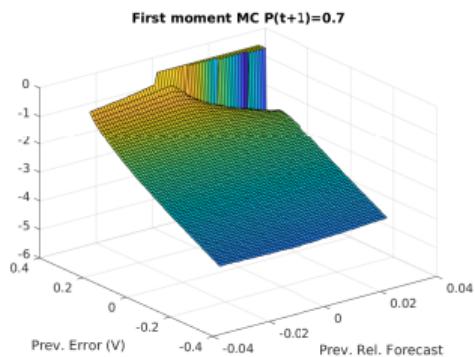
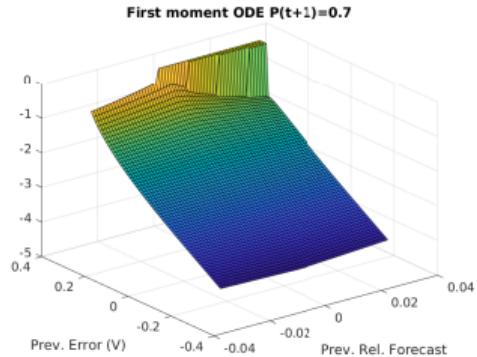
Approximated moments for Z_t :



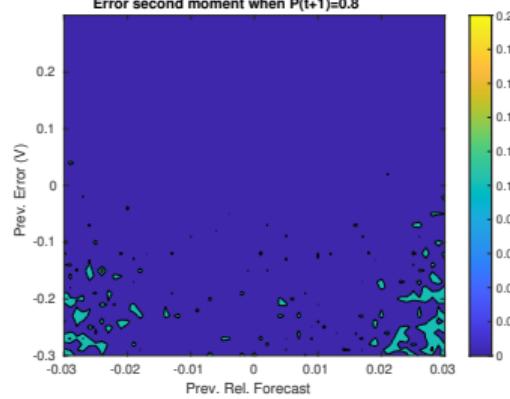
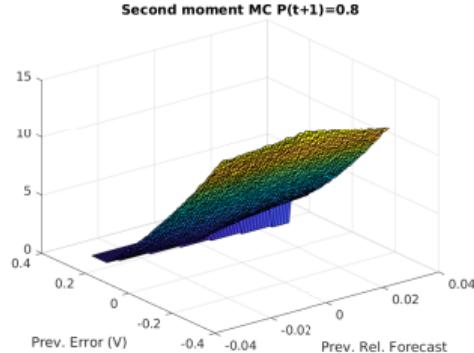
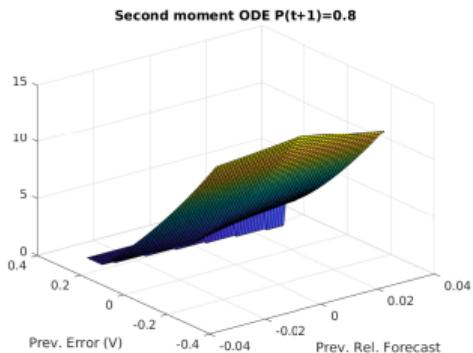
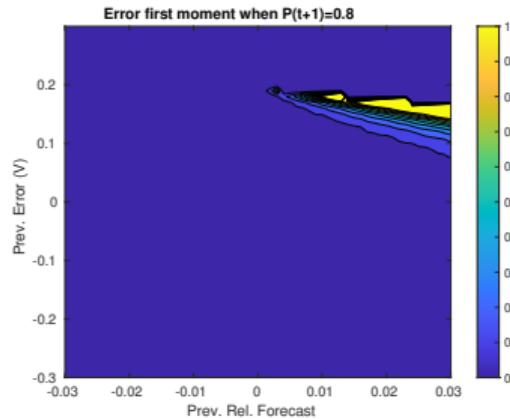
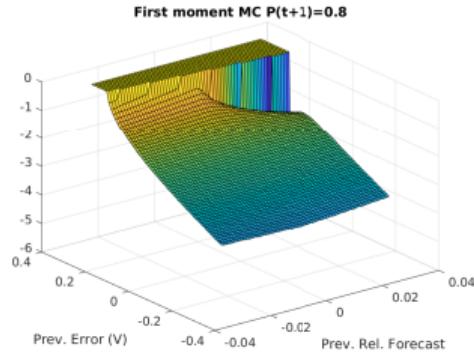
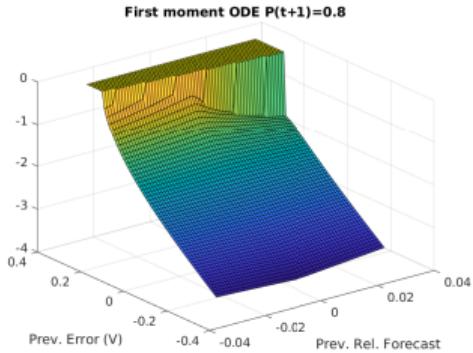
Approximated moments for Z_t :



Approximated moments for Z_t :



Approximated moments for Z_t :



Approximated moments for Z_t :

