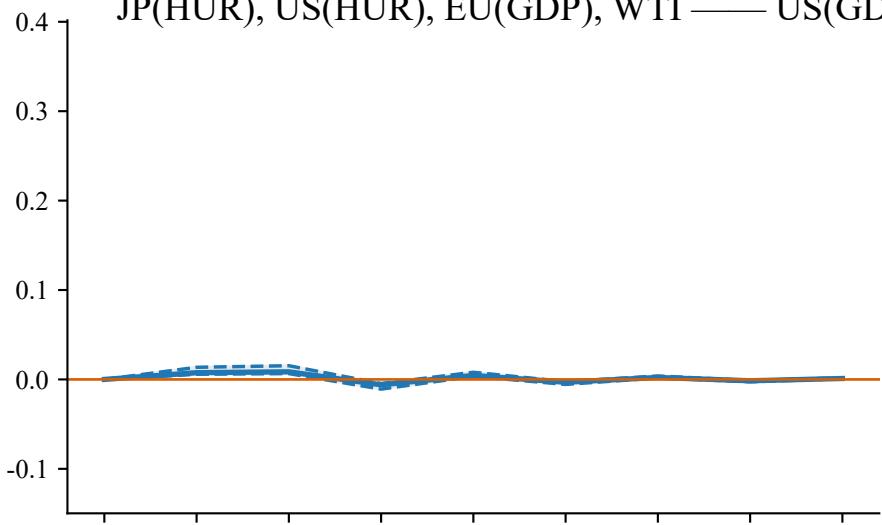


(a1) The time-invariant OIRF

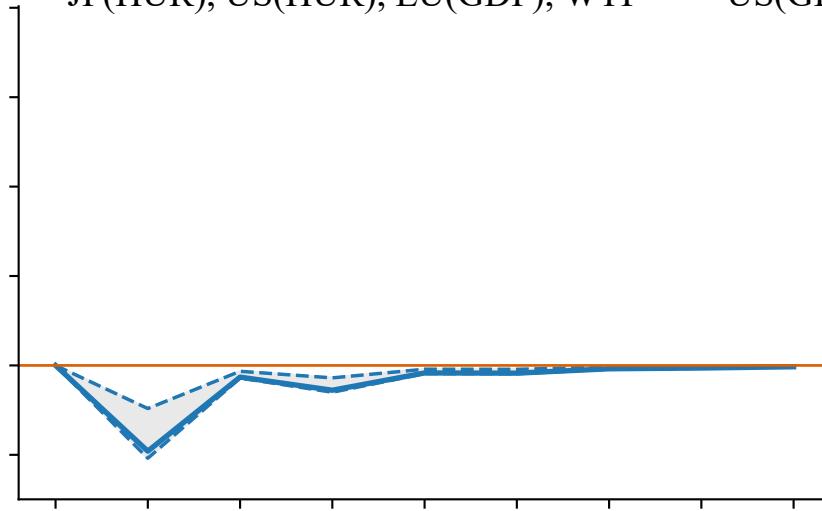
JP(HUR), US(HUR), EU(GDP), WTI —— US(GDP)

Response



(b1) The time-varying OIRF of June 1st, 2020

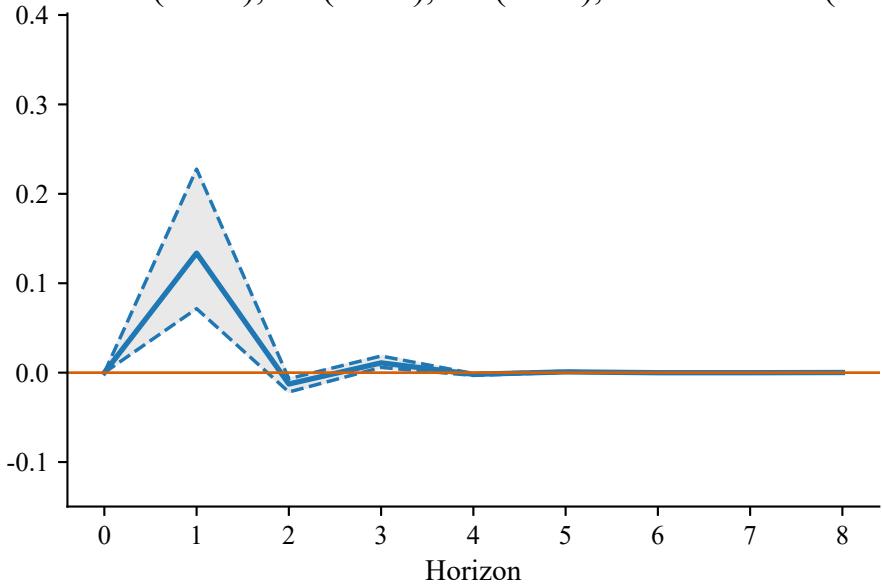
JP(HUR), US(HUR), EU(GDP), WTI —— US(GDP)



(c1) The time-varying OIRF of April 1st, 2013

JP(HUR), US(HUR), EU(GDP), WTI —— US(GDP)

Response



(d1) The time-varying OIRF of December 1st, 2007

JP(HUR), US(HUR), EU(GDP), WTI —— US(GDP)

