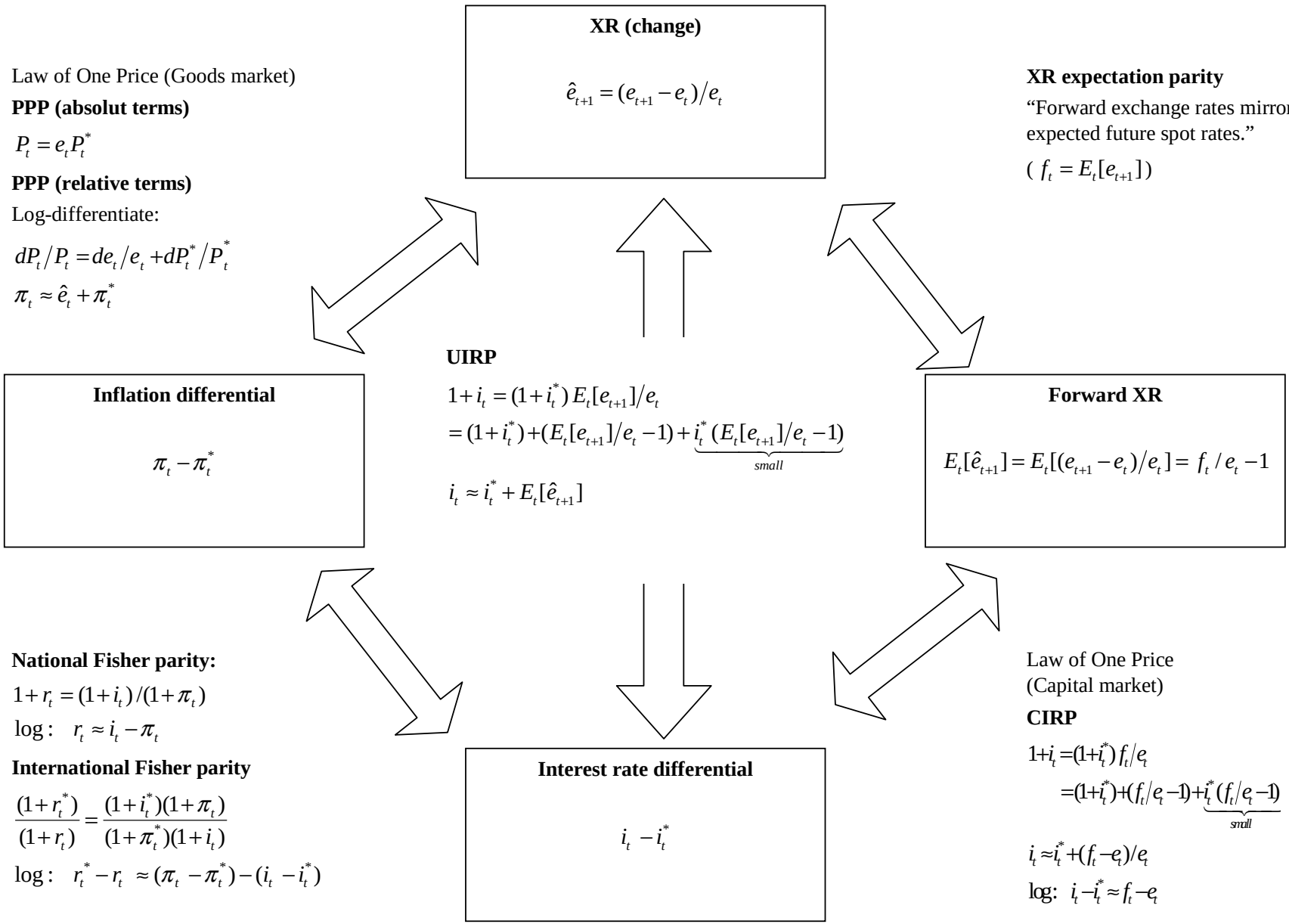
XR (change)
$\hat{e}_{t+1} = (e_{t+1} - e_t)/e_t$
Law of One Price (Goods market)
PPP (absolut terms)
$P_t = e_t P_t^*$
PPP (relative terms)
Log-differentiate:
$dP_t/P_t = de_t/e_t + dP_t^*/P_t^*$
$\pi_t \approx \hat{e}_t + \pi_t^*$
XR expectation parity
"Forward exchange rates mirror expected future spot rates."
($f_t = E_t[e_{t+1}]$)
UIRP
$1 + i_t = (1 + i_t^*)\, E_t[e_{t+1}]/e_t$
$= (1 + i_t^*) + (E_t[e_{t+1}]/e_t - 1) + \underbrace{i_t^* (E_t[e_{t+1}]/e_t - 1)}_{small}$
$i_t \approx i_t^* + E_t[\hat{e}_{t+1}]$
Inflation differential
$\pi_t - \pi_t^*$
Forward XR
$E_t[\hat{e}_{t+1}] = E_t[(e_{t+1} - e_t)/e_t] = f_t / e_t - 1$
National Fisher parity:
$1 + r_t = (1 + i_t)/(1 + \pi_t)$
log: $r_t \approx i_t - \pi_t$
International Fisher parity
$\frac{(1 + r_t^*)}{(1 + r_t)} = \frac{(1 + i_t^*)(1 + \pi_t)}{(1 + \pi_t^*)(1 + i_t)}$
log: $r_t^* - r_t \approx (\pi_t - \pi_t^*) - (i_t - i_t^*)$
Interest rate differential
$i_t - i_t^*$
Law of One Price (Capital market)
CIRP
$1 + i_t = (1 + i_t^*)\, f_t/e_t$
$= (1 + i_t^*) + (f_t/e_t - 1) + \underbrace{i_t^* (f_t/e_t - 1)}_{small}$
$i_t \approx i_t^* + (f_t - e_t)/e_t$
log: $i_t - i_t^* \approx f_t - e_t$