$$\left[E_t \sum_{i=0}^{\infty} \omega^i \beta^i C_{t+i}^{1-\sigma} \left(\frac{P_{t+i}}{P_t}\right)^{\theta-1}\right] Q_t = \mu \left[E_t \sum_{i=0}^{\infty} \omega^i \beta^i C_{t+i}^{1-\sigma} \varphi_{t+i} \left(\frac{P_{t+i}}{P_t}\right)^{\theta}\right]$$

The left side of (8.80) is approximated by

$$\left(\frac{C^{1-\sigma}}{1-\omega\beta}\right) + \left(\frac{C^{1-\sigma}}{1-\omega\beta}\right)\hat{q}_t + C^{1-\sigma} \sum_{i=0}^{\infty} \omega^i \beta^i [(1-\sigma)E_t \hat{c}_{t+i} + (\theta-1)(E_t \hat{p}_{t+i} - \hat{p}_t)]$$

The right side is approximated by

$$\mu \left\{ \left(\frac{C^{1-\sigma}}{1-\omega\beta}\right)\varphi + \varphi C^{1-\sigma} \sum_{i=0}^{\infty} \omega^i \beta^i [E_t \hat{\varphi}_{t+i} + (1-\sigma)E_t \hat{c}_{t+i} + \theta(E_t \hat{p}_{t+i} - \hat{p}_t)] \right\}$$