

Production and Marginal Taxation

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Capital, Production and Marginal Taxation

- Resource constraints

$$y_t = f(k_{t-1}, n_t) = c_t + g_t + [k_t - (1 - \delta)k_{t-1}]$$
$$d_t = q_t b_t + k_t$$

- Firms (**Capital Demand**):

$$f_k(k_{t-1}/n_t, 1) = r_t + \delta \quad f_n(k_{t-1}/n_t, 1) = w_t$$

No-arbitrage: $1/q_0 = 1 + r_1$

- Household Sequential BC:

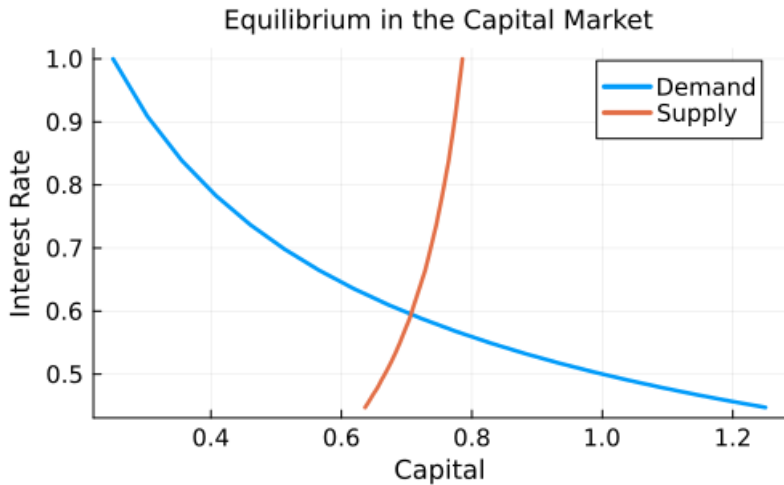
$$d_t + (1 + \tau_{c,t})c_t = [1 + (1 - \tau_{k,t})r_t]d_{t-1} + (1 - \tau_{n,t})w_t n_t - \tau_{L,t}$$

- Households' FOC (**Capital Supply**):

$$\frac{u'(c_0)}{1 + \tau_{c,0}} = \beta[1 + (1 - \tau_{k,1})r_1] \frac{u'(c_1)}{1 + \tau_{c,1}} \quad v'(n_t) = \frac{1 - \tau_{n,t}}{1 + \tau_{c,t}} w_t u'(c_t)$$

- Primary Surplus: $s_t = \tau_{c,t}c_t + \tau_{k,t}r_t d_{t-1} + \tau_{n,t}w_t n_t + \tau_{L,t} - g_t$

Capital Market



Frame title



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