

# A Model of the Current Account

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# Model Assumptions

- 2 periods. A small open economy
- **Consumers:**
  - Representative consumer
  - Period 1: allocates income to consumption or bonds (saving)
  - Consumption:  $C_1, C_2$
  - Bonds  $B_0$  (initial savings),  $B_1, B_2$ . Given interest  $r_0, r_1$
- **Endowment Economy:**  $Q_1, Q_2$  available to consumer
- **Equilibrium:** World interest rate.
  - Impose no saving in last period  $B_2 = 0$  (happens in equilibrium)
  - Normalize the price of the good to 1, in each period

# Consumer

- Budget Constraints

- BC 1st period:

$$C_1 + B_1 - B_0 = r_0 B_0 + Q_1$$

- BC 2ns period:

$$C_2 + B_2 - B_1 = r_1 B_1 + Q_2$$

No saving second period  $B_2 = 0$

- Combine the budget constraints and  $B_2 = 0$

$$C_1 + \frac{C_2}{1 + r_1} = (1 + r_0) B_0 + Q_1 + \frac{Q_2}{1 + r_1}$$