

2.1 : The Permanent Income Model

The Deterministic Case

$$\sum_{i=0}^{\infty} \frac{1}{(1+r)^i} = \frac{1}{1 - \frac{1}{1+r}} = \frac{1+r}{r}$$

So that
$$\frac{1}{1+r} \sum_{i=0}^{\infty} \frac{1}{(1+r)^i} C_{t+i} = \frac{C_t}{r}$$

Now, if we replace this expression into

$$A_t + H_t = \frac{1}{1+r} \sum_{i=0}^{\infty} \frac{1}{(1+r)^i} C_{t+i}$$

we get
$$C_t = r(A_t + H_t)$$

The consumption function defines a linear relation between the current consumption and the financial and human wealth.

Very different from the Keynesian consumption function that expresses the current consumption as a linear function of the current income).