

In a two-period framework with no initial or terminal assets, an individual's budget constraint can be written

$$(1+r)c_1 + c_2 = (1+r)w_1l_1 + w_2l_2,$$

with  $c$  being consumption by the person in terms of goods,  $l$  being labor hours worked,  $w$  being the real wage (goods per hour worked), and  $r$  being the real interest rate. We assume that the person takes wage rates and interest rates as exogenous.

1. For given amounts of labor in the two periods, what are the slope and vertical intercept of the budget constraint in terms of  $c_1$  and  $c_2$ , with  $c_2$  on the vertical axis?
2. For given amounts of consumption and labor in period two, what are the slope and vertical intercept of the budget constraint in terms of  $l_1$  and  $c_1$ , with  $c_1$  on the vertical axis?
3. For given amounts of consumption in the two periods, what are the slope and vertical intercept of the budget constraint in terms of  $l_1$  and  $l_2$ , with  $l_2$  on the vertical axis?