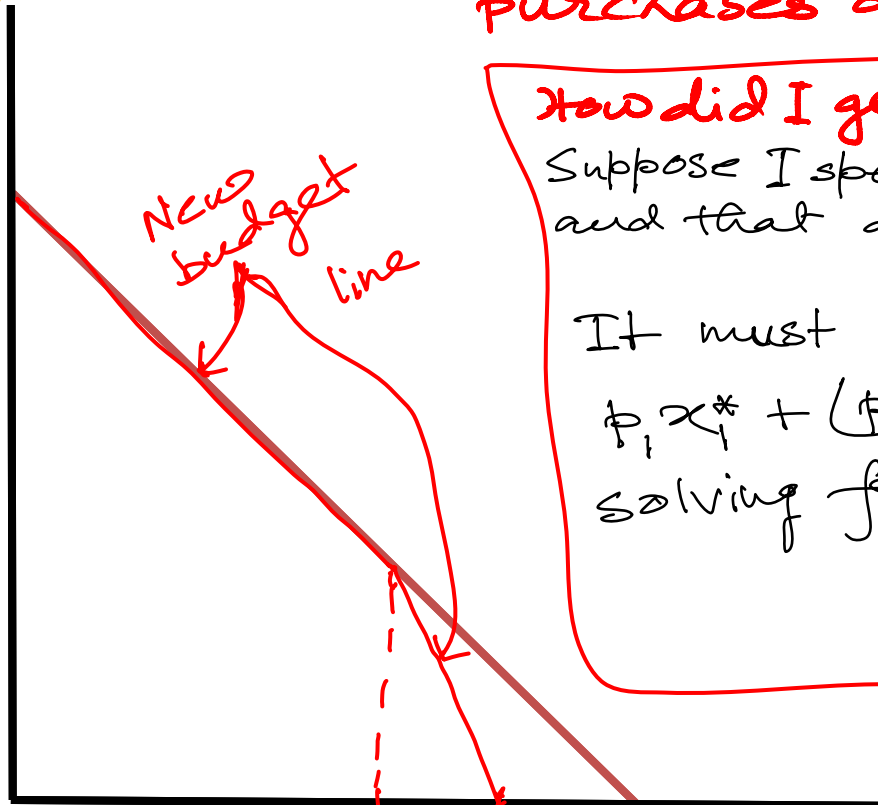


Correction

Note I assume here that  $x_1^* < \frac{m}{p_1}$ .

## Taxing ice-cream greater than $x_1^*$

ad valorem tax  $\alpha$  on  $x_1$  for purchases over  $x_1^*$ .



How did I get it?

Suppose I spend all my money on ice-cream and that allows me to buy  $z$  cones.

It must be the case that

$$p_1 x_1^* + (p_1 + \alpha p_1)(z - x_1^*) = m.$$

solving for  $z$  we have

$$z = \frac{m + \alpha x_1^* p_1}{p_1 + \alpha p_1}.$$

In the lecture I wrote  $\frac{m}{p_1 + \alpha p_1}$  instead.

