$$f'(i) = \min_x \left[ c(x) + f_{r+1}(i+x-d_r) \right]$$

$$x \geq 0$$
$$i+x-d_r \geq 0$$
$$i+x-d_r \leq H$$

(a) Add a holding cost. Charge $h$ per unit per period.

(b) We have assumed that demand must be met immediately.
   We could assume you can "back order" up to an amount $B$.
   Charge $b$ per unit period delay. Allow $i$ to be negative.

$$f_r(i) = \min_x \left[ c(x) + b \max(0,i) + p_h(i+x-d_r) \right]$$

$$i+x-d_r \geq B$$