

| Period $t$                 | 0   | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   |
|----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Demand $d_t$               | –   | 59  | 54  | 50  | 83  | 44  | 57  | 46  | 54  |
| Inventory on Hand $I_t^p$  | 248 | 189 | 135 | 85  | 2   | 0   | 0   | 55  | 1   |
| Inventory on Order $I_t^o$ | –   | 0   | 200 | 200 | 200 | 400 | 400 | 200 | 200 |
| Backlog $I_t^f$            | –   | 0   | 0   | 0   | 0   | 42  | 99  | 0   | 0   |
| Net Inventory $I_t^n$      | 248 | 189 | 135 | 85  | 2   | -42 | -99 | 55  | 1   |
| Inventory Position $I_t^d$ | 248 | 189 | 335 | 285 | 202 | 358 | 301 | 255 | 201 |

Table B.2: Development of Inventory (Order Quantity = 200)

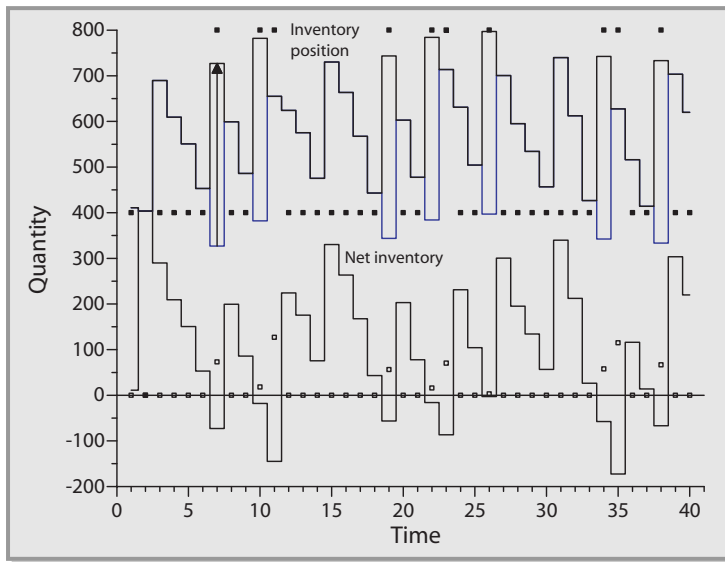


Figure B.3: Development of Inventory

Figure B.3 shows, for a different situation, a typical inventory development under an  $(s, q)$  policy. The dark dots mark the inventory on order at the end of each period, following the inventory review. In the upper part, the inventory position is shown immediately before as well as after the ordering decision. Only in those periods in which the inventory position falls below the reorder point ( $s = 400$ ), there is a difference between the inventory position at both of these points in time. The vertical arrow denotes the leap of the inventory position as a consequence of an order ( $q = 400$ ). In the lower part of the figure, the net inventory is depicted which in most periods is positive (i. e. inventory