

**Sets**

$P$  set of products

**Data**

$r_i$  return (%) for product  $i \in P$

**Variables**

$x_i$  investment in product  $i \in P$  (dollars)

**Objective function**

$$\text{maximize } \sum_{i \in P} r_i \cdot x_i / 100$$

**Constraints**

$$\sum_{i \in P} x_i = 100,000$$

$$x_{Cars \text{ (Germany)}} + x_{Cars \text{ (Japan)}} \leq 30,000 \quad (1)$$

$$x_{Short-term \text{ bonds}} \geq 0.4 x_{Medium-term \text{ bonds}} \quad (6)$$

$$x_i \geq 0 \quad \forall i \in P$$