Sets

P	set of products
S	set of scenarios

Data

r_i	first year return (%) for product $i \in P$
$prob_s$	probability of scenario $s \in S$
q_{is}	second year return (%) for product $i \in P$ if we are in scenario $s \in S$

Variables

x_i	first year investment in product $i \in P$ (dollars)
y_{is}	second year investment in product $i \in P$ if we are in scenario $s \in S$ (dollars)

Objective function

$$maximize \sum_{i \in P} r_i . x_i \,/100 + \sum_{\substack{i \in P \\ s \in S}} prob_s . q_{is} . y_{is} \,/100$$

Constraints

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

$$\sum_{i \in P} y_{is} = 100{,}000 \qquad \forall\, s \in S$$

$$x_i - 10{,}000 \le y_{is} \le x_i + 10000 \quad \forall i \in P, \forall s \in S$$

$$x_{Cars\ (Germany)} + x_{Cars\ (Japan)} \le 30{,}000 \qquad (1)$$

$$x_{Short-term\ bonds} \ge 0.4 x_{Medium-term\ bonds} \qquad (6)$$

$$x_i \ge 0 \quad \forall\, i \in P$$

$$y_{is} \ge 0 \quad \forall i \in P, \forall s \in S$$