1.设投资证券A，B，C，D，E的金额分别为x1，x2，x3，x4，x5(百万元),按照规定、限制和1000万元资金约束，列出模型

Max 0.043x1+0.027x2+0.025x3+0.022x4+0.045x5

s.t. x2+x3+x4≥4

X1+x2+x3+x4+x5≥10

（2x+2x2+x3+x4+5x5）/（x1+x2+x3+x4+x5）≤1.4

即6x1+6x2-4x3-4x4+36x3≤0

（9x1+15x2+4x3+3x4+2x5）/（x1+x2+x3+x4+x5）≤5

即4x1+10x2-x3-2x4-3x5≤0

x1，x2，x3，x4，x5≥0

用LINDO求解并要求灵敏性分析，得到:

OBJECTIVE FUNCTION VALUE

1) 0.2983637

VARIABLE VALUE REDUCED COST

X1 2.181818 0.000000

X2 0.000000 0.030182

X3 7.363636 0.000000

X4 0000000 0.000636

X5 0.454545 0.000000

ROW SLACKOR SURPLUS DUAL PRICES

2) 3.818182 0.000000

3) 0.000000 0.029836

4) 0.000000 0.000618

5) 0.000000 0.002364

RANGES IN WHICH THE BASIS IS UNCHANGED:

OBJ COEFFICIENT RANGES

VARIABLE CURRENT ALLOWABLE ALLOWABLE

COEF INCREASE DECREASE

X1 0.043000 0.003500 0.013000

X2 0.027000 0.030182 INFINITY

X3 0.025000 0.017333 0.000560

X4 0.022000 0.000636 INFINITY

X5 0.045000 0.052000 0.014000

RIGHTHAND SIDE RANGES

ROW CURRENT ALLOWABLE ALLOWABLE

RHS INCREASE DECREASE

2 4000000 3.818182 INFINITY

3 10.000000 INFINITY 4.883721

4 0.000000 231.428574 20.000000

5 0.000000 10.000000 12000000

即证券A,C,E分别投资2.182百万元，7.364百万元0.454百万元，最大税后收益为0.298百万元。