Example B

	$\bar{R}$	σ
Large Stocks	**10.7**	**20.3**
Small Stocks	**12.6**	**34.1**
Corporate Bonds	**5.6**	**9.2**

$$\rho_{L,S} = .81 \qquad R_F = 4\%$$

$$\rho_{LC} = .25$$

$$\rho_{SC} = .11$$

$$10.7 - 4 = Z_1(20.3)^2 + Z_2(.81)(20.3)(34.1) + Z_3(.25)(20.3)(9.2)$$

$$12.6 - 4 = Z_1(.81)(20.3)(34.1) + Z_2(34.1)^2 + Z_3(.11)(34.1)(9.2)$$

$$5.6 - 4 = Z_1(.25)(20.3)(9.2) + Z_2(9.2)^2 + Z_3(9.2)^2$$

$$6.7 = 412.09Z_1 + 560.7063Z_2 + 46.69Z_3$$

$$8.6 = 560.7063Z_1 + 1162.81Z_2 + 34.5092Z_3$$

$$1.6 = 46.69Z_1 + 34.5092Z_2 + 84.64Z_3$$

$$Z_1 = .01581$$

$$Z_2 = -.000536$$

$$Z_3 = .010401$$

$$\Sigma Z_i = .025675$$

$$X_1 = .615774$$

$$X_2 = -.02088$$

$$X_3 = .405102$$

$$Z_1 = .020976 - .001292 R_F$$

$$Z_2 = -.0091 + .00093 R_F$$

$$Z_3 = .054963 - .01114 R_F$$