

Trh	CP	r_i	riziko	korelace _{A,B}
I	A	0.22	0.3	0.15
	B	0.31	0.32	
II	A	0.26	0.29	-0.06
	B	0.34	0.33	
III	A	0.18	0.2	0.09
	B	0.41	0.38	

Trh_I

C_M

0.09 0.0144
0.0144 0.1024

Matic_soustava

Xa Xb lambda1
0.18 0.0288 1
0.0288 0.2048 1
1 1 0

VPS

Xi
0 Xa
0 Xb
1 lambda
zkouska

Inverzni matice

3.056235 -3.05623 0.537897
-3.05623 3.056235 0.462103
0.537897 0.462103 -0.11013

Zkouska

1 0
0 1
0 0

Trh_II

C_M

0.0841 -0.00574
-0.00574 0.1089

Matic_soustava

Xa Xb lambda1
0.1682 -0.01148 1
-0.01148 0.2178 1
1 1 0

VPS

Xi
0 Xa
0 Xb
1 lambda
zkouska

Inverzni matice

2.445179 -2.44518 0.56064
-2.44518 2.445179 0.43936
0.56064 0.43936 -0.08925

Zkouska

1 0
0 1
0 0

Trh_III

C_M

0.04 0.00684
0.00684 0.1444

Matic_soustava

Xa Xb lambda1
0.08 0.01368 1

VPS

Xi
0 Xa

0.01368	0.2888	1
1	1	0

0	Xb
1	lambda
	zkouska

Inverzni matice

2.928772	-2.92877	0.805764
-2.92877	2.928772	0.194236
0.805764	0.194236	-0.06712

Zkouska		
	1	0
	0	1
	0	0

Trh	Rp	sigma_p	Sharpe_R
I	0.261589	0.234659	0.897053
II	0.295149	0.211251	0.715745
III	0.224674	0.183192	0.815365

1.114761 1.397146 **Nejlepsi var** 1.226445

0.537897
0.462103
-0.11013
1
0
0
1

Rp	Riziko
0.261589	0.234659

0
|
0
|
0
|
0

0.56064
0.43936
-0.08925
1
0
0
1

Rp	Riziko
0.295149	0.211251

0.805764

Rp	Riziko
0.224674	0.183192

0.194236

-0.06712

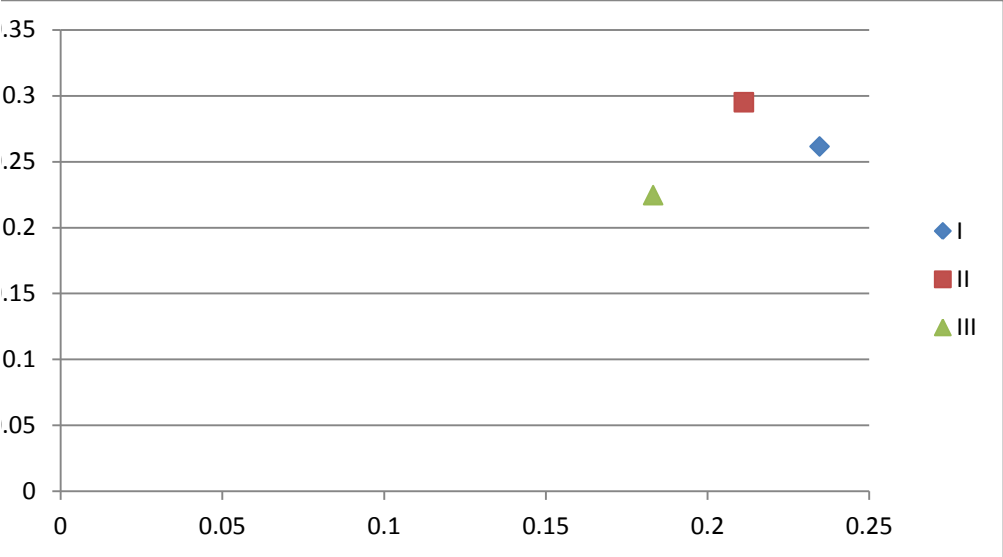
1

0

0

1

rianta!



	Firma 1	Firma 2	Firma 3		Kovariance	
μ	0.8	0.3	0.6		$\sigma_{1,2}$	-0.1
σ	1.2	0.8	1.1		$\sigma_{1,3}$	-0.5
					$\sigma_{2,3}$	0.3

CM	Firma 1	Firma 2	Firma 3
Firma 1	1.44	-0.1	-0.5
Firma 2	-0.1	0.64	0.3
Firma 3	-0.5	0.3	1.21

Matice soustavy

X1	X2	X3	lambda1	lambda2	VPS
2.88	-0.2	-1	1	0.8	0
-0.2	1.28	0.6	1	0.3	0
-1	0.6	2.42	1	0.6	0
1	1	1	0	0	1
0.8	0.3	0.6	0	0	0.15

Inverzni Matice

0.084002	0.056001	-0.14	-0.33097	1.200299
0.056001	0.037334	-0.09334	1.779354	-2.53313
-0.14	-0.09334	0.23334	-0.44839	1.332836
-0.33097	1.779354	-0.44839	-3.83598	5.870823
1.200299	-2.53313	1.332836	5.870823	-10.6268

0.8
0.3
0.6

Zk
Rp 0.15

Xi	
X1	-0.150924025
X2	1.399383984
X3	-0.248459959
lambda1	-2.955359343
lambda2	4.276796715

Zk						
						1
Zk						
1	0	0	0	0	0	0
0	1	0	0	0	0	0
0	0	1	0	0	0	0
0	0	0	0	1	0	0
0	0	0	0	0	1	0
0	0	0	0	0	0	1

Riziko
1.075602

Emise	CP ₁	CP ₂	CP ₃	CP ₄	CP ₅
CP ₁	80.5	82.7	85.3	85.1	123.9
CP ₂	82.7	184.7	131.5	69.4	49.5
CP ₃	85.3	131.5	374.2	384.5	366.5
CP ₄	85.1	69.4	384.5	684.8	599.1
CP ₅	123.9	49.5	366.5	599.1	871.4
CP ₆	22	58	103.8	51.6	-21.2
CP ₇	3.5	-9.9	343.5	502.7	520.4

b) Matice soustavy

	CP1	CP2	CP3	CP4	CP5
CP1	161	165.4	170.6	170.2	247.8
CP2	165.4	369.4	263	138.8	99
CP3	170.6	263	748.4	769	733
CP4	170.2	138.8	769	1369.6	1198.2
CP5	247.8	99	733	1198.2	1742.8
CP6	44	116	207.6	103.2	-42.4
CP7	7	-19.8	687	1005.4	1040.8
	1	1	1	1	1
	1.9	6.1	2.9	4	5.7

Inv_matice

0.016039416	0.007660609	-0.00406833	-0.00315134	-0.00914096
0.007660609	0.00468536	-0.00072196	-0.00130916	-0.00537105
-0.00406833	-0.00072196	0.004856308	-0.00091526	0.001708481
-0.00315134	-0.00130916	-0.00091526	0.003578658	0.001027626
-0.00914096	-0.00537105	0.001708481	0.001027626	0.00733021
-0.02351028	-0.01268939	0.002544365	0.004876574	0.01499997
0.01617088	0.007745581	-0.00340361	-0.0041071	-0.01055428
2.286870663	0.010736227	-0.25938093	-0.24623346	-0.84279583
-0.37867405	0.085258694	-0.07915971	0.040381057	0.175762112

0.3935 0.43703 -0.65518 -0.04433 0.036015 0.415334 0.417629

CP1	CP2	CP3	CP4	CP5	CP6	CP7
12.46483	14.22203	-21.9915	-1.48441	1.755887	3.595548	0.57518
14.22203	35.27677	-37.6528	-1.34447	0.779106	10.52776	-1.80691
-21.9915	-37.6528	160.6291	11.167	-8.64797	-28.2459	-93.9892
-1.48441	-1.34447	11.167	1.345623	-0.95644	-0.95001	-9.30635
1.755887	0.779106	-8.64797	-0.95644	1.130259	-0.31711	7.827232
3.595548	10.52776	-28.2459	-0.95001	-0.31711	15.47344	12.90509
0.57518	-1.80691	-93.9892	-9.30635	7.827232	12.90509	100.2183

suma 39.86213

Riziková portfolia	A	B	C	D
r_p	6.20%	4%	7.50%	8.40%
σ_p	14.50%	9.70%	17%	20%

	1.	2.	3.	4.	5.
r_f	0.2	0.4	0.5	0.6	0.8
Portfolio	0.8	0.6	0.5	0.4	0.2

Vynosno	1	2	3	4	5
A	0.7496	1.4372	1.781	2.1248	2.8124
B	0.732	1.424	1.77	2.116	2.808
C	0.76	1.445	1.7875	2.13	2.815
D	0.7672	1.4504	1.792	2.1336	2.8168

Riziko	1	2	3	4	5
A	0.116	0.087	0.0725	0.058	0.029
B	0.0776	0.0582	0.0485	0.0388	0.0194
C	0.136	0.102	0.085	0.068	0.034
D	0.16	0.12	0.1	0.08	0.04

