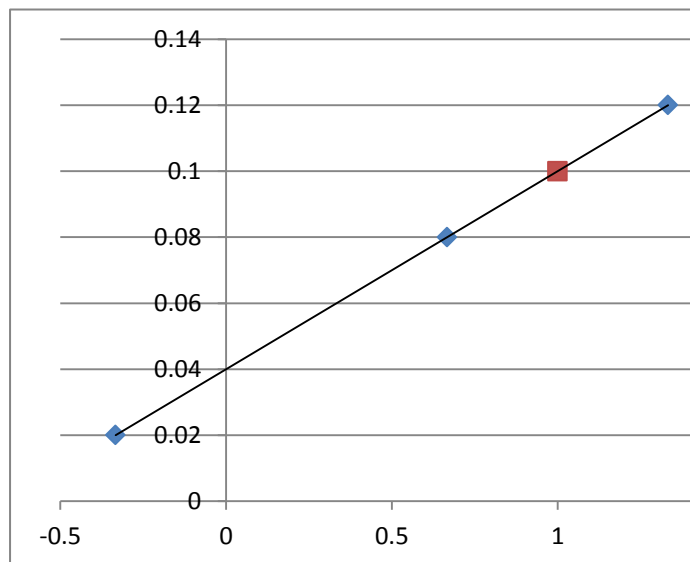
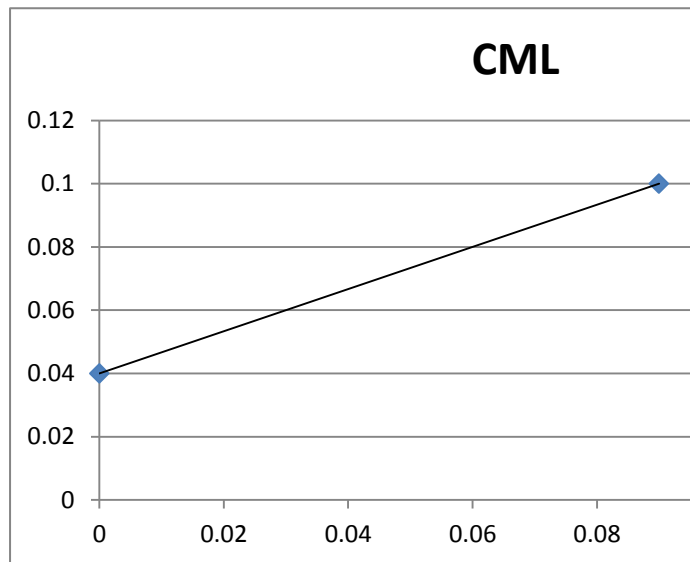
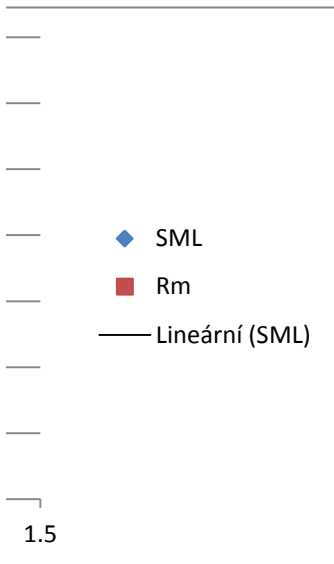
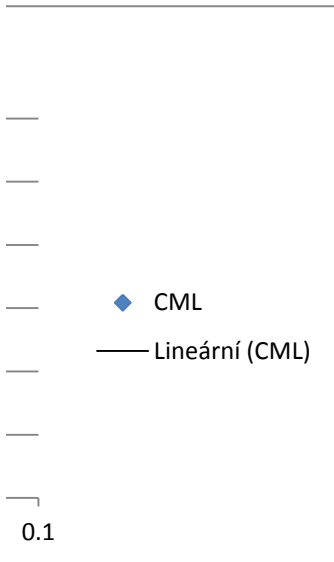
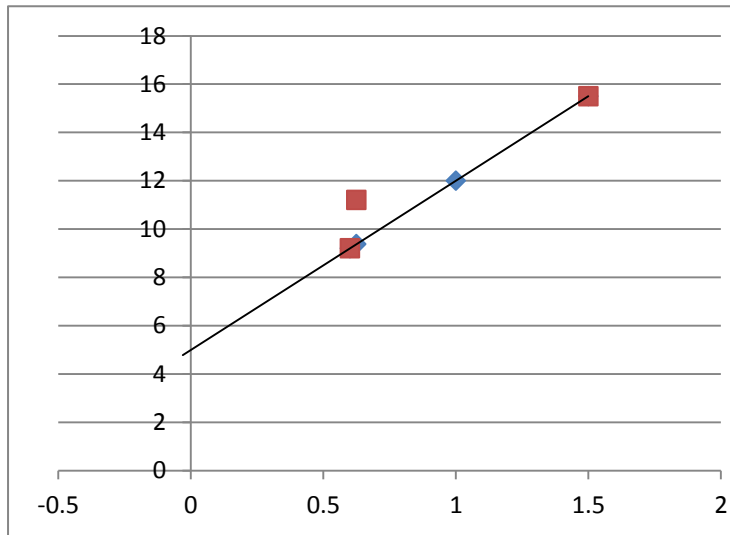


rf	0.04	0
rm	0.1	0.09
sigma_m	0.09	
covar(r1,rm)	0.0108	
covar(r2,rm)	-0.0027	
covar(r3,rm)	0.0054	
		E(ri)
beta1	1.333333	0.12
beta2	-0.333333	0.02
beta3	0.666667	0.08





	$r_i$	correlation i a M	sigma i	beta_i	E(r <sub>i</sub> )	delta
<b>S1</b>	15.5	0.9	20	1.5	15.5	0
<b>S2</b>	9.2	0.8	9	0.6	9.2	0
<b>S3</b>	11.2	0.5	15	0.625	9.375	1.825
<b>MP</b>	12	1	12	1	12	
<b>r<sub>f</sub></b>	5	0	0			



◆ SMLs

■ Real values

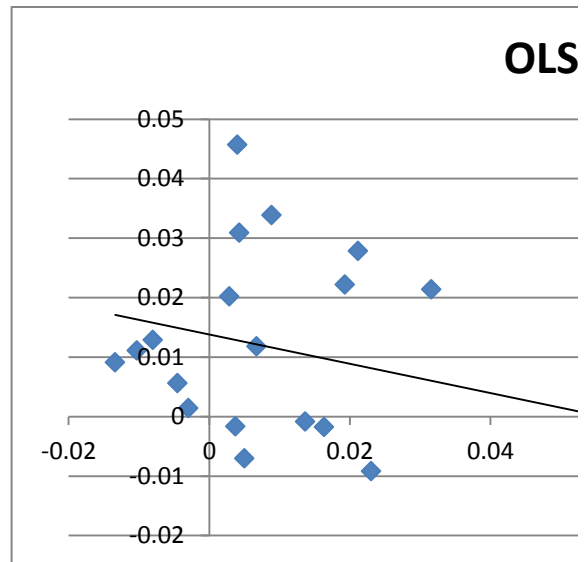
— Lineární (SMLs)



Inv_M	3135.688208
	-308.3583546
	-723.9039686
	-2041.711841
	-61.71404383
	0.518336137

Tg portfoli	7518.836014
	-396.1822772
	-1270.206012
	-3395.350697
	-50.43558186

B	C	D	E	Market Index
-0.002034589	0.066349	-0.00186	-0.00484	0.016362
-0.016427474	0.013889	-0.01122	-0.01074	0.023043
-0.001035733	-0.01249	0.013072	-0.01882	0.002879
0.00516797	0.012491	0.031053	0.015873	0.008874
0.014329826	0.003442	0.024868	-0.00394	-0.00801
0.006079046	-0.0151	-0.04119	0.007874	0.003728
0.062642786	0.006815	0.016319	-0.00393	0.013644
0.103556232	-0.00403	0.005381	0.000984	0.019293
0.022833973	-0.00111	0.010676	-0.01187	0.031619
-0.054996676	0.016168	-0.00177	0.028447	-0.00296
-0.033231617	-0.03757	-0.02696	-0.0107	0.063344
-0.041964199	0.066352	0.00182	0.004876	0.004285
-0.000952835	0.050514	0.028676	-0.02962	0.021153
0.003805904	0.011833	0.005286	0.015905	-0.01339
0.003791474	0.007356	-0.01594	-0.00494	-0.01028
0.02614528	0.077651	0.012423	-0.0571	0.004026
0.016453753	0.07483	0.005277	-0.37193	0.006758
0.020637789	0.011875	-0.00351	0.414053	-0.0045
0.011479155	0.002842	-0.0053	-0.00201	0.004999
0.007698951	0.018532	0.002479	-0.00223	0.00973
-2.00636E-05	-0.00014	-5.8E-05	-0.00035	0.000311
-0.064463954	-0.46036	-0.18606	-1.12845	1



sum_Xi	sum_Yi	Fce	beta	alfa
sum_Xi*Xi	sum_Xi*Yi			
	alfa		-0.24623	0.013807
	beta		0.216607	0.004275
0.184867802	0.216808		0.070644	0.016213
0.007401015	0.00073		1.292229	17
			0.00034	0.004468
-1.736774451	alfa			
178.4989822	beta			
				0.013807
				-0.24623

syst. Risk A    unsyst.Risk A  
1.88703E-05    0.000248

sigma\_uns    0.015756

B	C	D	E		vrs
0.000122378	0.000257	0.00019	-0.00025		
0.001223278	-0.00011	0.000168	-1.4E-05		
-0.000106427	0.001071	0.000203	-0.0015		
0.00016828	0.000203	0.00033	-0.00026		
-1.35394E-05	-0.0015	-0.00026	0.017557		
0.000244757	0.000514	0.000381	-0.00051	1	0
0.002446556	-0.00021	0.000337	-2.7E-05	1	0
-0.000212854	0.002143	0.000407	-0.00299	1	0
0.00033656	0.000407	0.000659	-0.00052	1	0
-2.70788E-05	-0.00299	-0.00052	0.035114	1	0
	1	1	1	1	0
				0	1

-308.3583546	-723.904	-2041.71	-61.714	0.518336	w1	0.518336	0.518336137
450.2517943	127.2655	-269.301	0.141659	0.091635	w2	0.091635	7.17675E-05
127.2654861	713.6363	-162.924	45.92632	0.073796	w3	0.073796	5.8127E-06
-269.300585	-162.924	2488.709	-14.7721	0.285904	w4	0.285904	9.83657E-06
0.141659233	45.92632	-14.7721	30.41821	0.030329	w5	0.030329	2.81979E-05
0.091635004	0.073796	0.285904	0.030329	-0.00043	lambda1	-0.00043	-3.97774E-06

Proof 1

Rp	0.008629
Var_p	0.000215
Sigma_p	0.014676

-396.1822772	-1270.21	-3395.35	-50.4356	VRS	0.011292	Av(ri)	0.011410933
939.4911725	285.9287	-416.959	13.18743		0.00758		0.007698951
285.9286541	1452.558	-227.887	102.2446		0.018413		0.018531903
-416.9589258	-227.887	5356.944	10.71687		0.00236		0.002479482
13.18743242	102.2446	10.71687	65.10743		-0.00235		-0.002233347

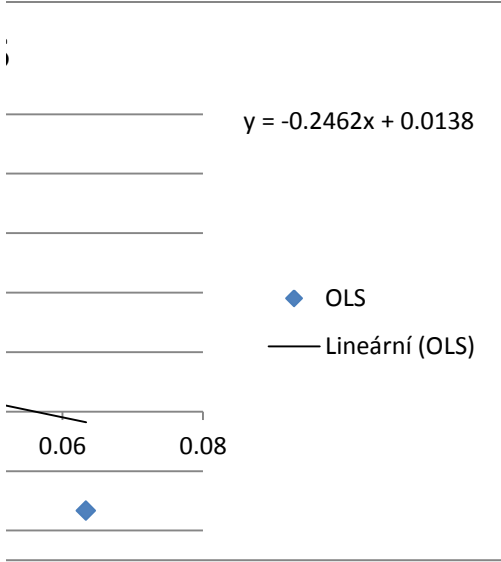
Zi

Z1	50.61484	w1	1.281004945
Z2	6.897144	w2	0.17455901
Z3	13.7916	w3	0.349049953
Z4	-33.077	w4	-0.837140901
Z5	1.285201	w5	0.032526993

sum\_Zi 39.51182 1

Rp	0.020282
Var_p	0.00051
Sigma_p	0.02259





0.091635	0.073796	0.285904	0.030329
5.81E-06	9.84E-06	2.82E-05	-4E-06
1.03E-05	-7.2E-07	4.41E-06	-3.8E-08
-7.2E-07	5.83E-06	4.29E-06	-3.3E-06
4.41E-06	4.29E-06	2.69E-05	-2.3E-06
-3.8E-08	-3.3E-06	-2.3E-06	1.62E-05

rf (p.d.)  
0.000119

1.281005	0.174559	0.34905	-0.83714	0.032527
0.000438	2.74E-05	0.000115	-0.0002	-1.1E-05
2.74E-05	3.73E-05	-6.5E-06	-2.5E-05	-7.7E-08
0.000115	-6.5E-06	0.000131	-5.9E-05	-1.7E-05
-0.0002	-2.5E-05	-5.9E-05	0.000231	7.08E-06
-1.1E-05	-7.7E-08	-1.7E-05	7.08E-06	1.86E-05