Security	Return_i	Excessive r	beta_i	VarEpsilon_	(r_i-r_fú/be	(r_i-r_f)*be	cum_sum	beta_i^2/v
1	15	10	1	50	10	0.2	0.2	0.02
2	17	12	1.5	40	8	0.45	0.65	0.05625
3	12	7	1	20	7	0.35	1	0.05
4	17	12	2	10	6	2.4	3.4	0.4
5	11	6	1	40	6	0.15	3.55	0.025
6	11	6	1.5	30	4	0.3	3.85	0.075
7	11	6	2	40	3	0.3	4.15	0.1
8	7	2	0.8	16	2.5	0.1	4.25	0.04
9	7	2	1	20	2	0.1	4.35	0.05
10	5.6	0.6	0.6	6	1	0.06	4.41	0.06
rf	5							
var_M	10							

long only portfolio

	Zi	wi
1	0.090979	0.23477
2	0.095585	0.246657
3	0.077447	0.199851
4	0.109789	0.283309
5	0.013724	0.035414
Sum_Zi	0.387524	1

also short positions

	Zi	wi
1	0.109654	6.15451
2	0.130602	7.330219
3	0.124136	6.967301
4	0.296543	16.64391
5	0.037068	2.080489
6	-0.02586	-1.45167
7	-0.07586	-4.25799
8	-0.10086	-5.66116
9	-0.12586	-7.06432
10	-0.35173	-19.7413
Sum_Zi	0.017817	1

cum_sum	C_i	C*	
0.02	1.666667	long	
0.07625	3.687943	long	
0.12625	4.41989	long	
0.52625	5.429142	long	
0.55125	5.451056	long	C*
0.62625	5.301205	short	
0.72625	5.022693	short	
0.76625	4.906205	short	
0.81625	4.747613	short	
0.87625	4.517286	short	C**

Rp	beta_p	SysVarP	UnsysVarP	VarP	SigmaP	ratio
15.31872	1.406637	19.78628	6.841037	26.62731	5.160166	2.968649

Rp	beta_p	SysVarP	UnsysVarP	VarP	SigmaP	ratio
343.935	25.35393	6428.22	12595.01	19023.23	137.9247	2.493643

Security	Return_i	Beta_i	Var_Epsi	(r_i-rf)/bet	(r_i-r_f)*be	cum_sum	beta_i^2/v	cum_sum
1	19	1	20	16	0.8	0.8	0.05	0.05
3	11	0.5	10	16	0.4	1.2	0.025	0.075
2	23	1.5	30	13.33333	1	2.2	0.075	0.15
6	9	0.5	50	12	0.06	2.26	0.005	0.155
4	25	2	40	11	1.1	3.36	0.1	0.255
5	13	1	20	10	0.5	3.86	0.05	0.305
7	14	1.5	30	7.333333	0.55	4.41	0.075	0.38
8	10	1	50	7	0.14	4.55	0.02	0.4
9	9.5	1	50	6.5	0.13	4.68	0.02	0.42
11	11	1.5	30	5.333333	0.4	5.08	0.075	0.495
10	13	2	20	5	1	6.08	0.2	0.695
12	8	1	20	5	0.25	6.33	0.05	0.745
14	7	1	20	4	0.2	6.53	0.05	0.795
13	10	2	40	3.5	0.35	6.88	0.1	0.895

r_f	3
var_m	10

long only portfolio

	Zi	wi	Rp
1	0.323457	0.337411	17.14939
2	0.323457	0.337411	
3	0.190123	0.198326	
4	0.024691	0.025757	
5	0.073457	0.076626	
6	0.023457	0.024469	
sum_Zi	0.958642	1	

long/short portfolio

	Zi	wi	Rp
			22.62617
1	0.454271	0.468066	
2	0.454271	0.468066	
3	0.320938	0.330684	
4	0.050854	0.052399	
5	0.204271	0.210475	
6	0.154271	0.158956	
7	0.020938	0.021574	
8	0.001709	0.00176	
9	-0.00829	-0.00854	
10	-0.07906	-0.08146	
11	-0.19146	-0.19727	
12	-0.09573	-0.09864	
13	-0.14573	-0.15015	
14	-0.17073	-0.17591	
sum_Zi	0.970528	1	

C_i	selection	
5.333333	long	
6.857143	long	
8.8	long	
8.862745	long	
9.464789	long	
9.530864	long	C*
9.1875	short	
9.1	short	
9	short	
8.537815	short	
7.647799	short	
7.491124	short	
7.296089	short	
6.914573	short	

Beta_p	SysVarP	UnsysVarP	VarP	SigmaP	ratios
0.994205	9.884431	4.875394	14.75983	3.841852	4.463834

Beta_p	SysVarP	UnsysVarP	VarP	SigmaP	ratios
0.712455	5.075922	15.14624	20.22216	4.496906	5.031497