

## ČEZ

<a href="#">25.3.2005</a>	420.41	+0.60%
<a href="#">24.3.2005</a>	409.35	+3.64%
<a href="#">23.3.2005</a>	395.82	+0.02%
<a href="#">22.3.2005</a>	392.37	+6.60%
<a href="#">21.3.2005</a>	378.73	-2.36%
<a href="#">18.3.2005</a>	395.28	-0.74%
<a href="#">17.3.2005</a>	399.70	-2.80%
<a href="#">16.3.2005</a>	410.13	-6.97%
<a href="#">15.3.2005</a>	438.63	-1.45%
<a href="#">14.3.2005</a>	448.49	-4.87%
<a href="#">11.3.2005</a>	466.06	-0.80%
<a href="#">10.3.2005</a>	459.18	+3.64%
<a href="#">9.3.2005</a>	449.01	+1.27%
<a href="#">8.3.2005</a>	444.23	-0.67%
<a href="#">7.3.2005</a>	437.14	+3.73%
<a href="#">4.3.2005</a>	423.08	+3.01%
<a href="#">3.3.2005</a>	420.82	-3.13%
<a href="#">2.3.2005</a>	428.28	-0.09%
<a href="#">1.3.2005</a>	430.08	+0.28%
<a href="#">28.2.2005</a>	428.81	+1.74%
<a href="#">25.2.2005</a>	416.41	+0.96%
<a href="#">24.2.2005</a>	413.46	-1.59%
<a href="#">23.2.2005</a>	420.47	+0.81%
<a href="#">22.2.2005</a>	412.83	+2.67%
<a href="#">21.2.2005</a>	399.72	+2.81%
<a href="#">18.2.2005</a>	393.59	+2.38%
<a href="#">17.2.2005</a>	384.54	-0.05%
<a href="#">16.2.2005</a>	387.68	-0.36%
<a href="#">15.2.2005</a>	388.74	+0.36%
<a href="#">14.2.2005</a>	388.56	-0.41%
<a href="#">11.2.2005</a>	385.81	+2.41%
<a href="#">10.2.2005</a>	375.89	+1.32%
<a href="#">9.2.2005</a>	368.69	+1.53%
<a href="#">8.2.2005</a>	366.69	+0.44%
<a href="#">7.2.2005</a>	361.28	+2.07%
<a href="#">4.2.2005</a>	354.17	+1.22%
<a href="#">3.2.2005</a>	351.92	+0.37%
<a href="#">2.2.2005</a>	351.02	-0.31%

## PHILIP MORIS

<a href="#">25.3.2005</a>	19 285.00	+2.48%
<a href="#">24.3.2005</a>	18 818.00	+4.28%
<a href="#">23.3.2005</a>	18 046.00	+1.95%
<a href="#">22.3.2005</a>	17 701.00	+2.05%
<a href="#">21.3.2005</a>	17 346.00	-3.06%
<a href="#">18.3.2005</a>	17 893.00	+0.31%
<a href="#">17.3.2005</a>	17 838.00	+0.50%
<a href="#">16.3.2005</a>	17 749.00	-6.21%
<a href="#">15.3.2005</a>	18 925.00	-0.60%
<a href="#">14.3.2005</a>	19 040.00	+3.16%
<a href="#">11.3.2005</a>	18 456.00	-1.64%
<a href="#">10.3.2005</a>	18 763.00	-0.31%
<a href="#">9.3.2005</a>	18 821.00	+0.37%
<a href="#">8.3.2005</a>	18 751.00	-0.03%
<a href="#">7.3.2005</a>	18 756.00	+0.30%
<a href="#">4.3.2005</a>	18 700.00	-0.13%
<a href="#">3.3.2005</a>	18 725.00	-4.32%
<a href="#">2.3.2005</a>	19 571.00	+1.08%
<a href="#">1.3.2005</a>	19 362.00	+0.09%
<a href="#">28.2.2005</a>	19 345.00	+2.00%
<a href="#">25.2.2005</a>	18 965.00	+0.16%
<a href="#">24.2.2005</a>	18 935.00	+0.77%
<a href="#">23.2.2005</a>	18 791.00	+0.86%
<a href="#">22.2.2005</a>	18 631.00	+0.55%
<a href="#">21.2.2005</a>	18 530.00	-1.88%
<a href="#">18.2.2005</a>	18 886.00	+0.16%
<a href="#">17.2.2005</a>	18 855.00	+0.19%
<a href="#">16.2.2005</a>	18 820.00	-0.25%
<a href="#">15.2.2005</a>	18 868.00	-0.44%
<a href="#">14.2.2005</a>	18 951.00	-2.19%
<a href="#">11.2.2005</a>	19 376.00	-1.71%
<a href="#">10.2.2005</a>	19 714.00	-1.14%
<a href="#">9.2.2005</a>	19 942.00	+0.13%
<a href="#">8.2.2005</a>	19 916.00	+1.33%
<a href="#">7.2.2005</a>	19 655.00	+3.47%
<a href="#">4.2.2005</a>	18 996.00	-0.74%
<a href="#">3.2.2005</a>	19 138.00	+1.79%
<a href="#">2.2.2005</a>	18 801.00	-0.03%

<a href="#">1.2.2005</a>	349.62	+0.23%
<a href="#">31.1.2005</a>	351.48	-0.85%
<a href="#">28.1.2005</a>	354.00	+0.71%
<a href="#">27.1.2005</a>	353.41	-0.03%
<a href="#">26.1.2005</a>	354.54	-1.04%
<a href="#">25.1.2005</a>	354.21	+2.57%
<a href="#">24.1.2005</a>	346.68	+0.03%
<a href="#">21.1.2005</a>	347.43	-0.34%
<a href="#">20.1.2005</a>	347.51	-0.17%
<a href="#">19.1.2005</a>	353.38	-1.37%
<a href="#">18.1.2005</a>	355.43	-0.31%

<a href="#">1.2.2005</a>	18 806.00	+2.12%
<a href="#">31.1.2005</a>	18 416.00	-0.02%
<a href="#">28.1.2005</a>	18 420.00	+1.74%
<a href="#">27.1.2005</a>	18 105.00	+1.68%
<a href="#">26.1.2005</a>	17 806.00	+1.81%
<a href="#">25.1.2005</a>	17 490.00	-0.35%
<a href="#">24.1.2005</a>	17 551.00	+0.01%
<a href="#">21.1.2005</a>	17 549.00	+0.58%
<a href="#">20.1.2005</a>	17 448.00	-0.66%
<a href="#">19.1.2005</a>	17 564.00	-2.37%
<a href="#">18.1.2005</a>	17 991.00	-0.06%

## UNIPETROL

<a href="#">25.3.2005</a>	142.00	+1.43%
<a href="#">24.3.2005</a>	140.00	+5.18%
<a href="#">23.3.2005</a>	133.11	-1.10%
<a href="#">22.3.2005</a>	134.59	+6.56%
<a href="#">21.3.2005</a>	126.30	-5.64%
<a href="#">18.3.2005</a>	133.85	+5.46%
<a href="#">17.3.2005</a>	126.92	-8.20%
<a href="#">16.3.2005</a>	138.25	-11.49%
<a href="#">15.3.2005</a>	156.20	-8.76%
<a href="#">14.3.2005</a>	171.19	-19.17%
<a href="#">11.3.2005</a>	211.80	+2.07%
<a href="#">10.3.2005</a>	207.50	+3.34%
<a href="#">9.3.2005</a>	200.80	+7.09%
<a href="#">8.3.2005</a>	187.50	+1.53%
<a href="#">7.3.2005</a>	184.68	+2.50%
<a href="#">4.3.2005</a>	180.18	-3.39%
<a href="#">3.3.2005</a>	186.50	+1.47%
<a href="#">2.3.2005</a>	183.80	-1.74%
<a href="#">1.3.2005</a>	187.05	+3.61%
<a href="#">28.2.2005</a>	180.54	+5.95%
<a href="#">25.2.2005</a>	170.40	+0.62%
<a href="#">24.2.2005</a>	169.35	+0.57%

Datum	PK30	PX50
25.3.2005	1 702.88	1 175.20
24.3.2005	1 685.94	1 170.10
23.3.2005	1 636.26	1 145.00
22.3.2005	1 644.14	1 147.60
21.3.2005	1 598.39	1 117.40
18.3.2005	1 628.72	1 137.70
17.3.2005	1 629.47	1 131.70
16.3.2005	1 650.89	1 143.40
15.3.2005	1 753.46	1 214.10
14.3.2005	1 772.50	1 220.10
11/3/2005	1 827.80	1 255.80
10/3/2005	1 826.99	1 262.70
9/3/2005	1 795.81	1 250.10
8/3/2005	1 784.03	1 240.90
7/3/2005	1 780.23	1 250.40
4/3/2005	1 731.61	1 217.60
3/3/2005	1 729.56	1 205.10
2/3/2005	1 737.46	1 211.30
1/3/2005	1 741.00	1 212.90
28.2.2005	1 727.79	1 199.90
25.2.2005	1 708.17	1 187.90
24.2.2005	1 699.61	1 171.90

<u>23.2.2005</u>	168.39	-4.02%
<u>22.2.2005</u>	175.44	+15.16%
<u>21.2.2005</u>	152.35	+8.67%
<u>18.2.2005</u>	140.20	+2.23%
<u>17.2.2005</u>	137.14	+0.44%
<u>16.2.2005</u>	136.54	+2.42%
<u>15.2.2005</u>	133.31	+3.90%
<u>14.2.2005</u>	128.30	+1.95%
<u>11.2.2005</u>	125.85	+4.19%
<u>10.2.2005</u>	120.79	-3.13%
<u>9.2.2005</u>	124.69	+0.16%
<u>8.2.2005</u>	124.49	+0.76%
<u>7.2.2005</u>	123.55	+1.91%
<u>4.2.2005</u>	121.24	-4.31%
<u>3.2.2005</u>	126.70	-0.58%
<u>2.2.2005</u>	127.44	-0.04%
<u>1.2.2005</u>	127.49	-2.67%
<u>31.1.2005</u>	130.99	+3.27%
<u>28.1.2005</u>	126.84	+3.71%
<u>27.1.2005</u>	122.30	+0.41%
<u>26.1.2005</u>	121.80	-2.51%
<u>25.1.2005</u>	124.94	+6.43%
<u>24.1.2005</u>	117.39	+6.99%
<u>21.1.2005</u>	109.72	+6.17%
<u>20.1.2005</u>	103.34	+0.39%
<u>19.1.2005</u>	102.94	+0.39%
<u>18.1.2005</u>	102.54	+0.24%

23.2.2005	1 695.55	1 174.00
22.2.2005	1 700.39	1 176.60
21.2.2005	1 680.25	1 161.20
18.2.2005	1 653.96	1 147.90
17.2.2005	1 640.58	1 139.70
16.2.2005	1 648.18	1 148.60
15.2.2005	1 642.26	1 142.40
14.2.2005	1 632.14	1 141.60
11/2/2005	1 627.28	1 135.60
10/2/2005	1 596.90	1 118.00
9/2/2005	1 594.19	1 121.10
8/2/2005	1 590.23	1 118.10
7/2/2005	1 580.30	1 108.80
4/2/2005	1 577.32	1 105.30
3/2/2005	1 572.22	1 106.70
2/2/2005	1 566.22	1 102.70
1/2/2005	1 571.23	1 106.60
31.1.2005	1 569.88	1 096.20
28.1.2005	1 584.22	1 102.20
27.1.2005	1 552.70	1 094.20
26.1.2005	1 565.62	1 098.30
25.1.2005	1 572.92	1 094.40
24.1.2005	1 523.95	1 063.20
21.1.2005	1 533.47	1 056.20
20.1.2005	1 512.59	1 053.30
19.1.2005	1 525.54	1 061.10
18.1.2005	1 526.56	1 068.50

### Úloha

1. Vypočítat beta jednotlivých cenných papírů
2. Jednodenní a týdenní výnosnosti CP
3. Alfa jednotlivých CP k 25.3.2005 a k 3.2.2005
4. Regresní přímky pro závislosti jednotlivých CP a závislosti na indexu trhu
5. Výnosnost a riziko portfolia z těchto CP, je-li podíl ČEZ 25%, Unipetrol 30% a Philip Morris 45%
6. Výnosnost bezrizikového aktiva je 2,45% p.a.









