

มหาวิทยาลัยเชียงใหม่
Chiang Mai University

ภาคผนวก

ตารางที่ 1 แสดงข้อมูลดัชนีตลาดหลักทรัพย์ และหลักทรัพย์ในกลุ่มพลังงาน

Date	Set Index	BANPU	LANNA	PTTEP	PTT
4/1/98	372.69	44.00	98.00	205.00	
11/1/98	349.67	38.90	95.00	200.00	
18/1/98	383.01	44.30	91.50	211.00	
25/1/98	422.87	60.20	130.00	261.00	
1/2/98	495.23	71.70	160.00	295.00	
8/2/98	535.98	104.85	200.00	280.00	
15/2/98	499.97	86.60	182.00	278.00	
22/2/98	521.83	85.90	190.00	285.00	
1/3/98	528.42	88.65	183.00	257.00	
8/3/98	508.07	88.65	190.00	248.00	
15/3/98	514.24	94.70	181.00	253.00	
22/3/98	499.75	90.00	179.00	224.00	
29/3/98	469.85	81.85	176.00	201.00	
5/4/98	442.96	74.40	160.50	198.00	
12/4/98	446.13	71.05	160.50	208.00	
19/4/98	438.99	74.40	160.50	202.00	
26/4/98	424.79	75.75	145.00	200.00	
3/5/98	412.13	67.65	129.00	198.00	
10/5/98	386.42	65.95	99.50	185.00	
17/5/98	369.43	57.50	93.00	188.00	
24/5/98	355.82	47.70	93.00	188.00	
31/5/98	325.59	43.65	80.00	175.00	
7/6/98	318.16	30.60	73.50	164.00	
14/6/98	279.37	26.05	68.50	154.00	
21/6/98	284.32	19.60	35.50	153.00	
28/6/98	264.98	15.20	31.25	162.00	
5/7/98	273.74	15.40	30.00	174.00	
12/7/98	274.26	16.85	24.50	170.00	
19/7/98	295.28	21.15	30.50	179.00	

Date	Set Index	BANPU	LANNA	PTTEP	PTT
26/7/98	275.44	23.15	35.00	170.00	
2/8/98	266.72	22.50	33.75	171.00	
9/8/98	247.54	20.80	31.25	162.00	
16/8/98	243.62	20.30	27.25	160.00	
23/8/98	238.92	20.45	26.75	154.00	
30/8/98	218.85	18.10	26.00	132.00	
6/9/98	207.31	19.60	26.00	128.00	
13/9/98	212.70	17.25	27.00	136.00	
20/9/98	221.85	15.75	26.25	153.00	
27/9/98	248.93	21.65	32.00	175.00	
4/10/98	251.56	15.90	29.50	180.00	
11/10/98	292.50	17.60	36.00	193.00	
18/10/98	319.22	19.45	37.75	194.00	
25/10/98	321.57	22.15	41.50	177.00	
1/11/98	331.29	16.75	42.50	170.00	
8/11/98	376.60	25.70	42.25	183.00	
15/11/98	333.59	28.35	40.25	167.00	
22/11/98	371.93	27.90	42.00	163.00	
29/11/98	373.09	30.45	50.50	146.00	
6/12/98	337.63	24.80	42.25	122.00	
13/12/98	360.30	25.85	46.75	127.00	
20/12/98	341.92	24.10	46.00	128.00	
27/12/98	356.16	24.10	43.75	127.00	
3/1/99	355.81	24.10	44.75	128.00	
10/1/99	399.43	26.45	47.50	166.00	
17/1/99	381.82	24.95	45.50	155.00	
24/1/99	376.48	24.50	45.00	146.00	
31/1/99	363.00	24.25	45.00	133.00	
7/2/99	337.96	23.20	37.50	130.00	
14/2/99	347.43	22.90	39.00	144.00	

Date	Set Index	BANPU	LANNA	PTTEP	PTT
21/2/99	336.57	22.75	37.00	127.00	
28/2/99	340.94	23.20	37.75	123.00	
7/3/99	336.21	22.75	38.00	126.00	
14/3/99	345.79	22.45	36.00	139.00	
21/3/99	367.69	23.35	37.25	142.00	
28/3/99	366.91	22.90	36.00	150.00	
4/4/99	357.10	21.70	31.50	148.00	
11/4/99	371.95	21.85	31.00	148.00	
18/4/99	402.54	23.05	32.00	161.00	
25/4/99	401.07	24.50	32.00	169.00	
2/5/99	459.35	26.15	34.50	171.00	
9/5/99	488.35	32.50	43.50	178.00	
16/5/99	474.90	32.50	42.75	170.00	
23/5/99	479.33	33.10	43.75	164.00	
30/5/99	453.60	29.10	43.50	152.00	
6/6/99	476.47	30.15	42.50	148.00	
13/6/99	507.06	30.75	45.00	139.00	
20/6/99	518.81	31.30	44.75	139.00	
27/6/99	543.85	34.00	44.75	144.00	
4/7/99	533.33	31.90	42.75	148.00	
11/7/99	509.58	33.40	51.00	146.00	
18/7/99	488.51	31.90	47.00	152.00	
25/7/99	475.73	31.30	44.00	151.00	
1/8/99	456.81	29.40	43.50	146.00	
8/8/99	437.04	27.20	38.50	143.00	
15/8/99	423.78	24.35	36.75	136.00	
22/8/99	440.51	26.00	39.75	144.00	
29/8/99	457.54	30.15	38.50	150.00	
5/9/99	431.12	27.20	36.50	153.00	
12/9/99	430.91	28.80	37.75	150.00	

Date	Set Index	BANPU	LANNA	PTTEP	PTT
19/9/99	438.16	28.95	37.25	155.00	
26/9/99	382.01	26.15	34.25	136.00	
3/10/99	407.23	26.90	40.00	145.00	
10/10/99	393.02	28.65	43.00	152.00	
17/10/99	385.40	31.60	42.00	139.00	
24/10/99	377.16	30.45	40.00	133.00	
31/10/99	395.55	31.30	41.00	141.00	
7/11/99	418.47	29.50	43.75	129.00	
14/11/99	432.02	29.25	42.25	131.00	
21/11/99	411.55	27.75	33.25	120.00	
28/11/99	412.31	27.00	34.00	120.00	
5/12/99	414.42	26.75	33.00	106.00	
12/12/99	419.77	25.00	32.00	112.00	
19/12/99	439.32	25.50	30.00	111.00	
26/12/99	461.29	26.75	28.00	115.00	
2/1/00	481.92	27.50	29.25	116.00	
9/1/00	453.31	25.50	26.00	104.00	
16/1/00	474.37	25.75	25.75	109.00	
23/1/00	478.92	32.25	28.25	129.00	
30/1/00	477.45	29.00	25.75	119.00	
6/2/00	470.34	27.00	25.50	113.00	
13/2/00	456.12	25.50	25.00	104.00	
20/2/00	408.35	22.00	20.50	92.00	
27/2/00	406.66	19.75	21.50	102.00	
5/3/00	383.13	19.75	20.00	94.50	
12/3/00	402.40	19.25	21.25	91.00	
19/3/00	399.74	19.75	21.75	98.00	
26/3/00	404.16	22.50	24.25	101.00	
2/4/00	400.32	22.00	24.00	97.50	
9/4/00	403.45	21.00	24.25	100.00	

Date	Set Index	BANPU	LANNA	PTTEP	PTT
16/4/00	414.45	24.00	25.00	102.00	
23/4/00	395.06	24.25	24.50	97.00	
30/4/00	390.40	24.00	23.75	96.00	
7/5/00	379.97	23.50	24.00	94.50	
14/5/00	345.67	20.50	22.75	95.50	
21/5/00	343.40	19.50	21.00	90.50	
28/5/00	313.08	15.75	20.25	85.50	
4/6/00	339.28	16.75	20.75	95.00	
11/6/00	341.35	18.50	21.75	95.00	
18/6/00	344.49	18.75	21.50	96.50	
25/6/00	333.31	17.00	22.00	91.50	
2/7/00	325.69	19.00	22.50	95.00	
9/7/00	322.87	18.00	21.50	97.50	
16/7/00	315.58	17.50	22.50	93.00	
23/7/00	305.66	17.00	23.50	90.00	
30/7/00	291.60	16.75	22.25	95.50	
6/8/00	311.42	17.75	22.50	102.00	
13/8/00	316.60	17.75	22.50	107.00	
20/8/00	319.22	18.75	22.00	119.00	
27/8/00	306.84	18.50	21.00	124.00	
3/9/00	310.73	19.75	21.50	123.00	
10/9/00	297.07	19.00	21.00	123.00	
17/9/00	293.30	19.00	21.25	124.00	
24/9/00	274.14	17.50	20.50	105.00	
1/10/00	277.29	17.50	20.50	106.00	
8/10/00	267.68	17.25	23.50	101.00	
15/10/00	254.26	16.50	26.75	103.00	
22/10/00	276.60	17.00	26.50	114.00	
29/10/00	274.34	17.25	26.00	109.00	
5/11/00	287.84	18.00	26.75	117.00	

Date	Set Index	BANPU	LANNA	PTTEP	PTT
12/11/00	293.23	18.50	29.50	115.00	
19/11/00	294.71	18.75	29.75	119.00	
26/11/00	285.42	17.75	33.00	118.00	
3/12/00	273.86	17.50	34.00	109.00	
10/12/00	273.69	17.25	31.25	102.00	
17/12/00	273.17	17.00	30.00	97.50	
24/12/00	267.09	16.75	30.00	97.00	
31/12/00	269.19	17.00	30.00	100.00	
7/1/01	286.76	17.75	33.75	104.00	
14/1/01	311.25	18.25	31.25	107.00	
21/1/01	316.86	18.25	31.50	109.00	
28/1/01	332.13	18.50	31.50	110.00	
4/2/01	334.10	18.50	31.00	109.00	
11/2/01	324.72	17.75	30.25	99.50	
18/2/01	316.00	21.00	30.25	100.00	
25/2/01	324.24	22.75	35.00	108.00	
4/3/01	306.05	18.00	32.00	100.00	
11/3/01	307.00	17.75	30.25	101.00	
18/3/01	293.00	18.00	30.00	100.00	
25/3/01	290.25	17.75	35.00	99.00	
1/4/01	291.94	17.75	35.50	102.00	
8/4/01	282.02	18.00	35.00	96.50	
15/4/01	291.28	18.25	35.25	97.00	
22/4/01	292.58	18.00	35.00	95.50	
29/4/01	297.21	18.75	35.00	106.00	
6/5/01	306.48	20.25	35.25	100.00	
13/5/01	310.93	20.25	35.00	103.00	
20/5/01	300.64	22.50	38.00	106.00	
27/5/01	311.11	24.50	38.50	113.00	
3/6/01	312.06	23.75	42.50	118.00	

Date	Set Index	BANPU	LANNA	PTTEP	PTT
10/6/01	312.29	25.50	42.25	118.00	
17/6/01	323.97	26.25	45.00	118.00	
24/6/01	318.67	26.50	44.00	124.00	
1/7/01	322.55	26.75	47.00	125.00	
8/7/01	324.88	27.00	47.00	127.00	
15/7/01	314.31	25.75	45.00	124.00	
22/7/01	312.27	25.50	45.50	122.00	
29/7/01	301.09	25.00	45.50	113.00	
5/8/01	315.95	25.00	44.00	115.00	
12/8/01	315.87	26.00	42.25	116.00	
19/8/01	323.25	27.00	42.75	117.00	
26/8/01	332.17	28.25	41.50	120.00	
2/9/01	335.57	27.50	41.75	117.00	
9/9/01	342.32	28.00	41.75	132.00	
16/9/01	288.10	23.75	33.00	130.00	
23/9/01	274.60	23.25	35.00	123.00	
30/9/01	277.04	23.75	42.25	109.00	
7/10/01	280.88	23.50	43.00	112.00	
14/10/01	284.97	24.00	44.50	112.00	
21/10/01	284.72	24.25	44.00	105.00	
28/10/01	280.60	24.25	44.00	103.00	
4/11/01	274.22	24.00	42.75	101.00	
11/11/01	268.11	23.10	41.00	100.00	
18/11/01	275.54	23.00	44.00	104.00	
25/11/01	296.77	24.60	44.50	107.00	
2/12/01	302.62	25.50	45.00	112.00	
9/12/01	304.05	25.00	48.25	106.00	35.50
16/12/01	294.00	24.30	50.00	105.00	34.50
23/12/01	296.69	24.40	58.00	102.00	34.25
30/12/01	303.85	25.00	45.50	106.00	34.50

Date	Set Index	BANPU	LANNA	PTTEP	PTT
6/1/02	315.73	26.00	46.75	107.00	35.00
13/1/02	322.55	25.75	46.50	110.00	35.00
20/1/02	317.52	25.25	45.25	107.00	34.50
27/1/02	338.99	26.25	46.00	110.00	34.25
3/2/02	336.65	28.75	44.50	110.00	35.00
10/2/02	353.59	32.00	46.00	116.00	34.50
17/2/02	373.02	36.00	45.75	117.00	34.75
24/2/02	351.32	33.50	43.75	111.00	34.25
3/3/02	380.65	38.50	46.25	118.00	36.25
10/3/02	390.65	45.75	50.00	118.00	36.25
17/3/02	377.39	44.00	51.50	118.00	35.00
24/3/02	389.31	43.00	51.50	124.00	35.75
31/3/02	373.95	41.25	44.50	120.00	35.75
7/4/02	369.99	38.50	45.75	116.00	33.00
14/4/02	379.63	42.00	47.00	116.00	32.75
21/4/02	386.51	40.00	47.00	115.00	32.00
28/4/02	376.44	39.00	45.75	110.00	31.25
5/5/02	374.05	39.50	46.50	107.00	30.00
12/5/02	382.09	38.50	45.75	112.00	31.75
19/5/02	378.23	37.50	44.00	113.00	32.00
26/5/02	392.09	38.75	45.00	117.00	33.25
2/6/02	407.96	43.00	44.50	128.00	33.50
9/6/02	417.33	44.00	44.50	130.00	36.50
16/6/02	422.44	44.75	46.00	124.00	37.50
23/6/02	395.46	41.75	42.25	116.00	35.00
30/6/02	389.10	40.00	40.75	117.00	36.00
7/7/02	401.10	41.25	40.25	120.00	35.50
14/7/02	400.66	41.50	39.00	116.00	35.75
21/7/02	394.27	40.50	39.00	112.00	35.75
28/7/02	366.47	35.25	39.00	106.00	34.25

Date	Set Index	BANPU	LANNA	PTTEP	PTT
4/8/02	370.46	35.00	39.50	107.00	34.50
11/8/02	367.07	35.00	39.75	114.00	35.75
18/8/02	373.03	38.00	40.00	120.00	37.50
25/8/02	367.01	37.00	40.00	119.00	37.75
1/9/02	361.16	37.00	39.50	122.00	37.75
8/9/02	353.55	36.75	39.00	122.00	38.25
15/9/02	357.15	34.50	39.25	124.00	38.50
22/9/02	351.52	32.50	38.75	120.00	38.75
29/9/02	338.72	32.25	38.00	121.00	40.75
6/10/02	340.92	32.00	40.00	124.00	39.75
13/10/02	330.41	30.75	39.50	125.00	40.50
20/10/02	342.46	31.00	38.75	119.00	38.25
27/10/02	348.46	32.25	40.75	119.00	38.00
3/11/02	357.68	32.50	38.00	125.00	38.75
10/11/02	355.00	32.00	38.50	128.00	39.75
17/11/02	356.24	32.50	38.75	126.00	38.75
24/11/02	362.59	33.00	38.00	132.00	39.25
1/12/02	364.90	32.75	38.75	130.00	38.75
8/12/02	365.09	32.50	38.75	136.00	40.25
15/12/02	356.20	32.75	38.25	133.00	40.25
22/12/02	350.01	32.50	37.00	141.00	41.25
29/12/02	356.48	33.00	37.00	142.00	42.25

หมายเหตุ: หลักทรัพย์ PTT เข้าตลาดเมื่อวันที่ 9/12/01

ตารางที่ 2 แสดงข้อมูลอัตราดอกเบี้ยอ้างอิงเงินฝากประจำ 3 เดือน ผดออบแทนจากตลาด และผดออบแทนจากหลักทรัพย์

Date	อัตราดอกเบี้ยอ้างอิงเงินฝากประจำ3เดือน	Rbanpu	Rlanna	Rpttep	Rppt	Rmarket
11/1/98	12.75	-11.591	-3.061	-2.439		-6.177
18/1/98	13	13.882	-3.684	5.500		9.535
25/1/98	12.75	35.892	42.077	23.697		10.407
1/2/98	13	19.103	23.077	13.027		17.112
8/2/98	13	46.234	25.000	-5.085		8.228
15/2/98	13	-17.406	-9.000	-0.714		-6.719
22/2/98	13.25	-0.808	4.396	2.518		4.372
1/3/98	13.25	3.201	-3.684	-9.825		1.263
8/3/98	13.25	0.000	3.825	-3.502		-3.851
15/3/98	13.5	6.825	-4.737	2.016		1.214
22/3/98	13.5	-4.963	-1.105	-11.462		-2.818
29/3/98	13.5	-9.056	-1.676	-10.268		-5.983
5/4/98	13.5	-9.102	-8.807	-1.493		-5.723
12/4/98	13.5	-4.503	0.000	5.051		0.716
19/4/98	13.5	4.715	0.000	-2.885		-1.600
26/4/98	13.5	1.815	-17.614	-0.990		-3.235
3/5/98	13.5	-10.693	-11.034	-1.000		-2.980
10/5/98	13.5	-2.513	-22.868	-6.566		-6.238
17/5/98	13.5	-12.813	-6.533	1.622		-4.397
24/5/98	13.5	-17.043	0.000	0.000		-3.684
31/5/98	13.5	-8.491	-13.978	-6.915		-8.496
7/6/98	13.5	-29.897	-8.125	-6.286		-2.282
14/6/98	13.5	-14.869	-6.803	-6.098		-12.192
21/6/98	13.5	-24.760	-48.175	-0.649		1.772
28/6/98	13.5	-22.449	-11.972	5.882		-6.802
5/7/98	13.5	1.316	-4.000	7.407		3.306
12/7/98	13.5	9.416	-18.333	-2.299		0.190

Date	อัตราดอกเบี้ยอ้างอิง เงินฝากประจำเดือน	Rbanpu	Rlanna	Rpttep	Rptt	Rmarket
19/7/98	13.5	25.519	24.490	5.294		7.664
26/7/98	12.75	9.456	14.754	-5.028		-6.719
2/8/98	12.25	-2.808	-3.571	0.588		-3.166
9/8/98	12.25	-7.556	-7.407	-5.263		-7.191
16/8/98	11.75	-2.404	-12.800	-1.235		-1.584
23/8/98	11.5	0.739	-1.835	-3.750		-1.929
30/8/98	11.25	-11.491	-2.804	-14.286		-8.400
6/9/98	10.75	8.287	0.000	-3.030		-5.273
13/9/98	9.75	-11.990	3.846	6.250		2.600
20/9/98	9.5	-8.696	-2.778	12.500		4.302
27/9/98	8.75	37.460	21.905	14.379		12.206
4/10/98	8	-26.559	-7.813	2.857		1.057
11/10/98	7.75	10.692	22.034	7.222		16.274
18/10/98	7.75	10.511	4.861	0.518		9.135
25/10/98	7.5	13.882	9.934	-8.763		0.736
1/11/98	7	-24.379	2.410	-3.955		3.023
8/11/98	6.75	53.433	-0.588	7.647		13.677
15/11/98	6.75	10.311	-4.734	-8.743		-11.421
22/11/98	6.5	-1.587	4.348	-2.395		11.493
29/11/98	6.5	9.140	20.238	-10.429		0.312
6/12/98	6.25	-18.555	-16.337	-16.438		-9.504
13/12/98	6	4.234	10.651	4.098		6.714
20/12/98	6	-6.770	-1.604	0.787		-5.101
27/12/98	6	0.000	-4.891	-0.781		4.165
3/1/99	6	0.000	2.286	0.787		-0.098
10/1/99	6	9.751	6.145	29.688		12.259
17/1/99	6	-5.671	-4.211	-6.627		-4.409
24/1/99	6	-1.804	-1.099	-5.806		-1.399
31/1/99	5.75	-1.020	0.000	-8.904		-3.581
7/2/99	5.5	-4.330	-16.667	-2.256		-6.898

Date	อัตราดอกเบี้ยอ้างอิง เงินฝากประจำ3เดือน	Rbanpu	Rlanna	Rpttep	Rppt	Rmarket
14/2/99	5.5	-1.293	4.000	10.769		2.802
21/2/99	5.25	-0.655	-5.128	-11.806		-3.126
28/2/99	5	1.978	2.027	-3.150		1.298
7/3/99	5	-1.940	0.662	2.439		-1.387
14/3/99	5	-1.319	-5.263	10.317		2.849
21/3/99	5	4.009	3.472	2.158		6.333
28/3/99	5	-1.927	-3.356	5.634		-0.212
4/4/99	5	-5.240	-12.500	-1.333		-2.674
11/4/99	5	0.691	-1.587	0.000		4.158
18/4/99	5	5.492	3.226	8.784		8.224
25/4/99	5	6.291	0.000	4.969		-0.365
2/5/99	5	6.735	7.813	1.183		14.531
9/5/99	5	24.283	26.087	4.094		6.313
16/5/99	5	0.000	2.874	-4.494		-2.754
23/5/99	5	1.846	2.339	-3.529		0.933
30/5/99	5	-12.085	-0.571	-7.317		-5.368
6/6/99	5	3.608	-2.299	-2.632		5.042
13/6/99	4.75	1.990	5.882	-6.081		6.420
20/6/99	4.75	1.789	-0.556	0.000		2.317
27/6/99	4.75	8.626	0.000	3.597		4.826
4/7/99	4.75	-6.176	-4.469	2.778		-1.934
11/7/99	4.75	4.702	19.298	-1.351		-4.453
18/7/99	4.75	-4.491	-7.843	4.110		-4.135
25/7/99	4.75	-1.881	-6.383	-0.658		-2.616
1/8/99	4.75	-6.070	-1.136	-3.311		-3.977
8/8/99	4.5	-7.483	-11.494	-2.055		-4.328
15/8/99	4.5	-10.478	-4.545	-4.895		-3.034
22/8/99	4.5	6.776	8.163	5.882		3.948
29/8/99	4.5	15.962	-3.145	4.167		3.866
5/9/99	4.5	-9.784	-5.195	2.000		-5.774

Date	อัตราดอกเบี้ยอ้างอิง เงินฝากประจำ 3 เดือน	Rbanpu	Rlanna	Rpttep	Rppt	Rmarket
12/9/99	4.5	5.882	3.425	-1.961		-0.049
19/9/99	4.5	0.521	-1.325	3.333		1.682
26/9/99	4.25	-9.672	-8.054	-12.258		-12.815
3/10/99	4.25	2.868	16.788	6.618		6.602
10/10/99	4.25	6.506	7.500	4.828		-3.489
17/10/99	4.25	10.297	-2.326	-8.553		-1.939
24/10/99	4.25	-3.639	-4.762	-4.317		-2.138
31/10/99	4	2.791	2.500	6.015		4.876
7/11/99	4	-5.751	6.707	-8.511		5.794
14/11/99	4	-0.847	-3.429	1.550		3.238
21/11/99	4	1.709	-21.302	-8.397		-4.738
28/11/99	3.75	-2.703	2.256	0.000		0.185
5/12/99	3.75	-0.926	-2.941	-11.667		0.512
12/12/99	3.75	-6.542	-3.030	5.660		1.291
19/12/99	3.75	2.000	-6.250	-0.893		4.657
26/12/99	3.75	4.902	-6.667	3.604		5.001
2/1/00	3.75	2.804	4.464	0.870		4.472
9/1/00	3.75	-7.273	-11.111	-10.345		-5.937
16/1/00	3.5	0.980	-0.962	4.808		4.646
23/1/00	3.5	25.243	9.709	18.349		0.959
30/1/00	3.5	-10.078	-8.850	-7.752		-0.307
6/2/00	3.5	-6.897	-0.971	-5.042		-1.489
13/2/00	3.5	-5.556	-1.961	-7.965		-3.023
20/2/00	3.5	-13.725	-18.000	-11.538		-10.473
27/2/00	3.5	-10.227	4.878	10.870		-0.414
5/3/00	3.5	0.000	-6.977	-7.353		-5.786
12/3/00	3.5	-2.532	6.250	-3.704		5.030
19/3/00	3.5	2.597	2.353	7.692		-0.661
26/3/00	3.5	13.924	11.494	3.061		1.106
2/4/00	3.5	-2.222	-1.031	-3.465		-0.950

Date	อัตราดอกเบี้ยอ้างอิง เงินฝากประจำเดือน	Rbanpu	Rlanna	Rpttep	Rppt	Rmarket
9/4/00	3.5	-4.545	1.042	2.564		0.782
16/4/00	3.5	14.286	3.093	2.000		2.726
23/4/00	3.5	1.042	6.000	-4.902		-4.678
30/4/00	3.5	-1.031	-3.061	-1.031		-1.180
7/5/00	3.5	-2.083	1.053	-1.563		-2.672
14/5/00	3.5	-12.766	-5.208	1.058		-9.027
21/5/00	3.5	-4.878	-7.692	-4.450		-0.657
28/5/00	3.5	-19.231	-3.571	-5.525		-8.829
4/6/00	3.5	6.349	2.469	11.111		8.368
11/6/00	3.5	10.448	4.819	0.000		0.610
18/6/00	3.5	1.351	-1.149	1.579		0.920
25/6/00	3.5	-9.333	2.326	-5.181		-3.245
2/7/00	3.5	11.765	2.273	3.825		-2.286
9/7/00	3.25	-5.263	-4.444	2.632		-0.866
16/7/00	3.25	-2.778	4.651	-4.615		-2.258
23/7/00	3.25	-2.857	4.444	-3.226		-3.143
30/7/00	3.25	-1.471	-5.319	6.111		-4.600
6/8/00	3.25	5.970	1.124	6.806		6.797
13/8/00	3.25	0.000	0.000	4.902		1.663
20/8/00	3.25	5.634	-2.222	11.215		0.828
27/8/00	3.25	-1.333	-4.545	4.202		-3.878
3/9/00	3.25	6.757	2.381	-0.806		1.268
10/9/00	3.25	-3.797	-2.326	0.000		-4.396
17/9/00	3	0.000	1.190	0.813		-1.269
24/9/00	3	-7.895	-3.529	-15.323		-6.533
1/10/00	3	0.000	0.000	0.952		1.149
8/10/00	3	-1.429	14.634	-4.717		-3.466
15/10/00	3	-4.348	13.830	1.980		-5.013
22/10/00	3	9.091	-0.935	10.680		8.786
29/10/00	3	1.471	-1.887	-4.386		-0.817

Date	อัตราดอกเบี้ยอ้างอิง เงินฝากประจำ 3 เดือน	Rbanpu	Rlanua	Rpttep	Rptt	Rmarket
5/11/00	3	4.348	2.885	7.339		4.921
12/11/00	3	2.778	10.280	-1.709		1.873
19/11/00	3	1.351	0.847	3.478		0.505
26/11/00	3	-5.333	10.924	-0.840		-3.152
3/12/00	3	-1.408	3.030	-7.627		-4.050
10/12/00	3	-1.429	-8.088	-6.422		-0.062
17/12/00	3	-1.449	-4.000	-4.412		-0.190
24/12/00	3	-1.471	0.000	-0.513		-2.226
31/12/00	3	1.493	0.000	3.093		0.786
7/1/01	3	4.412	12.500	4.000		6.527
14/1/01	3	2.817	-7.407	2.885		8.540
21/1/01	3	0.000	0.800	1.869		1.802
28/1/01	3	1.370	0.000	0.917		4.819
4/2/01	3	0.000	-1.587	-0.909		0.593
11/2/01	2.5	-4.054	-2.419	-8.716		-2.808
18/2/01	2.5	18.310	0.000	0.503		-2.685
25/2/01	2.5	8.333	15.702	8.000		2.608
4/3/01	2.5	-20.879	-8.571	-7.407		-5.610
11/3/01	2.5	15.278	-5.469	1.000		0.310
18/3/01	2.5	1.408	-0.826	-0.990		-4.560
25/3/01	2.5	-1.389	16.667	-1.000		-0.939
1/4/01	2.5	0.000	1.429	3.030		0.582
8/4/01	2.5	1.408	-1.408	-5.392		-3.398
15/4/01	2.5	1.389	0.714	0.518		3.283
22/4/01	2.5	-1.370	-0.709	-1.546		0.446
29/4/01	2.5	4.167	0.000	10.995		1.582
6/5/01	2.5	8.000	0.714	-5.660		3.119
13/5/01	2.5	0.000	-0.709	3.000		1.452
20/5/01	2.5	11.111	14.286	5.825		-3.309
27/5/01	2.5	8.889	1.316	6.604		3.483

Date	อัตราดอกเบี้ยอ้างอิง เงินฝากประจำ3เดือน	Rbanpu	Rlanna	Rpttep	Rppt	Rmarket
3/6/01	2.5	-3.061	10.390	4.425		0.305
10/6/01	2.5	7.368	-0.588	0.000		0.074
17/6/01	2.5	2.941	6.509	0.000		3.740
24/6/01	2.5	0.952	-2.222	5.085		-1.636
1/7/01	2.5	0.943	6.818	0.806		1.218
8/7/01	2.5	0.935	0.000	1.600		0.722
15/7/01	2.5	-4.630	-4.255	-2.362		-3.254
22/7/01	2.5	-0.971	1.111	-1.613		-0.649
29/7/01	2.5	-1.961	0.000	-7.377		-3.580
5/8/01	2.5	0.000	-3.297	1.770		4.935
12/8/01	2.5	4.000	-3.977	0.870		-0.025
19/8/01	2.5	3.846	1.183	0.862		2.336
26/8/01	2.5	4.630	-2.924	2.564		2.759
2/9/01	2.5	-2.655	0.602	-2.500		1.024
9/9/01	2.5	1.818	0.000	12.821		2.012
16/9/01	2.5	-15.179	-20.958	-1.515		-15.839
23/9/01	2.5	-2.105	6.061	-5.385		-4.686
30/9/01	2.5	2.151	20.714	-11.382		0.889
7/10/01	2.5	-1.053	1.775	2.752		1.386
14/10/01	2.5	2.128	3.488	0.000		1.456
21/10/01	2.5	1.042	-1.124	-6.250		-0.088
28/10/01	2.5	0.000	0.000	-1.905		-1.447
4/11/01	2.5	-1.031	-2.841	-1.942		-2.274
11/11/01	2.5	0.417	-4.094	-0.990		-2.228
18/11/01	2.5	-0.433	7.317	4.000		2.771
25/11/01	2.5	6.957	1.136	2.885		7.705
2/12/01	2.25	3.659	1.124	4.673		1.971
9/12/01	2.25	-1.961	7.222	-5.357		0.473
16/12/01	2.25	-2.800	3.627	-0.943	-2.817	-3.305
23/12/01	2.25	0.412	16.000	-2.857	-0.725	0.915

Date	อัตราดอกเบี้ยอ้างอิง เงินฝากประจำ3เดือน	Rbanpu	Rlanna	Rpttep	Rppt	Rmarket
30/12/01	2.25	2.459	-21.552	3.922	0.730	2.413
6/1/02	2.25	4.000	2.747	0.943	1.449	3.910
13/1/02	2.25	-0.962	20.856	2.804	0.000	2.160
20/1/02	2.25	-1.942	-2.688	-2.727	-1.429	-1.559
27/1/02	2.25	3.960	1.657	2.804	-0.725	6.762
3/2/02	2.25	9.524	-3.261	0.000	2.190	-0.690
10/2/02	2.25	11.304	3.371	5.455	-1.429	5.032
17/2/02	2	12.500	-0.543	0.862	0.725	5.495
24/2/02	2	-6.944	-4.372	-5.128	-1.439	-5.817
3/3/02	2	14.925	5.714	6.306	5.839	8.349
10/3/02	2	18.831	8.108	0.000	0.000	2.627
17/3/02	2	-3.825	3.000	0.000	-3.448	-3.394
24/3/02	2	-2.273	0.000	5.085	2.143	3.159
31/3/02	2	-4.070	-13.592	-3.226	0.000	-3.945
7/4/02	2	-6.667	2.809	-3.333	-7.692	-1.059
14/4/02	2	9.091	2.732	0.000	-0.758	2.605
21/4/02	2	-4.762	0.000	-0.862	-2.290	1.812
28/4/02	2	-2.500	3.723	-4.348	-2.344	-2.605
5/5/02	2	2.821	1.639	-2.727	-4.000	-0.635
12/5/02	2	-2.532	-1.613	10.280	5.833	2.149
19/5/02	2	-2.597	-3.825	0.893	8.661	-1.010
26/5/02	2	3.333	2.273	3.540	3.906	3.664
2/6/02	2	10.968	-1.111	9.402	0.752	4.048
9/6/02	2	2.326	0.000	1.563	8.955	2.297
16/6/02	2	1.705	3.371	-4.615	2.740	1.224
23/6/02	2	-6.704	-8.152	-6.452	-6.667	-6.387
30/6/02	2	-4.192	-3.550	0.862	2.857	-1.608
7/7/02	2	3.125	-1.227	2.564	-1.389	3.084
14/7/02	2	0.606	-3.106	-3.333	0.704	-0.110
21/7/02	2	-2.410	0.000	-3.448	0.000	-1.595

Date	อัตราดอกเบี้ยอ้างอิง เงินฝากประจำ 3 เดือน	Rbanpu	Rlanna	Rpttep	Rptt	Rmarket
28/7/02	2	-12.963	0.000	-5.357	-4.196	-7.051
4/8/02	2	-0.709	1.282	0.943	0.730	1.089
11/8/02	2	0.000	0.633	6.542	3.623	-0.915
18/8/02	2	8.571	0.629	5.263	4.895	1.624
25/8/02	2	-2.632	0.000	-0.833	0.667	-1.614
1/9/02	2	0.000	-1.250	2.521	0.000	-1.594
8/9/02	2	-0.676	-1.266	0.000	1.325	-2.107
15/9/02	2	-6.122	0.641	1.639	0.654	1.018
22/9/02	2	-1.449	-1.274	-3.226	0.649	-1.576
29/9/02	2	-0.769	-1.935	0.833	5.161	-3.641
6/10/02	2	-0.775	5.263	2.479	-2.454	0.650
13/10/02	2	-3.906	-1.250	0.806	1.887	-3.083
20/10/02	1.75	0.813	-1.899	-4.800	-5.556	3.647
27/10/02	1.75	4.032	5.161	0.000	-0.654	1.752
3/11/02	1.75	0.775	-6.748	5.042	1.974	2.646
10/11/02	1.75	-1.538	1.316	2.400	2.581	-0.749
17/11/02	1.75	1.563	0.649	-1.563	-2.516	0.349
24/11/02	1.75	1.538	-1.935	4.762	1.290	1.783
1/12/02	1.75	-0.758	1.974	-1.515	-1.274	0.637
8/12/02	1.75	-0.763	0.000	4.615	3.871	0.052
15/12/02	1.75	0.769	-1.290	-2.206	0.000	-2.435
22/12/02	1.75	-0.763	-3.268	6.015	2.484	-1.738
29/12/02	1.75	1.538	0.000	0.709	2.424	1.849

หมายเหตุ: หลักทรัพย์ PTT เข้าตลาดเมื่อวันที่ 9/12/01

ตารางที่ 3 แสดงผลตอบแทนที่ไม่มีความเสี่ยง(Risk Free Rate) และส่วนต่างระหว่างผลตอบแทนจากตลาดและผลตอบแทนที่ไม่มีความเสี่ยง

Date	Rf	Rbanpu-Rf	Rlanna-Rf	Rpttep-Rf	Rptt-Rf	Rmarket-Rf
11/1/98	0.245	-11.836	-3.306	-2.684		-6.422
18/1/98	0.250	13.632	-3.934	5.250		9.285
25/1/98	0.245	35.646	41.831	23.451		10.162
1/2/98	0.250	18.853	22.827	12.777		16.862
8/2/98	0.250	45.984	24.750	-5.335		7.978
15/2/98	0.250	-17.656	-9.250	-0.964		-6.969
22/2/98	0.255	-1.063	4.141	2.263		4.117
1/3/98	0.255	2.947	-3.939	-10.079		1.008
8/3/98	0.255	-0.255	3.570	-3.757		-4.106
15/3/98	0.260	6.565	-4.996	1.757		0.955
22/3/98	0.260	-5.223	-1.365	-11.722		-3.077
29/3/98	0.260	-9.315	-1.936	-10.527		-6.243
5/4/98	0.260	-9.362	-9.066	-1.752		-5.983
12/4/98	0.260	-4.762	-0.260	4.791		0.456
19/4/98	0.260	4.455	-0.260	-3.144		-1.860
26/4/98	0.260	1.555	-17.873	-1.250		-3.494
3/5/98	0.260	-10.953	-11.294	-1.260		-3.240
10/5/98	0.260	-2.773	-23.128	-6.825		-6.498
17/5/98	0.260	-13.072	-6.792	1.362		-4.656
24/5/98	0.260	-17.303	-0.260	-0.260		-3.944
31/5/98	0.260	-8.750	-14.238	-7.175		-8.755
7/6/98	0.260	-30.157	-8.385	-6.545		-2.542
14/6/98	0.260	-15.129	-7.062	-6.357		-12.452
21/6/98	0.260	-25.020	-48.435	-0.909		1.512
28/6/98	0.260	-22.709	-12.231	5.623		-7.062
5/7/98	0.260	1.056	-4.260	7.148		3.046
12/7/98	0.260	9.156	-18.593	-2.558		-0.070
19/7/98	0.260	25.260	24.230	5.035		7.405

Date	Rf	Rbanpu-Rf	Rlanna-Rf	Rpttep-Rf	Rptt-Rf	Rmarket-Rf
26/7/98	0.245	9.211	14.509	-5.273		-6.964
2/8/98	0.236	-3.043	-3.807	0.353		-3.401
9/8/98	0.236	-7.791	-7.643	-5.499		-7.427
16/8/98	0.226	-2.630	-13.026	-1.461		-1.810
23/8/98	0.221	0.518	-2.056	-3.971		-2.150
30/8/98	0.216	-11.708	-3.020	-14.502		-8.617
6/9/98	0.207	8.081	-0.207	-3.237		-5.480
13/9/98	0.188	-12.177	3.659	6.063		2.412
20/9/98	0.183	-8.878	-2.960	12.317		4.119
27/9/98	0.168	37.292	21.736	14.211		12.038
4/10/98	0.154	-26.713	-7.966	2.703		0.903
11/10/98	0.149	10.543	21.885	7.073		16.125
18/10/98	0.149	10.362	4.712	0.369		8.986
25/10/98	0.144	13.738	9.790	-8.907		0.592
1/11/98	0.135	-24.514	2.275	-4.089		2.888
8/11/98	0.130	53.303	-0.718	7.517		13.547
15/11/98	0.130	10.181	-4.864	-8.873		-11.550
22/11/98	0.125	-1.712	4.223	-2.520		11.368
29/11/98	0.125	9.015	20.113	-10.554		0.187
6/12/98	0.120	-18.675	-16.457	-16.559		-9.625
13/12/98	0.115	4.118	10.536	3.983		6.599
20/12/98	0.115	-6.885	-1.720	0.672		-5.217
27/12/98	0.115	-0.115	-5.007	-0.897		4.049
3/1/99	0.115	-0.115	2.170	0.672		-0.214
10/1/99	0.115	9.636	6.030	29.572		12.144
17/1/99	0.115	-5.786	-4.326	-6.742		-4.524
24/1/99	0.115	-1.919	-1.214	-5.922		-1.514
31/1/99	0.111	-1.131	-0.111	-9.015		-3.691
7/2/99	0.106	-4.436	-16.772	-2.361		-7.004
14/2/99	0.106	-1.399	3.894	10.663		2.696

Date	Rf	Rbanpu-Rf	Rlanna-Rf	Rpttep-Rf	Rptt-Rf	Rmarket-Rf
21/2/99	0.101	-0.756	-5.229	-11.907		-3.227
28/2/99	0.096	1.882	1.931	-3.246		1.202
7/3/99	0.096	-2.036	0.566	2.343		-1.483
14/3/99	0.096	-1.415	-5.359	10.221		2.753
21/3/99	0.096	3.913	3.376	2.062		6.237
28/3/99	0.096	-2.023	-3.452	5.538		-0.308
4/4/99	0.096	-5.336	-12.596	-1.429		-2.770
11/4/99	0.096	0.595	-1.683	-0.096		4.062
18/4/99	0.096	5.396	3.130	8.688		8.128
25/4/99	0.096	6.195	-0.096	4.873		-0.461
2/5/99	0.096	6.639	7.716	1.087		14.435
9/5/99	0.096	24.187	25.991	3.997		6.217
16/5/99	0.096	-0.096	2.777	-4.591		-2.850
23/5/99	0.096	1.750	2.243	-3.626		0.837
30/5/99	0.096	-12.181	-0.668	-7.413		-5.464
6/6/99	0.096	3.512	-2.395	-2.728		4.946
13/6/99	0.091	1.899	5.791	-6.172		6.329
20/6/99	0.091	1.697	-0.647	-0.091		2.226
27/6/99	0.091	8.535	-0.091	3.506		4.735
4/7/99	0.091	-6.268	-4.561	2.686		-2.026
11/7/99	0.091	4.611	19.207	-1.443		-4.545
18/7/99	0.091	-4.582	-7.934	4.018		-4.226
25/7/99	0.091	-1.972	-6.474	-0.749		-2.707
1/8/99	0.091	-6.162	-1.228	-3.403		-4.068
8/8/99	0.087	-7.570	-11.581	-2.141		-4.414
15/8/99	0.087	-10.564	-4.632	-4.982		-3.121
22/8/99	0.087	6.690	8.077	5.796		3.861
29/8/99	0.087	15.875	-3.231	4.080		3.779
5/9/99	0.087	-9.871	-5.281	1.913		-5.861
12/9/99	0.087	5.796	3.338	-2.047		-0.135

Date	Rf	Rbanpu-Rf	Rlanna-Rf	Rpttep-Rf	Rptt-Rf	Rmarket-Rf
19/9/99	0.087	0.434	-1.411	3.247		1.596
26/9/99	0.082	-9.754	-8.135	-12.340		-12.897
3/10/99	0.082	2.786	16.707	6.536		6.520
10/10/99	0.082	6.424	7.418	4.746		-3.571
17/10/99	0.082	10.215	-2.407	-8.634		-2.021
24/10/99	0.082	-3.721	-4.844	-4.398		-2.220
31/10/99	0.077	2.715	2.423	5.938		4.799
7/11/99	0.077	-5.828	6.630	-8.588		5.718
14/11/99	0.077	-0.924	-3.505	1.473		3.161
21/11/99	0.077	1.632	-21.379	-8.474		-4.815
28/11/99	0.072	-2.775	2.184	-0.072		0.113
5/12/99	0.072	-0.998	-3.013	-11.739		0.440
12/12/99	0.072	-6.614	-3.102	5.588		1.219
19/12/99	0.072	1.928	-6.322	-0.965		4.585
26/12/99	0.072	4.830	-6.739	3.531		4.929
2/1/00	0.072	2.732	4.392	0.797		4.400
9/1/00	0.072	-7.345	-11.183	-10.417		-6.009
16/1/00	0.067	0.913	-1.029	4.740		4.579
23/1/00	0.067	25.175	9.641	18.281		0.892
30/1/00	0.067	-10.145	-8.917	-7.819		-0.374
6/2/00	0.067	-6.964	-1.038	-5.109		-1.556
13/2/00	0.067	-5.623	-2.028	-8.032		-3.091
20/2/00	0.067	-13.793	-18.067	-11.606		-10.540
27/2/00	0.067	-10.295	4.811	10.802		-0.481
5/3/00	0.067	-0.067	-7.044	-7.420		-5.853
12/3/00	0.067	-2.599	6.183	-3.771		4.962
19/3/00	0.067	2.530	2.286	7.625		-0.728
26/3/00	0.067	13.857	11.427	2.994		1.038
2/4/00	0.067	-2.290	-1.098	-3.533		-1.017
9/4/00	0.067	-4.613	0.974	2.497		0.715

Date	Rf	Rbanpu-Rf	Rlanna-Rf	Rpttep-Rf	Rptt-Rf	Rmarket-Rf
16/4/00	0.067	14.218	3.025	1.933		2.659
23/4/00	0.067	0.974	5.933	-4.969		-4.746
30/4/00	0.067	-1.098	-3.129	-1.098		-1.247
7/5/00	0.067	-2.151	0.985	-1.630		-2.739
14/5/00	0.067	-12.833	-5.276	0.991		-9.094
21/5/00	0.067	-4.945	-7.760	-4.518		-0.724
28/5/00	0.067	-19.298	-3.639	-5.592		-8.897
4/6/00	0.067	6.282	2.402	11.044		8.301
11/6/00	0.067	10.380	4.752	-0.067		0.543
18/6/00	0.067	1.284	-1.217	1.512		0.853
25/6/00	0.067	-9.401	2.258	-5.249		-3.313
2/7/00	0.067	11.697	2.205	3.758		-2.353
9/7/00	0.063	-5.326	-4.507	2.569		-0.928
16/7/00	0.063	-2.840	4.589	-4.678		-2.320
23/7/00	0.063	-2.920	4.382	-3.288		-3.206
30/7/00	0.063	-1.533	-5.382	6.049		-4.662
6/8/00	0.063	5.908	1.061	6.744		6.734
13/8/00	0.063	-0.063	-0.063	4.839		1.601
20/8/00	0.063	5.571	-2.285	11.152		0.765
27/8/00	0.063	-1.396	-4.608	4.139		-3.941
3/9/00	0.063	6.694	2.318	-0.869		1.205
10/9/00	0.063	-3.860	-2.388	-0.063		-4.459
17/9/00	0.058	-0.058	1.133	0.755		-1.327
24/9/00	0.058	-7.952	-3.587	-15.380		-6.590
1/10/00	0.058	-0.058	-0.058	0.895		1.091
8/10/00	0.058	-1.486	14.576	-4.775		-3.523
15/10/00	0.058	-4.406	13.772	1.923		-5.071
22/10/00	0.058	9.033	-0.992	10.622		8.729
29/10/00	0.058	1.413	-1.944	-4.444		-0.875
5/11/00	0.058	4.290	2.827	7.282		4.863

Date	Rf	Rbanpu-Rf	Rlanna-Rf	Rpttep-Rf	Rptt-Rf	Rmarket-Rf
12/11/00	0.058	2.720	10.223	-1.767		1.815
19/11/00	0.058	1.294	0.790	3.421		0.447
26/11/00	0.058	-5.391	10.867	-0.898		-3.210
3/12/00	0.058	-1.466	2.973	-7.685		-4.108
10/12/00	0.058	-1.486	-8.146	-6.480		-0.120
17/12/00	0.058	-1.507	-4.058	-4.469		-0.248
24/12/00	0.058	-1.528	-0.058	-0.571		-2.283
31/12/00	0.058	1.435	-0.058	3.035		0.729
7/1/01	0.058	4.354	12.442	3.942		6.469
14/1/01	0.058	2.759	-7.465	2.827		8.483
21/1/01	0.058	-0.058	0.742	1.811		1.745
28/1/01	0.058	1.312	-0.058	0.860		4.761
4/2/01	0.058	-0.058	-1.645	-0.967		0.535
11/2/01	0.048	-4.102	-2.467	-8.764		-2.856
18/2/01	0.048	18.262	-0.048	0.454		-2.733
25/2/01	0.048	8.285	15.654	7.952		2.560
4/3/01	0.048	-20.927	-8.620	-7.455		-5.658
11/3/01	0.048	15.230	-5.517	0.952		0.262
18/3/01	0.048	1.360	-0.875	-1.038		-4.608
25/3/01	0.048	-1.437	16.619	-1.048		-0.987
1/4/01	0.048	-0.048	1.380	2.982		0.534
8/4/01	0.048	1.360	-1.457	-5.440		-3.446
15/4/01	0.048	1.341	0.666	0.470		3.235
22/4/01	0.048	-1.418	-0.757	-1.594		0.398
29/4/01	0.048	4.119	-0.048	10.947		1.534
6/5/01	0.048	7.952	0.666	-5.708		3.071
13/5/01	0.048	-0.048	-0.757	2.952		1.404
20/5/01	0.048	11.063	14.238	5.777		-3.357
27/5/01	0.048	8.841	1.268	6.556		3.434
3/6/01	0.048	-3.109	10.342	4.377		0.257

Date	Rf	Rbanpu-Rf	Rlanna-Rf	Rpttep-Rf	Rptt-Rf	Rmarket-Rf
10/6/01	0.048	7.320	-0.636	-0.048		0.026
17/6/01	0.048	2.893	6.461	-0.048		3.692
24/6/01	0.048	0.904	-2.270	5.037		-1.684
1/7/01	0.048	0.895	6.770	0.758		1.169
8/7/01	0.048	0.887	-0.048	1.552		0.674
15/7/01	0.048	-4.678	-4.303	-2.410		-3.302
22/7/01	0.048	-1.019	1.063	-1.661		-0.697
29/7/01	0.048	-2.009	-0.048	-7.425		-3.628
5/8/01	0.048	-0.048	-3.345	1.722		4.887
12/8/01	0.048	3.952	-4.025	0.821		-0.073
19/8/01	0.048	3.798	1.135	0.814		2.288
26/8/01	0.048	4.582	-2.972	2.516		2.711
2/9/01	0.048	-2.703	0.554	-2.548		0.975
9/9/01	0.048	1.770	-0.048	12.772		1.963
16/9/01	0.048	-15.227	-21.006	-1.563		-15.887
23/9/01	0.048	-2.153	6.013	-5.433		-4.734
30/9/01	0.048	2.102	20.666	-11.430		0.840
7/10/01	0.048	-1.101	1.727	2.704		1.338
14/10/01	0.048	2.080	3.440	-0.048		1.408
21/10/01	0.048	0.994	-1.172	-6.298		-0.136
28/10/01	0.048	-0.048	-0.048	-1.953		-1.495
4/11/01	0.048	-1.079	-2.889	-1.990		-2.322
11/11/01	0.048	0.369	-4.142	-1.038		-2.276
18/11/01	0.048	-0.481	7.269	3.952		2.723
25/11/01	0.048	6.908	1.088	2.837		7.657
2/12/01	0.043	3.615	1.080	4.630		1.928
9/12/01	0.043	-2.004	7.179	-5.400		0.429
16/12/01	0.043	-2.843	3.584	-0.987	-2.860	-3.349
23/12/01	0.043	0.368	15.957	-2.900	-0.768	0.872
30/12/01	0.043	2.416	-21.595	3.878	0.687	2.370

Date	Rf	Rbanpu-Rf	Rlanna-Rf	Rpttep-Rf	Rptt-Rf	Rmarket-Rf
6/1/02	0.043	3.957	2.704	0.900	1.406	3.867
13/1/02	0.043	-1.005	20.812	2.760	-0.043	2.117
20/1/02	0.043	-1.985	-2.731	-2.771	-1.472	-1.603
27/1/02	0.043	3.917	1.614	2.760	-0.768	6.719
3/2/02	0.043	9.481	-3.304	-0.043	2.147	-0.734
10/2/02	0.043	11.261	3.328	5.411	-1.472	4.989
17/2/02	0.038	12.462	-0.582	0.824	0.686	5.457
24/2/02	0.038	-6.983	-4.410	-5.167	-1.477	-5.856
3/3/02	0.038	14.887	5.676	6.268	5.801	8.310
10/3/02	0.038	18.793	8.070	-0.038	-0.038	2.589
17/3/02	0.038	-3.864	2.962	-0.038	-3.487	-3.433
24/3/02	0.038	-2.311	-0.038	5.046	2.104	3.120
31/3/02	0.038	-4.108	-13.631	-3.264	-0.038	-3.984
7/4/02	0.038	-6.705	2.771	-3.372	-7.731	-1.097
14/4/02	0.038	9.052	2.694	-0.038	-0.796	2.567
21/4/02	0.038	-4.800	-0.038	-0.901	-2.329	1.774
28/4/02	0.038	-2.538	3.685	-4.386	-2.382	-2.644
5/5/02	0.038	2.782	1.601	-2.766	-4.038	-0.673
12/5/02	0.038	-2.570	-1.651	10.242	5.795	2.111
19/5/02	0.038	-2.636	-3.864	0.854	8.623	-1.049
26/5/02	0.038	3.295	2.234	3.501	3.868	3.626
2/6/02	0.038	10.929	-1.150	9.363	0.713	4.009
9/6/02	0.038	2.287	-0.038	1.524	8.917	2.258
16/6/02	0.038	1.666	3.332	-4.654	2.701	1.186
23/6/02	0.038	-6.742	-8.191	-6.490	-6.705	-6.425
30/6/02	0.038	-4.230	-3.589	0.824	2.819	-1.647
7/7/02	0.038	3.087	-1.265	2.526	-1.427	3.046
14/7/02	0.038	0.568	-3.144	-3.372	0.666	-0.148
21/7/02	0.038	-2.448	-0.038	-3.487	-0.038	-1.633
28/7/02	0.038	-13.001	-0.038	-5.396	-4.234	-7.089

Date	Rf	Rbanpu-Rf	Rlanna-Rf	Rpttep-Rf	Rptt-Rf	Rmarket-Rf
4/8/02	0.038	-0.748	1.244	0.905	0.691	1.050
11/8/02	0.038	-0.038	0.594	6.504	3.585	-0.954
18/8/02	0.038	8.533	0.590	5.225	4.857	1.585
25/8/02	0.038	-2.670	-0.038	-0.872	0.628	-1.652
1/9/02	0.038	-0.038	-1.288	2.483	-0.038	-1.632
8/9/02	0.038	-0.714	-1.304	-0.038	1.286	-2.146
15/9/02	0.038	-6.161	0.603	1.601	0.615	0.980
22/9/02	0.038	-1.488	-1.312	-3.264	0.611	-1.615
29/9/02	0.038	-0.808	-1.974	0.795	5.123	-3.680
6/10/02	0.038	-0.814	5.225	2.441	-2.492	0.611
13/10/02	0.038	-3.945	-1.288	0.768	1.848	-3.121
20/10/02	0.034	0.779	-1.932	-4.834	-5.589	3.613
27/10/02	0.034	3.999	5.128	-0.034	-0.687	1.718
3/11/02	0.034	0.742	-6.782	5.008	1.940	2.612
10/11/02	0.034	-1.572	1.282	2.366	2.547	-0.783
17/11/02	0.034	1.529	0.616	-1.596	-2.549	0.316
24/11/02	0.034	1.505	-1.969	4.728	1.257	1.749
1/12/02	0.034	-0.791	1.940	-1.549	-1.308	0.603
8/12/02	0.034	-0.797	-0.034	4.582	3.837	0.018
15/12/02	0.034	0.736	-1.324	-2.240	-0.034	-2.469
22/12/02	0.034	-0.797	-3.302	5.981	2.451	-1.771
29/12/02	0.034	1.505	-0.034	0.676	2.391	1.815

หมายเหตุ: หลักทรัพย์ PTT เข้าตลาดเมื่อวันที่ 9/12/01

ตารางที่ 4 แสดงผลการทดสอบ Unit Root

BANPU

ADF Test Statistic	-9.838929	1% Critical Value*	-3.4573	
		5% Critical Value	-2.8728	
		10% Critical Value	-2.5727	
*MacKinnon critical values for rejection of hypothesis of a unit root.				
Augmented Dickey-Fuller Test Equation				
Dependent Variable: D(RBANPU)				
Method: Least Squares				
Date: 04/03/03 Time: 14:25				
Sample(adjusted): 1/25/1998 12/29/2002				
Included observations: 258 after adjusting endpoints				
Variable	Coefficient	Std. Error	t-Statistic Prob.	
RBANPU(-1)	-0.843701	0.085751	-9.838929	0.0000
D(RBANPU(-1))	-0.114644	0.061773	-1.855888	0.0646
C	0.326661	0.601044	0.543489	0.5873
R-squared	0.485649	Mean dependent var	-0.047004	
Adjusted R-squared	0.481615	S.D. dependent var	13.38512	
S.E. of regression	9.637143	Akaike info criterion	7.380686	
Sum squared resid	23683.01	Schwarz criterion	7.422000	
Log likelihood	-949.1085	F-statistic	120.3853	
Durbin-Watson stat	2.009312	Prob(F-statistic)	0.000000	

LANNA

ADF Test Statistic	-9.994070	1% Critical Value*	-3.4573	
		5% Critical Value	-2.8728	
		10% Critical Value	-2.5727	
*MacKinnon critical values for rejection of hypothesis of a unit root.				
Augmented Dickey-Fuller Test Equation				
Dependent Variable: D(RLANNA)				
Method: Least Squares				
Date: 04/03/03 Time: 14:26				
Sample(adjusted): 1/25/1998 12/29/2002				
Included observations: 258 after adjusting endpoints				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
RLANNA(-1)	-0.840916	0.084142	-9.994070	0.0000
D(RLANNA(-1))	-0.075046	0.062424	-1.202193	0.2304
C	0.075038	0.544555	0.137796	0.8905
R-squared	0.457821	Mean dependent var		0.015116
Adjusted R-squared	0.453569	S.D. dependent var		11.83198
S.E. of regression	8.746321	Akaike info criterion		7.186703
Sum squared resid	19507.02	Schwarz criterion		7.228017
Log likelihood	-924.0847	F-statistic		107.6622
Durbin-Watson stat	1.905639	Prob(F-statistic)		0.000000

PTTEP

ADF Test Statistic	-11.39432	1% Critical Value*	-3.4573	
		5% Critical Value	-2.8728	
		10% Critical Value	-2.5727	
*MacKinnon critical values for rejection of hypothesis of a unit root.				
Augmented Dickey-Fuller Test Equation				
Dependent Variable: D(RPTTEP)				
Method: Least Squares				
Date: 04/03/03 Time: 14:26				
Sample(adjusted): 1/25/1998 12/29/2002				
Included observations: 258 after adjusting endpoints				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
RPTTEP(-1)	-0.973326	0.085422	-11.39432	0.0000
D(RPTTEP(-1))	0.044390	0.062558	0.709578	0.4786
C	-0.031077	0.376930	-0.082447	0.9344
R-squared	0.467713	Mean dependent var	-0.017729	
Adjusted R-squared	0.463538	S.D. dependent var	8.265860	
S.E. of regression	6.054211	Akaike info criterion	6.450945	
Sum squared resid	9346.635	Schwarz criterion	6.492258	
Log likelihood	-829.1719	F-statistic	112.0323	
Durbin-Watson stat	1.970764	Prob(F-statistic)	0.000000	

PTT

ADF Test Statistic	-5.111768	1% Critical Value*	-3.5572	
		5% Critical Value	-2.9167	
		10% Critical Value	-2.5958	
*MacKinnon critical values for rejection of hypothesis of a unit root.				
Augmented Dickey-Fuller Test Equation				
Dependent Variable: D(RPTT)				
Method: Least Squares				
Date: 04/03/03 Time: 14:29				
Sample(adjusted): 12/30/2001 12/29/2002				
Included observations: 53 after adjusting endpoints				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
RPTT(-1)	-0.990356	0.193740	-5.111768	0.0000
D(RPTT(-1))	0.049297	0.140630	0.350545	0.7274
C	0.545525	0.472052	1.155647	0.2533
R-squared	0.472443	Mean dependent var		0.059604
Adjusted R-squared	0.451341	S.D. dependent var		4.560099
S.E. of regression	3.377734	Akaike info criterion		5.327226
Sum squared resid	570.4543	Schwarz criterion		5.438752
Log likelihood	-138.1715	F-statistic		22.38828
Durbin-Watson stat	1.985813	Prob(F-statistic)		0.000000

Set Index

ADF Test Statistic	-8.833 176	1% Critical Value*	-3.4573	
		5% Critical Value	-2.8728	
		10% Critical Value	-2.5727	
*MacKinnon critical values for rejection of hypothesis of a unit root.				
Augmented Dickey-Fuller Test Equation				
Dependent Variable: D(RMARKET)				
Method: Least Squares				
Date: 04/03/03 Time: 14:24				
Sample(adjusted): 1/25/1998 12/29/2002				
Included observations: 258 after adjusting endpoints				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
RMARKET(-1)	-0.731 137	0.082772	-8.833176	0.0000
D(RMARKET(-1))	-0.202597	0.060628	-3.341638	0.0010
C	-0.007190	0.292168	-0.024609	0.9804
R-squared	0.485656	Mean dependent var	-0.028953	
Adjusted R-squared	0.481622	S.D. dependent var	6.517974	
S.E. of regression	4.692842	Akaike info criterion	5.941514	
Sum squared resid	5615.806	Schwarz criterion	5.982827	
Log likelihood	-763.4553	F-statistic	120.3886	
Durbin-Watson stat	2.038321	Prob(F-statistic)	0.000000	

SMB

ADF Test Statistic	-9.052475	1% Critical Value*	-3.4573
		5% Critical Value	-2.8728
		10% Critical Value	-2.5727
*MacKinnon critical values for rejection of hypothesis of a unit root.			
Augmented Dickey-Fuller Test Equation			
Dependent Variable: D(SMB)			
Method: Least Squares			
Date: 04/23/03 Time: 22:40			
Sample(adjusted): 1/25/1998 12/29/2002			
Included observations: 258 after adjusting endpoints			
Variable	Coefficient	Std. Error	t-Statistic
SMB(-1)	-0.707604	0.078167	-9.052475
D(SMB(-1))	-0.099543	0.062277	-1.598397
C	0.202835	0.243885	0.831681
R-squared	0.398622	Mean dependent var	-0.013729
Adjusted R-squared	0.393906	S.D. dependent var	5.004868
S.E. of regression	3.896393	Akaike info criterion	5.569539
Sum squared resid	3871.379	Schwarz criterion	5.610853
Log likelihood	-715.4706	F-statistic	84.51323
Durbin-Watson stat	2.010513	Prob(F-statistic)	0.000000

HML

ADF Test Statistic	-12.14055	1% Critical Value*	-3.4573	
		5% Critical Value	-2.8728	
		10% Critical Value	-2.5727	
*MacKinnon critical values for rejection of hypothesis of a unit root.				
Augmented Dickey-Fuller Test Equation				
Dependent Variable: D(HML)				
Method: Least Squares				
Date: 04/23/03 Time: 22:42				
Sample(adjusted): 1/25/1998 12/29/2002				
Included observations: 258 after adjusting endpoints				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
HML(-1)	-1.132862	0.093312	-12.14055	0.0000
D(HML(-1))	-0.007343	0.061886	-0.118657	0.9056
C	0.172158	0.547508	0.314439	0.7534
R-squared	0.575766	Mean dependent var	-0.124012	
Adjusted R-squared	0.572439	S.D. dependent var	13.43481	
S.E. of regression	8.784773	Akaike info criterion	7.195476	
Sum squared resid	19678.92	Schwarz criterion	7.236790	
Log likelihood	-925.2165	F-statistic	173.0418	
Durbin-Watson stat	2.022675	Prob(F-statistic)	0.000000	

ตารางที่ 5 แสดงผลการวิเคราะห์การถดถอยอย่างง่ายโดยใช้แบบจำลอง CAPM

BANPU

Dependent Variable: RBANPU				
Method: Least Squares				
Date: 04/06/03 Time: 13:30				
Sample: 1/11/1998 12/29/2002				
Included observations: 260				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.385993	0.491709	0.785003	0.4332
RMARKET	1.163534	0.102118	11.39399	0.0000
R-squared	0.334748	Mean dependent var		0.393977
Adjusted R-squared	0.332170	S.D. dependent var		9.702010
S.E. of regression	7.928569	Akaike info criterion		6.986485
Sum squared resid	16218.45	Schwarz criterion		7.013875
Log likelihood	-906.2430	F-statistic		129.8230
Durbin-Watson stat	2.235093	Prob(F-statistic)		0.000000

LANNA

Dependent Variable: RLANNA				
Method: Least Squares				
Date: 04/06/03 Time: 13:31				
Sample: 1/11/1998 12/29/2002				
Included observations: 260				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.052318	0.486452	0.107550	0.9144
RMARKET	0.807963	0.101026	7.997555	0.0000
R-squared	0.198660	Mean dependent var		0.057862
Adjusted R-squared	0.195554	S.D. dependent var		8.745360
S.E. of regression	7.843791	Akaike info criterion		6.964984
Sum squared resid	15873.47	Schwarz criterion		6.992374
Log likelihood	-903.4479	F-statistic		63.96089
Durbin-Watson stat	2.017234	Prob(F-statistic)		0.000000

PTTEP

Dependent Variable: RPTTEP				
Method: Least Squares				
Date: 04/06/03 Time: 13:31				
Sample: 1/11/1998 12/29/2002				
Included observations: 260				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.024627	0.310680	-0.079268	0.9369
RMARKET	0.701812	0.064522	10.87711	0.0000
R-squared	0.314398	Mean dependent var		-0.019812
Adjusted R-squared	0.311740	S.D. dependent var		6.038416
S.E. of regression	5.009555	Akaike info criterion		6.068234
Sum squared resid	6474.676	Schwarz criterion		6.095624
Log likelihood	-786.8704	F-statistic		118.3115
Durbin-Watson stat	1.908992	Prob(F-statistic)		0.000000

PTT

Dependent Variable: RPTT				
Method: Least Squares				
Date: 04/06/03 Time: 13:32				
Sample: 12/16/2001 12/29/2002				
Included observations: 55				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.383356	0.433706	0.883907	0.3807
RMARKET	0.286304	0.139123	2.057924	0.0445
R-squared	0.073994	Mean dependent var		0.469091
Adjusted R-squared	0.056522	S.D. dependent var		3.296082
S.E. of regression	3.201576	Akaike info criterion		5.200850
Sum squared resid	543.2548	Schwarz criterion		5.273844
Log likelihood	-141.0234	F-statistic		4.235050
Durbin-Watson stat	1.894834	Prob(F-statistic)		0.044530

ตารางที่ 5 แสดงผลการวิเคราะห์การถดถอยอย่างง่ายโดยใช้แบบจำลอง Fama-French Factor Model

BANPU

Dependent Variable: RBANPU				
Method: Least Squares				
Date: 04/06/03 Time: 13:38				
Sample: 1/11/1998 12/29/2002				
Included observations: 260				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.091098	0.379143	0.240272	0.8103
RMARKET	1.012823	0.083705	12.09984	0.0000
SMB	1.290177	0.106966	12.06159	0.0000
HML	-0.451698	0.046472	-9.719801	0.0000
R-squared	0.610240	Mean dependent var		0.393977
Adjusted R-squared	0.605673	S.D. dependent var		9.702010
S.E. of regression	6.092423	Akaike info criterion		6.467234
Sum squared resid	9502.110	Schwarz criterion		6.522013
Log likelihood	-836.7404	F-statistic		133.6050
Durbin-Watson stat	2.001641	Prob(F-statistic)		0.000000

LANNA

Dependent Variable: RLANNA				
Method: Least Squares				
Date: 04/06/03 Time: 13:39				
Sample: 1/11/1998 12/29/2002				
Included observations: 260				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.234299	0.429054	-0.546084	0.5855
RMARKET	0.604916	0.094724	6.386054	0.0000
SMB	1.065133	0.121047	8.799359	0.0000
HML	-0.193708	0.052590	-3.683404	0.0003
R-squared	0.385699	Mean dependent var		0.057862
Adjusted R-squared	0.378500	S.D. dependent var		8.745360
S.E. of regression	6.894430	Akaike info criterion		6.714570
Sum squared resid	12168.49	Schwarz criterion		6.769349
Log likelihood	-868.8940	F-statistic		53.57787
Durbin-Watson stat	2.049842	Prob(F-statistic)		0.000000

PTTEP

Dependent Variable: RPTTEP				
Method: Least Squares				
Date: 04/06/03 Time: 13:39				
Sample: 1/11/1998 12/29/2002				
Included observations: 260				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.151787	0.275062	0.551830	0.5815
RMARKET	0.884566	0.060727	14.56629	0.0000
SMB	-0.462738	0.077602	-5.962979	0.0000
HML	-0.131322	0.033715	-3.895105	0.0001
R-squared	0.470423	Mean dependent var		-0.019812
Adjusted R-squared	0.464217	S.D. dependent var		6.038416
S.E. of regression	4.419952	Akaike info criterion		5.825400
Sum squared resid	5001.209	Schwarz criterion		5.880179
Log likelihood	-753.3019	F-statistic		75.80153
Durbin-Watson stat	2.051246	Prob(F-statistic)		0.000000

PTT

Dependent Variable: RPTT				
Method: Least Squares				
Date: 04/06/03 Time: 13:43				
Sample(adjusted): 12/23/2001 12/29/2002				
Included observations: 54 after adjusting endpoints				
Convergence achieved after 5 iterations				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.444815	0.504567	0.881578	0.3823
RMARKET	0.018117	0.159515	0.113575	0.9100
SMB	0.510016	0.194289	2.625043	0.0115
HML	-0.100587	0.051093	-1.968694	0.0547
AR(1)	0.159364	0.140056	1.137861	0.2607
R-squared	0.188684	Mean dependent var		0.530741
Adjusted R-squared	0.122454	S.D. dependent var		3.294868
S.E. of regression	3.086549	Akaike info criterion		5.180005
Sum squared resid	466.8123	Schwarz criterion		5.364171
Log likelihood	-134.8601	F-statistic		2.848917
Durbin-Watson stat	1.998895	Prob(F-statistic)		0.033505
Inverted AR Roots	.16			

ประวัติผู้เขียน

ชื่อ	นางสาวจิตราพรรณ ใจคุ้ม
วัน เดือน ปี เกิด	4 กันยายน 2522
ประวัติการศึกษา	สำเร็จการศึกษามัธยมศึกษาตอนต้น โรงเรียนสตรีศรีน่าน จังหวัดน่าน ปีการศึกษา 2538 สำเร็จการศึกษามัธยมศึกษาตอนปลาย โรงเรียนศรีสวัสดิ์วิทยาคาร จังหวัดน่าน ปีการศึกษา 2541 สำเร็จการศึกษาปริญญาเศรษฐศาสตรบัณฑิต สาขาวิชาเศรษฐศาสตร์ มหาวิทยาลัยแม่โจ้ ปีการศึกษา 2544