



ภาคผนวก

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

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ภาคผนวก ก

แสดงอัตราผลตอบแทนของหลักทรัพย์เฉลี่ยรายสัปดาห์โดยคิดเป็นร้อยละ

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

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ภาคผนวก ก

แสดงอัตราผลตอบแทนของหลักทรัพย์เฉลี่ยรายสัปดาห์โดยคิดเป็นร้อยละ

| DATE | SET | AH | GYT | IRC | STAN | TRU |
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| 3/1/1999 | 12.25935 | N/A | 26.666667 | -8.88888889 | -16.326531 | 2.34 |
| 10/1/1999 | -4.40878 | N/A | -21.052632 | 0 | 14.634146 | 2.88 |
| 17/1/1999 | -1.39856 | N/A | N/A | 12.195122 | 21.276596 | 3.2 |
| 24/1/1999 | -3.58054 | N/A | N/A | -8.69565217 | 3.5087719 | 3.12 |
| 31/1/1999 | -6.89807 | N/A | 11.851852 | 7.14285714 | 3.3898305 | 2.96 |
| 7/2/1999 | 2.802107 | N/A | N/A | 8.88888889 | -9.8360656 | 2.8 |
| 14/2/1999 | -3.1258 | N/A | 5.9602649 | -10.2040816 | -1.8181818 | 2.8 |
| 21/2/1999 | 1.29839 | N/A | -6.25 | -6.81818182 | 14.814815 | 2.72 |
| 28/2/1999 | -1.38734 | N/A | N/A | 21.9512195 | 3.2258065 | N/A |
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| 14/3/1999 | 6.333321 | N/A | 0 | 0 | -1.754386 | 2.4 |
| 21/3/1999 | -0.21214 | N/A | N/A | -4 | 5.3571429 | 2.4 |
| 28/3/1999 | -2.67368 | N/A | N/A | -6.25 | 0 | 2.4 |
| 4/4/1999 | 4.158499 | N/A | 0.7142857 | 0 | 0 | 2.38 |
| 11/4/1999 | 8.224223 | N/A | 0 | 8.88888889 | 5.0847458 | 3.36 |
| 18/4/1999 | -0.36518 | N/A | 6.3829787 | -8.16326531 | 9.6774194 | 3.92 |
| 25/4/1999 | 14.53113 | N/A | N/A | 11.1111111 | -1.4705882 | 3.6 |
| 2/5/1999 | 6.313269 | N/A | N/A | 10 | 17.910448 | 3.28 |
| 9/5/1999 | -2.75418 | N/A | -3.3333333 | 12.7272727 | 20.253165 | 2.82 |
| 16/5/1999 | 0.932828 | N/A | 10.344828 | 12.9032258 | 6.3157895 | 2.52 |
| 23/5/1999 | -5.36791 | N/A | 3.125 | 17.1428571 | 6.9306931 | N/A |
| 30/5/1999 | 5.041885 | N/A | -0.6060606 | -6.09756098 | 5.5555556 | 2.8 |
| 6/6/1999 | 6.420131 | N/A | N/A | 16.8831169 | 2.6315789 | 3.08 |
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| 27/6/1999 | -1.93435 | N/A | N/A | 36.0655738 | 10.810811 | 4.56 |
| 4/7/1999 | -4.45316 | N/A | 8.0246914 | -13.253012 | 1.2195122 | 5.48 |
| 11/7/1999 | -4.13477 | N/A | -1.1428571 | 19.4444444 | -4.2168675 | 5.12 |
| 18/7/1999 | -2.61612 | N/A | 29.479769 | 19.7674419 | 30.81761 | 4.88 |
| 25/7/1999 | -3.97705 | N/A | N/A | 26.2135922 | -14.903846 | 5.24 |
| 1/8/1999 | -4.32784 | N/A | N/A | -3.07692308 | 4.519774 | 4.32 |
| 8/8/1999 | -3.03405 | N/A | N/A | -23.8095238 | -9.1891892 | 4.4 |
| 15/8/1999 | 3.947805 | N/A | -23.214286 | 1.04166667 | 2.3809524 | 4.4 |
| 22/8/1999 | 3.865973 | N/A | 4.6511628 | 3.09278351 | 3.4883721 | 4.6 |
| 29/8/1999 | -5.77436 | N/A | 8.3333333 | 0 | 1.1235955 | 4.6 |
| 5/9/1999 | -0.04871 | N/A | N/A | -9 | -7.7777778 | 4.72 |
| 12/9/1999 | 1.682486 | N/A | 0 | 2.1978022 | -4.8192771 | 4.64 |
| 19/9/1999 | -12.815 | N/A | -2.5641026 | 2.15053763 | 5.0632911 | 4 |
| 26/9/1999 | 6.601921 | N/A | -5.2631579 | -17.8947368 | -4.8192771 | 4.24 |
| 3/10/1999 | -3.48943 | N/A | N/A | 10.2564103 | -1.2658228 | 4.4 |
| 10/10/1999 | -1.93883 | N/A | N/A | 2.3255814 | 1.2820513 | 4.32 |
| 17/10/1999 | -2.13804 | N/A | 0 | -6.81818182 | 0.6329114 | 4.48 |
| 24/10/1999 | 4.875912 | N/A | 5.5555556 | 1.2195122 | -1.8867925 | 4.48 |
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| 7/11/1999 | 3.237984 | N/A | N/A | 0 | 5.9210526 | 4.4 |
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| 28/11/1999 | 0.511753 | N/A | -13.142857 | 8.33333333 | 0 | 2.8 |
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| 26/12/1999 | 4.472241 | N/A | N/A | 1.0989011 | 9.6551724 | 2.88 |
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| 23/1/2000 | -0.30694 | N/A | N/A | 2.5 | 9.0909091 | 3.12 |
| 30/1/2000 | -1.48916 | N/A | 1.1904762 | 1.2195122 | 0.6410256 | 2.88 |
| 6/2/2000 | -3.02334 | N/A | N/A | -3.61445783 | -5.7324841 | 3.04 |
| 13/2/2000 | -10.4731 | N/A | 0 | 11.25 | -6.7567568 | 2.96 |
| 20/2/2000 | -0.41386 | N/A | 0 | -14.6067416 | -9.4202899 | 2.8 |
| 27/2/2000 | -5.78616 | N/A | 0 | -5.26315789 | -4.8 | 2.88 |
| 5/3/2000 | 5.029622 | N/A | 0 | -16.6666667 | 0.8403361 | 2.88 |
| 12/3/2000 | -0.66103 | N/A | 8.8235294 | 1.66666667 | 0 | N/A |
| 19/3/2000 | 1.105721 | N/A | N/A | 8.19672131 | 6.6666667 | 2.96 |
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| 2/4/2000 | 0.781874 | N/A | 8.5714286 | 2.40963855 | 0.7092199 | 2.44 |
| 9/4/2000 | 2.726484 | N/A | N/A | -1.17647059 | 1.4084507 | 2.32 |
| 16/4/2000 | -4.67849 | N/A | N/A | 5.95238095 | 2.7777778 | 2.08 |
| 23/4/2000 | -1.17957 | N/A | 0 | -3.37078652 | 0 | 2.24 |
| 30/4/2000 | -2.67162 | N/A | -5.2631579 | 1.1627907 | -2.027027 | 2.38 |
| 7/5/2000 | -9.02703 | N/A | -0.5555556 | -1.14942529 | 2.0689655 | 2.38 |
| 14/5/2000 | -0.6567 | N/A | N/A | -5.81395349 | -8.1081081 | N/A |
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| 28/5/2000 | 8.368472 | N/A | N/A | -17.5 | -9.4594595 | 2.48 |
| 4/6/2000 | 0.610118 | N/A | 3.3519553 | 10.6060606 | 7.4626866 | 2.46 |
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| 18/6/2000 | -3.24537 | N/A | 0 | 7.24637681 | 3.6764706 | 2.3 |
| 25/6/2000 | -2.28616 | N/A | N/A | -1.35135135 | -0.7092199 | 2.18 |
| 2/7/2000 | -0.86585 | N/A | -10.05291 | -4.10958904 | 0 | 2.22 |
| 9/7/2000 | -2.25788 | N/A | 0 | -2.85714286 | -3.5714286 | 2.26 |
| 16/7/2000 | -3.14342 | N/A | N/A | -1.47058824 | 0.7407407 | 2.24 |
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| DATE | SET | AH | GYT | IRC | STAN | TRU |
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| 30/7/2000 | 6.796982 | N/A | -0.617284 | -1.47058824 | 3.125 | 2.64 |
| 6/8/2000 | 1.663348 | N/A | 2.484472 | 4.47761194 | -9.0909091 | 2.6 |
| 13/8/2000 | 0.827539 | N/A | 0 | 1.42857143 | 5 | 2.62 |
| 20/8/2000 | -3.8782 | N/A | 0.6060606 | -4.22535211 | -4.7619048 | 2.28 |
| 27/8/2000 | 1.267765 | N/A | -0.6024096 | -4.41176471 | -4.1666667 | 2.28 |
| 3/9/2000 | -4.3961 | N/A | 0 | 3.07692308 | 0.8695652 | 2.32 |
| 10/9/2000 | -1.26907 | N/A | 9.0909091 | -4.47761194 | 2.5862069 | 2.4 |
| 17/9/2000 | -6.53255 | N/A | -5.5555556 | -1.5625 | -2.5210084 | 2.38 |
| 24/9/2000 | 1.149048 | N/A | -0.5882353 | 0 | 3.4482759 | 2.38 |
| 1/10/2000 | -3.46569 | N/A | -3.5502959 | 4.76190476 | -5.8333333 | 2.32 |
| 8/10/2000 | -5.01345 | N/A | 2.4539877 | -1.51515152 | -12.389381 | 2.64 |
| 15/10/2000 | 8.78629 | N/A | 1.7964072 | 0 | -8.0808081 | 2.4 |
| 22/10/2000 | -0.81707 | N/A | N/A | 1.53846154 | 1.0989011 | 2.34 |
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| 5/11/2000 | 1.872572 | N/A | -2.9411765 | 0 | -3.125 | 2.36 |
| 12/11/2000 | 0.504716 | N/A | 0 | 3.125 | -5.3763441 | 2.36 |
| 19/11/2000 | -3.15224 | N/A | 1.2121212 | -1.51515152 | 3.4090909 | 2.36 |
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| 17/12/2000 | -2.22572 | N/A | -0.5524862 | 0 | 0 | 2.56 |
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| 7/1/2001 | 8.540239 | N/A | 0 | 5.45454545 | 2.173913 | 2.52 |
| 14/1/2001 | 1.802406 | N/A | 2.2222222 | -1.72413793 | -1.0638298 | 2.48 |
| 21/1/2001 | 4.819166 | N/A | N/A | 0 | 0 | 2.46 |
| 28/1/2001 | 0.593144 | N/A | -1.6304348 | 0 | 0 | 2.52 |
| 4/2/2001 | -2.80755 | N/A | N/A | -1.75438596 | 1.0752688 | 2.66 |
| 11/2/2001 | -2.68539 | N/A | 1.6574586 | -1.78571429 | 7.4468085 | 2.66 |

| DATE | SET | AH | GYT | IRC | STAN | TRU |
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| 18/2/2001 | 2.607592 | N/A | 0 | -1.81818182 | -3.960396 | 3.04 |
| 25/2/2001 | -5.61004 | N/A | 0 | 0 | -1.0309278 | 2.92 |
| 4/3/2001 | 0.31041 | N/A | -0.5434783 | -1.85185185 | 1.0416667 | 3.18 |
| 11/3/2001 | -4.56026 | N/A | 1.0928962 | -3.77358491 | -1.0309278 | 3.16 |
| 18/3/2001 | -0.93857 | N/A | N/A | -5.88235294 | 9.375 | 2.64 |
| 25/3/2001 | 0.582257 | N/A | 3.7837838 | -10.4166667 | 8.5714286 | 2.64 |
| 1/4/2001 | -3.39796 | N/A | -1.0416667 | 0 | -6.1403509 | 2.86 |
| 8/4/2001 | 3.283459 | N/A | N/A | 2.3255814 | 0.9345794 | 2.82 |
| 15/4/2001 | 0.446303 | N/A | N/A | -2.27272727 | -4.6296296 | 2.82 |
| 22/4/2001 | 1.582473 | N/A | -1.5789474 | 0 | 1.9417476 | 3 |
| 29/4/2001 | 3.119014 | N/A | 0 | -2.3255814 | 0.952381 | N/A |
| 6/5/2001 | 1.451964 | N/A | -9.0909091 | 4.76190476 | 1.8867925 | 2.92 |
| 13/5/2001 | -3.30942 | N/A | 1.1764706 | 0 | 6.4814815 | 3.36 |
| 20/5/2001 | 3.482564 | N/A | -4.0697674 | 0 | 13.043478 | 3.6 |
| 27/5/2001 | 0.305361 | N/A | N/A | 13.6363636 | 4.6153846 | 4.48 |
| 3/6/2001 | 0.073707 | N/A | N/A | 16 | -2.2058824 | 4.84 |
| 10/6/2001 | 3.74011 | N/A | 7.2727273 | -3.44827586 | 15.037594 | 4.84 |
| 17/6/2001 | -1.63595 | N/A | 1.6949153 | 3.57142857 | 3.2679739 | 4.84 |
| 24/6/2001 | 1.217554 | N/A | 1.6666667 | -1.72413793 | 2.5316456 | 5.12 |
| 1/7/2001 | 0.722372 | N/A | 1.0928962 | 7.01754386 | 1.2345679 | 5.32 |
| 8/7/2001 | -3.25351 | N/A | -0.5405405 | 1.63934426 | -3.0487805 | 5.4 |
| 15/7/2001 | -0.64904 | N/A | -2.173913 | 4.83870968 | 7.5471698 | 5.32 |
| 22/7/2001 | -3.58023 | N/A | 2.7777778 | 0 | -9.3567251 | 5.2 |
| 29/7/2001 | 4.935405 | N/A | 1.6216216 | -4.61538462 | -1.9354839 | 5.2 |
| 5/8/2001 | -0.02532 | N/A | 0 | 0 | 2.6315789 | 5.16 |
| 12/8/2001 | 2.336404 | N/A | -1.5957447 | 1.61290323 | 3.2051282 | 5.04 |
| 19/8/2001 | 2.759477 | N/A | 10.27027 | -6.34920635 | -0.621118 | 4.88 |
| 26/8/2001 | 1.023572 | N/A | 0.9803922 | -1.69491525 | -1.25 | 4.36 |
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| DATE | SET | AH | GYT | IRC | STAN | TRU |
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| 16/9/2001 | -4.68587 | N/A | 0 | -15.2542373 | 5 | 4.16 |
| 23/9/2001 | 0.888565 | N/A | N/A | -10 | 0 | 4.48 |
| 30/9/2001 | 1.386078 | N/A | N/A | 15.5555556 | -1.7857143 | 4.64 |
| 7/10/2001 | 1.456138 | N/A | N/A | -3.84615385 | 2.4242424 | 4.92 |
| 14/10/2001 | -0.08773 | N/A | -0.952381 | 4 | -0.591716 | 4.96 |
| 21/10/2001 | -1.44703 | N/A | 2.8846154 | 0 | -4.7619048 | 5.12 |
| 28/10/2001 | -2.2737 | N/A | 3.7383178 | 0 | 0.625 | 5.16 |
| 4/11/2001 | -2.22814 | N/A | -0.9009009 | -7.69230769 | -0.621118 | 5.28 |
| 11/11/2001 | 2.771258 | N/A | 3.6363636 | 27.5 | 0 | 5.56 |
| 18/11/2001 | 7.704863 | N/A | 2.6315789 | -20.2614379 | 10 | 5.48 |
| 25/11/2001 | 1.971227 | N/A | 5.982906 | 8.19672131 | 9.0909091 | 5.52 |
| 2/12/2001 | 0.472537 | N/A | -3.2258065 | 6.06060606 | -1.0416667 | 5.76 |
| 9/12/2001 | -3.30537 | N/A | -1.6666667 | 0 | 0 | 6.24 |
| 16/12/2001 | 0.914966 | N/A | -11.016949 | 0 | -3.1578947 | 7.04 |
| 23/12/2001 | 2.413297 | N/A | 0 | 1.42857143 | 3.8043478 | 7.04 |
| 30/12/2001 | 3.909824 | N/A | 0.952381 | -1.4084507 | -2.617801 | 6.76 |
| 6/1/2002 | 2.160067 | N/A | -1.8867925 | 0.71428571 | 5.3763441 | 6.72 |
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| 20/1/2002 | 6.761779 | N/A | 0 | 0.69444444 | 0 | 7.4 |
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| 3/2/2002 | 5.031935 | N/A | 0.9090909 | 4.16666667 | -1.8867925 | 8.96 |
| 10/2/2002 | 5.495062 | N/A | 0.9009009 | -4 | 0.9615385 | 8.8 |
| 17/2/2002 | -5.81738 | N/A | 1.7857143 | 6.25 | 28.571429 | 9.28 |
| 24/2/2002 | 8.348508 | N/A | -3.5087719 | 4.5751634 | 8.8888889 | N/A |
| 3/3/2002 | 2.627085 | N/A | -2.7272727 | 15 | 2.0408163 | 10.56 |
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| DATE | SET | AH | GYT | IRC | STAN | TRU |
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| 7/4/2002 | 2.605479 | N/A | -4.6728972 | 0.45454545 | -1.0928962 | 10.3 |
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| 21/4/2002 | -2.60537 | N/A | 0 | 3.24074074 | 2.7777778 | 9.8 |
| 28/4/2002 | -0.6349 | N/A | 0.952381 | 0.44843049 | 0 | 9.55 |
| 5/5/2002 | 2.149448 | N/A | -0.9433962 | -8.48214286 | -1.0810811 | 11 |
| 12/5/2002 | -1.01023 | N/A | 0 | 3.90243902 | 2.7322404 | 12 |
| 19/5/2002 | 3.664434 | N/A | -2.8571429 | 0.93896714 | -1.0638298 | 11.5 |
| 26/5/2002 | 4.047538 | N/A | 1.9607843 | 7.90697674 | 0 | 12 |
| 2/6/2002 | 2.296794 | N/A | 0.9615385 | 1.29310345 | -5.9139785 | 11.1 |
| 9/6/2002 | 1.224453 | N/A | 0 | 2.12765957 | 0.5714286 | 11.2 |
| 16/6/2002 | -6.38671 | N/A | -2.8571429 | -0.41666667 | -3.9772727 | 11.1 |
| 23/6/2002 | -1.60825 | N/A | 0 | -2.51046025 | -0.591716 | 10.9 |
| 30/6/2002 | 3.08404 | N/A | -4.4117647 | -1.28755365 | -1.1904762 | 11.3 |
| 7/7/2002 | -0.1097 | N/A | 2.5641026 | 0 | 3.6144578 | 10.5 |
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| 21/7/2002 | -7.051 | N/A | -2.8037383 | 3.98230088 | -3.4285714 | 9.55 |
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| 4/8/2002 | -0.91507 | N/A | 6.7961165 | -2.10970464 | 1.1627907 | 9.7 |
| 11/8/2002 | 1.623666 | N/A | 1.8181818 | 3.01724138 | 0.5747126 | 9.8 |
| 18/8/2002 | -1.61381 | N/A | N/A | 22.3849372 | 1.7142857 | 9.6 |
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| 1/9/2002 | -2.1071 | N/A | -0.9009009 | -1.75438596 | 0 | 9.25 |
| 8/9/2002 | 1.018244 | N/A | 2.7272727 | 3.57142857 | -1.1235955 | 9.3 |
| 15/9/2002 | -1.57637 | N/A | -1.7699115 | 5.17241379 | 3.4090909 | 9.3 |
| 22/9/2002 | -3.64133 | N/A | 2.7027027 | 1.63934426 | 14.285714 | 8.5 |
| 29/9/2002 | 0.649507 | N/A | -5.2631579 | -3.22580645 | -3.8461538 | 8.75 |
| 6/10/2002 | -3.08284 | N/A | N/A | 0 | -0.5 | 8.5 |
| 13/10/2002 | 3.646981 | N/A | N/A | -1.66666667 | 0.5025126 | 8.5 |

| DATE | SET | AH | GYT | IRC | STAN | TRU |
|------------|----------|------------|------------|-------------|------------|------|
| 20/10/2002 | 1.752029 | 0 | 28.703704 | 6.77966102 | 2 | 8.35 |
| 27/10/2002 | 2.645928 | 0 | -13.669065 | 0 | 2.9411765 | 8.2 |
| 3/11/2002 | -0.74927 | -0.0617058 | -2.5 | 3.17460317 | 8.5714286 | 7.9 |
| 10/11/2002 | 0.349293 | 0.0175431 | N/A | 4.61538462 | -1.754386 | 7.8 |
| 17/11/2002 | 1.782509 | 0.2930904 | 2.5641026 | 8.82352941 | 2.6785714 | 7.95 |
| 24/11/2002 | 0.63708 | 0.1250043 | 0 | 8.10810811 | 3.4782609 | 7.7 |
| 1/12/2002 | 0.052072 | 0.081486 | 0.8333333 | 10 | -0.8403361 | N/A |
| 8/12/2002 | -2.43501 | -0.0411083 | 7.4380165 | 6.81818182 | 0.8474576 | 8 |
| 15/12/2002 | -1.73779 | -0.0571412 | N/A | 0 | 9.2436975 | 7.6 |
| 22/12/2002 | 1.848519 | -0.0681718 | 0 | 4.25531915 | 5.3846154 | 7.45 |
| 29/12/2002 | 0.21039 | 0.0243976 | 3.8461538 | 12.244898 | 0 | 7.65 |
| 5/1/2003 | 0.878983 | 0.0079279 | 0.7407407 | -3.63636364 | -1.459854 | 7.65 |
| 12/1/2003 | 1.884175 | 0.0944843 | -0.7352941 | 3.77358491 | 4.4444444 | 7.6 |
| 19/1/2003 | 2.489375 | 0.0071865 | N/A | 0 | -2.8368794 | 7.9 |
| 26/1/2003 | -1.67153 | 0.0071352 | 2.962963 | 0.90909091 | 2.189781 | 7.85 |
| 2/2/2003 | 2.416151 | -0.0070847 | -1.4388489 | 8.10810811 | -2.8571429 | 7.7 |
| 9/2/2003 | -2.70221 | 0.0285706 | 2.919708 | 0 | -3.6764706 | 7.7 |
| 16/2/2003 | -2.48976 | 0.0139029 | 0 | 2.5 | 0 | 7.75 |
| 23/2/2003 | 0.497875 | -0.0137122 | N/A | -8.1300813 | -1.5267176 | 7.75 |
| 2/3/2003 | -0.78601 | -0.034714 | 0 | -0.88495575 | -2.3255814 | 7.95 |
| 9/3/2003 | -0.06695 | -0.0431788 | 1.4184397 | 0 | -3.968254 | 7.85 |
| 16/3/2003 | 1.501789 | -0.0075108 | N/A | -2.67857143 | 0.8264463 | 7.9 |
| 23/3/2003 | 1.625323 | 0.0151667 | 12.587413 | -1.83486239 | 5.7377049 | 8.1 |
| 30/3/2003 | 0.649471 | 0.0596987 | N/A | 0 | 5.4263566 | 7.6 |
| 6/4/2003 | 3.073159 | 0 | N/A | 8.41121495 | 5.1470588 | 7.65 |
| 13/4/2003 | 0.297373 | -0.0070638 | 5.5900621 | 0.86206897 | 0.6993007 | 7.75 |
| 20/4/2003 | -4.15345 | -0.0141694 | 2.3529412 | 4.27350427 | -3.4722222 | 7.7 |
| 27/4/2003 | 1.820745 | 0.0071865 | 0.5747126 | -6.55737705 | 0.7194245 | 7.55 |
| 4/5/2003 | 2.41979 | -0.0285706 | N/A | 0.87719298 | 6.4285714 | 7.6 |

| DATE | SET | AH | GYT | IRC | STAN | TRU |
|------------|----------|------------|------------|-------------|------------|------|
| 11/5/2003 | -0.34347 | 0.0294109 | 2.2857143 | 3.47826087 | -1.3422819 | 7.7 |
| 18/5/2003 | 3.268927 | 0.0143001 | 2.7932961 | 3.36134454 | 0 | 7.05 |
| 25/5/2003 | 2.098508 | 0.2183076 | N/A | 3.25203252 | -2.0408163 | 7.1 |
| 1/6/2003 | 3.563464 | -0.0289185 | 14.130435 | 14.9606299 | 4.1666667 | 7.1 |
| 8/6/2003 | 2.333758 | 0.1726333 | N/A | -1.36986301 | 26.666667 | 7.15 |
| 15/6/2003 | 5.769096 | 0.3705605 | 0.952381 | 17.3611111 | 2.6315789 | 7.05 |
| 22/6/2003 | 1.071447 | 0.0073994 | 0.9433962 | 1.18343195 | 1.025641 | 7.4 |
| 29/6/2003 | 8.351728 | 0.0073603 | N/A | 1.16959064 | 1.5228426 | 8.65 |
| 6/7/2003 | -2.28556 | 0 | 3.7383178 | 12.1387283 | 3 | 10.1 |
| 13/7/2003 | 1.785751 | 0 | -5.4054054 | 8.24742268 | 4.8543689 | 9.55 |
| 20/7/2003 | -1.6591 | 0.0218894 | -0.952381 | 5.71428571 | 13.888889 | 9.4 |
| 27/7/2003 | 1.377721 | 0.0214353 | N/A | 16.2162162 | -4.0650407 | 9.75 |
| 3/8/2003 | 2.372137 | 0.0489565 | 0 | -3.10077519 | 3.3898305 | 9.4 |
| 10/8/2003 | 3.147848 | 0.2711045 | -3.1496063 | 1.6 | 3.2786885 | 10.6 |
| 17/8/2003 | 3.038305 | 0.0434783 | 10.576923 | 4.76190476 | N/A | 10.4 |
| 24/8/2003 | 0.542252 | 0 | 6.9565217 | 0 | N/A | 11 |
| 31/8/2003 | 2.333758 | 0.21875 | N/A | -4.06504065 | 12.121212 | 11.4 |
| 7/9/2003 | 1.893118 | 0.0854701 | -0.8130081 | 15.2542373 | 18.918919 | 15.3 |
| 14/9/2003 | -0.20409 | 0.007874 | 0.8196721 | 3.67647059 | 9.6590909 | 17 |
| 21/9/2003 | 2.408276 | -0.0234375 | N/A | 20.5673759 | 8.8082902 | 14.3 |
| 28/9/2003 | -3.87866 | 0.056 | 0.8130081 | 10.5882353 | -9.047619 | 15.1 |
| 5/10/2003 | 4.264425 | -0.0833333 | 0 | 1.06382979 | 2.0942408 | 13.9 |
| 12/10/2003 | 1.107955 | 0.0495868 | 0.8064516 | 1.05263158 | 0 | 15.4 |
| 19/10/2003 | 3.508328 | 0.1653543 | N/A | 0.52083333 | 2.0512821 | 15.7 |
| 26/10/2003 | 4.956916 | 0.0472973 | 3.2 | -1.55440415 | -1.0050251 | 15.3 |
| 2/11/2003 | 4.933926 | 0.1419355 | -2.3255814 | 1.57894737 | 0 | 15.3 |
| 9/11/2003 | -2.02981 | -0.1186441 | 0.7936508 | -4.14507772 | 7.8562 | 16.9 |
| 16/11/2003 | -6.68563 | 0.0128205 | -1.5748031 | -4.32432432 | 10.659898 | 16.7 |
| 23/11/2003 | 5.314386 | -0.0506329 | -0.8 | -2.82485876 | -5.5045872 | 15 |

| DATE | SET | AH | GYT | IRC | STAN | TRU |
|------------|----------|------------|-----------|-------------|------------|------|
| 30/11/2003 | 2.052528 | 0.0133333 | 0 | 9.30232558 | -0.9708738 | 15.7 |
| 7/12/2003 | 2.299448 | -0.0065789 | 0.8064516 | -5.85106383 | 1.9607843 | 16 |
| 14/12/2003 | 5.144934 | -0.0331126 | 0 | 3.95480226 | -3.8461538 | 15.7 |
| 21/12/2003 | 3.629696 | -0.0958904 | 0.8 | -0.54347826 | -0.5 | 15.1 |



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ภาคผนวก ข

แสดงอัตราดอกเบี้ยของเงินฝากเพื่อเรียกของธนาคารพาณิชย์ในประเทศเฉลี่ยรายปี
เพื่อใช้เป็นตัวแทนของผลตอบแทนของหลักทรัพย์ที่ไม่มีความเสี่ยง

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ภาคผนวก ข

แสดงอัตราดอกเบี้ยของเงินฝากเพื่อเรียกของธนาคารพาณิชย์ในประเทศเฉลี่ยรายปี เพื่อใช้
เป็นตัวแทนของผลตอบแทนของหลักทรัพย์ที่ไม่มีความเสี่ยง

| ปี | อัตราดอกเบี้ยของเงินฝากเพื่อเรียก เฉลี่ย (ร้อยละ) |
|--------|--|
| 2542 | 3.9375 |
| 2543 | 2.7400 |
| 2544 | 2.0290 |
| 2545 | 1.7030 |
| 2546 | 1.0120 |
| เฉลี่ย | 2.2843 |

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ภาคผนวก ค

แสดงการทดสอบ Unit Roots โดยวิธี Augmented Dickey-Fuller

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ภาคผนวก ก

แสดงการทดสอบ Unit Roots โดยวิธี Augmented Dickey-Fuller

หลักทรัพย์บริษัท อปโก้ไอเทค จำกัด(มหาชน) : AH

รูปแบบสมการ Intercept&Trend

| | | | |
|--------------------|-----------|--------------------|---------|
| ADF Test Statistic | -6.375101 | 1% Critical Value* | -4.1135 |
| | | 5% Critical Value | -3.4836 |
| | | 10% Critical Value | -3.1696 |

*MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(AH)

Method: Least Squares

Date: 05/06/04 Time: 15:40

Sample(adjusted): 2 62

Included observations: 61 after adjusting endpoints

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|----------|
| AH(-1) | -0.823435 | 0.129164 | -6.375101 | 0.0000 |
| C | 2.988858 | 2.444960 | 1.222457 | 0.2265 |
| @TREND(1) | -0.009649 | 0.067552 | -0.142836 | 0.8869 |
| R-squared | 0.412127 | Mean dependent var | | 0.012419 |
| Adjusted R-squared | 0.391856 | S.D. dependent var | | 11.91195 |
| S.E. of regression | 9.289366 | Akaike info criterion | | 7.343547 |
| Sum squared resid | 5004.954 | Schwarz criterion | | 7.447361 |
| Log likelihood | -220.9782 | F-statistic | | 20.33041 |
| Durbin-Watson stat | 1.989059 | Prob(F-statistic) | | 0.000000 |

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หลักทรัพย์บริษัท อปโก้เทคโนโลยี จำกัด(มหาชน) : AH

รูปแบบสมการ Intercept

| | | | |
|--------------------|-----------|--------------------|---------|
| ADF Test Statistic | -6.428574 | 1% Critical Value | -3.5398 |
| | | 5% Critical Value | -2.9092 |
| | | 10% Critical Value | -2.5919 |

•MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(AH)

Method: Least Squares

Date: 05/06/04 Time: 15:39

Sample(adjusted): 2 62

Included observations: 61 after adjusting endpoints

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|----------|
| AH(-1) | -0.823419 | 0.128087 | -6.428574 | 0.0000 |
| C | 2.689691 | 1.250833 | 2.150320 | 0.0356 |
| R-squared | 0.411920 | Mean dependent var | | 0.012419 |
| Adjusted R-squared | 0.401953 | S.D. dependent var | | 11.91195 |
| S.E. of regression | 9.211925 | Akaike info criterion | | 7.311112 |
| Sum squared resid | 5006.715 | Schwarz criterion | | 7.380321 |
| Log likelihood | -220.9889 | F-statistic | | 41.32657 |
| Durbin-Watson stat | 1.988356 | Prob(F-statistic) | | 0.000000 |

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หลักทรัพย์บริษัท อปโก้ไฮเทค จำกัด(มหาชน) : AH

รูปแบบสมการ None

| | | | |
|--------------------|-----------|--------------------|---------|
| ADF Test Statistic | -5.883221 | 1% Critical Value* | -2.6006 |
| | | 5% Critical Value | -1.9458 |
| | | 10% Critical Value | -1.6186 |

*MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(AH)

Method: Least Squares

Date: 05/06/04 Time: 15:38

Sample(adjusted): 2 62

Included observations: 61 after adjusting endpoints

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|----------|
| AH(-1) | -0.731715 | 0.124373 | -5.883221 | 0.0000 |
| R-squared | 0.365832 | Mean dependent var | | 0.012419 |
| Adjusted R-squared | 0.365832 | S.D. dependent var | | 11.91195 |
| S.E. of regression | 9.486038 | Akaike info criterion | | 7.353777 |
| Sum squared resid | 5399.095 | Schwarz criterion | | 7.388381 |
| Log likelihood | -223.2902 | Durbin-Watson stat | | 2.024473 |

หลักทรัพย์บริษัท Good Year Thai จำกัด(มหาชน) : GYT

รูปแบบสมการ Intercept&Trend

| | | | |
|--------------------|-----------|--------------------|---------|
| ADF Test Statistic | -21.09446 | 1% Critical Value | -4.0077 |
| | | 5% Critical Value | -3.4337 |
| | | 10% Critical Value | -3.1404 |

-Mackinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(GYT)

Method: Least Squares

Date: 05/06/04 Time: 15:34

Sample(adjusted): 2 197

Included observations: 196 after adjusting endpoints

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|-----------|
| GYT(-1) | -1.352386 | 0.064111 | -21.09446 | 0.0000 |
| C | 0.278888 | 0.840877 | 0.331664 | 0.7405 |
| @TREND(1) | 0.007856 | 0.007398 | 1.062015 | 0.2896 |
| R-squared | 0.697605 | Mean dependent var | | -0.140104 |
| Adjusted R-squared | 0.694472 | S.D. dependent var | | 10.59759 |
| S.E. of regression | 5.857780 | Akaike info criterion | | 6.388606 |
| Sum squared resid | 6622.523 | Schwarz criterion | | 6.438781 |
| Log likelihood | -623.0834 | F-statistic | | 222.6193 |
| Durbin-Watson stat | 2.016342 | Prob(F-statistic) | | 0.000000 |

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หลักทรัพย์บริษัท Good Year Thai จำกัด(มหาชน) : GYT

รูปแบบสมการ Intercept

| | | | |
|--------------------|-----------|--------------------|---------|
| ADF Test Statistic | -21.06699 | 1% Critical Value* | -3.4650 |
| | | 5% Critical Value | -2.8763 |
| | | 10% Critical Value | -2.5746 |

*MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(GYT)

Method: Least Squares

Date: 05/06/04 Time: 15:34

Sample(adjusted): 2 197

Included observations: 196 after adjusting endpoints

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|-----------|
| GYT(-1) | -1.350610 | 0.064110 | -21.06699 | 0.0000 |
| C | 1.051178 | 0.422353 | 2.488859 | 0.0137 |
| R-squared | 0.695838 | Mean dependent var | | -0.140104 |
| Adjusted R-squared | 0.694270 | S.D. dependent var | | 10.59759 |
| S.E. of regression | 5.859711 | Akaike info criterion | | 6.384229 |
| Sum squared resid | 6661.224 | Schwarz criterion | | 6.417679 |
| Log likelihood | -623.6545 | F-statistic | | 443.8182 |
| Durbin-Watson stat | 2.007350 | Prob(F-statistic) | | 0.000000 |

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หลักทรัพย์บริษัท Good Year Thai จำกัด(มหาชน) : GYT

รูปแบบสมการ None

| | | | |
|--------------------|-----------|--------------------|---------|
| ADF Test Statistic | -20.64892 | 1% Critical Value* | -2.5761 |
| | | 5% Critical Value | -1.9413 |
| | | 10% Critical Value | -1.6165 |

*MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(GYT)

Method: Least Squares

Date: 05/06/04 Time: 15:33

Sample(adjusted): 2 197

Included observations: 196 after adjusting endpoints

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|-----------|
| GYT(-1) | -1.329247 | 0.064374 | -20.64892 | 0.0000 |
| R-squared | 0.686126 | Mean dependent var | | -0.140104 |
| Adjusted R-squared | 0.686126 | S.D. dependent var | | 10.59759 |
| S.E. of regression | 5.937243 | Akaike info criterion | | 6.405456 |
| Sum squared resid | 6873.917 | Schwarz criterion | | 6.422181 |
| Log likelihood | -626.7347 | Durbin-Watson stat | | 1.978278 |

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หลักทรัพยบริษัท อินโรวรับเบอร จักัด(มหาชน) : IRC

รูปแบบสมการ Intercept&Trend

| | | | |
|--------------------|-----------|--------------------|---------|
| ADF Test Statistic | -12.65608 | 1% Critical Value | -4.0179 |
| | | 5% Critical Value | -3.4385 |
| | | 10% Critical Value | -3.1433 |

•MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(IRC)

Method: Least Squares

Date: 05/06/04 Time: 15:37

Sample(adjusted): 2 161

Included observations: 160 after adjusting endpoints

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|----------|
| IRC(-1) | -1.004615 | 0.079378 | -12.65608 | 0.0000 |
| C | 3.947010 | 1.565624 | 2.521047 | 0.0127 |
| @TREND(1) | -0.033805 | 0.016757 | -2.017324 | 0.0454 |
| R-squared | 0.505052 | Mean dependent var | | 0.051245 |
| Adjusted R-squared | 0.498747 | S.D. dependent var | | 13.67949 |
| S.E. of regression | 9.684976 | Akaike info criterion | | 7.397601 |
| Sum squared resid | 14726.41 | Schwarz criterion | | 7.455260 |
| Log likelihood | -588.8081 | F-statistic | | 80.10244 |
| Durbin-Watson stat | 2.004531 | Prob(F-statistic) | | 0.000000 |

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หลักทรัพย์บริษัท อินเวรืบเบอร์ จำกัด(มหาชน) : IRC

รูปแบบสมการ Intercept

| | | | |
|--------------------|-----------|--------------------|---------|
| ADF Test Statistic | -12.37577 | 1% Critical Value | -3.4722 |
| | | 5% Critical Value | -2.8795 |
| | | 10% Critical Value | -2.5763 |

•MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(IRC)

Method: Least Squares

Date: 05/06/04 Time: 15:36

Sample(adjusted): 2 161

Included observations: 160 after adjusting endpoints

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|----------|
| IRC(-1) | -0.981208 | 0.079285 | -12.37577 | 0.0000 |
| C | 1.198331 | 0.778603 | 1.539078 | 0.1258 |
| R-squared | 0.492222 | Mean dependent var | | 0.051245 |
| Adjusted R-squared | 0.489008 | S.D. dependent var | | 13.67949 |
| S.E. of regression | 9.778603 | Akaike info criterion | | 7.410691 |
| Sum squared resid | 15108.13 | Schwarz criterion | | 7.449131 |
| Log likelihood | -590.8553 | F-statistic | | 153.1597 |
| Durbin-Watson stat | 2.006924 | Prob(F-statistic) | | 0.000000 |

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หลักทรัพย์บริษัท อินเทอร์เน็ต จำกัด(มหาชน) : IRC

รูปแบบสมการ None

| | | | |
|--------------------|-----------|--------------------|---------|
| ADF Test Statistic | -12.22736 | 1% Critical Value | -2.5784 |
| | | 5% Critical Value | -1.9418 |
| | | 10% Critical Value | -1.6167 |

•MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(IRC)

Method: Least Squares

Date: 05/06/04 Time: 15:36

Sample(adjusted): 2 161

Included observations: 160 after adjusting endpoints

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|----------|
| IRC(-1) | -0.966682 | 0.079059 | -12.22736 | 0.0000 |
| R-squared | 0.484610 | Mean dependent var | | 0.051245 |
| Adjusted R-squared | 0.484610 | S.D. dependent var | | 13.67949 |
| S.E. of regression | 9.820602 | Akaike info criterion | | 7.413072 |
| Sum squared resid | 15334.63 | Schwarz criterion | | 7.432292 |
| Log likelihood | -592.0458 | Durbin-Watson stat | | 2.010787 |

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หลักทรัพย์บริษัท Thai Stanley จำกัด(มหาชน) : STAN

รูปแบบสมการ Intercept&Trend

| | | | |
|--------------------|-----------|--------------------|---------|
| ADF Test Statistic | -15.26992 | 1% Critical Value | -3.9968 |
| | | 5% Critical Value | -3.4285 |
| | | 10% Critical Value | -3.1373 |

-MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(STAN)

Method: Least Squares

Date: 05/06/04 Time: 15:42

Sample(adjusted): 2 260

Included observations: 259 after adjusting endpoints

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|----------|
| STAN(-1) | -0.939123 | 0.061501 | -15.26992 | 0.0000 |
| C | 1.334889 | 0.806142 | 1.655897 | 0.0990 |
| @TREND(1) | 0.001452 | 0.005360 | 0.270914 | 0.7867 |
| R-squared | 0.476773 | Mean dependent var | | 0.064977 |
| Adjusted R-squared | 0.472685 | S.D. dependent var | | 8.874727 |
| S.E. of regression | 6.444512 | Akaike info criterion | | 6.575850 |
| Sum squared resid | 10632.12 | Schwarz criterion | | 6.617049 |
| Log likelihood | -848.5726 | F-statistic | | 116.6356 |
| Durbin-Watson stat | 1.935387 | Prob(F-statistic) | | 0.000000 |

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หลักทรัพย์บริษัท Thai Stanley จำกัด(มหาชน) : STAN

รูปแบบสมการ Intercept

| | | | |
|--------------------|-----------|--------------------|---------|
| ADF Test Statistic | -15.29842 | 1% Critical Value | -3.4572 |
| | | 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(STAN)

Method: Least Squares

Date: 05/06/04 Time: 15:42

Sample(adjusted): 2 260

Included observations: 259 after adjusting endpoints

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|----------|
| STAN(-1) | -0.938481 | 0.061345 | -15.29842 | 0.0000 |
| C | 1.522662 | 0.410920 | 3.705498 | 0.0003 |
| R-squared | 0.476623 | Mean dependent var | | 0.064977 |
| Adjusted R-squared | 0.474586 | S.D. dependent var | | 8.874727 |
| S.E. of regression | 6.432884 | Akaike info criterion | | 6.568415 |
| Sum squared resid | 10635.17 | Schwarz criterion | | 6.595881 |
| Log likelihood | -848.6097 | F-statistic | | 234.0416 |
| Durbin-Watson stat | 1.936107 | Prob(F-statistic) | | 0.000000 |

หลักทรัพย์บริษัท Thai Stanley จำกัด(มหาชน) : STAN

รูปแบบสมการ None

| | | | |
|--------------------|-----------|--------------------|---------|
| ADF Test Statistic | -14.49056 | 1% Critical Value | -2.5735 |
| | | 5% Critical Value | -1.9408 |
| | | 10% Critical Value | -1.6163 |

-MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(STAN)

Method: Least Squares

Date: 05/06/04 Time: 15:41

Sample(adjusted): 2 260

Included observations: 259 after adjusting endpoints

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|----------|
| STAN(-1) | -0.885772 | 0.061128 | -14.49056 | 0.0000 |
| R-squared | 0.448660 | Mean dependent var | | 0.064977 |
| Adjusted R-squared | 0.448660 | S.D. dependent var | | 8.874727 |
| S.E. of regression | 6.589684 | Akaike info criterion | | 6.612741 |
| Sum squared resid | 11203.38 | Schwarz criterion | | 6.626474 |
| Log likelihood | -855.3500 | Durbin-Watson stat | | 1.942748 |

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หลักทรัพย์บริษัท ไทยรุ่งยูเนี่ยนคาร์ จำกัด(มหาชน) : TRU

รูปแบบสมการ Intercept&Trend

| | | | |
|--------------------|-----------|--------------------|---------|
| ADF Test Statistic | -14.09126 | 1% Critical Value | -3.9976 |
| | | 5% Critical Value | -3.4288 |
| | | 10% Critical Value | -3.1376 |

*MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(TRU)

Method: Least Squares

Date: 05/06/04 Time: 15:28

Sample(adjusted): 2 254

Included observations: 253 after adjusting endpoints

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|-----------|
| TRU(-1) | -0.886672 | 0.062924 | -14.09126 | 0.0000 |
| C | 0.806885 | 0.980228 | 0.823161 | 0.4112 |
| @TREND(1) | 0.000640 | 0.006681 | 0.095830 | 0.9237 |
| R-squared | 0.442673 | Mean dependent var | | -0.027815 |
| Adjusted R-squared | 0.438214 | S.D. dependent var | | 10.35407 |
| S.E. of regression | 7.760617 | Akaike info criterion | | 6.947788 |
| Sum squared resid | 15056.80 | Schwarz criterion | | 6.989686 |
| Log likelihood | -875.8951 | F-statistic | | 99.28486 |
| Durbin-Watson stat | 1.966129 | Prob(F-statistic) | | 0.000000 |

หลักทรัพย์บริษัท ไทยรุ่งยูเนี่ยนคาร์ จำกัด(มหาชน) : TRU

รูปแบบสมการ Intercept

| | | | |
|--------------------|-----------|--------------------|---------|
| ADF Test Statistic | -14.11905 | 1% Critical Value | -3.4578 |
| | | 5% Critical Value | -2.8731 |
| | | 10% Critical Value | -2.5729 |

•MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(TRU)

Method: Least Squares

Date: 05/06/04 Time: 15:28

Sample(adjusted): 2 254

Included observations: 253 after adjusting endpoints

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|-----------|
| TRU(-1) | -0.886598 | 0.062794 | -14.11905 | 0.0000 |
| C | 0.888119 | 0.491244 | 1.807898 | 0.0718 |
| R-squared | 0.442653 | Mean dependent var | | -0.027815 |
| Adjusted R-squared | 0.440432 | S.D. dependent var | | 10.35407 |
| S.E. of regression | 7.745285 | Akaike info criterion | | 6.939919 |
| Sum squared resid | 15057.35 | Schwarz criterion | | 6.967851 |
| Log likelihood | -875.8998 | F-statistic | | 199.3475 |
| Durbin-Watson stat | 1.966203 | Prob(F-statistic) | | 0.000000 |

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หลักทรัพย์บริษัท ไทยรุ่งยูเนี่ยนคาร์ จำกัด(มหาชน) : TRU

รูปแบบสมการ None

| | | | |
|--------------------|-----------|--------------------|---------|
| ADF Test Statistic | -13.94033 | 1% Critical Value | -2.5737 |
| | | 5% Critical Value | -1.9409 |
| | | 10% Critical Value | -1.6163 |

MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(TRU)

Method: Least Squares

Date: 05/06/04 Time: 15:25

Sample(adjusted): 2 254

Included observations: 253 after adjusting endpoints

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|-----------|
| TRU(-1) | -0.871606 | 0.062524 | -13.94033 | 0.0000 |
| R-squared | 0.435395 | Mean dependent var | | -0.027815 |
| Adjusted R-squared | 0.435395 | S.D. dependent var | | 10.35407 |
| S.E. of regression | 7.780068 | Akaike info criterion | | 6.944952 |
| Sum squared resid | 15253.42 | Schwarz criterion | | 6.958918 |
| Log likelihood | -877.5364 | Durbin-Watson stat | | 1.970727 |

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ดัชนีตลาดหลักทรัพย์ : SET

รูปแบบสมการ Intercept&Trend

| | | | |
|--------------------|-----------|--------------------|---------|
| ADF Test Statistic | -15.74459 | 1% Critical Value* | -3.9965 |
| | | 5% Critical Value | -3.4283 |
| | | 10% Critical Value | -3.1373 |

*MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(SET)

Method: Least Squares

Date: 05/06/04 Time: 15:31

Sample(adjusted): 2 262

Included observations: 261 after adjusting endpoints

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|-----------|
| SET(-1) | -0.978380 | 0.062141 | -15.74459 | 0.0000 |
| C | -0.315900 | 0.481285 | -0.656368 | 0.5122 |
| @TREND(1) | 0.005049 | 0.003196 | 1.580067 | 0.1153 |
| R-squared | 0.490049 | Mean dependent var | | -0.002050 |
| Adjusted R-squared | 0.486096 | S.D. dependent var | | 5.405038 |
| S.E. of regression | 3.874716 | Akaike info criterion | | 5.558250 |
| Sum squared resid | 3873.464 | Schwarz criterion | | 5.599221 |
| Log likelihood | -722.3516 | F-statistic | | 123.9653 |
| Durbin-Watson stat | 2.004050 | Prob(F-statistic) | | 0.000000 |

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ดัชนีตลาดหลักทรัพย์ : SET

รูปแบบสมการ Intercept

| | | | |
|--------------------|-----------|--------------------|---------|
| ADF Test Statistic | -15.62127 | 1% Critical Value | -3.4570 |
| | | 5% Critical Value | -2.8727 |
| | | 10% Critical Value | -2.5727 |

•MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(SET)

Method: Least Squares

Date: 05/06/04 Time: 15:31

Sample(adjusted): 2 262

Included observations: 261 after adjusting endpoints

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---------------------|-------------|-----------------------|-------------|-----------|
| SET ₍₋₁₎ | -0.969744 | 0.062078 | -15.62127 | 0.0000 |
| C | 0.342495 | 0.241540 | 1.417964 | 0.1574 |
| R-squared | 0.485114 | Mean dependent var | | -0.002050 |
| Adjusted R-squared | 0.483126 | S.D. dependent var | | 5.405038 |
| S.E. of regression | 3.885895 | Akaike info criterion | | 5.560217 |
| Sum squared resid | 3910.946 | Schwarz criterion | | 5.587531 |
| Log likelihood | -723.6083 | F-statistic | | 244.0240 |
| Durbin-Watson stat | 2.004259 | Prob(F-statistic) | | 0.000000 |

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ดัชนีตลาดหลักทรัพย์ : SET

รูปแบบสมการ None

| | | | |
|--------------------|-----------|--------------------|---------|
| ADF Test Statistic | -15.52663 | 1% Critical Value | -2.5735 |
| | | 5% Critical Value | -1.9408 |
| | | 10% Critical Value | -1.6163 |

•MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(SET)

Method: Least Squares

Date: 05/06/04 Time: 15:30

Sample(adjusted): 2 262

Included observations: 261 after adjusting endpoints

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|-----------|
| SET(-1) | -0.961706 | 0.061939 | -15.52663 | 0.0000 |
| R-squared | 0.481117 | Mean dependent var | | -0.002050 |
| Adjusted R-squared | 0.481117 | S.D. dependent var | | 5.405038 |
| S.E. of regression | 3.893440 | Akaike info criterion | | 5.560287 |
| Sum squared resid | 3941.307 | Schwarz criterion | | 5.573944 |
| Log likelihood | -724.6175 | Durbin-Watson stat | | 2.007003 |

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ภาคผนวก ง

แสดงการทดสอบหาเส้นพรมแดนเชิงเส้นด้วยโปรแกรม Frontier4.1
และโปรแกรม Limdep7.0

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ภาคผนวก ง

แสดงการทดสอบหาเส้นพรมแดนเชิงเส้นด้วยโปรแกรม Frontier4.1 และโปรแกรม Limdep7.0

หลักทรัพย์บริษัท อารีโก้ไฮเทค จำกัด(มหาชน) : AH

the final mle estimates are :

| | coefficient | standard-error | t-ratio |
|---------------|----------------|----------------|----------------|
| beta 0 | 0.24158278E+01 | 0.11682924E+02 | 0.20678280E+00 |
| beta 1 | 0.64278377E+00 | 0.43340894E+00 | 0.14830884E+01 |
| sigma-squared | 0.80711966E+02 | 0.14691106E+02 | 0.54939340E+01 |
| gamma | 0.10034892E-04 | 0.11138009E-01 | 0.90095924E-03 |

หลักทรัพย์บริษัท Good Year Thai จำกัด(มหาชน) : GYT

the final mle estimates are :

| | coefficient | standard-error | t-ratio |
|---------------|-----------------|----------------|-----------------|
| beta 0 | 0.92592356E+00 | 0.57909499E+01 | 0.15989148E+00 |
| beta 1 | -0.61234868E-01 | 0.10311618E+00 | -0.59384346E+00 |
| sigma-squared | 0.42347199E+02 | 0.42669912E+01 | 0.99243699E+01 |
| gamma | 0.20832913E-04 | 0.11048443E-01 | 0.18855972E-02 |

หลักทรัพย์บริษัท อินโนเวชั่นเบอร์ จำกัด(มหาชน) : IRC

the final mle estimates are :

| | coefficient | standard-error | t-ratio |
|---------------|----------------|----------------|----------------|
| beta 0 | 0.15329278E+01 | 0.52341748E+00 | 0.29286904E+01 |
| beta 1 | 0.68746008E+00 | 0.12997098E+00 | 0.52893351E+01 |
| sigma-squared | 0.65723405E+02 | 0.57673614E+01 | 0.11395749E+02 |
| gamma | 0.23819794E-05 | 0.18687924E-04 | 0.12746089E+00 |

หลักทรัพย์บริษัท Thai Stanley จำกัด(มหาชน) : STAN

the final mle estimates are :

| | coefficient | standard-error | t-ratio |
|---------------|----------------|----------------|----------------|
| beta 0 | 0.14212565E+01 | 0.32751986E+01 | 0.43394513E+00 |
| beta 1 | 0.41554691E+00 | 0.99078065E-01 | 0.41941363E+01 |
| sigma-squared | 0.39681176E+02 | 0.34376895E+01 | 0.11542979E+02 |
| gamma | 0.14887541E-04 | 0.54306084E-02 | 0.27414131E-02 |

หลักทรัพย์บริษัท ไทยรุ่งยูเนี่ยนคาร์ จำกัด(มหาชน) : TRU

the final mle estimates are :

| | coefficient | standard-error | t-ratio |
|---------------|----------------|----------------|----------------|
| beta 0 | 0.80834813E+00 | 0.38625672E+01 | 0.20927743E+00 |
| beta 1 | 0.62873700E+00 | 0.11521083E+00 | 0.54572736E+01 |
| sigma-squared | 0.54056111E+02 | 0.45658210E+01 | 0.11839297E+02 |
| gamma | 0.22080075E-04 | 0.67030980E-02 | 0.32940105E-02 |



ภาคผนวก จ

การหาค่าความเสี่ยงและผลตอบแทนที่คาดหวังด้วยวิธีกำลังสองน้อยที่สุด (OLS)

หลักทรัพย์บริษัท อาปีโกไฮเทค จำกัด(มหาชน) : AH

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ภาคผนวก จ

การหาค่าความเสี่ยงและผลตอบแทนที่คาดหวังด้วยวิธีกำลังสองน้อยที่สุด (OLS)

หลักทรัพย์บริษัท อปโก้ไฮเทค จำกัด(มหาชน) : AH

Dependent Variable: AH

Method: Least Squares

Date: 05/09/04 Time: 17:11

Sample: 1 62

Included observations: 62

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|----------|
| C | 1.104801 | 0.350940 | 3.148114 | 0.0026 |
| SET | 0.052383 | 0.036228 | 1.445897 | 0.1534 |
| R-squared | 0.033670 | Mean dependent var | | 1.273011 |
| Adjusted R-squared | 0.017565 | S.D. dependent var | | 2.630261 |
| S.E. of regression | 2.607059 | Akaike info criterion | | 4.786048 |
| Sum squared resid | 407.8053 | Schwarz criterion | | 4.854666 |
| Log likelihood | -146.3675 | F-statistic | | 2.090618 |
| Durbin-Watson stat | 2.089910 | Prob(F-statistic) | | 0.153410 |

หลักทรัพย์บริษัท Good Year Thai จำกัด(มหาชน) : GYT

Dependent Variable: GYT

Method: Least Squares

Date: 05/09/04 Time: 17:14

Sample: 1 197

Included observations: 197

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|----------|
| C | 0.902073 | 0.468567 | 1.925174 | 0.0557 |
| SET | -0.061235 | 0.104931 | -0.583574 | 0.5602 |
| R-squared | 0.001743 | Mean dependent var | | 0.873526 |
| Adjusted R-squared | -0.003376 | S.D. dependent var | | 6.529700 |
| S.E. of regression | 6.540712 | Akaike info criterion | | 6.604070 |
| Sum squared resid | 8342.279 | Schwarz criterion | | 6.637402 |
| Log likelihood | -648.5009 | F-statistic | | 0.340559 |
| Durbin-Watson stat | 2.606577 | Prob(F-statistic) | | 0.560181 |

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หลักทรัพย์บริษัท อินโนเว็บบอร์ จำกัด(มหาชน) : IRC

Dependent Variable: IRC

Method: Least Squares

Date: 05/09/04 Time: 17:16

Sample: 1 261

Included observations: 261

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|----------|
| C | 1.522955 | 0.505835 | 3.010774 | 0.0029 |
| SET | 0.687461 | 0.130074 | 5.285160 | 0.0000 |
| R-squared | 0.097350 | Mean dependent var | | 1.765797 |
| Adjusted R-squared | 0.093865 | S.D. dependent var | | 8.549357 |
| S.E. of regression | 8.138230 | Akaike info criterion | | 7.038656 |
| Sum squared resid | 17153.77 | Schwarz criterion | | 7.065970 |
| Log likelihood | -916.5446 | F-statistic | | 27.93292 |
| Durbin-Watson stat | 1.939800 | Prob(F-statistic) | | 0.000000 |

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หลักทรัพย์บริษัท Thai Stanley จำกัด(มหาชน) : STAN

Dependent Variable: STAN

Method: Least Squares

Date: 05/09/04 Time: 17:18

Sample: 1 260

Included observations: 260

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|----------|
| C | 1.401609 | 0.393804 | 3.559154 | 0.0004 |
| SET | 0.415552 | 0.100731 | 4.125354 | 0.0000 |
| R-squared | 0.061881 | Mean dependent var | | 1.549196 |
| Adjusted R-squared | 0.058245 | S.D. dependent var | | 6.516260 |
| S.E. of regression | 6.323642 | Akaike info criterion | | 6.534130 |
| Sum squared resid | 10317.02 | Schwarz criterion | | 6.561520 |
| Log likelihood | -847.4369 | F-statistic | | 17.01855 |
| Durbin-Watson stat | 1.894253 | Prob(F-statistic) | | 0.000050 |

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หลักทรัพย์บริษัท ไทยรุ่งยูเนี่ยนคาร์ จำกัด(มหาชน) : TRU

Dependent Variable: TRU

Method: Least Squares

Date: 05/09/04 Time: 17:19

Sample: 1 254

Included observations: 254

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|----------|
| C | 0.780683 | 0.465137 | 1.678392 | 0.0945 |
| SET | 0.628721 | 0.118890 | 5.288268 | 0.0000 |
| R-squared | 0.099890 | Mean dependent var | | 1.008163 |
| Adjusted R-squared | 0.096318 | S.D. dependent var | | 7.764705 |
| S.E. of regression | 7.381298 | Akaike info criterion | | 6.843619 |
| Sum squared resid | 13729.86 | Schwarz criterion | | 6.871472 |
| Log likelihood | -867.1396 | F-statistic | | 27.96578 |
| Durbin-Watson stat | 1.823749 | Prob(F-statistic) | | 0.000000 |

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ประวัติผู้เขียน

| | |
|-------------------|---|
| ชื่อ | นางสาวปัทมกร ตั้งเมธิกุล |
| วัน เดือน ปี เกิด | 16 กรกฎาคม 2522 |
| ประวัติการศึกษา | สำเร็จการศึกษามัธยมศึกษาตอนปลาย โรงเรียนนารีนรินทร์ จังหวัดแพร่ ปีการศึกษา 2540 สำเร็จการศึกษาระดับปริญญาตรีวิศวกรรมศาสตรบัณฑิต สาขาวิศวกรรม อุตสาหการ มหาวิทยาลัยเชียงใหม่ ปีการศึกษา 2544 |

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