Chapter 4

SELECTIVITY AND MARKET TIMING PERFORMANCE

Five sections of this chapter present investigation results of selectivity and market timing performance of Thai equity funds. The first three sections present the relevant test results. The fourth section contains sensitivity analysis results of using alternative fund market timing performance models. The fifth section briefly sums up the findings. Among sections that provides the results, the first gives, the test results of fund manager's ability with respect to individual fund while the second provides the frequency of the funds with superior market timing fund manager's ability and the third provides the results related to selectivity and market timing performance of the funds during the 9 sub-periods. A comparative exploration between the results of this research and the extant empirical findings will be provided in Chapter 5.

Given the intrinsic nature of the sample data on fund's earnings, residual analyses were conducted following the OLS estimation which indicated that the selectivity and market timing coefficient estimates of several funds obtained under alternative measures suffered from the problem of spherical disturbances. Among the funds estimated under Jensen measure, 25 funds estimation had the problems of both serial correlation and heteroskedasticity. In addition, there are 31 under HM measure and 32 funds under TM measure suffered from both serial correlation and heteroskedasticity.

To obtain BLUE (Best Linear Unbiased) estimate of the required parameters, FGLS (Feasible Generalised Least Square) estimation procedure was adopted for these funds. The estimation results of each measure are presented in Table A, B, and C in the appendix of this chapter.

4.1 Fund Managers' Ability with Respect to Individual Fund, 1992 –2004

This section presents the results of fund managers' ability with respect to individual funds during 1992 –2004. Statistical test results of selectivity (hypothesis H_{01}: see 3.1) and market timing (hypothesis H_{02}: see 3.1) performance are presented in subsections 4.1.1 and 4.1.2.

4.1.1 On Selectivity performance

As stated in 3.4.1, to answer the question of whether the Thai fund manager is a superior forecaster or stock picker is obtained by verifying and comparing the sign, size and significance of the estimated selectivity parameter.

To begin with. Jensen Alpha's from Jensen Alpha model is verified using these verification attributes. Since the Jensen alpha can be legitimately compared across differing time periods, the comparison can be used as a suitable ranking procedure of fund performance. Ranking comparison can be made on the basis of size of the Jensen Alpha and the sign, from positive to negative. Ranking result reported in Table A (see chapter 4 appendix) shows that the mean Jensen alpha value, for all funds is 0.0429.

This figure suggests the average performance for the equity fund industry is found to be marginally higher than that of the market portfolio (normally equal to zero).

In Table 4.1, the high number of the positive Jensen Alpha values (62 funds) is reported. This seems to be that more than half of the Thai equity funds outperformed the market benchmark. However, individual *t-test* (also reported in Table E of the Appendix) fails to support this claim because the number of significant positive alpha was every low. Only nine out of 107 funds' Jensen alpha estimates are found to be significant at the 10 percent level, which are approximately 8.41 percent of the sample funds used in this study. This percentage is even marginally lower than that was reported in Jensen's study, which was 10 percent (Jensen 1968). Of the nine funds with significant Jensen alpha estimates reported, only six are positive and three are negative. Hence, using significance as a verification attribute yields inferior selectivity ability of Thai equity fund managers. The result is consistent with the finding of Jegasothy, Satjawathee and Tippet (2005) who also found that Thai fund manager had inferior selectivity performance during 1992-2000.

Table 4.1   Numbers of positive and negative selectivity and market timing abilities, 1992-2004

	Jensen alpha		TM β_2		HM β_2	
	Positive	Negative	Positive	Negative	Positive	Negative
Number of funds (sig. at 0.10 level)	62 (6)	45 (3)	12 (2)	95 (76)	15 (1)	92 (61)

N = 107 funds

Table 4.1 shows that 62 funds exhibit positive Jensen alphas while 45 provided negative. Table A (see chapter 4 appendix) exhibits that the mean Jensen Alpha of

those 62 funds that out-performed the market is 0.3387 while the under-performed 45 funds have a mean value of - 0.3646.

Theoretically, a higher beta value of the Jensen alpha model characterizes the fund as more sensitive one to market returns and thus having a greater systematic risk. Table A shows that the overall average beta is 0.6983, indicating that almost all beta values experienced are less than the beta value of the market portfolio, which generally treated as equal to 1. This enables to infer that fund managers tend to choose lower systematic risk funds than the market portfolio during the fund selection. All beta estimates were found to be significant at the 5 percent level.

4.1.2 On Market Timing performance

To examine market timing performance, parameter estimates of two models are used, the *quadratic regression equation* (TM) and *dummy variable regression* (HM). The TM and HM results are reported in Table B and Table C (see chapter 4 appendix). A positive value of the estimated market timing parameter (β_2) infers that managers have superior timing ability while the negative value points to the inferior. All positive and negative significant results are already reported in Table 4.1.

a. Treynor and Mazuy quadratic regression equation

The estimated β_2 parameter of the quadratic term in TM measure infers that managers timing ability. Table 4.1 shows that only 12 funds have positive TM beta (β_2) while and among these only 2 is found to be significant at the 10 percent level. However, 76 funds of the estimated funds have negative beta that are significant at the 10 percent

level. These two together this approximates to 72.90 percent of the sample of the funds are significant. Hence the overall market timing ability of the fund managers over the study period seems to be inferior.

b. Henriksson and Merton dummy variable regression

The second model employed to examine whether the Thai fund manager possessed superior market timing ability is the Henriksson and Merton (HM) model. In HM the switching term (β_2) infers the market timing ability. Table 4.1 illustrates that 15 funds of the sample had positive HM beta$_2$ (β_2). Only 1 out of the 15 HM beta$_2$, estimated on an individual fund basis, are found to be significantly positive at the 10 percent level while 61 funds had negative beta$_2$ at the same level of significance. In total, this is approximately 57.94 percent of the sample of the fund. The results of the HM measure is almost similar that observed previously under TM, that is the fund managers have exhibited in general inferior timing ability over the study period.

4.2 Testing the Frequency of the Funds with Superior Selectivity and Market Timing Managers' Ability

The results of significance of the proportion of positive ability (z-test) using Jensen alpha as variable reported in Table 4.2. The test findings indicate that the null hypothesis ($H_{01.2}$) of the frequency of the funds with superior fund managers' selectivity ability is not rejected at the 0.10 level. Hence the tests suggests that the selectivity of equity fund managers, based on positive Jensen alpha, seems not to be significantly different from that of the market during 1992-2004.

Table 4.2   Numbers and percentage of superior and inferior selectivity managers

Alpha	superior managers		inferior managers		Z-stat	p-value (2-tail)	Reject / not reject $H_{01,2\ (selectivity)}$
	number	%	number	%			
Jensen alpha (sig. at 0.10 level)	62 (6)	57.94	45 (3)	42.06	1.6435	0.1003	not reject

Table 4.3 shows the number and percentages of superior and inferior market timing ability of managers' obtained using TM and HM models. A fund is classified as superior ability where the TM or HM's beta (β_2) value of fund is found to be positive value. For each performance measure the binomial test is applied to evaluate the proportion of superior market timing ability and test statistics also presented in this table.

Table 4.3   Numbers and percentage of superior and inferior market timing managers

β_2	superior managers		inferior managers		Z-stat	p-value (2-tail)	p-value (1-tail)	Reject/not reject $H_{01,2}$ (market timing)
	number	%	number	%				
TM β_2 (sig. at 0.10)	12 (2)	11.21	95 (76)	88.78	-8.0239	0.0000*	0.0000*	reject
HM β_2 (sig. at 0.10)	15 (1)	14.02	92 (61)	85.98	-7.4439	0.0000*	0.0000*	reject

* significant at the 0.01 level

The null hypothesis ($H_{02,2}$) used in testing the market timing ability during the period 1992-2004 is that 50 percent (or more) of the total number of Thai equity fund manager has superior market timing ability than the market. Table 4.3 shows that the

p-values for both TM and HM measures are less than 0.01 (0.00 < 0.01) and the Z-values are negative, indicating that the null hypothesis is rejected. These findings jointly imply that majority of the Thai equity fund managers operated during 1992-2004 had been, in general, inferior market timers.

4.3 Selectivity and Market Timing Performance of the Funds during the 9 Sub-periods

In order to verify the stability of the overall results (obtained above) over time, the analytical period was divided into sub time periods and examined. The result of nine overlapping five-year sub-periods beginning from January 1992 and ending in December 2004 are reported. The examination is aimed to determine whether any particular sub-period stands out over the entire sample period.

4.3.1. On selectivity performance

Tables 4.4 present the test results for selectivity performance for the nine overlapping periods using alphas from Jensen. Results for the entire period are also reported for the purpose of comparison. To summarize the results, average alphas for the 107 funds are reported. Under all three, the numbers of positive alphas vary over the different time periods.

In Table 4.4, the lower numbers of positive Jensen alpha in third to the sixth period (8, 8, 10 and 12 funds, respectively) indicates that during these time periods a few fund managers had superior selection ability. However the estimates before and after this time phase indicate the better selectivity ability due to the higher numbers of positive

Jensen alpha. Table 2 also reports one-tail significant test results of selectivity at 0.10, 0.05 and 0.01 levels of significance. Again. no positively significant alphas are found for the period from the third to the sixth. But the level of significance are stronger in the first and second periods. indicating that during the early periods several fund managers (20 funds in the first sub-period and 23 funds in the second sub-period) have done the selections reasonably well. This inference is reinforced by the fact that the average positive alpha values, 0.1764 in the first period and 0.3517 in the second period. The results also show that during the eighth and ninth subperiods (1999-2004) again positive average alpha values are found (0.2175 and 0.2392. receptively). indicating the beginning of a recovering period.

Table 4.4 Jensen Alpha the nine sub-periods with five-year overlapping years.

Jensen alpha	(1) 1992-1996		(2) 1993-1997		(3) 1994-1998		(4) 1995-1999		(5) 1996-2000	
N	82		87		87		88		88	
Average alpha	0.1764		0.3517		-0.2347		-0.4053		-0.5607	
Positive alpha	54		70		8		8		10	
Significance	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.
Sig. at 0.10	20	3	23	0	0	11	0	17	0	18
Sig. at 0.05	16	1	15	0	0	4	0	9	0	17
Sig. at 0.01	6	0	9	0	0	0	0	2	0	4

Jensen alpha	(6) 1997-2001		(7) 1998-2002		(8) 1999-2003		(9) 2000-2004		Entire period	
N	89		92		94		102		107	
Average alpha	-0.3883		-0.0556		0.2175		0.2392		0.0429	
Positive alpha	12		34		51		86		62	
Significance	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.
Sig. at 0.10	0	9	5	0	8	0	6	2	6	3
Sig. at 0.05	0	5	1	0	5	0	1	2	4	2
Sig. at 0.01	0	0	0	0	2	0	1	1	0	1

Table 4.5 TM Alpha the nine sub-periods with five-year overlapping years.

TM alpha	(1) 1992-1996		(2) 1993-1997		(3) 1994-1998		(4) 1995-1999		(5) 1996-2000	
N	82		87		87		88		88	
Average alpha	0.3001		0.2759		0.1641		0.1618		0.2283	
Positive alpha	66		68		79		79		79	
Significance	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.
Sig. at 0.10	19	1	15	3	22	0	12	0	6	0
Sig. at 0.05	17	1	10	1	11	0	6	0	3	0
Sig. at 0.01	6	0	2	0	3	0	0	0	0	0

TM alpha	(6) 1997-2001		(7) 1998-2002		(8) 1999-2003		(9) 2000-2004		Entire period	
N	89		92		94		102		107	
Average alpha	0.4255		0.6301		0.3912		0.4338		0.4493	
Positive alpha	85		88		84		93		100	
Significance	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.
Sig. at 0.10	12	0	30	0	8	0	10	1	54	1
Sig. at 0.05	6	0	9	0	4	0	1	1	43	1
Sig. at 0.01	0	0	5	0	2	0	0	0	10	0

Table 4.6 HM Alpha the nine sub-periods with five-year overlapping years.

HM alpha	(1) 1992-1996		(2) 1993-1997		(3) 1994-1998		(4) 1995-1999		(5) 1996-2000	
N	82		87		87		88		88	
Average alpha	0.3990		0.2956		0.1470		0.1923		0.4499	
Positive alpha	64		57		83		82		84	
Significance	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.
Sig. at 0.10	16	1	7	4	41	0	32	0	30	0
Sig. at 0.05	11	1	5	1	30	0	18	0	16	0
Sig. at 0.01	5	0	0	0	11	0	0	0	2	0

HM alpha	(6) 1997-2001		(7) 1998-2002		(8) 1999-2003		(9) 2000-2004		Entire period	
N	89		92		94		102		107	
Average alpha	0.5567		0.6641		0.4196		0.1921		0.8114	
Positive alpha	84		85		83		87		95	
Significance	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.
Sig. at 0.10	33	0	43	1	5	0	8	0	54	1
Sig. at 0.05	17	0	17	0	3	0	3	0	42	0
Sig. at 0.01	0	0	1	0	0	0	0	0	13	0

Table 4.5 gives the results of test on selectivity ability in term of Treynor and Mazuy (TM), over time. Unlike the Jensen alpha estimates, superior selectivity measured as positive TM alphas, on an average has overwhelmingly outperformed through out the 9 sub-period. However, individual *t-test* fails to support this claim because as the significance of positiveness became weaker as the level of significance changed from 0.10 to 0.01, especially between the periods of three to six. Hence it is reasonable to suggest that except for the time between the third and the sixth periods, the fund managers have been superior in fund selection. Table 4.6 presents the results from HM measure that is almost identical to TM.

Investigation on the alpha values from the Jensen Alpha measure infers that in general the fund managers have better fund selectivity performance in the first and second sub-periods than in the third to sixth sub-periods. The decline in selectivity could be the result of high market risk experienced during the economic crisis in Thailand. In 1997, the country was subject to a severe financial crisis that caused unprecedented volatility fund returns leading finally to an economy collapse. The collapse marks the worst recession in modern Thai economic history (Hataiseree 1998). Another interesting observation is that average positive alpha estimates for the years beyond the eighth sub-period indirectly signifies that the recovery phase had commenced for Thailand equity fund industry.

4.3.2. On market timing performance

a. Treynor and Mazuy quadratic regression

Table 4.7 reports the numbers of the estimated positive and negative market timing parameters (β_2) obtained from Treynor and Mazuy quadratic regression model. Results indicate that little or no significant positive timing effects experienced during the sub-period of the third to the ninth. Testing the significance of timing infer that majority of the funds had negative beta (timing) parameter estimates during the third to the seventh periods. These results together indicate that during the financial crisis period several fund managers have behaved as inferior market timers. The inferior market timing ability results to a great extend coincides with the findings of selectivity ability observed earlier, that during the market volatility, fund managers could not outperform the market portfolio.

Table 4.7 TM beta₂ for the nine sub-periods with five-year overlapping years.

TM	(1) 1992-1996		(2) 1993-1997		(3) 1994-1998		(4) 1995-1999		(5) 1996-2000	
Positive TM β_2	32		55		3		3		3	
Significance	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.
Sig. at 0.10	14	21	29	6	0	78	1	76	1	80
Sig. at 0.05	9	17	24	5	0	74	0	74	0	77
Sig. at 0.01	5	12	11	2	0	72	0	64	0	69

TM	(6) 1997-2001		(7) 1998-2002		(8) 1999-2003		(9) 2000-2004		Entire period	
Positive TM β_2	3		5		12		13		12	
Significance	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.
Sig. at 0.10	1	78	0	82	2	18	2	11	2	76
Sig. at 0.05	0	77	0	81	1	10	2	5	1	68
Sig. at 0.01	0	64	0	71	0	1	1	3	1	61

b. Henriksson and Merton Dummy variable regression

Table 4.8 also gives the market timing results in terms of the numbers of positive and negative timing coefficients (β_2). There is a little or no evidence for significant positive timing during the period of the third to the ninth and the result is similar to the observation that was made under the TM model. A stronger significant negative timing coefficients, from the third to the seventh period, indicates that majority of the Thai equity funds have experienced inferior market timing performance. This finding reiterates the experience of poor timing that fund managers had during the financial crisis.

Table 4.8 HM beta$_2$ for the nine sub-periods with five-year overlapping years.

HM	(1) 1992-1996		(2) 1993-1997		(3) 1994-1998		(4) 1995-1999		(5) 1996-2000	
Positive HM β_2	33		54		3		3		3	
Significance	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.
Sig. at 0.10	10	19	18	7	0	77	1	68	1	73
Sig. at 0.05	5	14	14	6	0	73	0	61	0	71
Sig. at 0.01	4	10	4	2	0	55	0	46	0	53

TM	(6) 1997-2001		(7) 1998-2002		(8) 1999-2003		(9) 2000-2004		Entire period	
Positive HM β_2	4		7		17		30		15	
Significance	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.
Sig. at 0.10	1	70	2	73	2	6	2	2	1	61
Sig. at 0.05	0	64	2	67	1	1	2	1	0	56
Sig. at 0.01	0	48	1	36	0	0	0	0	0	44

4.4   Sensitivity nature of alternative fund market timing performance models

In fund performance analysis it is also essential to verify whether the market timing performance revealed by alternative models are similar/related or different. Accordingly, this section examines the sensitivity of using two market timing

measures, the *quadratic regression equation* (TM) and *dummy variable regression* (HM) on Thai equity funds. Third null hypothesis (H_{03}) forms the basis for the sensitivity verification test of market timing ability of Thai equity funds during 1992 to 2004. Sensitivity of using alternative models can be verified either by comparing the mean value of estimated timing ability parameters ($H_{03.1}$) or using the correlation coefficient value of the estimated timing ability parameters ($H_{03.2}$), across funds. Results of the both procedures are reported in Tables 4.9 and 4.10, respectively below. Comparison of the mean value of estimated timing ability parameters is conducted using paired mean difference between the two measures.

Table 4.9   Average ability coefficient value two sample t-test

measure	mean paired differences	std. error mean	t-stat	p-value	n
TM Vs HM	0.2108	0.0586	3.6000	0.0000*	107

* significant at the 0.01 level

Table 4.9 reports the significance of the average difference of the ability coefficients from TM and HM models. The estimated mean of the paired mean difference is 0.2108. The *p-value* corresponding to the mean paired difference of 0.00 rejects the $H_{03.1}$ at the 0.01 level of significance. Hence in the estimation of timing ability TM and HM measures differ significantly.

Pearson's correlation coefficient is used to reveal the association between the time ability coefficient obtained from TM and HM models. Table 4.10 contains the matrix of correlation coefficients for market timing performance, and associated probabilities

(two-tail analysis). Since all probabilities are less than 0.01, the null hypothesis $H_{03.2}$ is rejected. The market timing performance of Thai equity funds as measured by the TM and HM measures are significantly correlated.

Table 4.10   Correlation between market timing performance measures

		Treynor and Mazuy (β_2)	Henriksson and Merton (β_2)
Treynor and Mazuy (β_2)	Pearson Correlation	1	0.792*
	Sig. (2-tailed)	-	0.000
	N	107	107
Henriksson and Merton (β_2)	Pearson Correlation	0.792*	1
	Sig. (2-tailed)	0.000	-
	N	107	107

* significant at the 0.01 level

The significant value of Pearson coefficient, 0.792, indicates that a proportional relationship exists between the two models measurement of timing ability.

4.5 Summary

In this chapter, empirical results obtained from the hypotheses test of mean performance that are related to research questions one, two, and three are presented. The results are summarized as follows.

The first research question attempts to find whether the equity fund managers have been superior or inferior in selecting funds during the period of 1992 – 2004. The selectivity performance, as measured by the Jensen alpha, strongly indicate that fund managers' selectivity ability with respect to individual fund was inferior to the market

portfolio, only 6 out of 107 funds has significant positive value at the 10 percent level. However, when the frequency of the funds with positive alpha value was examined (without considering the significant level), the majority of selectivity performance of equity fund managers during this period is found to not be different from the market benchmark.

The second research question attempts to find whether the equity fund managers have behaved superior or inferior market timers during 1992-2004. Both TM and HM performance measures strongly indicate that fund managers' market timing ability with respect to individual fund was inferior to the market portfolio, only 2 and 1 out of 107 funds had significant positive value at the 10 percent level for the TM and HM models, respectively. In addition, when the proportion of the funds with positive $beta_2$ value was tested, result indicated strong evidence that the majority of the Thai equity fund managers behave inferior market timer during 1992-2004.

The third research question attempts to find out whether the market timing performance of funds depending upon which of the (TM or HM) measures is used in the analysis. Statistical evidence points to the existence of a significant positive relationship between the two measures and thus the market timing performance of equity funds is not dependent upon which of the TM or HM measures is used to measure performance.

Chapter 4 Appendix:

Table A   Selectivity performance of Thai Equity funds based on Jensen Alpha model, 1992-2004

rank	fund code	Jensen Alpha	t-stat	sig. of t-stat	beta	months	rank	fund code	Jensen Alpha	t-stat	sig. of t-stat	beta	months
1	EQ-RMF	1.4487	2.1646	0.0388*	0.5191	30**	55	TISCOEGF	0.0555	0.1727	0.8632	0.6524	145
2	BERMF	1.3095	1.8126	0.0824*	0.3945	26	56	NPAT-PRO	0.0529	0.1703	0.8651	0.7188	121
3	NERMF	1.1317	2.0892	0.0447*	0.4643	33**	57	TNP	0.0430	0.1544	0.8775	0.8699	156
4	AJFSCAP	1.0419	1.5847	0.1166	0.6139	90	58	BKA2	0.0385	0.1172	0.9069	0.7364	130
5	V-RMF	0.9682	1.7712	0.0852*	0.5168	37	59	SSB	0.0333	0.0789	0.9372	0.7940	156
6	ABSC-RMF	0.8955	2.1390	0.0428*	0.4945	25**	60	TEFQ	0.0313	0.0756	0.9403	0.8802	25**
7	ABG	0.7429	1.5088	0.1349	0.7590	90	61	RKEDC	0.0239	0.0465	0.9630	0.6973	98
8	SCBRM4	0.6996	0.7750	0.4439	0.5033	35	62	ONE-UB3	0.0207	0.0669	0.9468	0.7068	133
9	NPAT SAFTY	0.6713	1.5895	0.1215	0.7408	34**	63	TVF	-0.0108	-0.0292	0.9767	0.6374	120
10	SYRUS-M	0.6291	1.0103	0.3142	0.8096	135	64	SMEVC	-0.0333	-0.1720	0.8643	-0.0217	43
11	BMF	0.6091	0.8831	0.3804	0.5350	68	65	RKF-H1	-0.0355	-0.0874	0.9305	0.6691	133
12	OSPD1	0.5584	1.9260	0.0566*	0.5320	116	66	ONE-UB5	-0.0467	-0.1107	0.9122	0.6689	59**
13	OSPD2	0.4854	1.3066	0.1940	0.5340	113	67	NF-PLUS	-0.0675	-0.1558	0.8796	0.6393	10**
14	RKF	0.4610	1.3349	0.1840	0.7295	151	68	TISCOEDF	-0.0678	-0.1224	0.9028	0.6634	128**
15	ABSL	0.4551	0.7517	0.4738	0.3309	9**	69	RKF4	-0.0713	-0.2015	0.8406	0.6596	126
16	N-SET	0.4333	0.9959	0.3362	0.7209	15**	70	B-SUB	-0.0715	-0.2005	0.8414	0.7325	118
17	RKF2	0.4253	1.1491	0.2525	0.7035	137	71	SCBTS3	-0.0796	-0.2305	0.8181	0.6267	131
18	TEGRMF	0.4031	0.0092	0.9927	0.3230	26**	72	TCMEQF	-0.0805	-0.2342	0.8152	0.6171	150
19	APF	0.4004	1.1303	0.2606	0.7370	119	73	DE-1	-0.0857	-0.2260	0.8216	0.8342	125
20	KPLUS	0.3713	1.1554	0.2500	0.7445	131**	74	TS	-0.0910	-0.2691	0.7883	0.8132	129
21	KTTN	0.3491	0.3748	0.7139	0.7236	15	75	SF5	-0.0983	-0.3333	0.7393	0.7867	156
22	KKF	0.3483	0.7364	0.4629	0.7558	126	76	SPF	-0.1268	-0.2810	0.7792	0.7974	128**
23	OSPD3	0.3473	1.0177	0.3111	0.5112	111	77	PISD	-0.1550	-0.3432	0.7321	0.8215	111**
24	ONE-D	0.3472	1.0831	0.2807	0.7038	138	78	AGF	-0.1675	-0.5043	0.6149	0.7891	132
25	ONEUB-G	0.3271	0.5813	0.5633	0.6546	59	79	SCIF2	-0.1705	-0.5377	0.5917	0.7460	132
26	IBP	0.2977	0.3455	0.7352	0.7130	15	80	SCBMF2	-0.1730	-0.4682	0.6404	0.7478	136
27	BCAP	0.2796	0.5766	0.5656	0.7065	97	81	UNF	-0.1990	-0.6089	0.5437	0.8298	130
28	PPSD	0.2772	0.6338	0.5272	0.5553	144**	82	SPT	-0.2090	-0.5771	0.5650	0.7107	116
29	TDF	0.2771	0.8278	0.4094	0.7698	128**	83	SCOF	-0.2134	-0.6867	0.4935	0.7850	126
30	SAN	0.2650	0.8720	0.3846	0.8587	153**	84	BKD	-0.2442	-0.7150	0.4760	0.7349	126
31	KPLUS2	0.2645	0.8062	0.4216	0.7354	131**	85	ONE-PF	-0.2504	-0.5861	0.5594	0.6750	85
32	RPF2	0.2633	0.9866	0.3254	0.8488	156	86	SF7	-0.2625	-0.7942	0.4286	0.8550	127
33	ONE-PR	0.2602	0.8369	0.4042	0.7178	132	87	SCBTS2	-0.2884	-0.7953	0.4279	0.5743	133
34	THANA1	0.2536	0.8260	0.4103	0.7142	132	88	SCBRT	-0.2895	-0.7556	0.4516	0.6837	105
35	ONE-G	0.2238	0.7966	0.4269	0.7253	150	89	RRF1	-0.2977	-0.7143	0.4762	0.8724	143
36	ONE-UB2	0.1875	0.5806	0.5626	0.7406	124	90	SCBMF4	-0.3139	-0.8558	0.3937	0.7448	131
37	ONE-WE	0.1534	0.4914	0.6240	0.7138	133	91	SCBMF3	-0.3229	-0.9098	0.3646	0.7396	135
38	RKF-H2	0.1507	0.3397	0.7346	0.6753	129**	92	SCBTS	-0.3283	-0.9429	0.3475	0.5976	134
39	USD2	0.1502	0.3786	0.7056	0.6869	133	93	SF8	-0.3393	-0.9953	0.3217	0.8686	116**
40	RKFC	0.1450	0.3809	0.7040	0.6824	121	94	STD	-0.3634	-1.0827	0.2809	0.7863	134
41	SCBDV	0.1367	0.2544	0.8029	0.4437	16	95	SCBPMO	-0.3719	-1.0064	0.3164	0.6446	116
42	RKF3	0.1366	0.3745	0.7086	0.6581	134	96	SCIF	-0.4007	-1.3067	0.1936	0.7647	134
43	BKA	0.1268	0.3797	0.7048	0.7601	133	97	BMBF	-0.4491	-1.3243	0.1880	0.7471	117
44	ONE-FAS	0.1230	0.4118	0.6811	0.7349	132	98	THOR 3	-0.4647	-0.7408	0.4618	0.5203	60
45	ONE-UB4	0.1077	0.3359	0.7376	0.7100	123	99	SCBDA	-0.4833	-1.2172	0.2259	0.7948	124
46	SF4	0.1069	0.2526	0.8009	0.7967	156	100	SCBMF5	-0.5137	-1.3797	0.1702	0.7452	126
47	SW2	0.1030	0.3265	0.7445	0.7748	141	101	STD2	-0.5721	-1.6566	0.1000*	0.7308	133
48	ONE-FF	0.0992	0.2471	0.8054	0.6312	91	102	AJFSEQ	-0.5779	-1.1122	0.2921	0.9178	11**
49	ONE+1	0.0925	0.3080	0.7586	0.7025	133	103	SCBSET	-0.5882	-0.0431	0.9657	1.8218	100**
50	USD	0.0783	0.1944	0.8462	0.6857	133	104	KPE	-0.6316	-0.7042	0.5041	0.6287	9
51	ONE-PRO	0.0782	0.2244	0.8228	0.7352	135	105	SRT	-1.6403	-1.1217	0.2646	0.6852	103**
52	SCBMF	0.0739	0.1797	0.8576	0.6739	149	106	DYNAMIC2	-1.9812	-2.5043	0.0293*	0.3210	13
53	INGTEF	0.0676	0.1585	0.8745	0.8723	67**	107	DYNAMIC	-2.1802	-3.6746	0.0032*	0.8719	13**
54	BTP	0.0604	0.1782	0.8589	0.7003	123	average Jensen alpha		0.0429	-	-	0.6983	-

*   significant at the 0.10 level

**   Funds were re-corrected for Serial correlation and Heteroskedasticity problems using FGLS procedure, so one observation of these funds was lost

Table B Market timing performance as measured by Treynor and Mazuy model, 1992-2004

Rank	fund code	TM β_2	t-stat	sig. of t-stat	TM Alpha	t-stat	sig. of t-stat	months
1	TEGRMF	0.2215	0.1461	0.8851	-8.1412	0.0062	0.9951	26**
2	EQ-RMF	0.0258	3.6841	0.0010*	0.2296	1.3634	0.1836	30**
3	SCBSET	0.0199	0.1487	0.8821	-13.7063	-1.1935	0.2356	100**
4	NERMF	0.0061	0.4315	0.6691	0.4262	1.5918	0.1216	33**
5	BMF	0.0054	1.6809	0.0976*	-0.0626	-0.0793	0.9370	68
6	TISCOEDF	0.0050	0.5520	0.5819	-0.1518	0.7731	0.4409	128**
7	KPLUS	0.0044	1.1594	0.2485	0.2390	2.4400	0.0160*	131**
8	KPLUS2	0.0039	1.1461	0.2539	0.1490	2.0490	0.0425*	131**
9	USD	0.0032	0.8094	0.4197	0.0552	1.6169	0.1083	132**
10	TDF	0.0021	0.5666	0.5720	0.2758	2.0680	0.0407*	128**
11	APF	0.0014	0.3875	0.6991	0.3744	2.2510	0.0263*	118**
12	SPF	0.0009	0.1677	0.8671	0.0450	1.0544	0.2937	128**
13	SAN	-0.0003	-0.1016	0.9192	0.4157	2.1798	0.0308*	153**
14	NPAT SAFTY	-0.0014	-0.2067	0.8375	0.6946	0.4828	0.6325	34**
15	SCBMF3	-0.0014	-0.4353	0.6641	0.1199	1.4828	0.1405	134**
16	SMFVC	-0.0020	-0.7958	0.4309	0.0916	0.2066	0.8374	42**
17	OSPD1	-0.0022	-1.7889	0.0763*	0.8410	2.5660	0.0116*	116
18	OSPD3	-0.0022	-1.5272	0.1296	0.6355	1.6373	0.1045	111
19	OSPD2	-0.0025	-1.5956	0.1135	0.8112	1.9237	0.0570*	113
20	RKF-HI2	-0.0028	-0.6645	0.5076	0.6918	2.1472	0.0337*	129**
21	TEFQ	-0.0028	-0.1918	0.8496	0.1470	1.2536	0.2226	25**
22	ABG	-0.0029	-1.5545	0.1237	1.1753	2.0908	0.0395*	90
23	SSB	-0.0033	-1.6740	0.0962*	0.4128	0.8659	0.3879	156
24	SYRUS-M	-0.0033	-1.2100	0.2284	1.0524	1.4754	0.1425	135
25	ONE-D	-0.0035	-2.4642	0.0150*	0.7827	2.1683	0.0319*	138
26	SCBMF	-0.0037	-1.9701	0.0507*	0.5109	1.1015	0.2725	149
27	TISCOEGF	-0.0037	-2.5382	0.0122*	0.4916	1.3691	0.1731	145
28	SF4	-0.0038	-1.9157	0.0573*	0.5415	1.1352	0.2581	156
29	ONE-WE	-0.0038	-2.8600	0.0049*	0.6432	1.8434	0.0676*	133
30	SPT	-0.0039	-1.1555	0.2503	0.4440	1.8468	0.0674*	115**
31	SF5	-0.0040	-2.9299	0.0039*	0.3576	1.0931	0.2760	156
32	RKF	-0.0044	-2.1252	0.0356*	0.8822	1.6651	0.0984*	126
33	ONE-G	-0.0044	-3.5179	0.0006*	0.7407	2.4046	0.0174*	150
34	DYNAMIC	-0.0045	-0.2936	0.7746	-2.5506	-2.4531	0.0321*	13**
35	RPF2	-0.0045	-3.6851	0.0003*	0.7746	2.6552	0.0088*	156
36	TCMEQF	-0.0045	-2.8758	0.0046*	0.4435	1.1609	0.2476	150
37	ONE-UB5	-0.0046	-3.1852	0.0023*	0.6828	1.3594	0.1794	60
38	SW2	-0.0047	-3.4265	0.0008*	0.6854	1.9687	0.0510*	141
39	RRF1	-0.0048	-2.5646	0.0114*	0.2776	0.5954	0.5525	143
40	USD2	-0.0048	-2.7714	0.0064*	0.7443	1.6825	0.0949*	133
41	TNP	-0.0049	-3.9100	0.0001*	0.6064	2.0017	0.0471*	156
42	ONE-UB2	-0.0049	-3.6609	0.0004*	0.8287	2.3409	0.0209*	124
43	ONE-PRO	-0.0050	-3.3805	0.0010*	0.7163	1.8610	0.0650*	135
44	THOR 3	-0.0050	-2.4925	0.0156*	0.4205	0.6026	0.5492	60
45	ONE-UB4	-0.0052	-3.8923	0.0002*	0.7593	2.1905	0.0304*	123
46	ONE-FAS	-0.0053	-4.2175	0.0000*	0.7643	2.3921	0.0182*	132
47	SCBRT	-0.0053	-3.5586	0.0006*	0.4551	1.0859	0.2801	105
48	ONE-PR	-0.0054	-4.1305	0.0001*	0.9159	2.7461	0.0069*	132
49	NPAT-PRO	-0.0054	-4.3206	0.0000*	0.7755	2.3173	0.0222*	121
50	ONE-PF	-0.0054	-3.5603	0.0006*	0.6063	1.2988	0.1977	85
51	SCDF	-0.0055	-4.2604	0.0000*	0.4548	1.3749	0.1717	126
52	THANA1	-0.0055	-4.2298	0.0000*	0.9146	2.7853	0.0062*	132
53	ONE-UB3	-0.0057	-4.4254	0.0000*	0.7303	2.2070	0.0291*	133
54	BKA	-0.0059	-4.1859	0.0001*	0.8564	2.3810	0.0187*	133
55	ONEUB-G	-0.0059	-3.5137	0.0009*	1.5082	2.4563	0.0172*	59
56	RKF2	-0.0059	-3.7685	0.0002*	1.1669	2.8857	0.0046*	137
57	BKD	-0.0060	-4.2780	0.0000*	0.4929	1.3563	0.1775	126
58	DF-1	-0.0060	-3.8302	0.0002*	0.6589	1.6119	0.1096	125
59	ONE+1	-0.0060	-4.8331	0.0000*	0.8359	2.6336	0.0095*	133

*   significant at the 0.10 level   (continued)

**   Funds were re-corrected for Serial correlation and Heteroskedasticity problems using FGLS procedure, so one observation of these funds was lost.

Table 8 (cont.)

Rank	fund code	TM β_2	t-stat	sig. of t-stat	TM Alpha	t-stat	sig. of t-stat	months
60	SF8	-0.0063	-4.5164	0.0000*	0.3843	1.0259	0.3071	117
61	SRT	-0.0063	-0.6231	0.5346	-1.3244	-0.8148	0.4171	103**
62	SCBMF2	-0.0063	-4.0062	0.0001*	0.6129	1.5263	0.1293	136
63	BTP	-0.0064	-4.7315	0.0000*	0.8672	2.4374	0.0163*	123
64	SCIF	-0.0064	-5.0602	0.0000*	0.3845	1.1962	0.2338	134
65	STD	-0.0064	-4.5494	0.0000*	0.4217	1.1797	0.2403	134
66	RKF	-0.0064	-4.2081	0.0000*	1.2076	3.2425	0.0015*	151
67	SF7	-0.0065	-4.8737	0.0000*	0.5357	1.5517	0.1233	127
68	ONE-FF	-0.0065	-4.7174	0.0000*	1.1245	2.6709	0.0090*	91
69	TVF	-0.0065	-4.4047	0.0000*	0.8187	2.0915	0.0386*	120
70	BCAP	-0.0066	-3.6470	0.0004*	1.2429	2.3576	0.0205*	97
71	SCIF2	-0.0066	-5.0382	0.0000*	0.6227	1.8825	0.0620*	132
72	UNF	-0.0067	-4.9819	0.0000*	0.6060	1.7776	0.0779*	130
73	BKA2	-0.0069	-5.1826	0.0000*	0.8753	2.5697	0.0113*	130
74	B-SUB	-0.0069	-4.9444	0.0000*	0.8089	2.1817	0.0312*	118
75	PISD	-0.0069	-3.8152	0.0002*	0.7214	1.4568	0.1480	112
76	SCBPMO	-0.0069	-4.8209	0.0000*	0.5247	1.3600	0.1765	116
77	BMBF	-0.0070	-5.3529	0.0000*	0.4432	1.2767	0.2043	117
78	RKEC	-0.0070	-4.5997	0.0000*	1.0288	2.5652	0.0116*	121
79	SCBTS3	-0.0072	-5.0778	0.0000*	0.7844	2.1847	0.0307*	131
80	INGTEF	-0.0073	-1.7220	0.0898*	0.4204	0.8623	0.3917	67**
81	AGF	-0.0073	-5.3587	0.0000*	0.7069	2.0619	0.0412*	132
82	TS	-0.0073	-5.3871	0.0000*	0.7926	2.2817	0.0242*	129
83	SCBDA	-0.0073	-4.5128	0.0000*	0.4208	1.0025	0.3181	124
84	RKF3	-0.0073	-4.8309	0.0000*	1.0349	2.6867	0.0082*	134
85	RKF4	-0.0073	-5.1247	0.0000*	0.8182	2.2351	0.0272*	126
86	V-RMF	-0.0074	-1.2661	0.2141	1.3592	2.1789	0.0364*	37
87	AJFSCAP	-0.0078	-3.2039	0.0019*	2.1829	3.0332	0.0032*	90
88	SCBTS	-0.0078	-5.5192	0.0000*	0.6295	1.7511	0.0823*	134
89	RKEDC	-0.0078	-4.1259	0.0001*	1.1514	2.1018	0.0382*	98
90	SCBTS2	-0.0079	-5.3630	0.0000*	0.6902	1.8330	0.0691*	133
91	RKF-III	-0.0083	-4.9605	0.0000*	0.9915	2.3208	0.0219*	133
92	STD2	-0.0084	-6.1432	0.0000*	0.4666	1.3372	0.1835	133
93	SCBMF4	-0.0091	-6.3348	0.0000*	0.7813	2.1416	0.0341*	131
94	SCBMF5	-0.0091	-6.4093	0.0000*	0.6034	1.6414	0.1033	126
95	PPSD	-0.0101	-1.6205	0.1073	1.3066	1.8110	0.0723*	144**
96	NF-PLUS	-0.0164	-0.6648	0.5249	0.2759	0.7330	0.4845	10**
97	SCBRM4	-0.0197	-0.6426	0.5251	1.0250	0.7176	0.4782	34**
98	BERMF	-0.0224	-2.1601	0.0414*	1.8306	2.7152	0.0123*	25**
99	ABSC-RMF	-0.0388	-4.5367	0.0001*	1.6585	2.8192	0.0097*	25**
100	DYNAMIC2	-0.0420	-2.1488	0.0572*	-0.7345	-0.8174	0.4327	13
101	N-SET	-0.0449	-1.3562	0.1981	1.2774	0.5265	0.6074	15**
102	AJFSEQ	-0.0512	-3.5468	0.0062*	0.0708	0.1098	0.9150	11**
103	ABSL	-0.0525	-2.5770	0.0366*	1.4297	1.1025	0.3067	9**
104	SCBDV	-0.0542	-2.1190	0.0539*	1.4097	0.7486	0.4674	15**
105	IBP	-0.0683	-1.1247	0.2827	1.5839	0.2612	0.7984	14**
106	KPE	-0.1037	-4.6131	0.0036*	1.0457	1.7969	0.1225	9
107	KTTN	-0.1087	-1.7963	0.0976*	2.4158	0.6404	0.5340	14**

*   significant at the 0.10 level
**   Funds were re-corrected for Serial correlation and Heteroskedasticity problems using FGLS procedure, so one observation of these funds was lost.

Table C   Market timing performance as measured by Henriksson and Merton, 1992-2004

rank	fund code	HM β_2	t-stat	sig. of t-stat	HM Alpha	t-stat	sig. of t-stat	months
1	TEGRMF	4.5371	0.0843	0.9335	-3.1801	-0.1111	0.9124	26**
2	EQ-RMF	1.1927	3.8464	0.0006*	-1.6526	-1.8991	0.0679*	30**
3	AJFSEQ	1.0905	1.1744	0.2704	-2.0179	-1.5080	0.1658	11**
4	TISCOEDF	0.5770	1.3184	0.1898	-1.4709	-1.1207	0.2645	128**
5	V-RMF	0.5514	1.5050	0.1416	-0.3193	-0.3988	0.6925	36**
6	INGTEF	0.3239	1.2343	0.2216	-0.6852	-0.9719	0.3347	67**
7	NPAT SAFTY	0.3029	1.2485	0.2209	-0.5360	-0.6006	0.5523	34**
8	BMF	0.2928	1.6156	0.1110	-0.5851	-0.5819	0.5626	68
9	SPF	0.2053	0.7063	0.4813	-0.5084	-0.5536	0.5809	128**
10	KPLUS	0.0620	0.3177	0.7512	0.2711	0.5045	0.6148	131**
11	SAN	0.0563	0.3782	0.7058	0.1820	0.3400	0.7343	153**
12	APF	0.0426	0.2199	0.8263	0.3455	0.5990	0.5504	118**
13	KPLUS2	0.0192	0.1009	0.9198	0.2733	0.5127	0.6090	131**
14	RKF-HI2	0.0166	0.0571	0.9546	0.4710	0.5196	0.6043	129**
15	TEFQ	0.0056	0.0139	0.9890	0.0692	0.0804	0.9367	25**
16	OSPD2	-0.0273	-0.1610	0.8724	0.6818	0.9982	0.3204	112**
17	SYRUS-M	-0.0274	-0.1649	0.8693	0.7415	0.8018	0.4241	135
18	SCBMF	-0.0541	-0.4788	0.6328	0.2880	0.4735	0.6366	149
19	SMEVC	-0.0610	-0.9251	0.3605	0.1571	0.5647	0.5755	42**
20	OSPD1	-0.0867	-1.1474	0.2536	0.9157	2.1535	0.0334*	116
21	ONE-D	-0.0979	-1.1413	0.2558	0.7495	1.5739	0.1179	138
22	OSPD3	-0.1055	-1.1997	0.2329	0.7904	1.5733	0.1186	111
23	SF4	-0.1125	-0.9570	0.3401	0.5480	0.8756	0.3826	156
24	KKF	-0.1193	-0.9457	0.3462	0.8248	1.1932	0.2351	126
25	SSB	-0.1222	-1.0431	0.2986	0.5121	0.8215	0.4126	156
26	TDF	-0.1234	-0.6016	0.5485	0.7114	1.2259	0.2225	128**
27	USD2	-0.1244	-1.1723	0.2432	0.6552	1.1196	0.2650	133
28	ONE-WE	-0.1291	-1.5744	0.1178	0.6851	1.4935	0.1377	133
29	TISCOEGF	-0.1360	-1.5679	0.1191	0.5947	1.2666	0.2074	145
30	USD	-0.1376	-1.2780	0.2035	0.6371	1.0726	0.2854	133
31	ABG	-0.1500	-1.2516	0.2141	1.4127	1.9455	0.0549*	90
32	SF5	-0.1553	-1.9135	0.0576*	0.5105	1.1817	0.2391	156
33	RPF2	-0.1607	-2.1941	0.0297*	0.8931	2.2914	0.0233*	156
34	ONE-G	-0.1639	-2.1518	0.0330*	0.8690	2.1268	0.0351*	150
35	ONE-UB2	-0.1790	-2.1384	0.0345*	0.9399	1.9810	0.0499*	124
36	TCMEQF	-0.1833	-1.9612	0.0517*	0.6412	1.2786	0.2030	150
37	SW2	-0.1848	-2.2023	0.0293*	0.8584	1.8538	0.0659*	141
38	RRFI	-0.1878	-1.6791	0.0954*	0.4509	0.7410	0.4599	143
39	DYNAMIC	-0.1901	-0.4739	0.6448	-1.8263	-1.7659	0.1051	13**
40	ONE-UB5	-0.2025	-2.0370	0.0463*	0.8033	1.2320	0.2230	60
41	TNP	-0.2060	-2.7176	0.0073*	0.8505	2.1080	0.0367*	156
42	ONE-UB4	-0.2061	-2.4706	0.0149*	0.9508	2.0497	0.0426*	123
43	ONE-PRO	-0.2107	-2.3150	0.0222*	0.9437	1.8605	0.0650*	135
44	ONE-PR	-0.2157	-2.6149	0.0100*	1.1199	2.5004	0.0137*	132
45	THANA1	-0.2215	-2.7255	0.0073*	1.1363	2.5752	0.0111*	132
46	NPAT-PRO	-0.2299	-2.9221	0.0042*	1.0335	2.2917	0.0237*	121
47	ONE-FAS	-0.2328	-2.9592	0.0037*	1.0508	2.4601	0.0152*	132
48	RKF2	-0.2336	-2.4126	0.0172*	1.3738	2.5651	0.0114*	137
49	ONE-PF	-0.2373	-2.3900	0.0191*	0.8338	1.3552	0.1791	85

(continued)

*   significant at the 0.10 level
**   Funds were re-corrected for Serial correlation and Heteroskedasticity problems using FGLS procedure, so one observation of these funds was lost.

Table C (cont.)

rank	fund code	HM β_2	t-stat	sig. of t-stat	HM Alpha	t-stat	sig. of t-stat	Months
50	SCDF	-0.2429	-3.0272	0.0030*	0.7566	1.7210	0.0878*	126
51	SCBMF2	-0.2468	-2.5663	0.0114*	0.8342	1.5624	0.1206	136
52	SCBRT	-0.2493	-2.6373	0.0097*	0.7931	1.4308	0.1555	105
53	ONE-UB3	-0.2514	-3.1354	0.0021*	1.0414	2.3547	0.0200*	133
54	RKF	-0.2523	-2.7098	0.0075*	1.4546	2.9160	0.0041*	151
55	STD	-0.2561	-2.9222	0.0041*	0.6713	1.3940	0.1657	134
56	ONE+1	-0.2686	-3.4760	0.0007*	1.1830	2.7758	0.0063*	133
57	N-SET	-0.2708	-0.3233	0.7516	0.8931	0.9063	0.3813	15**
58	THOR 3	-0.2735	-1.9551	0.0555*	0.7915	0.8917	0.3763	60
59	SCIF	-0.2806	-3.5557	0.0005*	0.7330	1.6903	0.0933*	134
60	DE-1	-0.2845	-2.9113	0.0043*	1.0534	1.9611	0.0521*	125
61	ONE-FF	-0.2881	-3.1265	0.0024*	1.3908	2.4691	0.0155*	91
62	SCIF2	-0.2901	-3.5189	0.0006*	0.9858	2.2022	0.0294*	132
63	SCBTS3	-0.2923	-3.2423	0.0015*	1.0817	2.2115	0.0288*	131
64	ONEUB-G	-0.3054	-2.6330	0.0109*	1.8862	2.3627	0.0216*	59
65	SCBMF3	-0.3061	-3.3726	0.0010*	0.9345	1.8476	0.0669*	135
66	TVF	-0.3065	-3.2774	0.0014*	1.2445	2.3843	0.0187*	120
67	SF7	-0.3070	-3.6393	0.0004*	0.9631	2.0875	0.0389*	127
68	UNF	-0.3098	-3.6820	0.0003*	1.0334	2.2586	0.0256*	130
69	SF8	-0.3105	-3.5086	0.0006*	0.8435	1.6999	0.0919*	117
70	AGF	-0.3112	-3.6119	0.0004*	1.0729	2.2933	0.0234*	132
71	PISD	-0.3124	-2.7022	0.0080*	1.1122	1.6896	0.0940*	112
72	RKFC	-0.3142	-3.2551	0.0015*	1.4211	2.6490	0.0092*	121
73	RKF3	-0.3146	-3.3329	0.0011*	1.4075	2.7139	0.0075*	134
74	SCBPMO	-0.3229	-3.5119	0.0006*	0.9597	1.8538	0.0664*	116
75	SPT	-0.3242	-3.6077	0.0005*	1.1280	2.2293	0.0278*	116
76	BKA	-0.3270	-3.8438	0.0002*	1.4543	3.0997	0.0024*	133
77	SCBTS	-0.3297	-3.6912	0.0003*	1.0037	2.0450	0.0429*	134
78	TS	-0.3332	-3.8568	0.0002*	1.2312	2.6207	0.0099*	129
79	BMBF	-0.3333	-4.0029	0.0001*	0.9161	1.9620	0.0522*	117
80	RKF4	-0.3340	-3.7216	0.0003*	1.2625	2.5676	0.0114*	126
81	ABSC-RMF	-0.3365	-0.5017	0.6206	1.3909	1.1052	0.2805	25**
82	SCBTS2	-0.3367	-3.6235	0.0004*	1.0787	2.1046	0.0373*	133
83	SCBDA	-0.3442	-3.4168	0.0009*	0.8999	1.6194	0.1080	124
84	RKEDC	-0.3490	-2.8224	0.0058*	1.5692	2.1255	0.0361*	98
85	NERMF	-0.3560	-0.8135	0.4221	1.2616	1.3837	0.1763	33**
86	BKD	-0.3570	-4.1724	0.0001*	1.1815	2.5203	0.0130*	126
87	AJFSCAP	-0.3577	-2.2803	0.0250*	2.6389	2.7769	0.0067*	90
88	BTP	-0.3678	-4.4109	0.0000*	1.5479	3.3517	0.0011*	123
89	PPSD	-0.3778	-1.1644	0.2462	1.5784	1.7782	0.0775*	144**
90	RKF-HI	-0.3821	-3.6776	0.0003*	1.5157	2.6452	0.0092*	133
91	STD2	-0.3945	-4.5775	0.0000*	1.0294	2.1659	0.0321*	133
92	BKA2	-0.4002	-4.9025	0.0000*	1.6309	3.6732	0.0004*	130
93	B-SUB	-0.4053	-4.7181	0.0000*	1.5869	3.3019	0.0013*	118
94	BCAP	-0.4134	-3.6317	0.0005*	2.1244	3.1106	0.0025*	97
95	NF-PLUS	-0.4330	-0.5487	0.5982	0.7177	0.5786	0.5788	10**
96	SCBMF4	-0.4529	-4.9644	0.0000*	1.4858	3.0012	0.0032*	131
97	SCBMF5	-0.4538	-4.9935	0.0000*	1.2985	2.6079	0.0102*	126
98	SCBRM4	-0.5583	-0.5171	0.6087	1.7127	0.8055	0.4265	34**
99	BERMF	-0.6489	-1.4438	0.1623	2.4783	2.3063	0.0304*	26
100	DYNAMIC2	-0.7442	-1.4183	0.1865	-0.3597	-0.2623	0.7984	13
101	SRT	-0.8328	-1.1418	0.2562	0.5319	0.2235	0.8236	103**
102	SCBDV	-0.8936	-1.6069	0.1321	1.9458	1.7513	0.1034	15**
103	ABSL	-0.9508	-1.5811	0.1579	2.1830	1.8016	0.1146	9**
104	IBP	-1.4999	-1.1276	0.2815	2.9529	1.2671	0.2291	14**
105	KPE	-1.6684	-2.2988	0.0612*	2.0436	1.5395	0.1746	8**
106	KTTN	-1.6873	-1.1823	0.2600	3.3582	1.4589	0.1703	14**
107	SCBSET	-2.2503	-0.4802	0.6321	-3.0948	-0.2058	0.8374	100**

*   significant at the 0.10 level

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