

The Allocation of Decision-Making Power and the Investment Strategy of Open-End Funds

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Abstract

This paper attempts to explain relationship between fund management structure and fund investment strategy from multiple perspectives by comparing the individual management funds with centralized decision-making power and the team-managed funds with decentralized decision-making powers. Selected stock-type open-end and hybrid open-end funds from 2005 to 2018, and used classical two-factor and five-factor TM, HM and other models to conduct empirical research. The research found that: in total performance, individually managed funds are significantly better than team managed funds, and hybrid funds are better than stock funds. In stock fund management, the stock selection ability and timing ability of team management are better than those of individual management. In the management of mixed funds, the stock selection ability of individual management is better but the timing ability is relatively poor. This shows that the differentiation of management structure and investment strategy depends on the type of fund and investment objectives.

Keywords

Five-factor model; Performance comparison benchmark; Stock selection ability; Timing ability.

1. INTRODUCTION

Securities investment funds have the ability to reduce the overall investment risk by diversifying the unsystematic risks of different financial products. so they are gradually becoming a more popular financial product in various countries. In recent years, the proportion of team-managed funds has increased. Since open-end funds are purchased and redeemed according to their net value. Therefore, the quality of its performance directly affects the returns of investors. However, since different managers have different knowledge, information and investment preferences, there will lead to differences in securities analysis, general trend judgment and investment styles, which are manifested as high and low investment performance. That is to say, the performance of the fund is mainly determined by the investment ability of the fund managers, which can be subdivided into micro-level securities selection ability and macro-level timing ability.

2. LITERATURE REVIEW

With the prevalence of team management in the fund industry, many academic studies have focuses on the performance differences between individual and team management. Chen et al. found that team managed funds performed worse than individually managed funds. Karagiannidis examined the relationship between open-end fund performance and team management structure from 1997 to 2004 and found that during the bear market period of 2001 to 2004, the risk-adjusted return of team-managed funds was worse than that of individual- managed funds, which is the case in growth funds. The performance is more

significant, and there is no significant difference in the bull market stage from 1997 to 2000. Most of the studies on the performance differences between individual and team-managed funds found that the performance of team-managed funds was worse than that of single-managed funds, but the reason why the team management model is still popular is that the replacement cost of team-managed managers is lower, which helps to promote the promotion of team-managed funds. Recent research explores the differentiation of mutual fund investment strategies from the perspective of decision-making power allocation, and finds that individually managed funds have significant market timing ability, while team-managed funds have significant stock selection performance. In view of the research on China's fund market, Luo Chunfeng (2011) used TM, HM and other models to decompose the performance analysis of my country's open-end stock funds and hybrid funds. The research results also show that my country's open-end funds basically do not have the ability to choose timing. Zhang Jun and Chen Weibin (2012) used TM and CL models to draw the conclusion that the stock selection timing ability of Chinese QDII fund managers is not significant and not sustainable. Sun Bingwen (2017) used a six-factor model to find that all samples funds, equity funds, and hybrid funds have all achieved significant risk-adjusted returns, and all have the ability to choose timing. However, the usability of the six factors in my country remains to be tested.

3. THEORETICAL BASIS

3.1. The Concept of Stock Selection Ability and Timing Ability

The stock selection ability means that the fund manager has used a certain analysis and his own cognition to select the actual value of which is greater than market value or the ability of stocks with very good growth potential. If he has this excellent ability, he will buy stocks with high-growth potential or master the core technologies and concepts of great future development in the rising stage of the market. and obtain good returns through the growth of enterprise value and valuation. During market downturns, stocks that are severely undervalued are selected to be held at low points, in order to obtain substantial returns when the market improves and thus improve fund performance.

Timing ability refers to the ability of fund managers to dynamically allocate and adjust assets. Specifically, when the market is in a long position, fund managers will reduce assets with low elasticity and increase the allocation of assets with relatively high risks, so as to obtain higher assets in a rising market. Income or even excess return, improve the performance of the fund. When the market is in a short position, reduce risky assets and buy assets with high safety, such as high-quality assets such as government bonds and interbank deposits, to reduce investment losses and ensure stable returns.

3.2. Multi-factor Performance Evaluation Theory Based on Arbitrage Pricing Model

Ross founded the arbitrage pricing theory in 1976, further relaxed the assumptions of the CAPM model, and proposed that asset prices are jointly explained by a variety of factors, but Ross did not clearly point out which factors affect asset returns. A typical multifactor model decomposes the returns of n stocks in a portfolio into a line of m factors and a residual that cannot be explained by the m factors. In a study of stock market and fund returns, the three-factor model has good applicability and has been adopted by scholars one after another, Fama and French (1993) established a three-factor model based on the CAPM model with stock market index, company size, and book-to-market ratio. The empirical results show that the three-factor model can explain the changes in stock returns very well. With the deepening of research, the three-factor model has also been continuously improved, among which the famous five-factor model introduced by Fama and French (2015) introduced the profitability factor. In recent years, based on the theory of liquidity premium, the latest research in academia has also

introduced the market liquidity factor to study the impact of liquidity on the rate of return. The introduction of the factor model has greatly improved the explanatory power of the single factor model, but different factors have different applicability in different markets and research objects, and the choice of factors depends on the research problem.

4. RESEARCH DESIGN

4.1. Data Selection

This paper selects open-end partial stock funds, namely stock funds and hybrid funds. namely stock funds and hybrid funds. ETF funds with special trading methods among stock-oriented funds are excluded, and hybrid funds with a stock investment ratio of less than 60% are excluded. The sample of funds selected in the final article covers 1107 open-end equity-oriented funds in 14 full years from 2005 to 2018, and the funds have been established for more than three years. This paper mainly uses monthly data to measure the timing ability of the fund market, and quarterly data is used for the performance attribution method used in the stationarity test.

Table 1. Distribution and size of sample funds from 2005 to 2018

years	full sample			stock type		hybrid stocks		
	total	alone	team	alone	team	alone	team	
PanelA: Number of Funds								
2005	71	53	18	7	1	46	17	
2006	106	86	20	10	0	76	20	
2007	169	135	34	11	3	124	31	
2008	220	148	72	14	1	134	71	
2009	272	189	83	12	4	177	79	
2010	351	256	95	24	7	232	88	
2011	418	308	110	35	9	273	101	
2012	504	378	126	55	14	323	112	
2013	576	427	149	70	19	357	130	
2014	656	514	142	86	21	428	121	
2015	809	622	187	131	37	491	150	
2016	1080	782	298	264	97	518	201	
2017	1105	851	254	280	80	571	174	
2018	1107	837	270	274	88	563	182	
PanelB: average size (TNA) (million dollar)								
2005	6562	3190	3372	1637	1299	1553	2073	
2006	5351	2668	2683	900	0	1768	2683	
2007	49760	20809	28951	11122	15214	9687	13737	
2008	22722	14433	8289	9492	3045	4941	5244	
2009	28295	15254	13041	9106	7008	6148	6033	
2010	19844	9264	10580	4728	5655	4536	4925	
2011	12160	5601	6559	2726	3130	2875	3429	
2012	9594	4709	4885	2284	1745	2425	3140	
2013	8577	3600	4977	1571	1938	2029	3039	
2014	8271	3371	4900	1693	1997	1678	2903	
2015	7591	2458	5133	1078	3230	1380	1903	
2016	5319	2037	3282	888	1782	1149	1500	
2017	5159	2239	2920	983	1486	1256	1434	
2018	3939	1673	2266	784	974	889	1292	

The research data in this paper mainly comes from the wind database. All are obtained through manual sorting, such as the year-by-year screening of funds and the division of fund management structures in the five-factor model.

4.2. Descriptive Statistics

By filtering and sorting out the data, this paper finally obtains a sample of 1107 annual funds. As can be seen from Table 1, the number of funds is increasing year by year. Compared with stock funds, hybrid funds account for a larger proportion. Regarding the fund management structure, although the number of funds managed by the team is increasing year by year, on the whole, team-managed funds account for about 25% of the total sample, which is not as popular and accepted as single-person management in China.

The fund size in Table 1 is measured by the average net assets of the fund. It can be found that the changes of the average net assets of the fund are irregular. Generally speaking, in 2005-2006, net assets increased gradually, and in 2007, net assets peaked with the advent of the capital market bull market, and then there was a sharp drop in 2008, which may be the huge impact of the global financial crisis and economic recession on China. However, from 2009 to 2018, the average net assets of funds gradually decreased, which may be caused by the relatively slow inflow of funds due to the large number of new funds issued in my country's fund market.

Table 2. Characteristic statistics of team and individually managed funds

Fund type	total sample	alone	team	Alone-team	t-statistic
PanelA: average monthly rate of return					
total sample	1.10	1.15	0.63	0.53	[1.35]
stock type	0.83	0.88	0.28	0.60	[0.89]
hybrid stocks	1.14	1.19	0.68	0.50	[1.31]
hybrid-stock	0.31	0.31	0.40		
t-statistic	[1.42]	[1.27]	[1.56]		
PanelB: Standard deviation of monthly returnsmonthly returns					
total sample	0.92	0.92	0.86	0.06	[3.16]
stock type	0.85	0.83	0.87	-0.04	[1.18]
hybrid stocks	0.92	0.92	0.86	0.06	[2.14]
hybrid-stock	0.07	0.09	-0.003		
t-statistic	[1.63]	[1.36]	[1.52]		
PanelC: expense ratio					
total sample	1.58	1.89	1.58	0.30	[0.98]
stock type	1.32	1.32	1.38	-0.06	[-0.95]
hybrid stocks	1.62	1.95	1.63	0.32	[0.99]
hybrid-stock	0.31	0.63	0.25		
t-statistic	[1.85]	[1.80]	[1.89]		
PanelD: turnover rate					
total sample	630.74	220.15	109.09	111.06	[1.92]
stock type	328.85	372.89	242.72	130.16	[1.07]
hybrid stocks	723.43	147.05	124.46	22.59	[1.10]
hybrid-stock	394.58	-225.84	-118.27		
t-statistic	[-1.48]	[-1.22]	[-2.10]		

Table 2 reports the characteristics of funds managed individually and in teams and their differences. It can be seen that for all samples and for the stock and mixed subsamples, the t-tests show the difference between individually managed funds and team-managed funds is not statistically significant. However, individually managed hybrid funds have a larger standard

deviation of returns than team-managed hybrid funds. At the same time, we can find the average expense ratio of hybrid funds is higher than the average expense ratio of stock funds.

4.3. Fund's Timing Ability

In this part, we mainly use TM and HM models to measure stock funds and hybrid funds and the differences in market timing ability between individually managed and team managed funds.

Two-factor TM model:

$$r_{i,t} - r_{f,t} = \alpha_i + \beta_{i,m}(r_{m,t} - r_{f,t}) + \beta_{i,b}(r_{b,t} - r_{f,t}) + \gamma_{i,TM}(r_{m,t} - r_{b,t})^2 + \epsilon_{i,t}$$

Two-factor HM model:

$$r_{i,t} - r_{f,t} = \alpha_i + \beta_{i,m}(r_{m,t} - r_{f,t}) + \beta_{i,b}(r_{b,t} - r_{f,t}) + \gamma_{i,TM}(r_{m,t} - r_{b,t})^+ + \epsilon_{i,t}$$

Five-factor TM model:

$$r_{i,t} - r_{f,t} = \alpha_i + \beta_{i,m}(r_{m,t} - r_{f,t}) + \beta_{i,b}(r_{b,t} - r_{f,t}) + \gamma_{i,TM}(r_{m,t} - r_{b,t})^2 + \beta_{SMB}SMB_t + \beta_{HML}HML_t + \beta_{MOM}MOM_t + \epsilon_{i,t}$$

Five-factor HM model:

$$r_{i,t} - r_{f,t} = \alpha_i + \beta_{i,m}(r_{m,t} - r_{f,t}) + \beta_{i,b}(r_{b,t} - r_{f,t}) + \gamma_{i,TM}(r_{m,t} - r_{b,t})^+ + \beta_{SMB}SMB_t + \beta_{HML}HML_t + \beta_{MOM}MOM_t + \epsilon_{i,t}$$

$\gamma_{i,TM}, \gamma_{i,HM}$ are the market timing coefficients of the TM model and the HM model, respectively, representing the market timing ability of the fund manager.

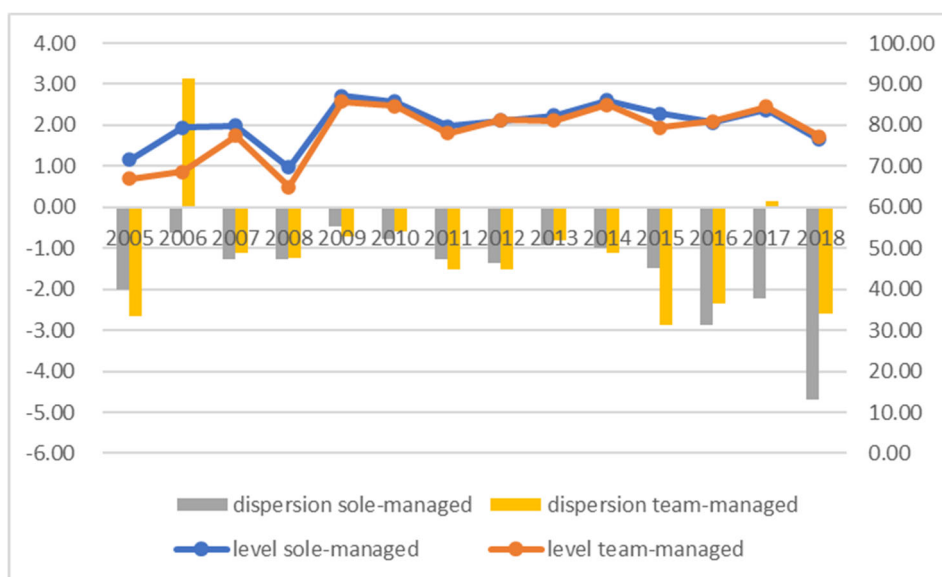


Figure 1. Market Timing Ability of Solely Managed and Team Managed Funds

In Figure 1, the bar graphs represent the difference in market timing between individually managed funds and team managed funds. The difference between the two lines is represented by a histogram. The histogram shows that 13 years in the sample, funds managed individually were at least not significantly different from funds managed by teams in terms of market timing. On average, team-managed funds are better at timing the market than individually managed funds.

Table 3. Market Timing, Security Selection and Fund Performance

Fund type	TM			HM			performance		
	SS	MT	Overall	SS	MT	Overall	SS	MT	Overall
Total revenue									
Full stock	1.1072	-0.0154	1.0919	1.3127	0.090	1.4031	0.287	-0.03	0.257
	1.22	-0.11	1.13	1.55	0.59	1.53	2.984	-0.56	-0.055
Full mix	1.4920	0.1408	1.6328	1.4936	0.268	1.7618	0.509	0.163	0.660
	1.64	1.78	1.74	1.73	1.76	1.95	4.205	1.961	0.898
Single stock	0.8133	-0.0237	0.7895	1.0532	0.061	1.1144	0.302	-0.04	0.280
	0.84	-0.16	0.78	1.17	0.41	1.15	20.98	-3.70	-0.449
Single mix	1.5450	0.1295	1.6745	1.5383	0.284	1.8227	0.574	0.178	0.750
	1.71	1.53	1.80	1.76	1.73	2.05	4.086	1.839	1.024
Team stock	1.8000	0.1481	1.9481	1.7262	0.246	1.9722	0.246	-0.01	0.245
	2.04	1.44	2.08	2.04	1.18	2.16	20.75	-2.35	-6.055
Team mix	1.3435	0.1666	1.5100	1.4009	0.225	1.6258	0.327	0.104	0.430
	1.45	2.46	1.59	1.54	1.74	1.71	3.926	2.163	0.440
Single - team(stock)	-0.986	-0.1719	-1.1586	-0.673	-0.18	-0.858	0.057	-0.02	0.030
	-1.95	-1.69	-2.33	-1.18	-1.07	-1.56	0.517	-0.24	0.862
Single - team(mix)	0.2015	-0.0371	0.1644	0.1374	0.059	0.1968	0.247	0.074	0.300
	0.18	-1.35	1.63	0.14	0.95	2.69	2.521	1.149	2.806
net income									
Full stock	0.1906	0.0101	0.2007	0.2798	0.108	0.3877	0.291	-0.03	0.250
	0.20	0.08	0.19	0.31	0.24	0.39	3.028	-0.56	0.688
Full mix	-0.443	-0.0186	-0.4619	-0.147	0.007	-0.139	0.508	0.163	0.660
	-0.33	-0.20	-0.34	-0.11	0.03	-0.10	4.199	1.961	0.779
Single stock	-0.011	-0.0217	-0.0323	0.0619	0.066	0.1282	0.573	0.178	0.770
	-0.01	-0.15	-0.03	0.06	0.43	0.12	3.609	1.801	0.904
Single mix	0.1706	0.0024	0.1731	0.4496	-0.01	0.4404	0.573	0.178	0.755
	0.15	0.02	0.15	0.38	-0.04	0.37	3.609	1.801	0.904
Team stock	0.5758	0.1493	0.7251	0.5030	0.272	0.7748	0.249	-0.01	-0.235
	0.64	1.44	0.76	0.58	1.40	0.84	2.429	-0.29	-0.182
Team mix	-1.452	-0.0787	-1.5308	-1.619	0.059	-1.561	0.326	0.104	0.430
	-0.52	-0.79	-0.54	-0.59	0.21	-0.55	3.496	2.096	0.333
Single - team(stock)	-0.586	-0.1710	-0.7574	-0.441	-0.21	-0.647	0.324	0.191	0.510
	-1.18	-1.68	-1.57	-0.83	-1.20	-1.22	1.177	0.527	-0.237
Single - team(mix)	1.6228	0.0811	1.7039	2.0690	-0.07	2.0012	0.247	0.074	0.320
	0.60	0.59	0.62	0.79	-0.28	0.73	2.520	1.149	2.752

Table 3 reports the overall fund performance along with its security selection performance (SS) and market timing performance (MT). Based on the five-factor Treynor-Mazuy and Henriksson-Merton market timing models, we first use the base regression on a three-year rolling window to obtain the corresponding coefficients for each fund, and then separate them with market timing variables (rm, t-rb, t square term or option term) multiplied to get the result, which is the MT of each fund, and the constant obtained by the regression is used as SS, and finally the sum of SS and MT is used as the overall performance of the fund, and then according to each fund Gold's TNA is weighted to calculate the current year's MT and SS, and finally the arithmetic average in 05-18 years is calculated, which is the result in the table. In addition, we also obtain SS and MT according to the performance attribution procedure. For the performance attribution approach, we decompose fund performance into market timing and security selection components on a quarterly basis, and report time-series averages for funds managed individually and by teams. The above methods are respectively used for two types of funds of stock type and mixed type and total funds. After reporting results for the full sample of funds, we report data for individual stocks, individual mixes, team stocks, and team mix funds. Finally, we report the differences between single- and team-managed funds. Panel A results are based

on gross earnings (before fees) and Panel B results are based on net earnings (after fees). The t statistic is autocorrelation adjusted.

Performance Attribution Model:

$$R_{P,t} - R_{B,t} = \sum_{i=1}^K w_{Pi,t} R_{Pi,t} - \sum_{i=1}^K w_{Bi,t} R_{Bi,t}$$

$$\sum_{i=1}^K w_{Pi,t} R_{Pi,t} - \sum_{i=1}^K w_{Bi,t} R_{Bi,t} = \sum_{i=1}^K R_{Bi,t} (w_{Pi,t} - w_{Bi,t}) + \sum_{i=1}^K w_{Pi,t} (R_{Pi,t} - R_{Bi,t})$$

where $R_{p,t}$ is the return of the fund portfolio in period t , $R_{B,t}$ is the rate of return of the benchmark portfolio in period t , $w_{pi,t}$ is the investment ratio of the fund portfolio in stocks, bonds and cash in period t , $w_{Bi,t}$ is the investment proportion of the benchmark portfolio invested in i -type assets in period t , which is represented by the average value of the proportion of stock funds and hybrid funds invested in type i assets in period t , $R_{pi,t}$ is the i invested by fund p The return on class assets, $R_{Bi,t}$ is the return on class i assets invested by the benchmark portfolio in period t . For the benchmark portfolio, we use the quarterly return of the S&P China A-Share Main Index to express the return of stock investment, and the return of bond investment we It is expressed by the quarterly yield of the CSI All Bond Index, and the cash yield is expressed by the quarterly yield converted from the one-year time deposit rate.

Because the regression results based on the Treynor-Mazuy model and the Henriksson-Merton model are similar, the discussion is based on the Treynor-Mazuy model. As can be seen from the results in the table, in terms of total returns, the mixed overall performance of the fund is better than that of equity funds. Based on net income, the difference in performance between the two types of funds is not significant, as hybrid funds tend to have higher expense ratios than equity funds. The aggregate performance of individually managed hybrid funds outperformed team-managed funds. The aggregate performance of individually managed stock funds is weaker than that of team management.

The results of the five-factor model considering company size and momentum factor are better and more in line with theoretical expectations. Hybrid funds performed positively in market timing performance, while equity funds performed negatively in market timing performance. Of the separately managed funds, only hybrid funds showed positive timing performance. In team management, the stock type has stronger market timing ability than the mixed type. In terms of security selection, individually managed hybrid funds outperform equity funds. In team management, the securities selection ability of stock funds is better than that of hybrid funds.

According to the analysis of the results obtained by the performance attribution method, in the whole sample, the hybrid funds are in terms of securities selection better than equity funds. Both individually managed equity and hybrid funds outperform team management in terms of securities selection reason. In both individual management and team management, the securities selection ability of hybrid funds is better than that of stocks. full sample among them, the market timing ability of hybrid funds is better than that of stock funds. Among separately managed funds, hybrid funds better than stock funds, among team-managed funds, hybrid funds are better than stock funds. In stock funds. There is no significant difference between individual and management, and in hybrid funds, individual management is better than team management. Although the results were not statistically significant. One reason for the somewhat weaker results was controlling for additional risk factors that appear to be important in measuring market timing. Another reason may be that using the average from the previous

quarter as a benchmark may underestimate the performance of the market timing if the market timing strategy is running for a long time. The market timing component here may be influenced by security selection strategies, but the comparison between the two groups provides preliminary results on the differences in market timing performance between individual funds and team-managed funds.

We will further demonstrate the impact of fund management structure on its market timing ability. During the sample period, the management structure of some open-end funds has changed. This is partly due to the fact that the open-ended fund sector has solely managed funds are gradually shifting to team management. But at the same time, some of the open-ended funds in our sample team managed funds have shifted to individually managed funds. We examine a sample of balanced funds that change their structure and examine to see if their performance and market timing were affected by these changes.

Table 4. Changes in management structure and market timing

Model	Alpha			TM market timing			HM market timing		
	Before	after	after-before	Before	after	after-before	Before	after	after-before
Panel A: Individual management becomes team management									
Five factor (untimely factor)	2.9131	2.189	-0.7245						
	3.72	2.87	-0.76						
TM	4.2954	2.667	-1.6286	0.0047	0.004	-0.0008			
	3.68	2.79	-1.12	3.44	2.10	-0.35			
HM	4.2196	2.526	-1.6941				0.170	0.09	-0.0799
	3.61	2.73	-1.18				2.58	1.71	-0.91
Panel B: Team management becomes individual management									
Five factor (untimely factor)	4.5475	0.989	-3.5588						
	5.45	2.16	-4.00						
TM	7.0218	1.369	-5.6527	0.0075	0.006	-0.0015			
	5.63	2.19	-4.28	6.17	2.77	-0.44			
HM	6.9133	1.224	-5.6891				0.308	0.11	-0.1995
	5.42	1.96	-4.35				5.05	2.08	-1.93

Table 4 illustrates the relationship between the market timing ability of sample funds and changes in management structure. During the sample period, the management structure changed from individual management to team management (Panel A), or from team management to single management (Panel B), these funds that change their management structure must maintain the same management structure for more than three years before and after the change. The differences in total performance, market timing, and security selection before and after the structural change in Panel A are not significant. The results in panel B show that α before and after the structural change is significantly positive, and α after the structural change is significantly reduced compared to before. The regression results of TM and HM models show that α is significantly smaller after changing the structure than before. In terms of market timing, after the change of the structure, it is weaker than before the change. This result shows that market timing or security selection performance tends to deteriorate after the management structure is changed from team to individual. This result shows that team-managed funds outperform individually managed funds in overall performance, market timing, and security selection.

4.4. Decentralization and Coordination Costs of Fund Management

To study the relationship between market timing, security selection, and fund performance, we regressed between market timing and security selection (Panel A) and between market timing and overall fund performance (Panel B), and found The regression coefficient estimates and the t-statistics for the mean of the associated time series are reported, and the regression results are reported in Table 5. Model 1 represents various types of performance from the performance attribution method, and the performance of Model 2 and Model 3 are from the five-factor TM model and the five-factor HM model. The control variables in the regression include fund size (log (TNA), the logarithm of the fund’s net assets), the expense ratio (expense), the turnover rate of the holdings during the reporting period (turnover), and the fund’s establishment period (log (Age), the age of the fund). logarithm).

Table 5. The Relationship Between Market Timing, Security Selection, and Fund Performance

	full sample			stock type						Hybrid						
				Separate management			team management			Separate management			team management			
	[1]	[2]	[3]	[1]	[2]	[3]	[1]	[2]	[3]	[1]	[2]	[3]	[1]	[2]	[3]	
Panel A: Security Selection Performance																
intercept	-2.2	-1.3	-1.1	-0.9	-2.0	-1.2	-0.4	1.9	4.8	-2.4	2.7	2.6	0.1	-1.3	-1.1	
Log (TNA)	0.1	0.1	0.1	0.1	0.1	0.1	0.0	-0.1	-0.1	0.2	0.1	0.1	0.0	-0.1	-0.0	
Expense	-0.2	0.5	0.1	-0.2	-0.3	-0.0	-0.1	-1.5	-1.9	-0.5	-2.0	-2.3	-0.1	2.5	1.7	
Turnover	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MT	0.8	-1.1	-1.1	0.9	-2.3	-1.2	2.9	1.7	0.6	0.8	-0.7	-1.0	0.9	-1.2	-0.8	
Panel B: Overall Fund Performance																
MT	1.8	-0.1	-0.1	1.9	-1.3	-0.2	3.9	2.7	1.6	1.8	0.3	-0.0	1.9	-0.2	0.2	

From the results of the whole sample, it can be seen that there is a negative relationship between market timing and the fund's security selection performance.

In Panel A, we next examine the relationship between market timing and security selection skills for individual funds and team-managed funds, respectively, regressing on the full sample of open-end funds and a subsample of equity funds and hybrid funds. analyze. In stock funds and hybrid funds, the separately managed market timing performance is negatively correlated with securities selection performance. In team-managed stock funds, market timing ability is positively correlated with security selection performance; while in team-managed hybrid funds, market timing ability is negatively correlated with security selection. Panel A shows that market timing and security selection skills are negatively correlated.

Because the overall performance of the fund is the sum of market timing and security selection, the MT coefficient in panel B is equal to the MT coefficient in panel A plus one. In panel B we report only the value of the market timing variable (MT). Again, we find a negative correlation between market timing and security selection skills. This relationship applies to the full sample as well as stock-type separately managed funds. Since the fund's security selection performance is negatively correlated with market timing performance, there is no significant relationship between total performance and MT.

5. IN CONCLUSION

This paper empirically examines the relationship between fund management structure and fund investment strategy and the the economic consequences of investment strategy choice. The study found that: in the total performance, individually managed funds are significantly better than team managed funds, and mixed funds are better than stock funds. In stock fund

management, the stock selection ability and timing ability of team management are better than those of individual management. In mixed fund management, the stock selection ability of individual management is better but the timing ability is relatively poor. This shows that the differentiation of management structure and investment strategy depends on the type of fund and investment objectives. Hybrid funds are more suitable for a separate management structure, while equity funds are more suitable for a team management structure.

Before and after the change of the management structure, there are also obvious characteristics, that is, the funds managed by the team are better than the funds managed by the individual management in the total performance, market timing and security selection.

There is mutual restriction between stock selection behavior and timing behavior, and the empirical test also finds that there is a negative relationship between stock selection and timing performance. Pursuing a stock-picking strategy means giving up the timing strategy in moderation.

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