

研究报告

2018

25

56

2018

9

16

Carhart

Treynor - Mazuy

Bootstrap

338

108

31.95%

108

89

338

26.33%

19

338

38

11. 24%

1

Car har t

/

Treynor - Mazuy

/

	1	/		%
	/			

$\geq 50\%$

1967 Michael Jensen

CAPM

CAPM

CAPM

$$R_{it} - R_{ft} = \alpha_i + \beta_{im} * (R_{mt} - R_{ft}) + \varepsilon_{it}$$

$$\begin{matrix} R_{it} & i & t & R_{ft} & t & R_{it} - R_{ft} \\ i & t & R_{mt} & t & (R_{mt} - R_{ft}) \\ & t & \beta_{im} & \varepsilon_{it} \end{matrix}$$

$$\alpha_i \approx \bar{R}_{it} - \bar{R}_{ft} - \beta_{im} * (\bar{R}_{mt} - \bar{R}_{ft})$$

$$\beta_{im} * (\bar{R}_{mt} - \bar{R}_{ft}) \quad \text{CAPM} \quad i$$

0

0

0

Fama French 1992 1993

Fama-French

$$R_{it} - R_{ft} = \alpha_i + \beta_{im} * (R_{mt} - R_{ft}) + \beta_{ismb} * SMB_t + \beta_{ihml} * HML_t + \varepsilon_{it} \quad (3)$$

$$R_{it} - R_{ft} = \alpha_i + \beta_{im} (R_{mt} - R_{ft}) + \beta_{ismb} SMB_t + \beta_{ihml} HML_t + \beta_{imom} MOM_t + \varepsilon_{it}$$

A

1997 Carhart Fama-French

Carhart

$$R_{it} - R_{ft} = \alpha_i + \beta_{im} (R_{mt} - R_{ft}) + \beta_{ismb} SMB_t + \beta_{ihml} HML_t + \beta_{imom} MOM_t + \varepsilon_{it} \quad (4)$$

MOM_t

α_i

$$\alpha_i \approx \bar{R}_{it} - \bar{R}_{ft} - \beta_{im} (\bar{R}_{mt} - \bar{R}_{ft}) - \beta_{ismb} \overline{SMB_t} - \beta_{ihml} \overline{HML_t} - \beta_{imom} \overline{MOM_t} \quad (5)$$

0

0

0

Carhart

Tr eynor Mazuy 1966

Henr i ksson 1984

Bol l en Busse 2001

CAPM

Tr eynor

Mazuy CAPM

Tr eynor - Mazuy

$$R_{it} - R_{ft} = \alpha_i + \beta_{im} * (R_{mt} - R_{ft}) + \gamma_i * (R_{mt} - R_{ft})^2 + \varepsilon_{it} \quad (6)$$

1

0 i

0

Tr eynor - Mazuy

Car har t

Tr eynor - Mazuy

Car har t

Tr eynor - Mazuy

$$R_{it} - R_{ft} = \alpha_i + \beta_{im} * (R_{mt} - R_{ft}) + \beta_{ismb} * SMB_t + \beta_{ihml} * HML_t + \beta_{imom} * MOM_t$$

$$+ \gamma_i * (R_{mt} - R_{ft})^2 + \varepsilon_{it} \quad (7)$$

Car har t γ

Bootstrap

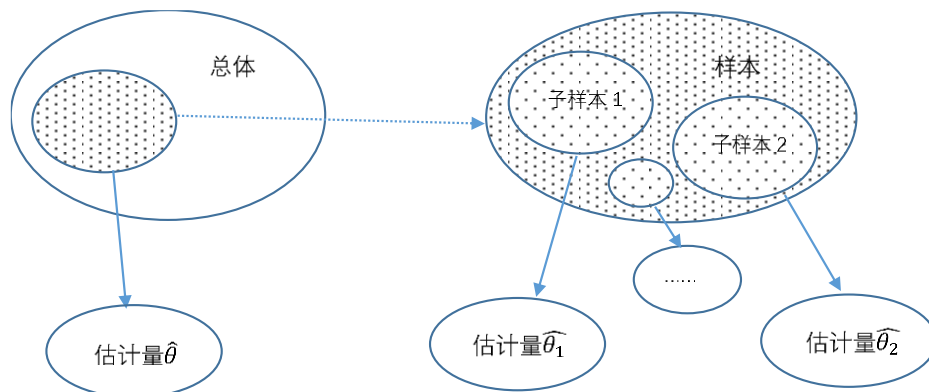
Bootstrap

Efron 1979

Bootstrap

1

1000



Car har t

A

1000

4

1000

1000

A

1000

Car har t

1000

5%

1000

5%

Car har t

A

1000

5%

A

Car har t

748

338

410

2

3

Carhart

α

10

α

10

α

α β_m β_{smb} β_{hml} b_{mom}

R^2

Carhart

α - 6.85%~18.36%

β_m

0.64~0.81

β_{smb} - 0.20~0.01

β_{hml}

- 0.42~ - 0.20

β_{mom}

0.07~0.24

R^2 82%

3

Carhart

	α	β_m	β_{smb}	β_{hml}	b_{mom}	
α						

1 10

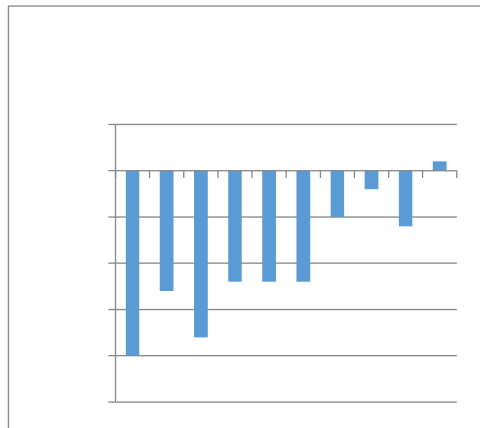
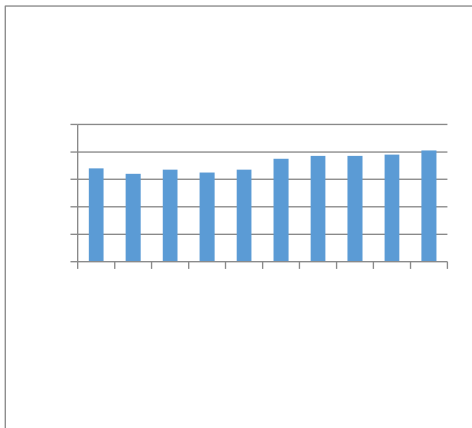
1

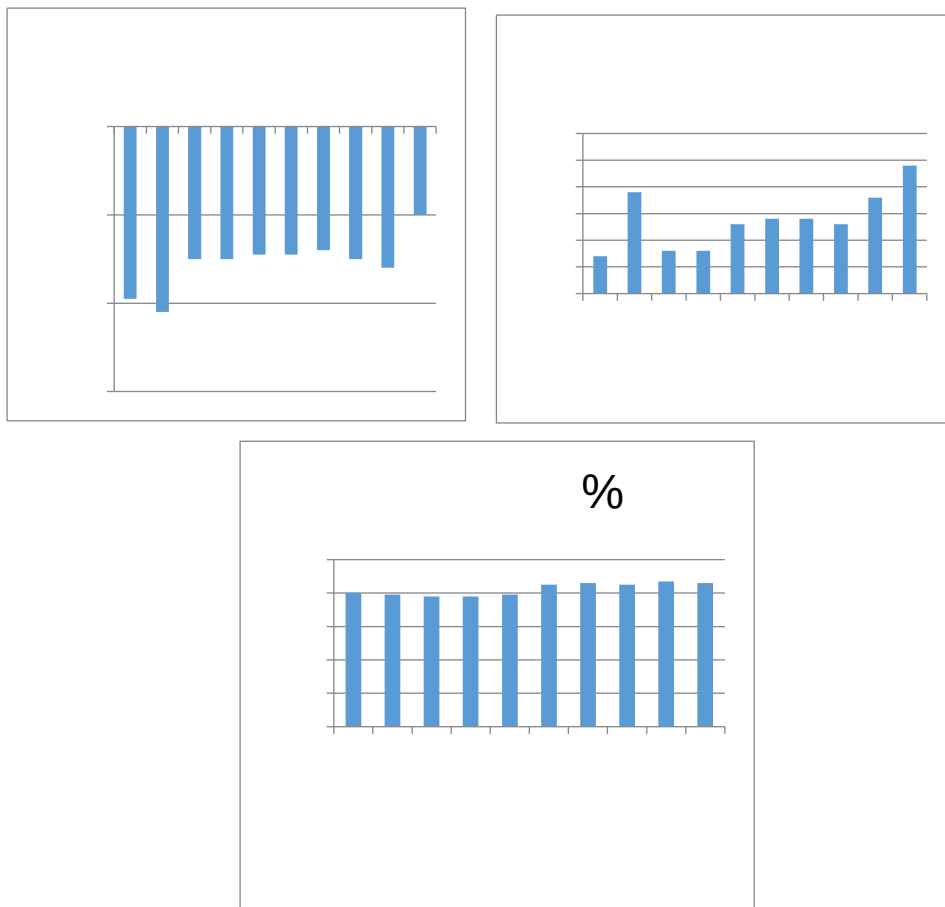
10

- 0.20

0.01

82%





3 四因子模型中不同因子和调整后的回归结果

4 338 α t

5% 221 α t

65.38% 108 α t 1.64

108 31.95%

α 11.45% α 3.13% 32.61%

9 2.66% α

t -1.64 9

α -9.61% α -11.61%

-7.1% 31.95%

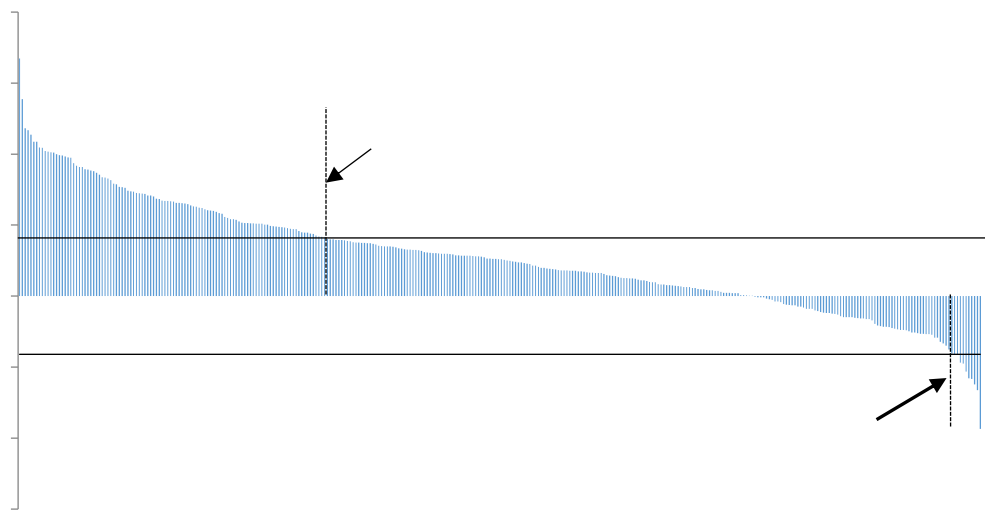


图 位股票型公募在职基金经理其年化选股能力 的 值（显著性）的排列图

4

		α	α		

108

4 Car har t

108

3. 13% 32. 61%

32. 61%

2014

2017

212%

A

56%

156%

5

Car har t

α

10

α

10

α

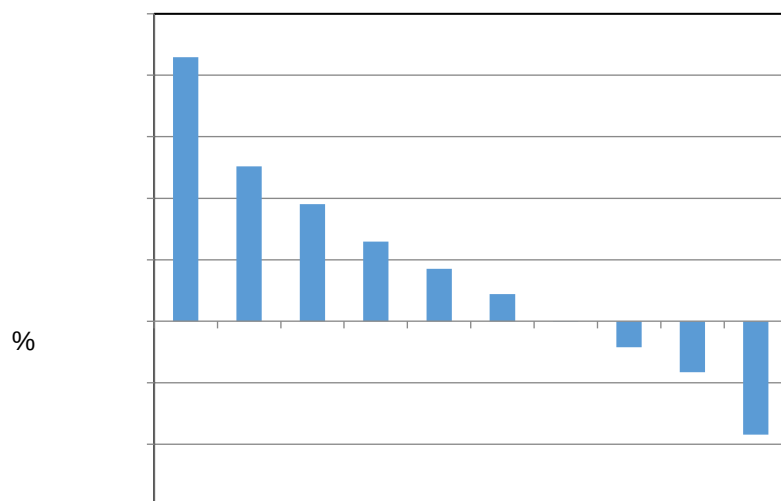
α β_m β_{smb} β_{hml} b_{mom}

R^2

Car har t

α - 9. 22%~21. 48%

β_m 0. 73~0. 79



5

6

1

10

b_{mom}

R^2

1

10

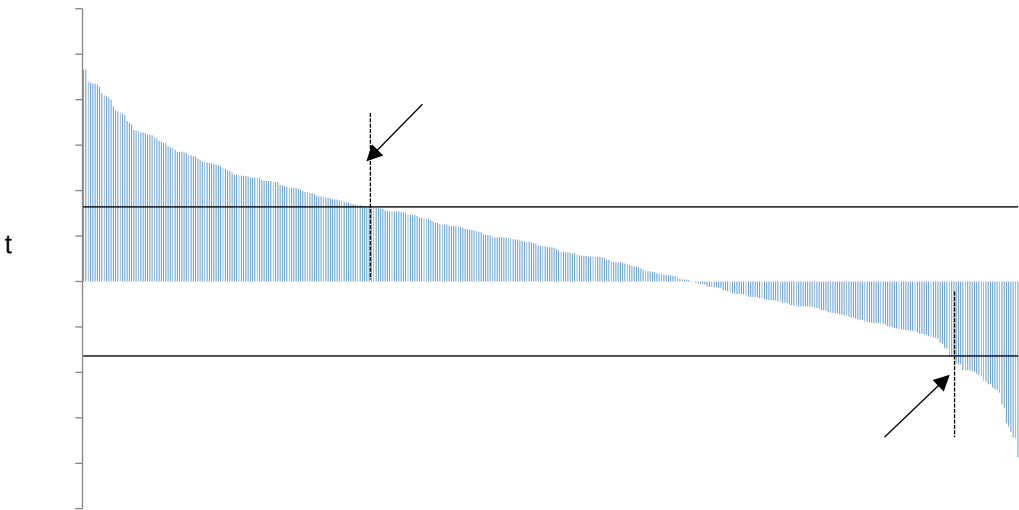
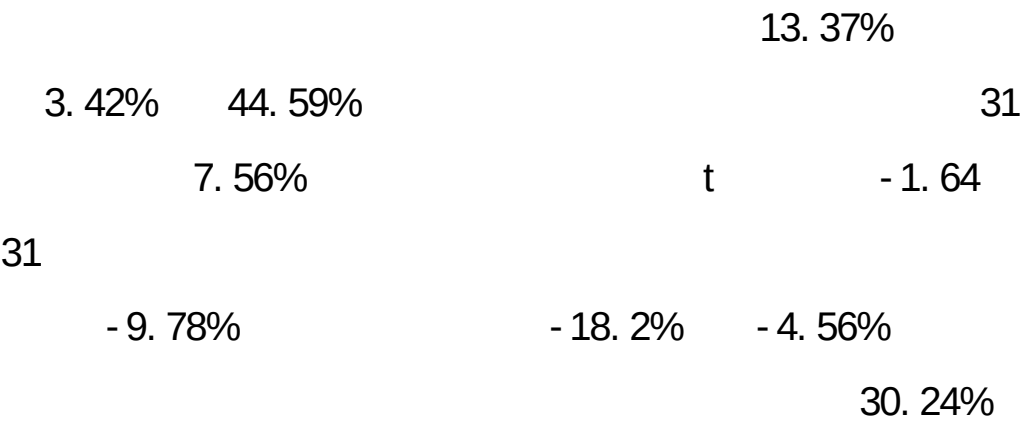
1

-0.36

10

0.10

83%



7 位股票型公募在职基金经理其年化选股能力 的 值（显著性）的排列图

6

		α	α		

124

3.42% 44.59%

22.43%

2004

2009

422%

A

180% 7

4

Treynor Mazuy 1966

Henriksson 1984 Bollin Busse 2001

Treynor - Mazuy 338

7 Treynor - Mazuy

10 1

10

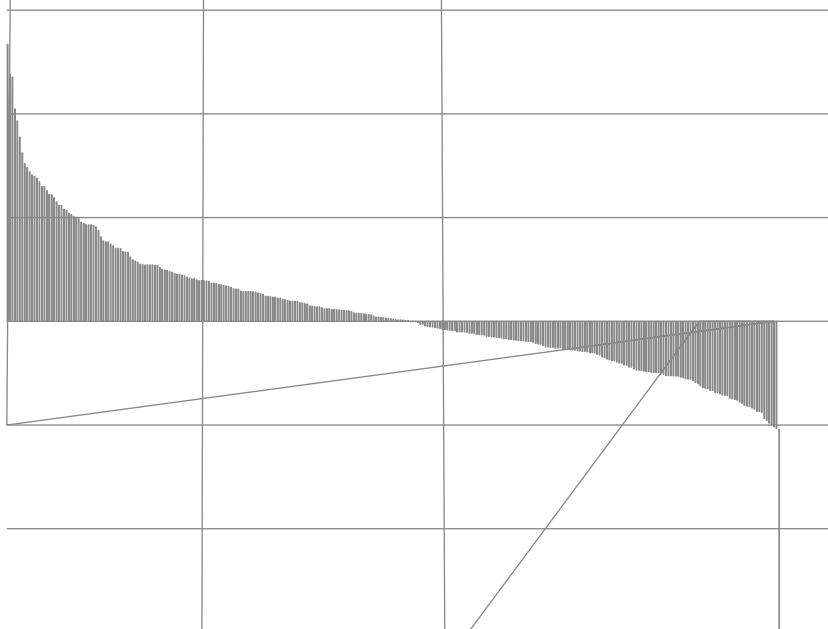
b_{mom}

R^2

- 0.75 0.88

R^2 83%

	γ	α	β	β	β	β	
γ							
γ							



8 Treynor-Mazuy

8 Treynor - Mazuy

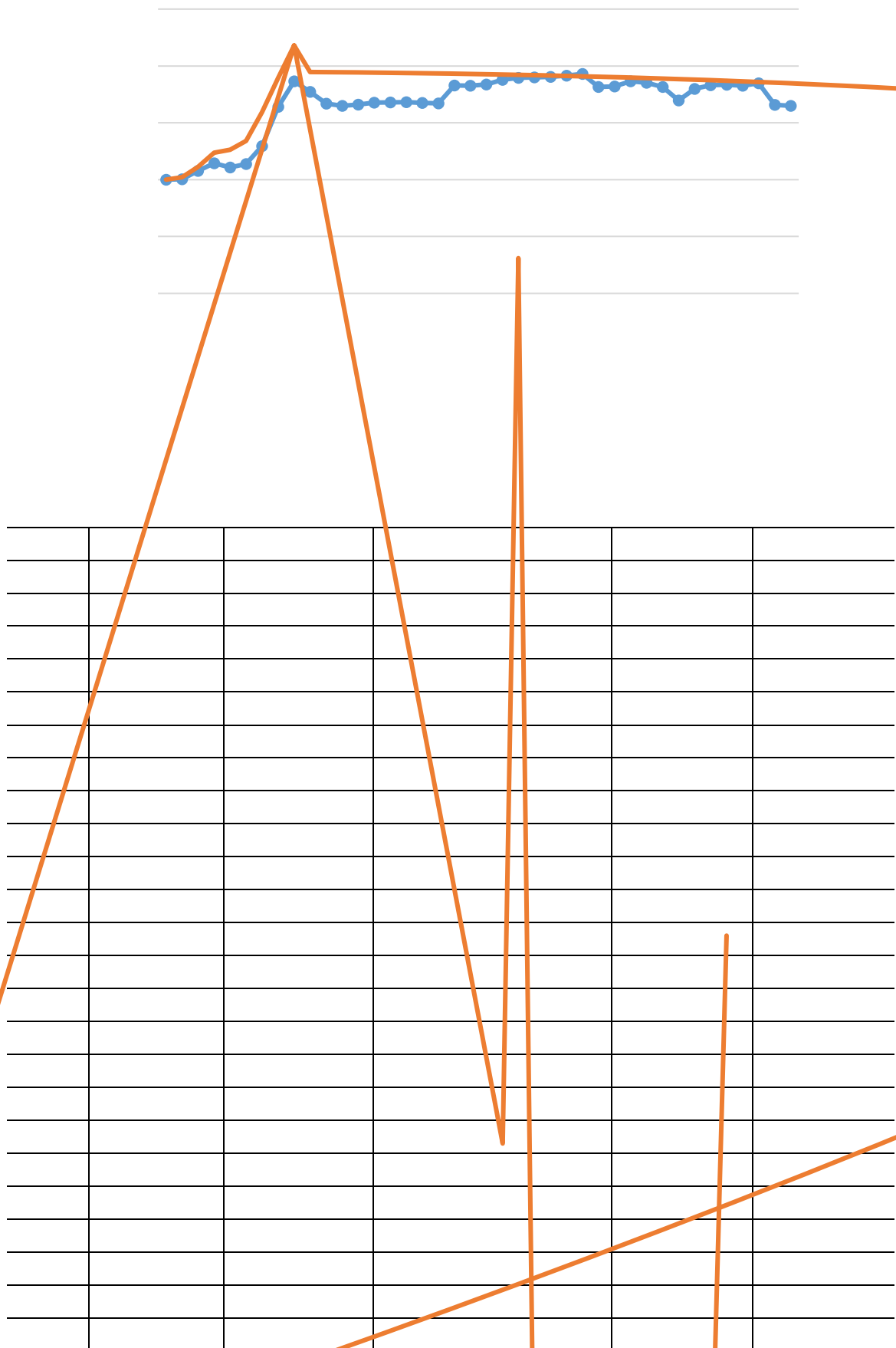
2014

65%

A

56%

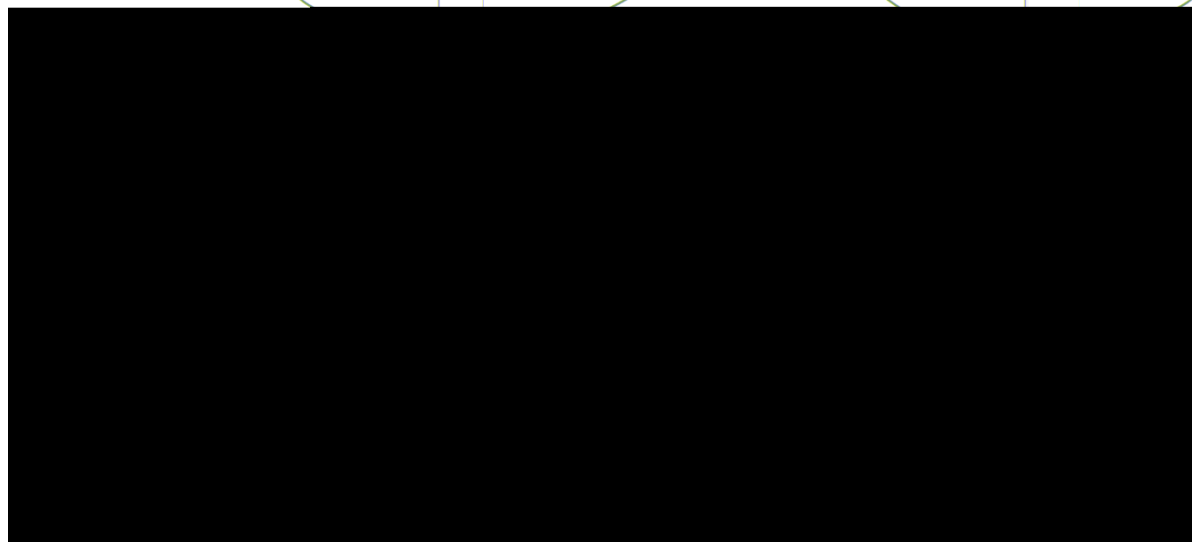
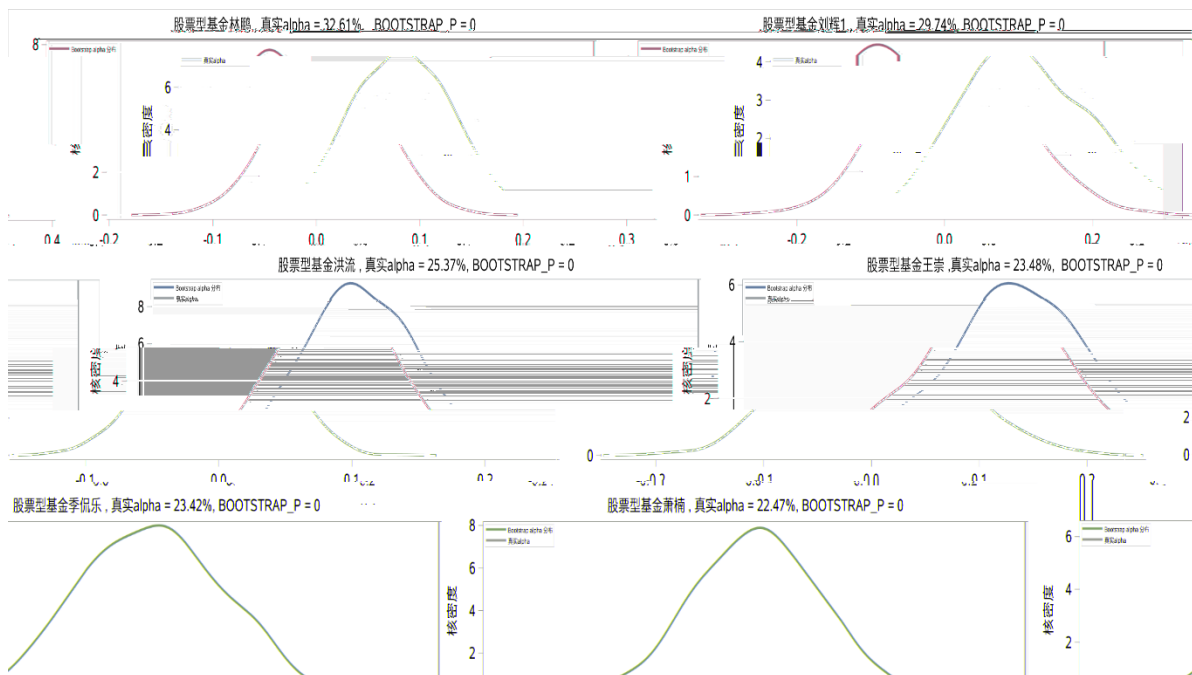
2017



10 1

	2009	2017	
72%	A	51%	11

10					



12

Car har t

338

108

31.95%

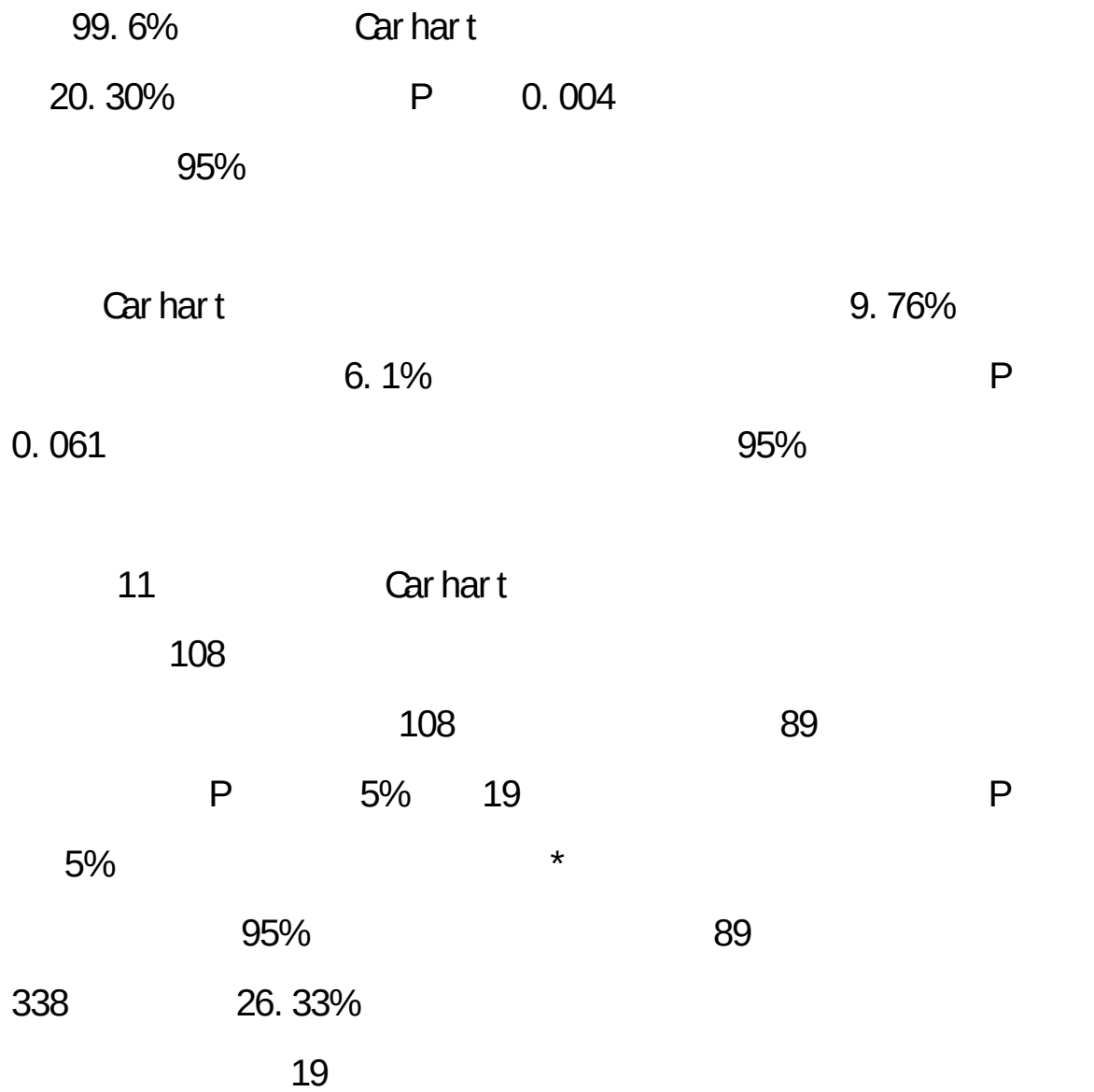
108

12

10

1000

Car har t



11				
		α (%)	α t	p

*	P	5%		

Treynor - Mazuy 338

38 11.24%

38

10

13

Treynor - Mazuy

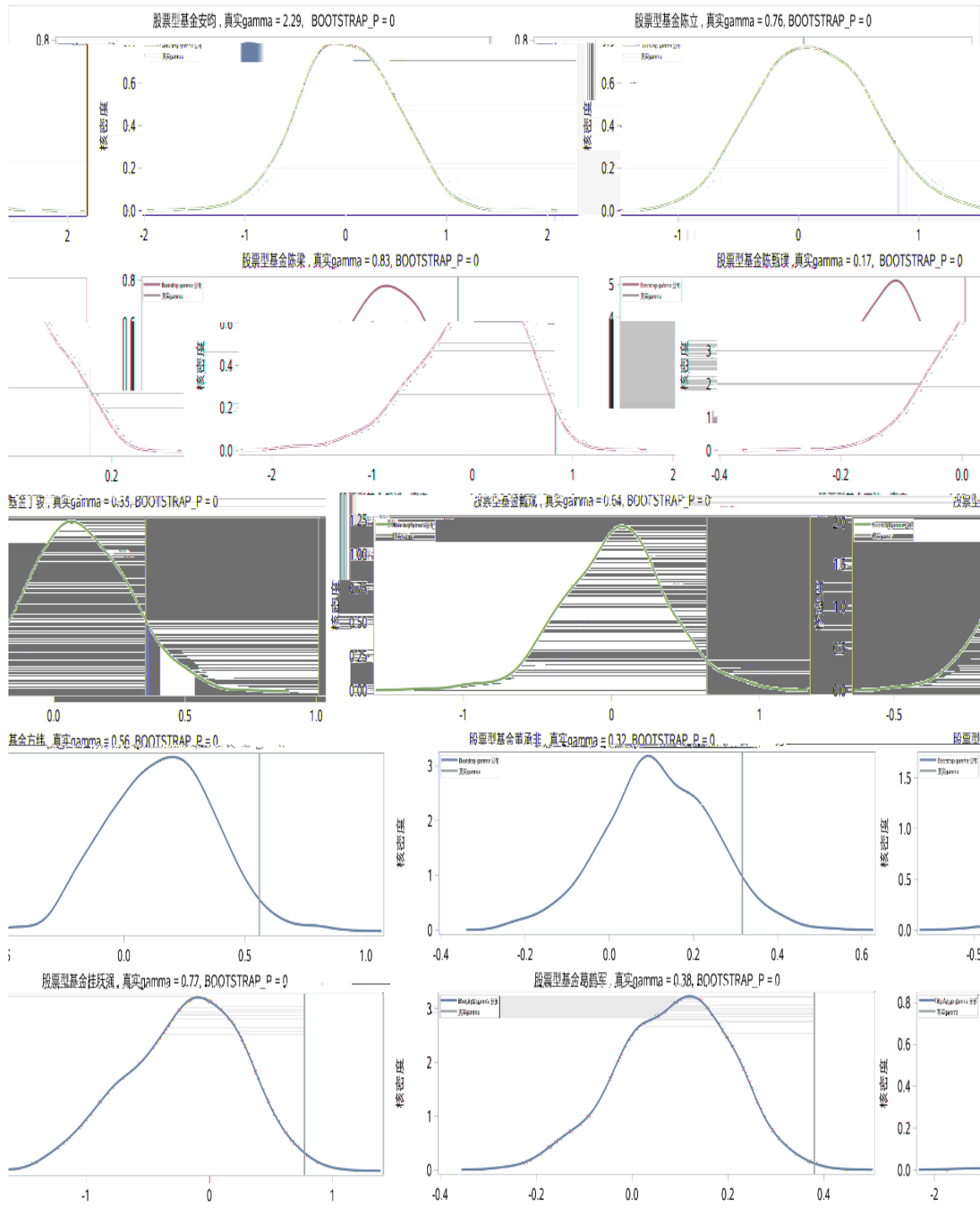
Treynor - Mazuy

0.35

0%

P 0

95%



Treynor-Mazuy

12 Treynor - Mazuy

38

38

P

5%

95%

38

338

11.24%

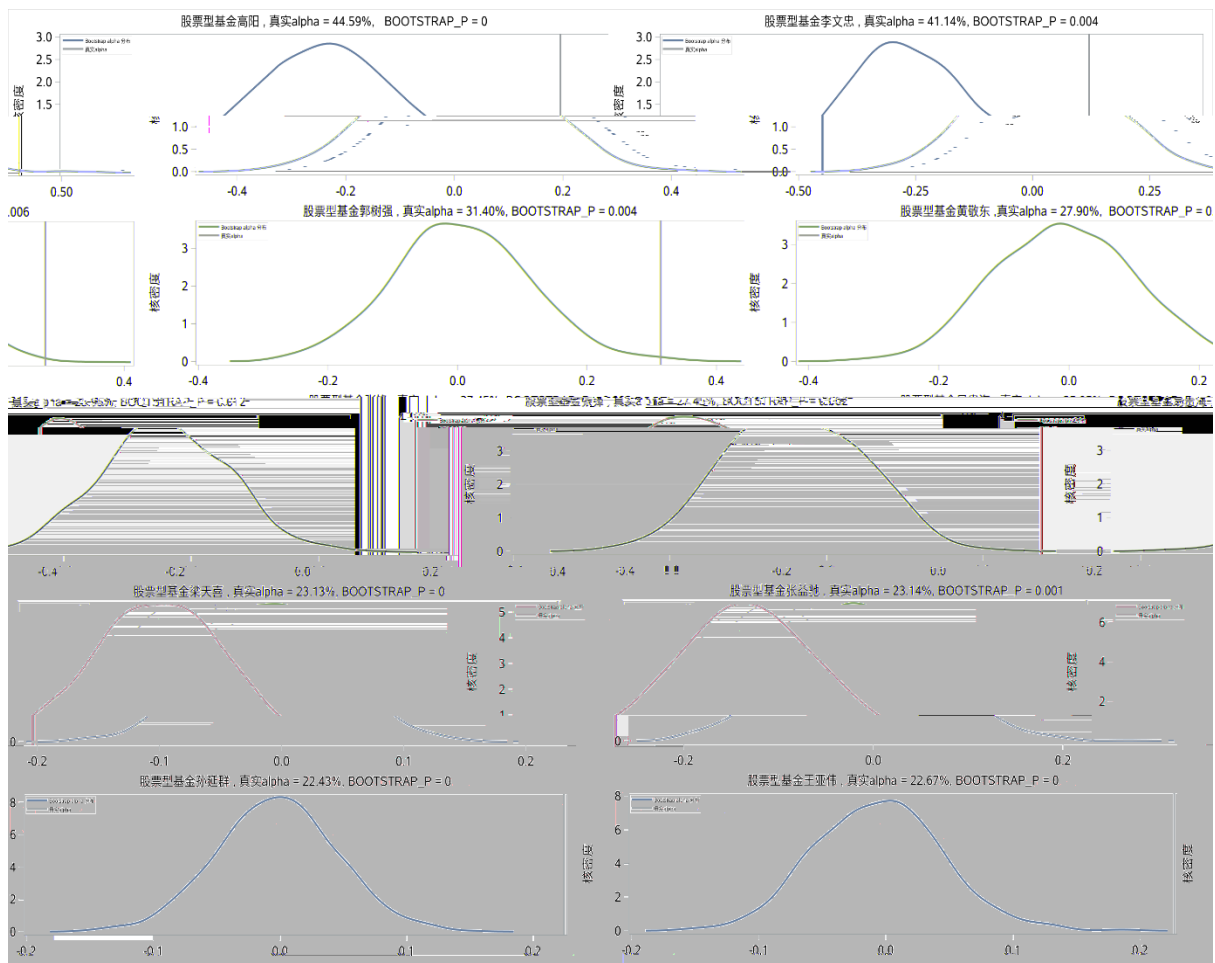
12

			t	P
1		2.30	5.34	0.000
2		1.25	4.76	0.000
3		2.00	4.70	0.000
4		0.87	4.10	0.000
5		0.73	3.87	0.000
6		2.29	3.55	0.000
7		0.85	3.25	0.000
8		0.62	3.04	0.000
9		0.38	2.97	0.000
10		1.55	2.88	0.000
11		0.45	2.82	0.000
12		0.56	2.79	0.000
13		0.80	2.76	0.000
14		0.77	2.69	0.000
15		0.97	2.60	0.000
16		0.59	2.60	0.000
17		0.32	2.52	0.000
18		0.65	2.44	0.000
19		0.76	2.44	0.000
20		0.63	2.38	0.000
21		0.55	2.30	0.000
22		0.94	2.24	0.000
23		0.63	2.23	0.000
24		0.58	2.16	0.000
25		0.58	2.14	0.000
26		0.74	2.09	0.002
27		0.56	2.05	0.000

28		0.54	2.02	0.000
29		0.79	2.00	0.000
30		0.77	1.98	0.000
31		0.35	1.91	0.000
32		0.83	1.88	0.000
33		0.64	1.87	0.000
34		0.37	1.86	0.001
35		0.49	1.86	0.000
36		0.76	1.84	0.000
37		0.48	1.82	0.000
38		0.17	1.75	0.000

Boot st r ap

Boot st r ap



14

α

Car har t

410

124

30.24%

124

14

10

1000

Car har t

99.6%

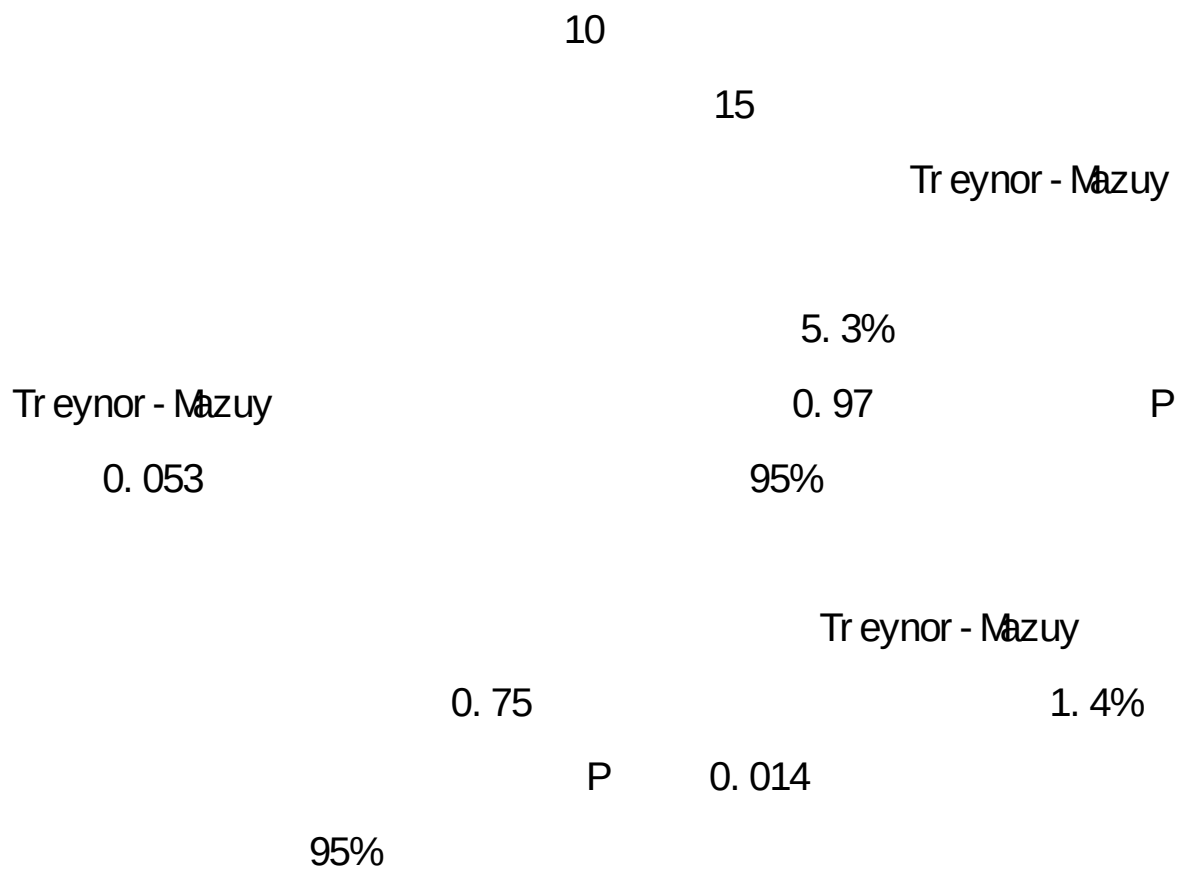
Car har t

31.40%

P 0.004

[illegible]

- 45 -



15

Treynor-Mazuy

14

[illegible]

*	P	5%		

Car har t

Tr eynor - Mazuy

Boot st r ap

2018 9 16

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