

研究报告

2015

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清华大学国家金融研究院

民生财富研究中心

$$R_{it} - R_{ft} = \alpha_i + \beta_{im} * (R_{mt} - R_{ft}) + \beta_{ismb} * SMB_t + \beta_{ihml} * HML_t + \varepsilon_{it} \quad 1$$

$R_{it} - R_{ft}$

$R_{mt} - R_{ft}$

SMB_t

HML_t

R_{ft}

α

α

$$R_{it} - R_{ft} = \alpha_i + \beta_{i\,m} * (R_{mt} - R_{ft}) + \gamma_i * (R_{mt} - R_{ft})^2 + \beta_{i\,smb} * SMB_t + \beta_{i\,hml} * HML_t + \varepsilon_{it}$$

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$R_{it} - R_{ft}$

$R_{mt} - R_{ft}$

SMB_t

HML_t

R

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α		T M
	2 5%	1 2%
	17 9%	19 6%
75%	6 7%	5 5%
50%	2 8%	2 0%
25%	1 2%	3 2%
	16 8%	22 8%

α

α

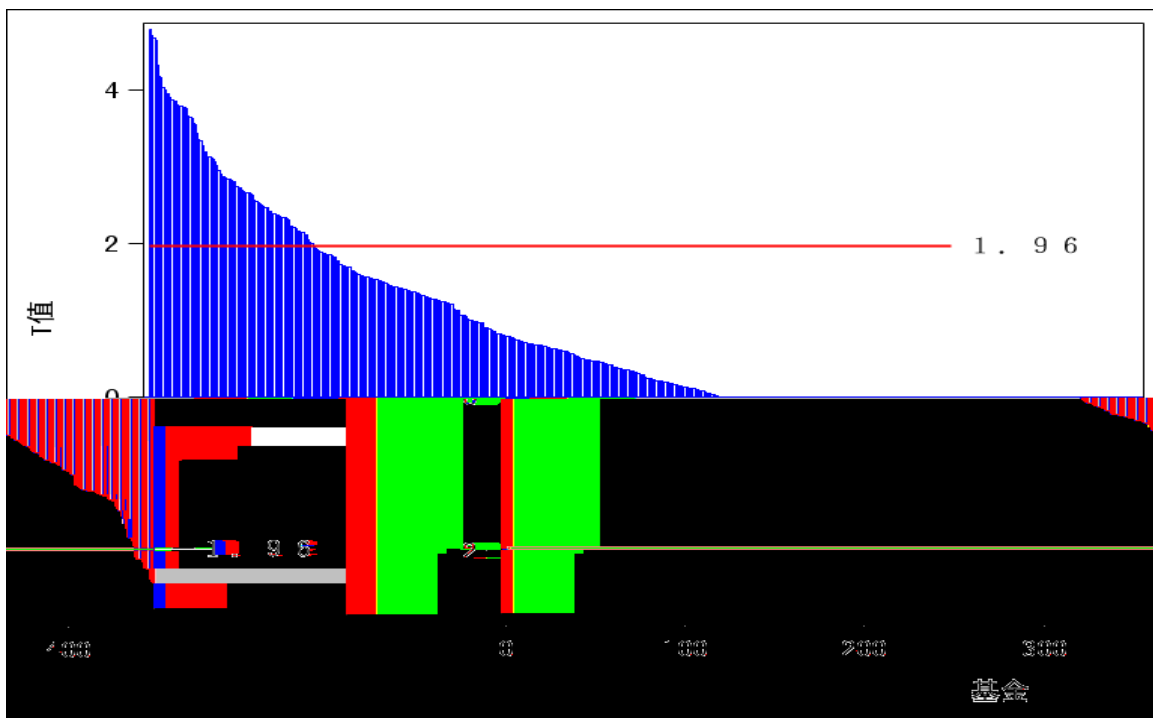
α

α

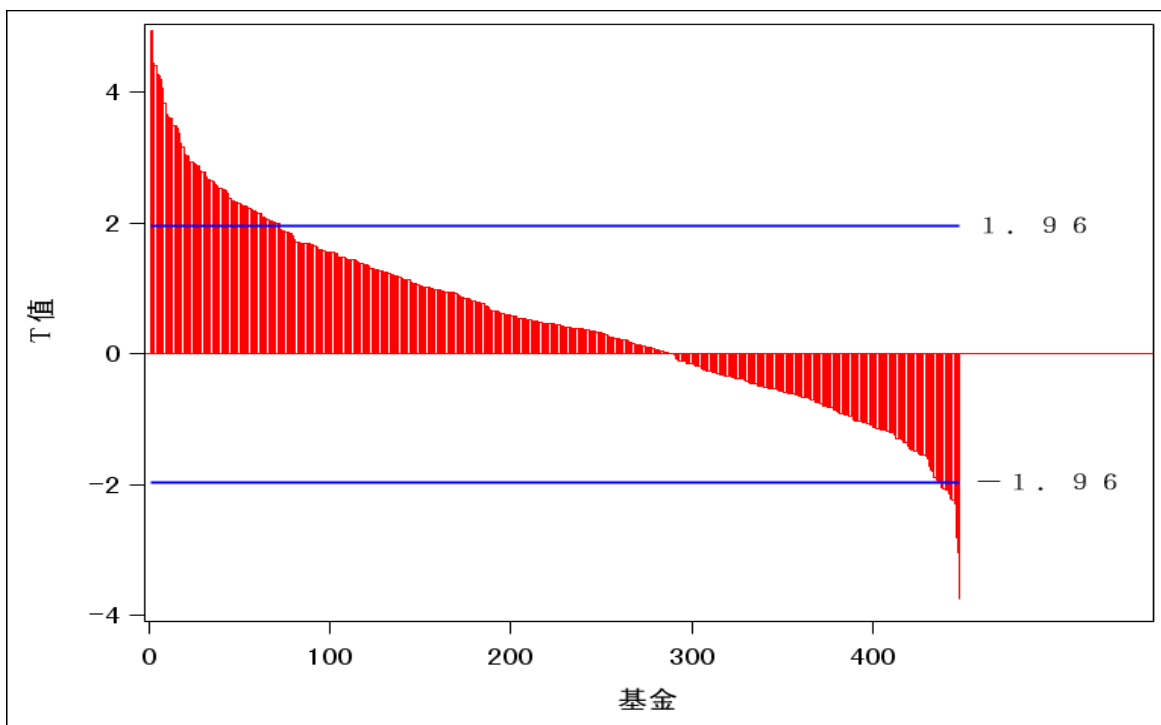
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	α	α
	90	20 1%
T M	68	15 2%

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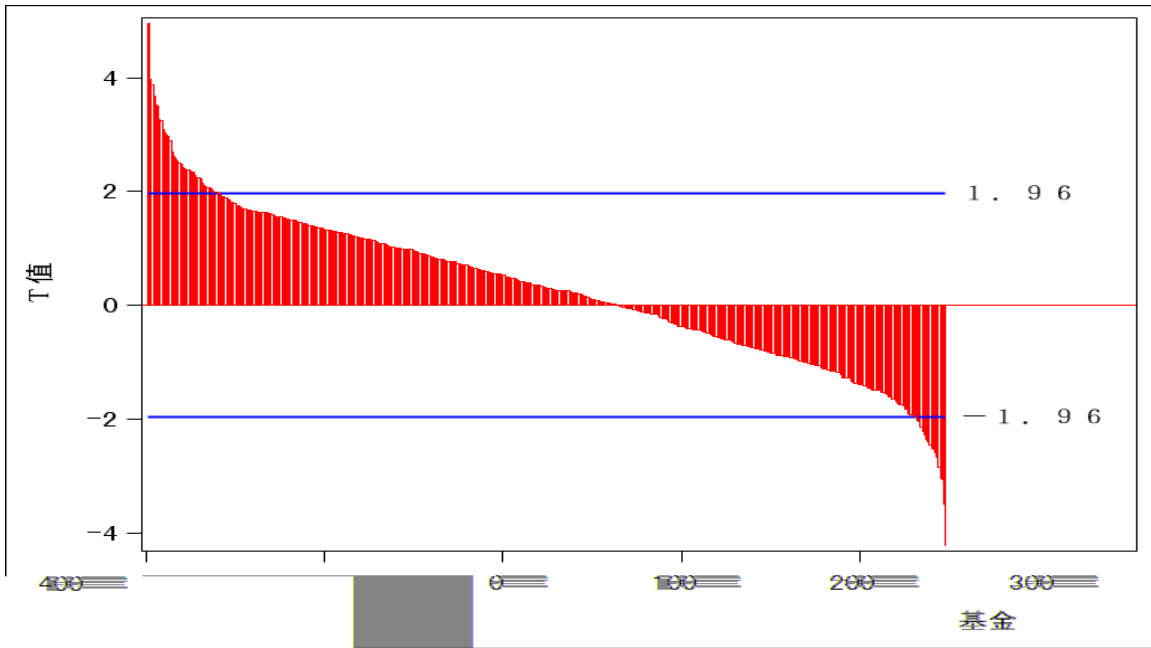
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α		γ		
		γ		
α				
	321	10	33	364
	9	0	7	16
	59	7	2	68
	389	17	42	448

α		γ		
	γ			
α				
	71 7%	2 2%	7 4%	81 3%
	2 0%	0 0%	1 6%	3 6%
	13 2%	1 6%	0 5%	15 2%
	86 8%	3 8%	9 4%	100 0%

$$R_{it} - R_{ft} = \alpha_i + \beta_{i\ m} * (R_{mt} - R_{ft}) + \beta_{i\ smb} * SMB_t + \beta_{i\ hml} HML_t + \varepsilon_{it} \quad 3$$

$$R_{it} - R_{ft} = \alpha_i + \beta_{i\ m} * (R_{mt} - R_{ft}) + \gamma_i * (R_{mt} - R_{ft})^2 + \beta_{i\ smb} * SMB_t + \beta_{i\ hml} * HML_t + \varepsilon_{it} \quad 4$$

α

	13 8%	4 76	0 000		8 2%	2 82	0 002
	14 2%	4 75	0 000		9 4%	2 8	0 009
	12 6%	4 67	0 000		9 1%	2 77	0 005
	13 9%	4 65	0 000		7 8%	2 77	0 006
	11 8%	4 34	0 000		7 4%	2 73	0 005
	8 3%	4 21	0 000		6 4%	2 72	0 004
	11 3%	4 15	0 000		7 3%	2 69	0 008
	8 3%	4 11	0 000		11 0%	2 69	0 008
	13 2%	4 02	0 000	2	9 0%	2 68	0 008
	15 2%	3 98	0 000		15 7%	2 66	0 010
	7 9%	3 95	0 000		8 2%	2 66	0 014
	9 1%	3 92	0 000		8 4%	2 66	0 006
	9 8%	3 91	0 000		7 3%	2 62	0 014
	9 2%	3 89	0 000		7 2%	2 6	0 015
	13 6%	3 86	0 000		11 0%	2 59	0 015
	10 7%	3 86	0 000		7 2%		

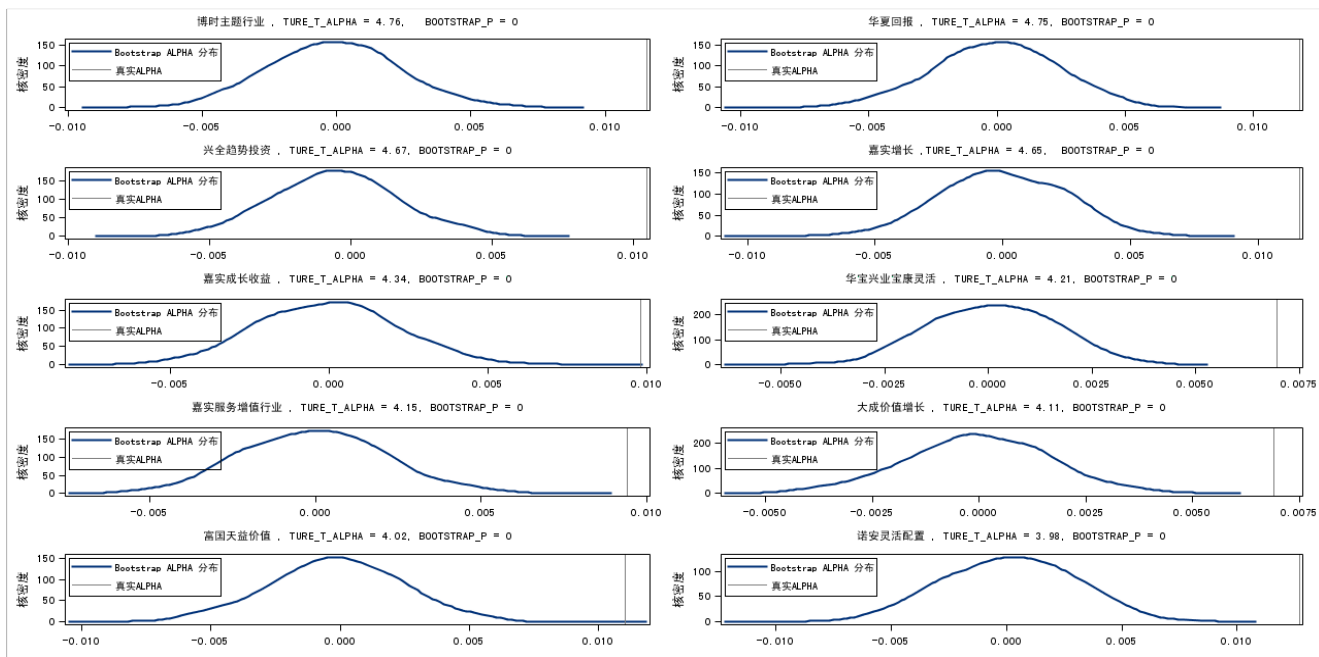
	11 9%	3 44	0 001		7 6%	2 36	0 020
	8 9%	3 44	0 002		9 5%	2 35	0 025
	7 8%	3 33	0 000		5 9%	2 33	0 016
	15 6%	3 31	0 003		10 0%	2 27	0 024
	8 6%	3 21	0 004		9 5%	2 26	0 036
	12 4%	3 14	0 001	2	7 1%	2 23	0 021
	9 4%	3 13	0 003		14 0%	2 2	0 033
	7 8%	3 12	0 002		9 0%	2 19	0 026
	7 1%	3 12	0 004		6 1%	2 18	0 026
	10 2%	3 11	0 001		6 6%	2 17	0 033
	8 4%	3 04	0 001		7 1%	2 16	0 041
	7 3%	3 01	0 003		12 1%	2 16	0 030
	9 6%	3 01	0 002		6 1%	2 15	0 040
	9 7%	3	0 000		7 3%	2 12	0 043
	13 6%	3	0 002		6 7%	2 11	0 026
	9 8%	2 91	0 003		7 1%	2 07	0 033
	7 7%	2 89	0 002		7 0%	2 04	0 091
	9 7%	2 83	0 004		6 2%	2 02	0 041
	9 7%	2 83	0 005		7 6%	1 99	0 054

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	0 95	4 88	0 000		0 43	2 39	0 015
	1 54	4 03	0 002		1 54	2 37	0 027
	1 06	3 84	0 022		0 43	2 36	0 030
	0 53	3 64	0 000		0 83	2 33	0 055
	1 42	3 63	0 009		0 94	2 33	0 064
	0 60	3 54	0 001		0 59	2 33	0 008
	0 78	3 25	0 001		0 66	2 32	0 062
	1 22	3 18	0 041		1 27	2 22	0 046
	1 60	3 12	0 000		0 62	2 18	0 103
	2 64	3 03	0 002		0 62	2 16	0 101

	1 30	3 01	0 012		0 37	2 12	0 113
	2 31	3 00	0 002		0 96	2 09	0 144
	0 79	2 97	0 027		1 16	2 08	0 027
	0 43	2 74	0 041		1 38	2 06	0 066
	0 90	2 64	0 006		0 41	2 05	0 067
	1 77	2 61	0 036		0 59	2 05	0 071
	1 63	2 54	0 020		1 44	2 04	0 010
	1 53	2 54	0 004		1 48	2 02	0 065
	0 60	2 47	0 086		1 31	2 00	0 045
	0 61	2 45	0 023		0 60	1 98	0 351
	2 45	2 44	0 005		1 13	1 96	0 061

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