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摘 要： 2003—2019
A

关键词：
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2020 6 2004 107
5887 7. 45 1. 54
20. 67%¹

2012
Ben - Rephael et al. 2012 Goldstein et al. 2017
1940

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* 71790605 71790591 71903106

2014 8

140%

“ ”

Simutin 2014

Frazzini and Pedersen 2014

“

” “ ”

“ ”¹

Boguth and

Simutin 2018

9.26%

“ ”

¹
” 110%

90%
1.10

“ ”

“

Huang et al. 2011

Boguth and Simutin 2018 Christoffersen and Simutin 2017
Frazzini and Pedersen 2014 BAB Betting – Against – Beta
Asness et al. 2020 BAB

2013 Huang et al. 2011
Dong et al. 2019

Mansononi et al. 2012

2017

Backward Holding Return Gap		
BHRG		
$BHRG_{jt}$ $=$ $\sum_{i=1}^M sw_{ijt} \times ret_{it} - fee_{jt} - RetNav_{jt}$ 1 j t M sw_{ijt} i ret_{it} t i fee_{jt} $RetNav_{jt}$ j t		
$BHRG_{jt}$ 5% w_{it}^{ExWD} 2		
w_{it}^{ExWD} $=$ $\sum_{j=1}^N mv_{ijt} / \sum_{i=1}^M \sum_{j=1}^N mv_{ijt}$ 2 mv_{ijt} j t i 1		
Lewellen and Nagel 200612		
180		
R_{it} $=$ $\alpha_i + \beta_{it_0} R_{M\ t} + \beta_{it_1} R_{M\ t-1} + \beta_{it_2} R_{M\ t-2} + R_{M\ t-3} + R_{M\ t-4} / 3 + \varepsilon_{it}$ 3 R_{it} $R_{M\ t}$		
$R_{M\ t-k}$ $k = 1\ 2\ 3\ 4$ k 2017		
β_{it} $=$ $\beta_{it_0} + \beta_{it_1} + \beta_{it_2}$ 4 2 w_{it}^{ExWD} β_{it}		
Implicit Leverage ConstraintILC		
ILC_t $=$ $\sum_{i=1}^M w_{it}^{ExWD} \times \beta_{it}$ 5 §		

1

−0.20 −0.11

“ ”

“ ”

2008

2015

Pastor et al.

2017 An et al. 2019 2015

5%

85%

2017

1

1% 99%

Panel A

3.72

18.10

85.34%

表 1 变量的描述性统计						
Panel A		P10	P90	Mean	Median	Std. Dev
	%	−0.0583	2.7117	1.1766	0.9909	1.3430
		2.3333	45.6946	18.1045	8.0253	25.0440
		17.0000	85.5378	44.6740	35.4198	26.4063
	%	76.8643	92.0100	85.3404	86.2220	5.4469
	%	1.5000	1.5000	1.4517	1.5000	0.2092
	%	0.2500	0.2500	0.2438	0.2500	0.0222
Panel B		P10	P90	Mean	Std. Dev	AR 1
ILC		0.7186	0.9841	0.8603	0.1054	0.9141
ΔILC		−0.0461	0.0377	−0.0003	0.0440	−0.0271

Panel C		P10	P90	Mean	Median	Std. Dev
Log	Amihud	%	14.0993	16.8102	15.3818	1.0811
			0.3024	0.9462	0.6369	0.2384
			0.0082	0.2940	0.1295	0.0405
			-0.1428	0.1809	0.0115	0.0000
			0.6965	1.6315	1.1627	0.3715

		Lewellen and Nagel 2006		Log	
Panel B					
ILC	AR 1	0.91		ΔILC	
AR 1			-0.03		
Panel C					

1.

24

$$R_{i\tau}^e = \alpha_{it} + \beta_{it}^{ILC} \Delta_{\tau}^{ILC} + \beta_{it}^M R_{M\tau}^e + \varepsilon_{it\tau} \quad \tau \in [t-35, t]$$

$$\Delta_{\tau}^{ILC} \qquad \beta^{ILC}$$

6

$$\beta_{it}^{ILC} \qquad \Delta_{\tau}^{ILC}$$

表 2 按照隐性杠杆约束敏感程度高低分组的股票组合

		Alphas				Carhart			
		CAPM	FF3	Carhart4	FF5	β^{MKT}	β^{SMB}	β^{HML}	β^{UMD}
P1	1. 2166	-0. 1728	-0. 3188	-0. 3605	-0. 1417	1. 1208 ***	0. 1901 *	-0. 4772 ***	-0. 0594
	1. 24	-0. 60	-1. 28	-1. 39	-0. 50	28. 94	1. 78	-4. 03	-0. 70
P10	1. 1553	-0. 0401	0. 0259	0. 0727	-0. 0854	0. 9781 ***	-0. 0642	0. 1313	0. 0667
	1. 36	-0. 22	0. 13	0. 39	-0. 46	34. 29	-0. 73	0. 87	0. 78
P10 - P1	-0. 0613	0. 1327	0. 3447	0. 4333	0. 0563	-0. 1427 **	-0. 2542	0. 6085 **	0. 1260
	-0. 13	0. 32	0. 91	1. 15	0. 14	-2. 41	-1. 43	2. 34	0. 81
Newey - West		t				%	*** ** *	1% 5% 10%	

β_{it}^{ILC}	β_{it}^{ILC}	P1	β_{it}^{ILC}	P10
				CAPM
Fama	French 1992		Fama	French 2015
				Carhart
1997				
0. 43%	t = 1. 15			
				36
			β_{jt}^{ILC}	
			3	
			Q4 - Q1	
				3

表 3 按照隐性杠杆约束敏感程度高低分组的基金组合

		Alphas			Carhart
		CAPM	FF3	Carhart4	β

		Alphas			Carhart			
		CAPM	FF3	Carhart4	β^{MKT}	β^{SMB}	β^{HML}	β^{UMD}
Q4 – Q1	0.0834	0.0386	– 0.0141	0.0755	0.0295	0.1174 **	– 0.0682	0.1223 **
	0.54	0.25	– 0.09	0.49	1.06	2.29	– 1.12	2.30
Newey – West		t			%	***	**	*
							1%	5% 10%

2.

De long et al. 1990
Shen et al. 2017

					P1	P10			P10 – P1			
Carhart4					– 0. 0110			– 1. 0165	***		– 1. 0055	**
					– 0. 04			– 3. 40			– 2. 32	
					– 0. 7880			0. 4054			1. 1933	
					– 1. 54			0. 86			1. 40	
		–			0. 7770			– 1. 4219	***		– 2. 1989	**
					1. 31			– 2. 62			– 2. 28	
FF5					0. 1596			– 1. 0473	***		– 1. 2069	**
					0. 56			– 3. 64			– 2. 50	
					– 0. 7325			0. 3713			1. 1038	
					– 1. 39			0. 81			1. 27	
		–			0. 8921			– 1. 4186	***		– 2. 3107	**
					1. 44			– 2. 63			– 2. 25	
CICSI	2003	2	2019	12								Newey – West
t		%	***	**	*	1%	5%	10%				

Shen et al. 2017	CICSI	
2	4	β_{it}^{ILC}
- 1. 18% t = -2. 43		- 1. 01% t = -2. 32
- 1. 21% t = -2. 58		
	0. 77%	9. 26%
β_{it}^{ILC}	P10	β_{it}^{ILC}
	Hong and Sraer 2016	Shen et al. 2017
	1. 95%	23. 45%
3		

Carhart	β_{jt}^{ILC}	β_{jt}^{ILC}
0. 46% t = 1. 69		
		5

表 5 按照隐性杠杆约束敏感程度高低分组的基金组合:基于情绪的条件定价

			CAPM			
			—		—	
Q1	0.1818	2.0717 **	−1.8899	0.1970	−0.1213	0.3183
	0.26	1.96	−1.54	0.83	−0.31	0.65
Q4	−0.0483	2.6229 **	−2.6711 **	−0.0324	0.3367	−0.3691
	−0.06	2.33	−1.98	−0.10	0.80	−0.65
Q4 − Q1	−0.2301	0.5512 *	−0.7812 **	−0.2294	0.4579 *	−0.6873 **
	−1.45	1.87	−2.28	−1.50	1.65	−2.21
			FF3			
			—		—	
Q1	0.3612 *	0.2985	0.0627	0.3711 *	0.3043	0.0668
	1.87	1.19	0.19	1.87	1.17	0.21
Q4	0.0933	0.6956 **	−0.6023	0.2068	0.7617 **	−0.5549
	0.41	2.29	−1.55	0.98	2.49	−1.46
Q4 − Q1	−0.2679 *	0.3971	−0.6650 **	−0.1644	0.4574 *	−0.6217 **
	−1.71	1.46	−2.21	−1.21	1.69	−2.01
Newey − West			t	% *** ** *	1% 5% 10%	

表 6 流动性高、低区：股票与债券型基金

Panel A				Panel B				
Carhart4				Carhart4				
—				—				
P1	−0.6445 ***	0.0936	−0.7381 *	Q1	−0.4807 *	−0.8808 *	−0.2290	−0.6518
	−2.77	0.18	−1.68		−1.87	−1.90	−0.92	−1.35
P10	0.2407	−0.1959	0.4365	Q4	0.1330	0.2347	0.0691	0.1656
	0.90	−0.49	0.79		0.88	0.88	0.45	0.59
P10 − P1	0.8852 **	−0.2894	1.1746 *	Q4 − Q1	0.6138 *	1.1155 **	0.2981	0.8174
	2.11	−0.36	1.81		1.89	1.96	1.05	1.50

Ma et al. 20207Newey – WestR007t% *** ** *1% 5%

Wind10%

Panel B “ ”

3 1

Ma et al. 2020

Panel B

2008 10

2010 3

2010 3

Q1 β_{it}^{ILC}
Q4 β_{it}^{ILC}

	2. 5138 **	2. 5861 **	0. 0723	0. 1212	1. 1054	0. 9842
	2. 11	2. 03	0. 26	0. 16	0. 78	1. 04
—	−2. 5146	−2. 9816 *	−0. 4671	−0. 0924	−0. 9336	−0. 8412
	−1. 46	−1. 67	−1. 32	−0. 08	−0. 63	−0. 71
Carhart4	−0. 1708	−0. 5562 ***	−0. 3855 **	−0. 0107	0. 2315	0. 2421
	−1. 26	−4. 00	−1. 99	−0. 03	0. 91	0. 48
	−0. 0401	0. 1007	0. 1408	−0. 8678 *	0. 8207 *	1. 6885 **
	−0. 22	0. 34	0. 44	−1. 91	1. 87	2. 11
—	−0. 1307	−0. 6570 **	−0. 5263	0. 8571	−0. 5892	−1. 4463
	−0. 57	−2. 10	−1. 39	1. 36	−1. 13	−1. 41
Newey – West						
	t		% *** ** *			1% 5% 10%

201520172017Wind2007—

20191217101

3CICSI9

“ ”

表 9 基于中小盘和大盘基金持股的隐性杠杆约束:条件定价

P10 – P1	—			—		
	−0. 8371	1. 4549	−2. 2921	−1. 1174 ***	1. 4621	−2. 5794 *
	−1. 46	0. 88	−1. 30	−2. 65	1. 10	−1. 84
CAPM	−0. 8269 *	1. 4801	−2. 3070	−1. 1180 ***	1. 4542	−2. 5722 *
	−1. 76	0. 96	−1. 38	−2. 65	1. 13	−1. 87

FF3	-0.6715	2.6773 *	-3.3488 **	-1.0524 **	2.1109	-3.1633 **
	-1.32	1.78	-2.11	-2.36	1.42	-2.12
Carhart4	-0.8144	2.6910 *	-3.5055 **	-0.9762 **	2.1036	-3.0798 **
	-1.56	1.92	-2.30	-2.20	1.37	-1.98
FF5	-0.8470 *	2.5000 *	-3.3470 **	-1.3359 ***	1.8438	-3.1797 **
	-1.77	1.84	-2.18	-2.73	1.39	-2.28
		2010	2019	%	Newey – West	t
*** ** *	1% 5% 10%					

“ ” Cao et al. 2013
2006
2017 2008 2015
2018
Han and Li 2017

Shen et al. 2017 Chen et al. 2019

“ ”

Baker and Wurgler 2007

“ ” “ ”

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16 ~ 25

2 2015

4 165 ~ 177

3 2015

2 108 ~ 118

4 2017 Fama – French 6

191 ~ 206

5 2013 8 67 ~ 76

6 2017 11 49 ~ 60

7 2019

11 20 ~ 32

8 2013 8 53 ~ 66

9 2011 “ ” 1 112 ~ 125

10 2009 CICI 11 174 ~ 184

11 2017

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12 2012 4

110 ~ 123

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Implic

We find that exposure to the monthly change in the aggregate mutual fund beta unconditionally fails to predict returns at the firm and fund levels. In contrast such exposure negatively predicts stock and fund returns following periods of low sentiment or low liquidity. The negative price of the change in the tightness of implicit leverage constraints is consistent with the notion that an asset that pays off when implicit leverage constraints are tighter provides capital when the capital is most valuable. As a result the strong performance of stocks and funds with low exposure to implicit leverage constraints following periods of low sentiment or low liquidity can be rationalized as compensation for liquidity risk. However short – sale constraints prohibit the positive relationship between leverage tightness exposure and stock returns after periods of high sentiment.

By exploiting the staggered implementation of pilot marginable stocks in China our study compares the cross – sectional pricing power of changes in implicit leverage constraints among pilot and non – pilot stocks. We find that the distorted risk-return relationship is more pronounced among stocks that are ineligible for margin trading. This confirms our conjecture regarding conditional pricing namely that tightness