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Missing momentum in China: Considering individual investor preference

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Highlights

The missing momentum effect in the Chinese stock market

We construct a comprehensive individual investor preference index (IIPI)

Momentum effect diminishes toward absence with increasing IIPI

A new explanation for the missing momentum effect

Abstract: We explore the missing momentum effect in the Chinese stock market from the perspective of individual investor preference. Creating a comprehensive individual investor preference index to investigate the missing momentum effect, we find that the momentum effect diminishes toward absence in Chinese-market stocks with particularly high-levels of individual investor preference. In contrast, momentum manifests with decreases in individual investor preference. Contributing to the literature, we provide a new explanation of the missing momentum effect.

Keywords: Financial markets; Market anomalies; Individual investors; Momentum; Trending

JEL classification: G02; G12

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Abstract

We explore the missing momentum effect in the Chinese stock market from the perspective of individual investor preference. Creating a comprehensive individual investor preference index to investigate the missing momentum effect, we find that the momentum effect diminishes toward absence in Chinese-market stocks with particularly high-levels of individual investor preference. In contrast, momentum manifests with decreases in individual investor preference. Contributing to the literature, we provide a new explanation of the missing momentum effect.

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1. Introduction

Literature suggests that the momentum effect, as identified by Jegadeesh and Titman (1993) for the U.S. stock market, has differing degrees of manifestion across countries (Jegadeesh and Titman, 1993; Rouwenhorst, 1998; Griffin et al., 2005; Asness et al., 2013; Ruenzi and Weigert, 2018; Chui et al., 2010; Boubaker et al., 2021). However, research evidences that the traditional momentum effect does not exist in the Chinese, Japanese, and Korean markets, as compared to other important capital markets (Grundy and Martin, 2001; Kang et al., 2002; Wu, 2011; Pan et al., 2013; Hung and Banerjee, 2014; Blitz et al., 2020; Gao et al.,2021). This curious lack of momentum in these marekts continues to puzzle researchers.

As noted by Goodell (2019), some scholars suggest as an explanation national culture. Chui, Titman, and Wei (2010), especially, evidience more market momentum in more individualist countries. While evidence suggests that culture is very important, we also consider that particular characteristics of respective investor bases will also play a significant role. In this study we hold culture constant by only considering one country, China. We then investigate the association of momentum in markets with individual investor preferences. In this way, we contribute by highlighting the particular role of individual investors in establishing market momentum. In this way, while we seek an answer for the missing momentum effect China, we also seek to add to our knowledge regarding the role of individual investors for momentum in all markets.

As the second-largest capital market, China's rapid development and extensive capital markets have attracted scholarly attention. In contrast to developed capital markets, retail investors account for

a large proportion of the Chinese stock market (Nartea et al., 2017). Cheng et al. (2021) notes that individual retail investors comprise more than 99% of total investors in China. Moreover, Chinese retail investors are generally highly speculative (Yao et al., 2019). Lin and Liu (2018), and Andy and Chu (2010) posit that individual investors are particularly sensitive to positive market news, while prone to overreaction. Consequently, stocks with high individual investor preference are often speculatively overpriced. Following this, we expect China's market provides a good setting for exploring the missing momentum effect and individual investor preferences.

We construct an individual investor preference index (IIPI) for Chinese stocks to explore the relationship between individual investor preferences and momentum effects. We find that the momentum effect does not exist in stocks with high IIPI. Further, we find that the momentum effect manifests with decreases in IIPI. Our results are robust using either Fama-Macbeth regressions or three-factor analysis.

We contribute to the literature by providing a robust explanation for the missing momentum effect in the Chinese stock market. We find that the momentum effect exists only for stocks with low IIPI, while missing from stocks with high IIPI. We, thus, add add to our knowledge regarding momentum literature (Zhang, 2006; Stambaugh et al., 2012; Grobys, 2014; Jacobs et al., 2016; Jain et al., 2020; Tan et al., 2022). Similarly, Chui et al. (2022) posit that the ownership of institutional investors will strengthen the momentum of the stock market. They reason that prevail momentum prevails in markets where noise traders are less prevalent relative to informed investors. However, their research is based on a small number of B-share listed stocks, with a preponderance of large cap stocks, with an average total daily trading volume of no more than 100 million RMB. Consequenty it is not clear if their identified momentum might be due to sample selection. In contrast, we construct an individual investor preference index, applied to a full A-share sample, to test the relationship between the presence of individual investors and momentum. Additionally, as the momentum effect is missed not only in China but also in other important stock markets (Liu and Lee, 2001; Hung and Banerjee, 2014), our results provide insight into the momentum effects of other stock markets.[1]

[1] Jia, Goodell, and Shen (2022) find that momentum is a critical factor in determining cryptocurrency returns. This has interesting resonance with our study, as, while cryptocurrencies are regarded as a primary vehicle of individual

The remainder of this paper is organized as follows. Section 2 describes the methodology and data sources. Section 3 reports and discusses the empirical results and robustness checks. Section 4 concludes.

2. Data and Methodology

2.1. Sample Selection and Data Sources

Our sample includes all Chinese A-shares listed on the Shanghai Stock Exchange and Shenzhen Stock Exchange.[2] The data set covers the period from January 1997 with 533 firms to December 2018 with 3,567 firms with an average of 1,651 firms per month, resulting in a total of 412,529 firm-month observations. We exclude stocks listing on the market in the previous six months to avoid the impact of IPOs. All data are obtained from the Chinese Stock Market and Accounting Research Database. All time-series data has been winzorized between 1% and 99%.

2.2. The Measurement of Momentum Factor

Following Jegadeesh and Titman (1993), we construct the J/K momentum strategy. J (J=3, 6, 9, 12) represents the developing period for the momentum factor, and K (K=3, 6, 9, 12) represents the holding period of the momentum factor. We use the momentum factor of the *t* period to examine its impact on the stock returns of *t*+1 period.

2.3. Comprehensive Index of Individual Investors' Preference

We construct monthly individual investor preference indices (IIPI) following Lin and Liu (2018). Lin and Liu (2018) suggest ten variables that best describe individual investor preferences: small market value, high book to market, high market beta, low return on net assets, low closing price, high idiosyncratic volatility, high idiosyncratic skewness, low institutional shareholding ratio, high abnormal trading volume, and high proportion of small trades. Each of these variables are defined in the online appendix.

Specifically, we divide all sample stocks into 100 portfolios according to one of ten variables each month. We assign the group number to each stock within the group as their ranking score. Thus, a higher-

investors (Karaa et al., 2021), we evidence that individual investors dampen momentum for Chinese markets.

[2] We exclude ST shares. ST stock is the special treatment stock. Gu et al., (2018) pointed out that due to the continuous negative profit, this kind of stock was given risk warning by the exchange, and a special price-limit was set, that is, 5%.

ranking score for a stock suggests that the stock is preferable by individual investors. We define the individual investor preference index (*IIPI*) as the equal-weighted average of the ranking scores from ten stock characteristics.

To test the consistent ability of *IIPI*, we examine a month-to-month transition matrix of the average probabilities that stocks in decile *i* in one month move to decile *j* in the following month, *i* and *j* = 1, …, 10. Stocks in decile 10 (with the highest *IIPI*) have a probability of 43.35 % appearing in the same decile in the next month. To capture a more stable *IIPI*, we use the average *IIPI* of the past six months (*t*-5, *t*) as the value of *IIPI* in month *t*.[3]

2.4. Control Variables

We control for a number of variables as suggested in the literature, including size (*SIZE*), book-to-market (*BM*), illiquidity (*ILLIQ*), short-term reversal (*REV*), idiosyncratic volatility (*IVOL*), idiosyncratic skewness (*ISKEW*), co-skewness (*COSKE*), and maximum daily return (*MAX*). Control variables are defined in the online appendix.

3. Empirical Results and Analysis

3.1. Descriptive Statistical Analysis

Panel A of Table 1 reports descriptive statistics for each variable. The average value of IIPI is 50.461, with its distribution is relatively concentrated. MOM has a mean of 0.363 with a large kurtosis and skewness, indicating that the distribution is relatively discrete and has prominent thick tail characteristics. Panel B reports the correlation coefficients of applied variables. The correlation between IIPI and other control variables is relatively low, suggesting that there is no multicollinearity.

[Insert Table 1 about here]

3.2. Individual Investors' Preference and Momentum Effect

3.2.1. Portfolio analysis

[3] We also use the original *IIPI* in month *t* or an average value of *IIPI* from *t*-2 to *t* to replace the average *IIPI* of the past six months, and check the robustness of our results. These results are qualatitively consistent with what we report in the manuscript. We do not report these results due to space constraints (available upon request).

In this section we offer portfolio analysis.[4] We hypothesize that the momentum effect disappears in stocks with high *IIPI*. We undertake a bivariate portfolio sorting approach between *IIPI* and MOM to test this hypothesis. We choose a representative momentum strategy (J=6,K=6) to conduct baseline tests.

As shown in Table 2, the raw returns and adjusted alpha of the low IIPI group's momentum effect are significant at 1% regardless of the weighting scheme. However, the raw returns for high IIPI stocks, 0.464% and -0.533%, respectively, are less than zero in equal- and value-weighted portfolios. The adjusted alphas (FF3 and FF5) also reflect a pronounced negative effect. Therefore, results suggest a significant negative momentum effect in high *IIPI* stock portfolios. In contrast, the momentum effect is stable in low *IIPI* stock portfolios. Results in Table 2 are consistent with our hypothesis.

[Insert Table 2 about here]

3.2.2. Fama-Macbeth results

We further perform the Fama-Macbeth regression to analyze the cross-sectional influence of *IIPI* on momentum returns. We further control variables, such as *SIZE*, *BM*, *RMRF_beta*, *ILLIQ*, *REV*, *IVOL*, *IS*, *COSKE*, *MAX*, as suggested in the literature. The regression model is as follows:

$$EXRET_{i,t+1} = \beta_{0,t} + \beta_{1,t}MOM_{i,t} + \beta_{2,t}IIPI_{i,t} + \sum_{j=3}^{j=5}\beta_{j,t}IIPI_{i,t}\_Group * MOM_{i,t} + \sum_{k=6}^{K}\beta_{k,t}X_{k,i,t} + \varepsilon_{i,t+1} \quad (1)$$

where $EXRET_{i,t+1}$ is the excess returns of stock *i* in month *t+1*; $MOM_{i,t}$ is the momentum factor (J=6, K=6) for stock *i* in month *t*. $IIPI_{i,t}\_Group$ is the *IIPI* group indicator (Low, Medium and High) of stock *i* in month *t*; $X_{k,i,t}$ represents other control variables.

Table 3 reports the regression results. Model 1 in Table 3 shows a significant negative MOM effect when we control only for a standard series of factors. We include the variable of *IIPI* in Model 2. This

[4] We examine the momentum effect by initially using a univariate portfolio sorting approach. We then choose the representative momentum strategy with a six-month developing period (J=6) to evidence main results. Table A1 (Online Appendix) shows the raw returns and adjusted FF3_Alpha and FF5_Alpha of momentum strategies constructed by J = 6 (developing period) and K = 3, 6, 9, 12 (holding period). Results indicate that the momentum effect in the Chinese stock market is not significant either in the equal-weighted or value-weighted condition, consistent with previous studies (Grundy and Martin, 2001; Kang et al. 2002; Wu, 2011; Pan et al., 2013). We also examine the other momentum strategies by using 3, 9, and 12 months developing period (J=3, 9, and 12). Results are consistent to the main results reported in Table A1. We do not report these results in the manuscript due to space constraints.

results in a significant negative relationship between the high retail investors' preference index and expected stock returns, which is consistent with the retail speculation theory (Han and Kumar, 2013). Furthermore, we divide all sample stocks into three groups according to their investor preference index and explore the momentum portfolio returns in each group. Results show that the significant positive momentum effect only exists in low *IIPI* stocks. For the high IIPI stocks, we observe a significant negative momentum effect, even when controlling for all interaction terms and control variables according to the results in Models 3–6 of Table 3. Overall, results reported in Table 3 are consistent with the results reported in Table 2, even while controlling for all variables.

[Insert Table 3 about here]

To check the robustness of our main findings, as reported in Table 3, we use the Fama-Macbeth method to test and compare the effects of all 16 MOM factors (J=3, 6, 9, 12; K=3, 6, 9, 12). Table 4 reports all results. In sum, we find that the positive momentum effect only significantly appears in low-IIPI samples, consistent with results in Table 3.

[Insert Table 4 about here]

3.2.3. Further analysis of individual investor preference

Literature suggests that individual investors are more likely to speculate on small and high liquidity stocks (Kumar and Lee, 2006; Kaniel et al., 2008), while other research suggests that short-sale constraints substantially impact the speculative nature of individual investors (Gu et al., 2018). To further examine the influence of individual investors' preference on the momentum effect, we test the conditional relationship between IIPI and the representative momentum effect based on factors relevant to individual investor speculation. We conduct a three-way portfolio sorting approach by controlling as an extra variable either firm size or liquidity. We also compare the relationship between IIPI and the momentum effect before- and after the period of the short-selling restriction being removed for the Chinese stock market.

Table A2 (Online Appendix) reports the results. Panel A of Table A2 shows no momentum effects for small stocks (the group with more speculative individual investors) for any of the IIPI portfolios. However, the momentum effect becomes stronger with increases in firm size. We find a significant momentum effect for large-size stocks in the low-IIPI portfolio. Similarly, Panel B shows a weaker momentum effect for the high liquidity stocks (with highly speculative retail investors), compared to low liquidity stocks in the low IIPI portfolio. Finally, Panel C shows that all three IIPI portfolios have momentum effects that increase after removal of the short-selling constraint.

Results, as reported in Table A2, are consistent with the relationship between IIPI and momentum being strongly conditioned by individual investor speculation. This is also the case regarding the momentum effect in the low IIPI group. Results suggest that individual investor behavior strongly conditions the momentum effect in the China stock market.

4. Conclusions

While many studies affirm momentum effects for various countries, whether there is a momentum effect for China has remained inconclusive. We explore the momentum effect in the Chinese stock markets from the perspective of individual investor preference. We show that an individual investor preference index (IIPI) explains the Chinese stock markets' momentum effect. This momentum effect only manifests in stocks with low IIPI, while changes to a reversal effect in stocks with high IIPI. Findings are robust tocontrolling for the influence of related factors. Our results shed light on the missing momentum effect in the Chinese stock market due to the individual investors' preference trading.

Considering the dominate role of retail investors in emerging markets, future research can incorporate individual investor preference to test and explain other anomalies, especially some controversial anomalies. In addition, individual investor preference may also help explain important phenomena such as stock market bubbles, price discovery efficiency impediments, liquidity changes. Our results should be of great interest to researchers interested in the financial markets.

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Table 1 Descriptive statistics

Panel A of Table 1 reports the descriptive statistics of the variables. The sample period is from January 1997 to December 2018, with 3,567 firms in total and an average of 1,651 firms per month. Panel B reports the time-series average of the cross-sectional Pearson correlation estimates.

Panel A: Pooled Descriptive Statistics

Variables	Mean	Sd.Dev	Min	P25	P50	P75	Max	Skewness	Kurtosis
EXRET	0.025	0.171	-0.341	-0.070	0.015	0.107	0.504	1.925	8.359
IIPI	50.461	11.270	23.423	42.917	51.100	58.405	74.511	-0.210	2.818
MOM	0.363	1.004	-0.687	-0.204	0.104	0.607	4.002	1.591	1.076
SIZE	14.910	1.058	12.760	14.180	14.860	15.560	17.802	0.453	0.543
BETA	1.040	0.540	-0.380	0.788	1.053	1.306	2.346	-1.383	0.243
BM	0.517	0.240	0.093	0.331	0.493	0.682	1.083	0.500	0.386
ROE	0.062	4.163	-0.294	0.010	0.035	0.076	0.272	15.520	2.511
PRICE	13.900	11.030	2.860	7.200	10.900	16.840	56.810	3.606	3.055
IS	0.437	0.705	-1.316	0.003	0.407	0.851	2.300	0.107	1.132
IVOL	0.019	0.022	0.005	0.012	0.017	0.024	0.829	1.474	1.894
HOLDER	29.640	21.430	1.504	11.080	24.670	46.700	79.506	3.557	2.232
SMALL	0.466	0.168	0.090	0.346	0.469	0.587	0.982	-0.055	1.558
REV	0.027	0.173	-0.324	-0.068	0.015	0.108	0.503	1.112	1.274
ILLIQ	0.010	0.204	0.000	0.002	0.004	0.009	0.063	3.195	15.525
MAX	0.059	0.086	0.014	0.035	0.051	0.082	0.101	3.532	3.015
COSKE	-0.761	4.427	-11.619	-2.186	-0.491	0.978	9.179	-3.106	5.028

Panel B: Correlation Matrix

	EXRET	*PIPI*	*MOM*	*SIZE*	*BETA*	*BM*	*ROE*	*PRICE*	*IS*	*IVOL*	*HOLDER*	*SMALL*	*REV*	*ILLIQ*	*MAX*	*COSKE*
EXRET	1															
PIPI	0.053	1														
MOM	-0.010	-0.138	1													
SIZE	0.042	-0.543	0.128	1												
BETA	0.113	0.198	-0.016	0.024	1											
BM	-0.007	0.325	-0.324	-0.037	0.051	1										
ROE	-0.002	-0.014	0.011	-0.001	-0.006	-0.016	1									
PRICE	0.125	-0.471	0.288	0.317	-0.048	-0.470	0.007	1								
IS	-0.134	0.371	-0.004	-0.013	0.032	0.013	-0.003	-0.042	1							
IVOL	-0.392	0.086	0.101	-0.013	-0.145	-0.100	0.003	0.073	0.076	1						
HOLDER	-0.027	-0.325	-0.113	0.494	0.003	0.101	-0.003	0.021	-0.012	-0.052	1					
SMALL	-0.185	0.383	-0.312	-0.737	-0.001	0.236	-0.007	-0.426	0.002	-0.150	-0.141	1				
REV	-0.004	-0.005	0.015	0.051	-0.013	-0.072	0.003	0.119	-0.023	0.082	-0.019	-0.267	1			
ILLIQ	0.041	-0.007	0.012	-0.028	-0.012	-0.020	0.005	0.034	-0.010	0.035	-0.014	0.023	-0.004	1		
MAX	-0.139	0.011	0.059	0.003	-0.108	-0.050	-0.001	0.021	0.037	0.367	-0.032	-0.041	0.005	0.002	1	
COSKE	-0.024	-0.021	-0.027	0.020	0.015	0.058	-0.003	-0.013	-0.006	-0.011	0.002	0.031	0.007	0.000	0.003	1

Table 2 Double-sorted portfolios for individual investor preference and momentum

This table reports double-sorted portfolio results based on the individual investors' preference index (*IIPI*) and momentum (J=6, K=6), for January 1997–December 2018. We first divide all stocks into three sub-groups according to the *IIPI* at the end of each month *t*. Then, within each *IIPI* portfolio, stocks are divided into five groups according to their momentum factors. 3×5 double-sorted portfolios are constructed. Portfolios are rebalanced monthly. We calculate raw returns and FF3-alpha and FF5-alpha for each portfolio-month. Newey-West t-statistics reported in parentheses. ***, **, *, denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Equal-Weighted Returns (%)			
EW	Raw Returns	FF3-α	FF5-α
Low IIPI	1.006***	1.120***	1.001***
	(4.338)	(4.893)	(3.960)
Medium IIPI	0.403*	0.268	0.229
	(1.729)	(1.088)	(0.852)
High IIPI	-0.464	-0.601**	-0.849***
	(-1.599)	(-2.184)	(-3.424)
Panel B: Value-Weighted Returns (%)			
VW	Raw Returns	FF3-α	FF5-α
Low IIPI	1.389***	1.589***	1.248***
	(4.852)	(4.645)	(3.366)
Medium IIPI	0.752***	0.680**	0.317
	(2.673)	(2.138)	(0.790)
High IIPI	-0.533	-0.732**	-0.979***
	(-1.631)	(-2.281)	(-3.336)

Table 3 Fama-Macbeth regressions

This table reports standard Fama-Macbeth (1973) regression results, for January 1997–December 2018. The regression model is as follows:

$$EXRET_{i,t+1} = \beta_{0,t} + \beta_{1,t} * MOM_{i,t} + \beta_{2,t} * IIPI_{i,t} + \sum_{j=3}^{j=5} \beta_{j,t} * IIPI_{i,t\_}Group * MOM_{i,t} + \sum_{k=6}^{K} \beta_{k,t} * X_{k,i,t} + \varepsilon_{t+1}$$

where E$XRET_{i,t+1}$ is the excess returns of stock *i* in month t+1; $MOM_{i,t}$ is the momentum factor (J=6, K=6) for stock *i* in month *t*. $IIPI_{i,t}$ is the individual investors' preference index of stock *i* in month *t*; $IIPI_{i,t\_}GROUP$ is the IIPI group indicator (low, medium, and high) of stock *i* in month *t*; $X_{k,i,t}$ represents other control variables. Newey-West t-statistics reported in parentheses. ***, **, *, denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Dependent	$EXRET_{t+1}$					
	Model1	Model2	Model3	Model4	Model5	Model6
MOM	-0.029***	-0.028***	-0.032***	-0.031***	-0.029***	-0.042***
	(-3.569)	(-4.092)	(-3.987)	(-3.021)	(-4.118)	(-4.123)
IIPI		-0.002***	-0.001***	-0.002***	-0.002***	-0.001***
		(-9.713)	(-7.945)	(-9.107)	(-7.949)	(-8.193)
*Low*MOM*			0.238***			0.217***
			(4.692)			(3.332)
*Medium*MOM*				-0.005*		-0.001
				(-2.166)		(-1.489)
*High*MOM*					-0.014***	-0.011***
					(-4.101)	(-3.092)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R2	0.044	0.352	0.358	0.361	0.347	0.369

Table 4 Robustness Check

This table results of robustness checks, testing different momentum factors (J=3, 6, 9, 12, K=3, 6, 9, 12), for January 1997–December 2018. Newey-West t-statistics reported in parentheses. ***, **, *, denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Dep var. = $EXRET_{t+1}$	Panel A: J=3				Panel B: J=6			
	K=3	K=6	K=9	K=12	K=3	K=6	K=9	K=12
$MOM_{J,K}$	-0.056***	-0.072***	-0.078***	-0.075***	-0.075***	-0.042***	-0.034***	-0.038***
	(-8.591)	(-9.512)	(-8.035)	(-6.729)	(-4.728)	(-4.213)	(-4.951)	(-4.894)
$IIPI$	-0.001***	-0.001***	-0.001***	-0.001***	-0.002***	-0.001***	-0.002***	-0.002***
	(-8.274)	(-8.234)	(-8.465)	(-8.923)	(-8.931)	(-8.193)	(-9.074)	(-9.342)
$L^*MOM_{J,K}$	0.029***	0.039***	0.038***	0.029***	0.029***	0.217***	0.017***	0.014***
	(5.882)	(7.551)	(5.941)	(4.211)	(4.592)	(3.332)	(5.228)	(4.966)
$M^*MOM_{J,K}$	0.002	0.012***	0.011*	0.001	0.005	-0.001	0.005	0.003
	(0.561)	(2.751)	(1.953)	(0.084)	(1.083)	(1.489)	(1.611)	(0.858)
$H^*MOM_{J,K}$	-0.021***	-0.018***	-0.024***	-0.036***	-0.038***	-0.011***	-0.011***	-0.012***
	(-4.781)	(-4.033)	(-4.013)	(-4.022)	(-5.902)	(-3.092)	(-4.576)	(-3.609)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R2	0.364	0.363	0.362	0.361	0.362	0.369	0.361	0.359
Dep var. = $EXRET_{t+1}$	Panel C: J=9				Panel D: J=12			
	K=3	K=6	K=9	K=12	K=3	K=6	K=9	K=12
$MOM_{J,K}$	-0.024***	-0.020***	-0.016***	-0.023***	-0.021***	-0.018***	-0.017***	-0.018***
	(-7.124)	(-5.591)	(-6.023)	(-6.418)	(-7.489)	(-6.524)	(-6.032)	(-6.257)
$IIPI$	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***
	(-8.455)	(-9.013)	(-9.492)	(-9.471)	(-8.918)	(-9.321)	(-9.482)	(-9.818)
$L^*MOM_{J,K}$	0.013***	0.010***	0.006***	0.008***	0.013***	0.009***	0.008***	0.006***
	(5.365)	(3.832)	(3.423)	(3.541)	(5.924)	(4.914)	(4.174)	(3.233)
$M^*MOM_{J,K}$	0.002	0.010	-0.004	-0.006	0.037	0.015	0.003	-0.015
	(1.124)	(0.449)	(-0.789)	(-0.373)	(1.831)	(0.854)	(0.195)	(-0.867)
$H^*MOM_{J,K}$	-0.011***	-0.015***	-0.068***	-0.079***	-0.007***	-0.005***	-0.005***	-0.006***
	(-5.365)	(-5.636)	(-4.658)	(-4.226)	(-4.092)	(-3.583)	(-3.428)	(-3.823)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R2	0.363	0.361	0.356	0.359	0.362	0.359	0.369	0.361

Author statement

The authors assert that this paper is an original work that is not published or under consideration elsewhere and is a genuine collaboration.