

## Daily Winners and Losers in the Korean Stock Market

Jangkoo Kang, *Professor, KAIST*

Jaesun Yun\*, *Ph.D. Candidate, KAIST*

### <Abstract>

In their working paper, Kumar, Ruenzi, and Ungeheuer (KRU) document that stocks ranked as daily winners or losers in the previous month underperform unranked stocks during the month after the ranking. KRU explain that the ranked stocks experience a large increase in investor attention, which leads to temporary overpricing and subsequent underperformance. Following KRU, we investigate whether the same effect exists in the Korean stock market and find a robust daily winners and losers effect. First, stocks that were both daily winners and losers in a given month underperform those that were neither daily winners nor losers during the following months. Second, stocks that were never a daily winner or loser during the previous month do not exhibit the idiosyncratic volatility puzzle or the MAX effect. Moreover, the underperformance of ranked stocks is robust after controlling for the idiosyncratic volatility and the MAX effect. We suggest that the overpricing caused by excessive attention to daily winners and losers may be the main driver of the idiosyncratic volatility puzzle and the MAX effect. Lastly, we find that retail investors buy daily winners and losers, while both institutional investors and foreign investors decrease trades in the ranked stocks.

*Keywords:* Investor Attention; Retail Investors; Idiosyncratic Volatility Puzzle; Stock Rankings; MAX Effect

*JEL Classification:* G11, G12, G14

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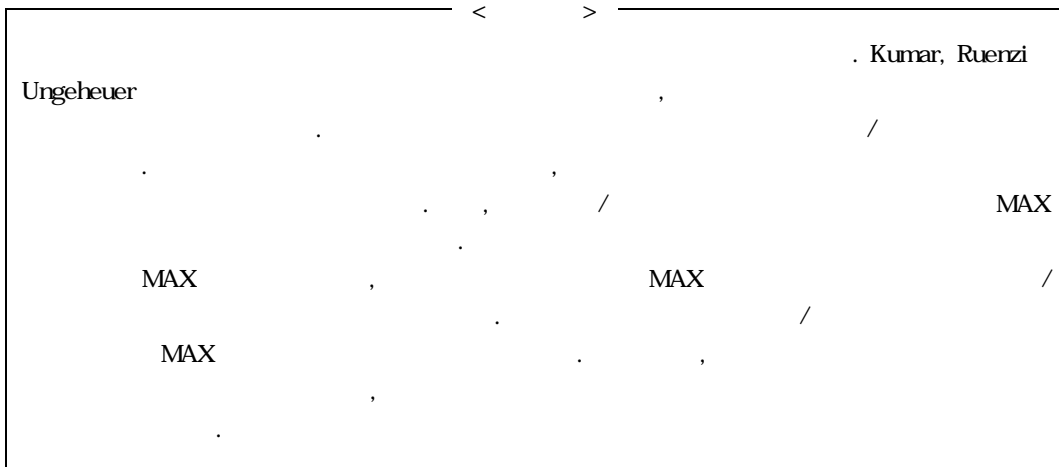
\* Corresponding Author. Address: KAIST College of Business, 85 Hoegi-ro, Dongdaemun-Gu, Seoul, Korea 02455; E-mail: yjs16@kaist.ac.kr; Tel: +82-2-958-3693.

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(KAIST )

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: (Investor attention), , ,  
, MAX

**JEL** : G11, G12, G14

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\* :  
Tel: 02- 958- 3693.

85 KAIST , 02455; E- mail: yjs16@ kaist.ac.kr;

1.

Kumar et al.(2020)( KRU) /

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. KRU /

KRU / MAX

(lottery- like stock) , /

MAX

MAX /

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MAX

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KRU

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, ( 2.30%), /

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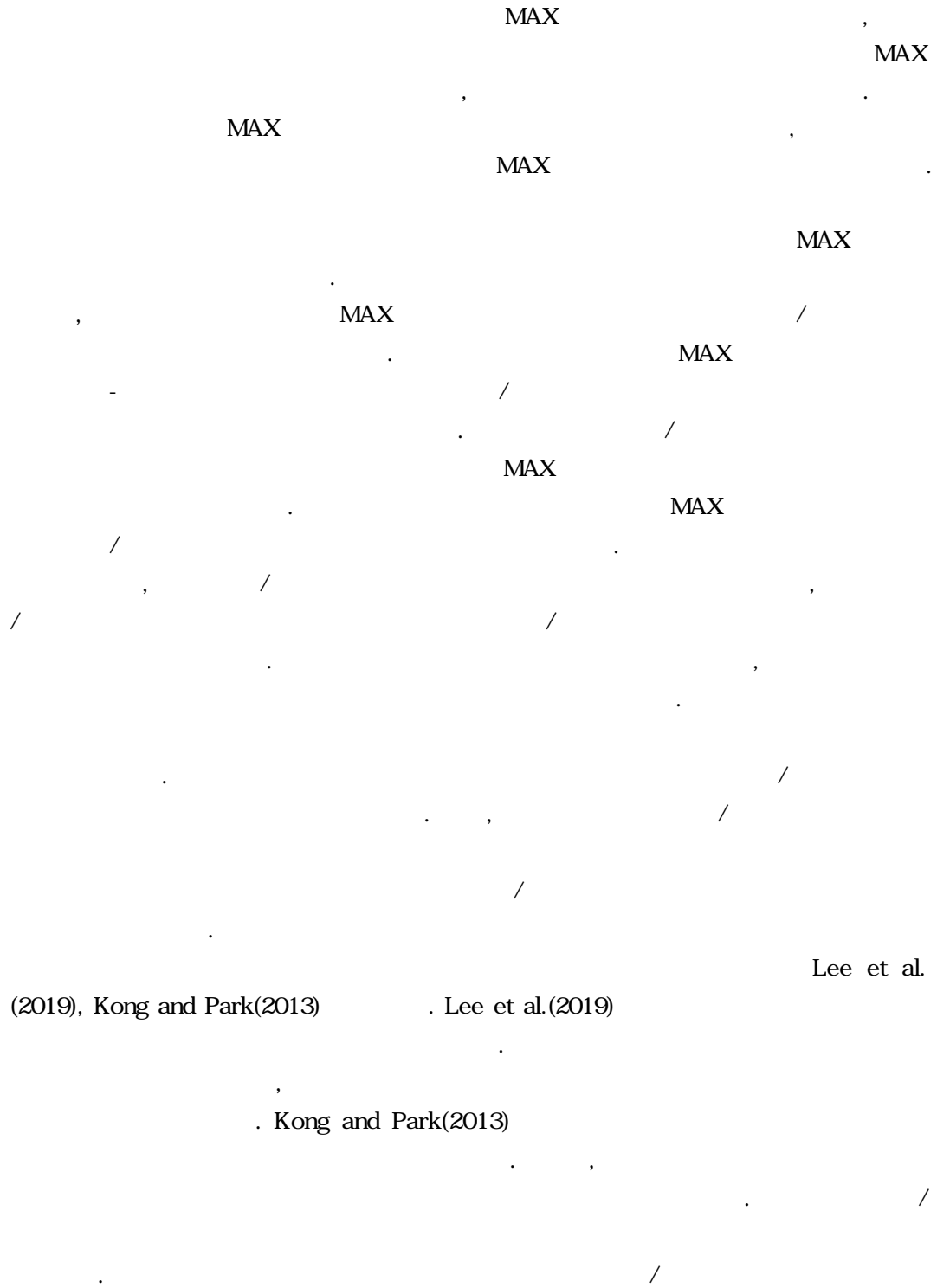
,

2.64%

, /

KRU MAX

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(2019), Kong and Park(2013)

. Lee et al.(2019)

Lee et al.

. Kong and Park(2013)

MAX  
 2 /  
 3 /  
 4 / , MAX  
 5 /  
 6

2. / (Daily Winners and Losers)

2000 1 2017 8 (KOSPI)  
 (KOSDAQ) (FnGuide)  
 500 1,611  
 1  
 KRU ( ) ( )  
 )

, KRU / , KRU  
 / (dummy variable) .  $I_w = 1$   
 $r$  ( $r=10, 20, 30$ ) 1,  $r$  0  
 .  $I_L = 1$   $r$  1,  
 0 .  $I_{WL} = 1$   $r$   
 $r$  1, 0  
 . KRU / 80 ( $r = 80$ )

10 , 20 , 30 ( $r = 10, 20, 30$ )  
 < 1> A /  
 , 'BOTH'  $I_{WL} = 1$   
 , 'WINNER'  $I_w = 1$  , 'LOSER'  
 $I_L = 1$  , 'NEVER'  $I_w, I_L, I_{WL} = 0$

Panel A	$r = 10$			$r = 20$			$r = 30$		
	% of Stocks	% of Market Caps.	% of Stocks	% of Market Caps.	% of Stocks	% of Market Caps.	% of Stocks	% of Market Caps.	
BOTH	3.28%	1.03%	6.70%	1.75%	9.96%	2.45%			
LOSER	9.08%	3.02%	16.35%	5.92%	22.87%	9.00%			
WINNER	8.09%	2.43%	13.35%	4.00%	16.95%	5.15%			
NEVER	86.11%	95.57%	77.00%	91.83%	70.15%	88.31%			

Panel B	$r = 10$			$r = 20$			$r = 30$						
	SIZE	BM	BETA	INV	OP	MOM (%)	REV (%)	ILLIQ (%)	IVOL (%)	ISKEW (%)	MAX (%)	TURN	DTURN
BOTH	10.28	-0.22	1.03	0.15	-0.31	41.64	13.82	7.03	6.22	0.47	9.66	-3.16	0.87
LOSER	10.51	0.41	1.05	0.18	-0.18	40.05	0.86	32.63	4.99	0.05	7.09	-3.76	0.44
WINNER	10.49	0.63	1.08	0.16	-0.07	31.16	15.97	4.86	5.24	0.90	8.48	-3.54	0.73
NEVER	11.26	1.33	0.91	0.15	0.02	16.67	0.19	16.30	2.22	0.35	3.53	-5.22	-0.13

. A r 10, 20, 30  
 . r , KRU  
 . KRU BOTH ( ) 6.67%(1.13%)  
 . , NEVER ( ) 77.88%(93.14%)  
 . r 20 .  
 < 1> B r 20 ,  
 . (SIZE) (BM) Fama and French(1993)  
 , (BETA) 1  
 , (INV) (OP) Fama and French(2015)  
 , (MOM) Jegadeesh  
 and Titman(1993) 1 12 .  
 (REV) 1 , (TURN)  
 1 , (DTURN)  
 1 . (IVOL) Ang et al.(2006) 1  
 Fama and French(1993) 3  
 , (ISKEW)  
 < 1> B BOTH NEVER ,  
 (growth) , 12 ,  
 , MAX . Kumar(2009) Bali et al.(2011)  
 MAX , BOTH  
 , BOTH NEVER  
 , / 1  
 ,  
 (volume) . /  
 . LOSER WINNER  
 NEVER ,  
 , MAX .  
 NEVER .

3.

KRU

3.1

< 2> A t / (value-weighted) (equal-weighted) t+ 1

( ) - 1.43%(- 1.19%) , BOTH  
 ( ) 0.86%(1.71%) . WINNER LOSER  
 BOTH , NEVER

< 2> B NEVER , BOTH  
 (NMB), NEVER LOSER (NML)

< 2> WINNER,  
 LOSER, r r  
 NEVER  
 A t . NMB NEVER  
 BOTH , NMW NEVER , WINNER  
 , NML NEVER , LOSER  
 . FF3 alpha FF5 alpha Fama- French 3

5

Panel A

BOTH	- 1.43(- 1.60)	- 1.19(- 1.75)
WINNER	- 0.63(- 0.91)	- 0.34(- 0.58)
LOSER	- 0.33(- 0.46)	- 0.22(- 0.32)
NEVER	0.86(1.90)	1.71(3.11)

Panel B

	FF3 alpha		FF5 alpha		Fama- French 3	
NMB	2.30(3.14)	2.65(4.20)	2.74(4.48)	2.91(7.04)	2.81(6.95)	2.34(5.84)
NMW	1.49(3.07)	1.93(4.44)	1.72(3.87)	2.06(6.84)	2.14(7.01)	1.67(5.38)
NML	1.19(2.41)	1.41(3.09)	1.44(3.26)	1.94(5.41)	1.84(6.44)	1.70(5.63)



NEVER, WINNER (NMW)  
 . NMB 2.30%  
 . Fama-French 3 5 2.65% 2.74% t  
 . , BOTH NEVER  
 . NMW  
 . NML

3.2

Fama and MacBeth(1973)

(1)

< 3>

$$r_{i,t+1} = a_{0,t} + a_{1,t}I_{WL(i,t)} + a_{2,t}I_{W(i,t)} + a_{3,t}I_{L(i,t)} + a'_{4,t}X_{i,t} + v_{i,t+1} \quad (1)$$

$r_{i,t}$   $t$   $i$  ,  $I_{WL(i,t)}$   $t$   $i$   $I_{WL}$  ,  $I_{W(i,t)}$   $t$   $i$   $I_W$  ,  $I_{L(i,t)}$   
 $t$   $i$   $I_L$  ,  $X_{i,t}$   $t$   $i$  (BETA), (SIZE),  
 (BM), (MOM), (REV), (INV),  
 (OP), (TURN), (DTURN)

< 3> , 1 20

20

2.64% , (t = 6.52). KRU

1) (Jang, 2017; Eom, 2013). , Jang(2017) , Eom(2013)

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0.81%

< 3>

(1)  $I_{WL}$   $I_W$   $I_L$   $BETA$   $SIZE$   $BM$   $INV$   $OP$   $MOM$   $REV$   $TURN$   $DTURN$

	(1)	(2)	(3)	(4)
$I_{wl}$	- 2.64(- 6.52)	- 1.20(- 3.94)	- 1.21(- 4.01)	- 1.40(- 4.71)
$I_w$		- 0.86(- 4.03)	- 0.85(- 4.04)	- 0.62(- 2.62)
$I_L$		- 0.81(- 3.08)	- 0.79(- 3.08)	- 0.44(- 1.67)
BETA	0.11(0.84)	0.12(0.90)	0.13(1.05)	0.22(2.12)
SIZE	- 0.55(- 3.71)	- 0.58(- 3.98)	- 0.56(- 3.92)	- 0.64(- 4.35)
BM	0.34(2.94)	0.31(2.81)	0.30(2.81)	0.24(2.37)
INV			- 0.57(- 4.27)	
OP			0.07(0.57)	
MOM	- 0.18(- 0.84)	- 0.15(- 0.73)	- 0.17(- 0.84)	- 0.08(- 0.37)
REV	- 4.32(- 5.33)	- 3.98(- 4.83)	- 3.94(- 4.82)	- 3.70(- 4.83)
TURN				- 0.44(- 3.64)
DTURN				0.10(0.93)

Fama and French(2015) (INV) (OP)

Kang et al.(2013b)

#### 4. , MAX

##### 4.1 , MAX

Ang et al.(2006)

Bali et al.(2011) 1 (MAX)

MAX

Kim and Byun(2011), Kang and Sim(2014)

MAX

, Kang and Sim(2014)

MAX

MAX

, KRU

MAX

NEVER

MAX

Daily Winners and Losers in the Korean Stock Market

MAX /

NEVER

< 4> A 5

1 NEVER

Kim and 5

Byun(2011), Kang and Sim(2014)

- 1.30%, - 1.51%

< 4> , MAX /

A 5 t

Fama- French 3

B MAX 5 t 1

MAX , NEVER 20 20

	LOW	2	3	4	HIGH	High- Low
Panel A:	5					
( )	0.72 (1.66)	1.06 (2.14)	0.93 (1.72)	0.90 (1.42)	- 0.57 (- 0.85)	- 1.30 (- 2.23)
NEVER	0.69 (1.58)	1.07 (2.18)	0.95 (1.73)	1.11 (1.62)	- 0.14 (- 0.18)	- 0.84 (- 1.12)
( )	1.96 (4.53)	1.97 (3.97)	1.81 (3.49)	1.45 (2.53)	0.45 (0.72)	- 1.51 (- 4.00)
NEVER	1.97 (4.55)	1.98 (4.00)	1.80 (3.43)	1.54 (2.54)	0.58 (0.80)	- 1.39 (- 2.70)
Panel B: MAX 5						
( )	0.92 (2.22)	0.91 (1.90)	0.97 (2.04)	0.81 (1.31)	- 0.50 (- 0.76)	- 1.42 (- 2.49)
NEVER	0.89 (2.16)	0.85 (1.80)	0.89 (1.85)	0.96 (1.49)	0.24 (0.34)	- 0.66 (- 1.00)
( )	2.16 (4.57)	1.99 (4.11)	1.82 (3.55)	1.41 (2.60)	0.26 (0.41)	- 1.90 (- 5.31)
NEVER	2.11 (4.51)	1.98 (4.10)	1.86 (3.60)	1.38 (2.44)	0.86 (1.21)	- 1.25 (- 2.46)

, NEVER

- 1.39%(t = 2.70) . NEVER  
77%, 91.83%

< 4> B MAX  
MAX . MAX  
MAX - 1.42%(t = 2.49),  
- 1.90%(t = 5.31)

NEVER MAX

MAX

MAX

4.2 NMB , MAX

NEVER BOTH (NMB)  
MAX

, Barillas and Shanken(2017) Fama and French(2018)  
(spanning test) , NMB

MAX MAX  
(Fama- French 3 , Fama- French 5 )

< 5> . 1 6 NMB  
, MAX  
7 12 NMB , MAX

1

NMB

NMB NMB  
Fama- French 3  
2.07%(t = 3.33) . 2 NMB

MAX . MAX

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
alpha	2.07 (3.33)	2.41 (3.71)	2.14 (3.36)	2.26 (3.78)	2.52 (4.08)	2.32 (3.80)	1.95 (5.83)	2.02 (5.26)	1.99 (5.61)	1.79 (5.23)	1.75 (4.66)	1.79 (5.04)
MKT	-0.23 (-2.29)	-0.27 (-2.02)	-0.27 (-2.11)	-0.27 (-2.50)	-0.29 (-2.22)	-0.30 (-2.37)	0.26 (4.39)	0.20 (2.82)	0.26 (4.31)	0.31 (4.75)	0.28 (4.76)	0.31 (4.87)
HML	0.03 (0.17)	-0.04 (-0.19)	0.05 (0.27)	0.11 (0.67)	0.06 (0.33)	0.12 (0.74)	-0.15 (-1.60)	-0.03 (-0.29)	-0.15 (-1.58)	-0.07 (-0.69)	0.04 (0.42)	-0.07 (-0.68)
SMB	-0.66 (-3.60)	-0.82 (-4.54)	-0.65 (-3.57)	-0.60 (-3.66)	-0.74 (-4.66)	-0.60 (-3.64)	0.11 (0.94)	-0.08 (-0.66)	0.11 (0.98)	0.10 (1.22)	-0.04 (-0.46)	0.10 (1.21)
CMA				-0.43 (-1.56)	0.01 (0.05)	-0.41 (-1.55)			-0.13 (-0.76)	0.55 (3.99)	-0.13 (-0.78)	-0.13 (-0.78)
RMW				-0.08 (-0.39)	-0.48 (-1.90)	-0.10 (-0.47)			0.43 (3.33)	-0.16 (-0.86)	0.44 (3.40)	0.44 (3.40)
IVOL	-0.29 (-2.61)		-0.41 (-2.15)	-0.28 (-2.31)		-0.39 (-2.08)	-0.71 (-7.10)		-0.75 (-4.56)	-0.58 (-5.23)		-0.57 (-3.37)
MAX		-0.13 (-0.96)	0.16 (0.70)		-0.13 (-0.94)	0.14 (0.66)		-0.46 (-3.35)	0.05 (0.27)		-0.39 (-3.25)	-0.01 (-0.06)

MAX  
 NMB 4, 5, 6  
 Fama- French 5 NMB  
 Fama- French 3 NMB 2.65%(t = 4.20),  
 Fama- French 5 NMB 2.74%(t = 4.48)  
 < 2> MAX  
 NMB  
 7 12 1 6 NMB  
 MAX  
 < 6>  
 NMB  
 , NMB  
 < 6> A  
 1.68%(t = 3.56)  
 NMB 0  
 (t = 1.99), NMB  
 , NMB  
 (- 0.94%, t = 2.98), NMB  
 t 0.08  
 MAX NMB  
 < 6> B MAX  
 MAX ( ) 1.67%(1.52%)  
 . MAX , NMB  
 , t 2.08(2.00) NMB MAX  
 MAX  
 MAX  
 /  
 . MAX

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Panel A

Panel B

	IVOL_VW	IVOL_VW	IVOL_EW	IVOL_EW
alpha	- 1.68(- 3.56)	- 0.96(- 1.99)	- 0.94(- 2.98)	- 0.02(- 0.08)
MKT	0.30(2.77)	0.19(1.59)	0.15(2.59)	0.23(4.58)
HML	0.24(1.70)	0.26(1.85)	- 0.34(- 3.78)	- 0.29(- 3.48)
SMB	0.74(6.04)	0.46(3.34)	0.49(6.26)	0.34(4.36)
CMA	0.16(0.51)	0.24(0.91)	0.00(0.01)	- 0.03(- 0.29)
RMW	- 0.42(- 2.40)	- 0.63(- 3.68)	- 0.34(- 2.81)	- 0.18(- 1.78)
NMB		- 0.18(- 3.46)		- 0.37(- 7.24)

	MAX_VW	MAX_VW	MAX_EW	MAX_EW
alpha	- 1.67(- 3.86)	- 1.08(- 2.08)	- 1.52(- 4.00)	- 0.73(- 2.00)
MKT	0.46(4.58)	0.37(3.50)	0.16(2.12)	0.20(2.79)
HML	0.11(0.78)	0.13(0.84)	- 0.24(- 2.04)	- 0.15(- 1.37)
SMB	0.55(4.28)	0.22(1.38)	0.37(5.20)	0.31(3.06)
CMA	- 0.03(- 0.11)	0.03(0.12)	- 0.05(- 0.35)	0.07(0.62)
RMW	- 0.21(- 1.06)	- 0.48(- 2.46)	- 0.21(- 1.88)	- 0.03(- 0.21)
NMB		- 0.11(- 1.22)		- 0.31(- 5.46)

4.3

$$r_{i,t+1} = a_{0,t} + a_{1,t}I_{WL(i,t)} + a_{2,t}I_{W(i,t)} + a_{3,t}I_{L(i,t)} + a_{4,t}X_{i,t} + a_{5,t}IVOL_{i,t} + a_{6,t}MAX_{i,t} + v_{i,t+1} \quad (1)$$

$$r_{i,t+1} = a_{0,t} + a_{1,t}I_{WL(i,t)} + a_{2,t}I_{W(i,t)} + a_{3,t}I_{L(i,t)} + a_{4,t}X_{i,t} + a_{5,t}IVOL_{i,t} + a_{6,t}MAX_{i,t} + v_{i,t+1} \quad (2)$$



$$\frac{I_{WL}}{I_{WL}} = \frac{I_{WL}}{I_{WL}} \quad (2)$$

$$\frac{I_{WL}}{I_{WL}} = \frac{I_{WL}}{I_{WL}} \quad (2)$$

$$\frac{I_{WL}}{I_{WL}} = \frac{I_{WL}}{I_{WL}} \quad (3)$$

$$\frac{I_{WL}}{I_{WL}} = \frac{I_{WL}}{I_{WL}} \quad (4)$$

$$\frac{I_{WL}}{I_{WL}} = \frac{I_{WL}}{I_{WL}} \quad (2)$$

< 7> (2) (1)  
 $I_{WL}$   
 $I_{WL}$ ,  $I_W$ ,  $I_L$  0  
 < 3> / MAX  
 MAX /  
 < 7> , MAX  
 1 ,  $I_W$  1  
 20 1 ,  $I_{WL}$  1 ,  $I_L$  1 20 20  
 1 1 . BETA 1 20 20 , SIZE  
 (10<sup>5</sup>) , BM Fama and French(1993) , INV  
 OP Fama and French(2015)  
 MOM Jagadeesh and Titman(1993) 1 12  
 REV 1 , IVOL FF 3  
 MAX

	(1)	(2)	(3)	(4)	(5)	(6)
$I_{WL}$	- 1.08 (- 2.99)	- 1.21 (- 4.01)	- 1.07 (- 2.87)	- 1.06 (- 3.66)	- 0.95 (- 2.65)	- 1.06 (- 3.61)
$I_W$		0.20 (0.87)		- 0.05 (- 0.21)		0.14 (0.61)
$I_L$		0.04 (0.15)		0.04 (0.14)		0.06 (0.20)
BETA	0.19 (1.44)	0.19 (1.45)	0.36 (2.01)	0.36 (1.96)	0.38 (1.72)	0.37 (1.72)
SIZE	- 0.65 (- 4.48)	- 0.64 (- 4.51)	- 0.62 (- 4.20)	- 0.62 (- 4.23)	- 0.64 (- 4.48)	- 0.64 (- 4.51)
BM	0.24 (2.26)	0.23 (2.22)	0.23 (2.20)	0.23 (2.19)	0.23 (2.18)	0.22 (2.14)
MOM	- 0.11 (- 0.51)	- 0.11 (- 0.52)	- 0.11 (- 0.50)	- 0.10 (- 0.48)	- 0.08 (- 0.38)	- 0.08 (- 0.40)
REV	- 3.16 (- 3.87)	- 2.97 (- 3.58)	- 1.58 (- 1.69)	- 1.49 (- 1.54)	- 1.89 (- 1.89)	- 1.85 (- 1.88)
IVOL	- 50.33 (- 5.43)	- 53.60 (- 4.92)			- 25.89 (- 1.78)	- 30.84 (- 2.06)
MAX			- 36.81 (- 5.44)	- 37.04 (- 4.88)	- 21.47 (- 1.94)	- 19.88 (- 1.78)

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$$I_{WL} = \frac{\text{MAX} - \text{MIN}}{\text{MAX} - \text{MIN}} \quad (5)$$

$$I_{WL} = \frac{\text{MAX} - \text{MIN}}{\text{MAX} - \text{MIN}} \quad (6)$$

5.

5.1

KRU = (buy- sell imbalance) / total trade amount

(4) Fama- MacBeth

< 8 >

$$\Delta trade\_amt_{\{b,s\},i,t} = \frac{trade\_amt_{\{b,s\},i,t}}{total\_trade\_amt_{\{b,s\},t}} - \frac{trade\_amt_{\{b,s\},i,t-1}}{total\_trade\_amt_{\{b,s\},t-1}} \quad (3)$$

$$\Delta trade\_amt_{\{b,s\},i,t} = a_{0,t} + a_{1,t}I_{WL(i,t)} + a_{2,t}I_{W(i,t)} + a_{3,t}I_{L(i,t)} + a_{4,t}X_{i,t} + v_{i,t+1} \quad (4)$$

trade\\_amt\_{\{b,s\},i,t} (i = 1, 2, 3, 4) (b) / (s)  
 total\\_trade\\_amt\_{\{b,s\},t} (b) / (s) < 8 > A

1.64%(t = 7.97)

1.44%(t = 3.60), 1.91%(t = 6.64)

(8)  $\frac{1}{I_{W,t}} = \alpha_0 + \alpha_1 \frac{I_{W,t-1}}{I_{W,t}} + \alpha_2 \frac{I_{L,t-1}}{I_{L,t}} + \alpha_3 \text{BETA}_{i,t-1} + \alpha_4 \text{SIZE}_{i,t-1} + \alpha_5 \text{BM}_{i,t-1} + \alpha_6 \text{MOM}_{i,t-1} + \alpha_7 \text{REV}_{i,t-1} + \epsilon_{i,t}$

Panel A:

$I_{WL}$	0.34 (1.71)	1.64 (7.97)				
$I_W$			0.66 (1.78)	1.44 (3.60)		
$I_L$					0.33 (1.83)	1.91 (6.64)
BETA	-0.03 (-0.13)	-0.17 (-0.81)	-0.02 (-0.09)	-0.16 (-0.78)	-0.03 (-0.13)	-0.19 (-1.00)
SIZE	-0.01 (-0.12)	0.02 (0.45)	0.01 (0.17)	0.04 (0.72)	0.01 (0.12)	0.07 (1.33)
BM	0.01 (0.22)	0.04 (1.32)	0.01 (0.50)	0.05 (1.59)	0.01 (0.46)	0.07 (2.11)
MOM	-0.55 (-9.77)	-0.02 (-0.47)	-0.56 (-9.67)	-0.04 (-0.65)	-0.56 (-9.71)	-0.04 (-0.69)
REV	6.51 (5.74)	-3.76 (-3.82)	6.58 (5.84)	-3.28 (-3.36)	6.22 (5.68)	-4.83 (-4.86)

Panel B:

$I_{WL}$	0.02 (0.41)	-0.67 (-13.29)				
$I_W$			-0.03 (-0.64)	-0.43 (-9.00)		
$I_L$					-0.04 (-0.57)	-0.89 (-15.47)
BETA	-0.11 (-3.98)	-0.05 (-1.60)	-0.11 (-4.00)	-0.05 (-1.69)	-0.11 (-3.95)	-0.02 (-0.87)
SIZE	0.01 (0.44)	-0.01 (-0.42)	0.00 (0.27)	-0.01 (-0.58)	0.01 (0.35)	-0.03 (-1.40)
BM	0.01 (0.43)	-0.01 (-0.50)	0.00 (0.23)	-0.01 (-0.77)	0.01 (0.53)	-0.02 (-1.21)
MOM	0.29 (9.46)	-0.04 (-1.60)	0.29 (9.50)	-0.03 (-1.34)	0.29 (9.50)	-0.03 (-1.40)
REV	-2.92 (-9.98)	3.33 (11.15)	-2.89 (-10.17)	3.14 (10.74)	-2.90 (-9.39)	3.79 (11.56)

Daily Winners and Losers in the Korean Stock Market

< 8> / ( )

Panel C:

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$I_{WL}$	- 0.26 (- 3.74)	- 0.57 (- 6.76)				
$I_W$			- 0.24 (- 4.17)	- 0.34 (- 6.12)		
$I_L$					- 0.27 (- 3.22)	- 0.69 (- 6.30)
BETA	- 0.03 (- 1.46)	0.01 (0.38)	- 0.03 (- 1.40)	0.01 (0.36)	- 0.02 (- 1.15)	0.02 (0.59)
SIZE	0.01 (0.46)	0.01 (0.21)	0.01 (0.39)	0.01 (0.23)	0.01 (0.28)	- 0.01 (- 0.16)
BM	0.00 (0.11)	- 0.01 (- 0.91)	0.00 (- 0.54)	- 0.01 (- 1.11)	0.00 (- 0.51)	- 0.02 (- 1.80)
MOM	0.22 (8.66)	0.08 (2.63)	0.23 (8.57)	0.09 (2.68)	0.23 (8.48)	0.09 (2.71)
REV	- 2.38 (- 8.47)	0.66 (1.85)	- 2.49 (- 8.22)	0.47 (1.24)	- 2.21 (- 9.13)	1.05 (3.31)

Kong and Park(2013)

Kang et al.(2013a)

12

1

(reversal)

Kil et al.(2006)

< 8> B

/

0.67%(t = 13.29)

0.43%(t = 9.00),

0.89%(t = 15.47)

A

< 8> C

/

0.26%(t = 3.74), 0.57%(t = 6.76),  
 0.24%(t = 4.17), 0.34%(t = 6.12),  
 0.27%(t = 3.22), 0.69%(t = 6.30)  
 Kim(2018)

5.2 (saliency)

KRU NMB  
 < 9> NMB  
 20 20  
 Fama-French 3 5  
 t (NMB Saliency)

	(1)	(2)	(3)	(4)
MKT	- 0.06(- 0.54)	- 0.02(- 0.17)	0.24(2.64)	0.32(3.93)
HML	- 0.57(- 2.05)	- 0.53(- 1.88)	- 0.16(- 1.06)	- 0.13(- 0.89)
SMB	- 0.90(- 3.08)	- 0.77(- 2.66)	- 0.46(- 3.30)	- 0.30(- 2.32)
RMW		0.47(2.76)		0.59(2.51)
CMA		- 0.15(- 0.66)		0.06(0.31)
Saliency	0.51(1.88)	0.49(1.90)	0.57(3.09)	0.55(2.96)
alpha	3.49(4.45)	3.24(4.26)	4.02(8.05)	3.68(6.92)

Daily Winners and Losers in the Korean Stock Market

,  
 . < 9> NMB  
, (Fama- French 3 Fama- French 5 )  
 . NMB  
 < 9> , NMB  
 . /

6.

KRU /  
 / MAX /  
 , KRU

## References

- Ang, A., R. J. Hodrick, Y. Xing, and X. Zhang, 2006, The Cross-Section of Volatility and Expected Returns, *Journal of Finance*, Vol. 61 (1), pp. 259- 299.
- Bali, T. G., N. Cakici, and R. F. Whitelaw, 2011, Mxing Out: Stocks as Lotteries and the Cross- Section of Expected Returns, *Journal of Financial Economics*, Vol. 99 (2), pp. 427- 446.
- Barillas, F., and J. Shanken, 2017, Which alpha?, *The Review of Financial Studies*, Vol. 30 (4), pp. 1316- 1338.
- Eom, Y., 2013, Momentum Profits and Firm, *Korean Journal of Financial Studies*, Vol. 42 (5), pp. 901- 927.
- Fama, E. F., and K. R. French, 1999, Common Risk Factors in the Returns on Stocks and Bonds, *Journal of Financial Economics*, Vol. 33 (1), pp. 3- 56.
- Fama, E. F., and K. R. French, 2015, A five- factor asset pricing model, *Journal of Financial Economics*, Vol. 116, pp. 1- 22.
- Fama, E. F., and K. R. French, 2018, Choosing factors, *Journal of Financial Economics*, Vol. 128 (2), pp. 234- 252.
- Fama, E. F., and J. D. MacBeth, 1973, Risk, Return and Equilibrium: Empirical Tests, *Journal of Political Economy*, Vol. 81 (3), pp. 607- 636.
- Jang, J., 2017, Price Momentum Anomaly Revisited: Evidence in the Korean Stock Market, *Asian Review of Financial Research*, Vol. 30 (3), pp. 317- 359.
- Jegadeesh, N., and S. Titman, 1993, Returns to Buying Winners and Selling Losers: Implications for Stock Market Efficiency, *Journal of Finance*, Vol. 48 (1), pp. 65- 91.
- Kang, J., K. Kwon, and M. Sim, 2013a, Retail Investor Sentiment and Stock Returns, *The Korean Journal of Financial Management*, Vol. 30 (3), pp. 35- 68.
- Kang, J., and M. Sim, 2014, Lottery- Like Stocks and the Cross- Section of Expected Stock Returns in the Korean Stock Market, *Asian Review of Financial Research*, Vol. 27 (2), pp. 297- 332.
- Kang, J., D. Lee, C. Lee, and J. Choi, 2013b, A Construction of the Korean Stock Database and Its Applications, *Asian Review of Financial Research*, Vol. 26 (3), pp. 311- 351.
- Kil, J., N. Kim, and Y. Son, 2006, The Impact of the Investors` Trading Behavior on the Return and the Volatility in the Recent Korean Stock Market, *Korean Journal of Financial Studies*, Vol. 35 (3), pp. 77- 106.
- Kim, K., 2018, Analysis of Relationship between Price Momentum and Investor Types` Trade Imbalance, *Journal of Money & Finance*, Vol. 32 (4), pp. 37- 74.

- Kim, T., and Y. Byun, 2011, The Relationship between Idiosyncratic Volatility and Expected Returns in the Korea Stock Markets, *Korean Journal of Financial Studies*, Vol. 40 (3), pp. 525- 550.
- Kong, O., and D. Park, 2013, The Impact of Attention Effect on the Buying Behavior of Investors in the Korea Stock Market, *The Korean Journal of Financial Engineering*, Vol. 12 (3), pp. 75- 98.
- Kumar, A., 2009. Who Gambles in the Stock Market?, *The Journal of Finance*, Vol. 64 (4), pp. 1889- 1933.
- Kumar, A., S. Ruenzi, and M. Urgeheuer, Daily Winners and Losers, *Working Paper*, 2020. <https://ssrn.com/abstract=2931545>.
- Lee, J., Y. Lee, and J. Chae, 2019, Investor Attention and Expected Return, *Journal of Derivatives and Quantitative Studies*, Vol. 27 (1), pp. 49- 83.