

Internet Appendix for “Catering Through Nominal Share Prices”*

Malcolm Baker, Robin Greenwood, and Jeffrey Wurgler

This note presents supplementary results and data referred to in “Catering Through Nominal Share Prices.”

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Table IA I
Raw Market-to-book Data

The market-to-book ratio is the ratio of the market value of the firm to its book value. Market value is equal to market equity at calendar year end plus book debt. Book equity is defined as stockholders' equity minus preferred stock plus deferred taxes and investment tax credits and post retirement assets. All NYSE stocks with share codes of 10 or 11 are ranked each year by share price and market capitalization at the end of December. Low-price i.e. cheap stocks (high price i.e. expensive) are stocks with share prices below the 30th NYSE percentile (above the 70th percentile) by share price. Small (large) stocks are stocks with market capitalizations below the 30th NYSE percentile (above the 70th percentile) by capitalization.

Year	<i>Low-price Premium</i>				<i>Small-stock premium</i>			
	Cheap MB		Expensive MB		Small Cap MB		Large Cap MB	
	VW	EW	VW	EW	VW	EW	VW	EW
1962	0.99	1.17	1.72	1.95	0.98	1.17	1.62	2.01
1963	1.06	1.22	1.88	2.13	1.03	1.23	1.77	2.17
1964	1.08	1.29	1.96	2.09	1.09	1.31	1.87	2.18
1965	1.18	1.46	2.02	2.40	1.22	1.52	1.93	2.39
1966	1.04	1.23	1.77	2.31	1.07	1.33	1.65	2.18
1967	1.25	1.79	2.11	3.06	1.39	1.97	1.83	2.51
1968	1.53	2.14	1.98	2.94	1.62	2.29	1.81	2.45
1969	1.10	1.39	1.97	2.87	1.19	1.55	1.64	2.36
1970	1.01	1.18	1.76	2.36	1.05	1.25	1.53	2.07
1971	1.02	1.28	1.97	2.88	1.13	1.42	1.64	2.49
1972	1.04	1.26	2.07	3.05	1.12	1.42	1.79	2.73
1973	0.84	0.91	1.58	2.17	0.86	0.96	1.48	2.15
1974	0.75	0.75	1.14	1.32	0.75	0.78	1.08	1.38
1975	0.82	0.86	1.28	1.49	0.82	0.88	1.22	1.52
1976	0.92	0.98	1.31	1.48	0.90	1.01	1.26	1.47
1977	0.90	1.01	1.15	1.36	0.92	1.04	1.11	1.26
1978	0.89	1.02	1.15	1.37	0.93	1.06	1.08	1.21
1979	0.93	1.31	1.18	1.59	0.98	1.33	1.11	1.31
1980	0.95	1.73	1.31	2.04	1.06	1.78	1.22	1.64
1981	1.00	1.45	1.11	1.55	1.01	1.46	1.05	1.33
1982	1.00	1.54	1.24	1.83	1.09	1.57	1.11	1.54
1983	1.21	1.82	1.22	1.63	1.24	1.79	1.18	1.54
1984	1.10	1.53	1.14	1.43	1.12	1.51	1.11	1.42
1985	1.14	1.73	1.26	1.68	1.20	1.73	1.22	1.60
1986	1.17	1.70	1.30	1.82	1.18	1.69	1.28	1.75
1987	1.13	1.47	1.27	1.68	1.07	1.46	1.26	1.74
1988	1.16	1.58	1.25	1.66	1.13	1.59	1.25	1.66
1989	1.20	1.65	1.41	1.92	1.16	1.67	1.39	1.90
1990	1.00	1.31	1.36	1.94	1.01	1.38	1.31	1.78
1991	1.11	1.63	1.59	2.64	1.19	1.79	1.47	2.33
1992	1.17	1.83	1.63	2.44	1.31	1.93	1.54	2.23
1993	1.29	2.04	1.63	2.55	1.45	2.11	1.60	2.26
1994	1.24	1.77	1.61	2.41	1.32	1.84	1.56	2.02
1995	1.32	1.98	1.86	3.08	1.41	2.08	1.75	2.52
1996	1.37	2.01	1.97	2.94	1.46	2.09	1.85	2.52
1997	1.40	2.01	2.26	3.03	1.53	2.09	2.09	2.73
1998	1.16	1.69	2.62	3.66	1.23	1.79	2.41	3.17
1999	1.12	2.06	3.03	5.08	1.23	2.23	2.77	4.22
2000	1.08	1.57	2.35	3.87	1.03	1.62	2.16	3.31
2001	1.24	1.77	2.18	2.85	1.19	1.82	1.88	2.59
2002	1.15	1.52	1.94	2.28	1.09	1.55	1.63	2.08
2003	1.44	2.37	1.97	2.54	1.42	2.39	1.78	2.36
2004	1.56	2.45	1.98	2.57	1.57	2.50	1.74	2.40
2005	1.48	2.30	1.95	2.50	1.55	2.35	1.77	2.47

Table IA II
Control Variables in Time-series Regressions

Time-series regressions in tables III and IV include controls for the lagged equal-weighted price, and the current average return, not including dividends. Raw data are presented below; in the regressions, these variables enter in log form. Average price is computed using all firms with share codes of 10 or 11 that are on CRSP at the end of each year. Equal-weighted return is also from CRSP, and excludes dividends.

Year	p^{EW}	r^{EW}
1962	23.76	NA
1963	25.44	0.158
1964	26.54	0.182
1965	29.48	0.356
1966	24.25	-0.064
1967	33.87	0.774
1968	36.77	0.418
1969	25.39	-0.254
1970	21.43	-0.109
1971	23.78	0.204
1972	19.37	0.056
1973	13.03	-0.356
1974	9.00	-0.261
1975	11.82	0.642
1976	14.21	0.490
1977	14.24	0.237
1978	14.39	0.265
1979	16.48	0.415
1980	17.89	0.431
1981	14.39	-0.001
1982	16.18	0.250
1983	16.61	0.372
1984	14.29	-0.114
1985	16.98	0.255
1986	15.49	0.079
1987	12.22	-0.085
1988	13.69	0.188
1989	15.40	0.118
1990	12.04	-0.216
1991	16.26	0.516
1992	15.78	0.268
1993	16.45	0.269
1994	14.59	-0.051
1995	17.39	0.302
1996	17.81	0.179
1997	20.04	0.202
1998	18.02	-0.029
1999	21.26	0.338
2000	16.20	-0.111
2001	16.97	0.221
2002	15.03	-0.109
2003	21.15	0.726
2004	23.55	0.217
2005	23.34	0.056
2006	NA	0.188

Table IA III
Robustness of IPO Price Regressions

The first two columns show the baseline results from Table IV. The remaining columns replace the log closing price with the log offer price and the log of the mid point of the filing range.

	P=Log(Closing Price)		P=Log(Offer Price)		P=Log(MidPoint File Range)	
$VW P_{t-1}^{CME}$	-0.19	-0.17	-0.10	-0.09	-0.06	-0.04
	[-10.24]	[-8.63]	[-6.39]	[-5.31]	[-3.09]	[-1.85]
p_{t-1}		0.14		0.08		0.14
		[2.92]		[1.21]		[2.13]
r_t		0.23		0.18		0.12
		[2.13]		[2.26]		[1.48]
Adj-Rsq	0.78	0.81	0.65	0.69	0.31	0.44

Table IA IV
Returns to Low-price Stocks Net of the Returns to High-price Stocks

Future excess returns of low-price stocks over high price stocks. Note that the 2-year holding period return is not exactly the same as the twice compounded one-year holding period return (and similarly for the 3-year holding period return), because the composition of the 2-year portfolios remain fixed over a two-year period. Cheap stocks are all stocks with year-end prices below that of the 30th NYSE price percentile. Expensive stocks are all stocks with year-end prices above that of the 70th NYSE price percentile. These data are used in Table VI. Below, returns are presented in percentage form.

	Value-weighted (%)			Equal-weighted (%)		
	$R_{Cheapt+1} - R_{Expt+1}$	$R_{Cheapt+2} - R_{Expt+2}$	$R_{Cheapt+3} - R_{Expt+3}$	$R_{Cheapt+1} - R_{Expt+1}$	$R_{Cheapt+2} - R_{Expt+2}$	$R_{Cheapt+3} - R_{Expt+3}$
1962	-6.26	-6.77	24.82	-4.19	-0.97	26.56
1963	-1.41	23.66	33.11	4.92	31.42	33.61
1964	25.34	29.45	97.51	23.93	27.54	133.49
1965	0.16	37.44	66.43	-3.90	62.24	136.03
1966	49.11	98.36	58.98	85.36	192.57	112.39
1967	21.04	3.60	4.20	43.00	11.92	2.20
1968	-17.41	-20.42	-27.07	-18.56	-20.70	-30.55
1969	-7.04	-7.34	-26.03	-8.07	-11.43	-22.68
1970	0.83	-19.29	-39.09	-2.69	-16.05	-30.61
1971	-19.57	-27.16	-6.47	-14.71	-20.20	-4.14
1972	-15.96	-5.15	-0.57	-13.21	0.34	0.70
1973	2.86	20.73	49.97	5.51	21.88	42.57
1974	37.47	86.44	145.02	34.96	76.33	138.36
1975	29.84	66.51	95.83	20.35	62.58	102.45
1976	24.35	41.02	74.84	26.78	49.69	78.31
1977	9.91	31.54	38.95	18.81	38.17	60.45
1978	16.31	19.93	29.83	11.88	25.93	26.28
1979	-16.19	3.10	28.08	-5.37	3.76	29.82
1980	14.74	42.19	65.67	1.46	21.23	51.27
1981	8.79	19.25	7.46	5.86	22.28	-1.05
1982	4.71	-10.49	-23.64	7.35	-16.08	-40.17
1983	-16.42	-27.90	-38.52	-23.60	-44.41	-65.16
1984	-11.66	-29.59	-40.00	-20.30	-42.79	-54.04
1985	-20.65	-30.11	-30.66	-21.43	-29.86	-38.68
1986	-14.20	-12.70	-24.82	-13.60	-19.44	-31.23
1987	7.37	-2.58	-27.13	0.32	-11.54	-24.53
1988	-14.33	-34.73	-29.67	-17.39	-28.94	-29.46
1989	-22.46	-12.63	-5.60	-16.95	-10.00	-3.04
1990	18.03	48.98	84.73	23.50	47.70	79.95
1991	20.06	46.09	44.00	21.71	49.48	47.05
1992	8.37	2.16	-7.95	13.69	8.42	7.52
1993	-7.32	-19.02	-28.62	-4.79	-5.54	-5.16
1994	-13.33	-22.95	-47.09	0.01	0.40	-14.20
1995	-5.73	-21.88	-58.23	0.00	-5.67	-37.17
1996	-14.20	-37.22	-23.70	-10.16	-25.16	-12.26
1997	-31.25	-15.16	-20.06	-16.37	13.17	-16.13
1998	12.03	16.82	23.91	20.10	-2.20	12.13
1999	15.37	41.12	47.41	2.81	28.78	37.03
2000	29.06	23.28	53.52	40.42	42.12	82.45
2001	-19.39	-3.57	-1.55	-3.33	28.26	32.65
2002	45.81	51.52	51.81	68.51	75.64	66.46
2003	1.44	-3.99	-2.83	1.28	-5.88	-3.81
2004	-6.15	-3.25	-3.74	-7.12	-6.05	-6.26
2005	6.85	6.76	6.76	3.25	3.13	3.13

Table IA VI

The Low-price and Small-stock premia and Splitting Activity, Subset Results for Firms with Positive Earnings

Regressions of measures of splitting activity on the low-price and small-stock premia.

$$s_t = a + bP_{t-1}^{CME} + cP_{t-1}^{SMB} + dA_{t-1} + u_t \text{ and } p_t = a + bP_{t-1}^{CME} + cP_{t-1}^{SMB} + dA_{t-1} + u_t$$

where s is the number of splits in year t , expressed as a percentage of the number of firms, p is the log of the average post-split price, P^{CME} and P^{SMB} are the low-price and small-stock premia shown in Table 2, A is the split announcement premium shown in Table 3. Both p and s are computed on the sample of firms that reported positive earnings (Compustat data item 18) in that year. Each regression has 44 observations. All right-hand-side variables have been standardized to unit variance. T-statistics use standard errors that are robust to heteroskedasticity and autocorrelation of up to three lags.

	<i>Split % s</i>					<i>Post-split price p</i>				
VW P_{t-1}^{CME}	1.36					-0.15				
	[2.73]					[-7.00]				
EW P_{t-1}^{CME}		1.64					-0.12			
		[3.58]					[-3.18]			
VW P_{t-1}^{SMB}			1.78					-0.14		
			[3.22]					[-5.29]		
EW P_{t-1}^{SMB}				2.09					-0.10	
				[5.18]					[-2.29]	
A_{t-1}					2.01					-0.09
					[3.23]					[-3.60]
R ²	0.14	0.20	0.24	0.33	0.31	0.51	0.29	0.40	0.22	0.17

Table IA VII
The Low-price and Small-stock premia and Post-split Stock Prices: Robustness Checks

Regressions of price levels on the low price and small-stock premia.

$$p_t = a + bP_{t-1}^{CME} + dp_{t-1}^{EW} + er_t^{EW} + u_t \text{ and } p_t = a + cP_{t-1}^{SMB} + dp_{t-1}^{EW} + er_t^{EW} + u_t$$

where p is the log of the average post-split stock price in year t , P^{CME} and P^{SMB} are the low price and small-stock premia shown in Table 2. All regressions control for the log equal-weighted average stock price p^{EW} in year $t-1$ and the log equal-weighted return r excluding distributions at time t (not reported). All right-hand-side variables are standardized to have unit variance. T-statistics use standard errors that are robust to heteroskedasticity and autocorrelation of up to three lags.

Specification	N	Low-price Premium P^{CME}			Small-stock premium P^{SMB}		
		b	t-stat	Adj-R ²	c	t-stat	Adj-R ²
Base Case	44	-0.12	-4.00	0.79	-0.12	-4.52	0.80
First Half	22	-0.13	-6.26	0.84	-0.13	-5.95	0.84
Second Half	22	-0.12	-6.46	0.91	-0.11	-7.45	0.92
Exclude 1998-2001	40	-0.08	-4.26	0.82	-0.08	-4.79	0.83
Exclude 1998-2005	35	-0.08	-5.41	0.83	-0.08	-6.14	0.84
Time Trend Control	44	-0.12	-6.36	0.85	-0.12	-7.55	0.87
Differences	43	-0.12	-2.08	0.25	-0.10	-1.96	0.14
Return-Based CME or SMB	44	-0.10	-3.82	0.67	-0.12	-3.90	0.72
IPO Offer Price	27	-0.08	-5.01	0.68	-0.08	-5.55	0.72
Large Firms	44	-0.10	-4.11	0.56	-0.09	-4.25	0.55
Small Firms	44	0.01	0.34	0.68	0.01	0.23	0.68
Premia based on profitable firms	44	-0.12	-3.75	0.78	-0.12	-4.83	0.81
M/B _{High}	44	0.15	6.81	0.86	0.21	8.44	0.89
M/B _{Low}		-0.04	-1.92		-0.06	-2.96	

Table IA VIII
The Propensity to Split: Alternate Firm-level Regressions Using Two-stage Procedure

In the first stage, we estimate a set of quarterly Fama-Macbeth logit regressions of the decision to split on firm characteristics

$$\Pr(\text{Split}_{it} = 1) = \text{logit}\left(a_t + b_t p_{it-1} + c_t r_{it} + d_t \text{NYSEDEC}_{it-1} + e_t p_{it-1}^{\text{Industry}} + f_t p_{it-1}^{\text{LastSplit}}\right) + u_{it}$$

An alternate first-stage regression is based on the ratio of the end of quarter price to the counterfactual price in the absence of splits, on firm characteristics at the beginning of the quarter.

$$\text{Log}\left[\frac{P_{it}}{P_{it-1}(1+R_{it})}\right] = p_{it} - p_{it-1} - r_{it} = a_t + b_t p_{it-1} + c_t r_{it} + d_t \text{NYSEDEC}_{it-1} + e_t p_{it-1}^{\text{Industry}} + f_t p_{it-1}^{\text{LastSplit}} + u_{it}$$

The constant term from these first-stage regressions captures the desired reduction in log price, controlling for firm characteristics. The second stage regresses the constant term from the cross-sectional regressions on the low-price premium at the end of the previous year

$$\tilde{a}_t = g + h P_{t-1}^{\text{CME}} + v_t$$

The firm characteristics included in the first-stage regressions are the beginning-of-quarter log price, the NYSE size decile at the end of the previous year, the return in that quarter not including dividends, the beginning-of-quarter log average industry price, and the log price prior to the last split. Including this last variable limits the sample to firms that have split previously. Industries are defined following Fama and French (1997). T-statistics in the second-stage regression use standard errors that are robust to heteroskedasticity and autocorrelation up to eight quarters of lags.

	<i>a</i>		<i>P</i> _{<i>it-1</i>}		<i>r</i> _{<i>it</i>}		<i>NYSEDEC</i> _{<i>it-1</i>}		<i>P</i> _{<i>it-1</i>} ^{<i>Industry</i>}		<i>P</i> _{<i>it-1</i>} ^{<i>LastSplit</i>}		<i>VW P</i> _{<i>t-1</i>} ^{<i>CME</i>}	
	<i>a</i>	[t]	<i>b</i>	[t]	<i>c</i>	[t]	<i>d</i>	[t]	<i>e</i>	[t]	<i>f</i>	[t]	<i>h</i>	[t]
<i>Pr(Split</i> _{<i>it</i>} <i> = 1)</i>	-10.09	[-67.44]	2.14	[48.02]	2.40	[18.25]	-0.24	[-25.01]					0.85	[2.63]
<i>Pr(Split</i> _{<i>it</i>} <i> = 1)</i>	-8.36	[-53.71]	2.20	[46.71]	2.39	[18.28]	-0.22	[-23.09]	-0.63	[-14.27]			0.57	[1.87]
<i>Pr(Split</i> _{<i>it</i>} <i> = 1)</i>	-10.25	[-40.84]	2.62	[9.13]	2.62	[9.13]	-0.21	[-10.87]			-0.49	[-22.35]	1.09	[3.63]
<i>P</i> _{<i>it</i>} <i> - P</i> _{<i>it-1</i>} <i> - r</i> _{<i>t-1</i>}	4.05	[15.79]	-2.35	[-23.69]	-3.00	[-17.72]	0.31	[22.27]					-0.70	[-2.42]
<i>P</i> _{<i>it</i>} <i> - P</i> _{<i>it-1</i>} <i> - r</i> _{<i>t-1</i>}	2.23	[10.72]	-2.37	[-23.57]	-3.01	[-17.83]	0.28	[20.55]	0.62	[13.01]			-0.52	[-2.12]
<i>P</i> _{<i>it</i>} <i> - P</i> _{<i>it-1</i>} <i> - r</i> _{<i>t-1</i>}	4.08	[12.60]	-2.94	[-21.93]	-3.24	[-11.62]	0.28	[20.42]			[0.58]	[15.11]	-0.94	[-2.77]