

Large controlling shareholders and stock price synchronicity¹

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Stock price synchronicity

- Estimating the following modified market model for each firm-year

$$RET_{i,w} = \alpha + \beta_1 MKRET_{w-1} + \beta_2 MKRET_w + \beta_3 INDRET_{i,w-1} + \beta_4 INDRET_{i,w}$$

- R-squared value obtained from the above regression

$$SYNCH = \log\left(\frac{R_{i,t}^2}{1 - R_{i,t}^2}\right)$$

Proxies for the control– ownership wedge

- $\text{Excess} = (\text{cr} - \text{cfr})/\text{cr}$
- $\text{ExcessDiff} = \text{cr} - \text{cfr}$
- $\text{ExcessDummy} = \begin{cases} 1 & \text{cr} - \text{cfr} > 0 \\ 0 & \text{cr} - \text{cfr} \leq 0 \end{cases}$
- $\text{ExcessHigh} = \begin{cases} 1 & \text{Excess} > \text{Median}(\text{Excess}) \\ 0 & \text{Excess} \leq \text{Median}(\text{Excess}) \end{cases}$

Table 4

Independent variable	Expected sign	Baseline model	Full model				Economic impact (Eq. (2))
		Eq. (1)	Eq. (2)	Eq. (3)	Eq. (4)	Eq. (5)	
<i>Excess</i>	+	0.4340 ^a (2.7801)	0.4619 ^a (3.4131)				0.100
<i>ExcessDiff</i>	+			0.9153 ^a (3.4351)			
<i>ExcessDummy</i>	+				0.0995 ^b (2.1971)		
<i>ExcessHigh</i>	+					0.1433 ^a (3.1382)	
<i>UCF</i>	–	–0.6642 ^a (–5.7162)	–0.6052 ^a (–5.6130)	–0.7275 ^a (–7.5125)	–0.7255 ^a (–6.4477)	–0.6740 ^a (–6.0187)	–0.151
<i>LEV</i>	+/-		–0.0874 (–0.6386)	–0.1043 (–0.7636)	–0.0931 (–0.6794)	–0.0878 (–0.6414)	–0.021
<i>STDRET</i>	–		–0.3878 ^a (–2.7929)	–0.3824 ^a (–2.7977)	–0.3960 ^a (–2.8127)	–0.3952 ^a (–2.8034)	–0.007
<i>AMIHU</i>	+		1.5637 ^a (3.4752)	1.5733 ^a (3.4656)	1.5941 ^a (3.5632)	1.5788 ^a (3.5080)	0.056
<i>ROACORR</i>	+		0.0536 ^b (2.2553)	0.0526 ^b (2.2252)	0.0557 ^b (2.3335)	0.0565 ^b (2.3727)	0.038
<i>LOG (NIND)</i>	?		–0.2101 ^a (–5.7570)	–0.2110 ^a (–5.6911)	–0.2100 ^a (–5.6905)	–0.2094 ^a (–5.6542)	–0.220
<i>DIVERS</i>	+/-		0.0217 (1.5799)	0.0225 (1.6409)	0.0235 ^c (1.6984)	0.0226 (1.6275)	0.042
<i>XLIST</i>	+/-		0.4402 ^a (3.3607)	0.4291 ^a (3.3980)	0.4210 ^a (3.3282)	0.4288 ^a (3.3806)	0.112
<i>SIZE</i>	+	0.3213 ^a (21.4299)	0.2955 ^a (18.9320)	0.2934 ^a (18.7762)	0.2953 ^a (18.8792)	0.2946 ^a (18.8705)	0.639
<i>Intercept</i>		–1.1752 ^a (–3.8217)	–1.0364 ^a (–3.6233)	–0.9710 ^a (–3.4784)	–0.9792 ^a (–3.5666)	–1.0010 ^a (–3.5848)	
Industry dummies		Yes	Yes	Yes	Yes	Yes	
Year dummies		Yes	Yes	Yes	Yes	Yes	
<i>N</i>		4561	4561	4561	4561	4561	
Adjusted R ²		0.4167	0.4491	0.4494	0.4451	0.4464	
<i>F</i>		41.12 ^a	37.72 ^a	36.74 ^a	36.69 ^a	37.34 ^a	

	Synchronicity							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Excess		-0.899** [-3.22]	-0.557* [-2.10]					
ExcessDiff				-0.512 [-1.61]				
ExcessDummy					-0.0900 [-0.66]			
ExcessHigh						-0.175 [-1.34]		
position							-0.0959* [-2.53]	
centrality								1.159** [2.83]
cfr		-0.421 [-1.17]	-0.173 [-0.53]	0.0838 [0.31]	0.244 [0.96]	0.102 [0.38]	0.119 [0.50]	0.336 [1.53]
volatility	-0.00453 [-0.27]		-0.0184 [-0.95]	-0.0168 [-0.87]	-0.0137 [-0.69]	-0.0171 [-0.86]	-0.0182 [-0.92]	-0.0135 [-0.69]
Liquidity	-0.206*** [-9.33]		-0.191*** [-6.17]	-0.192*** [-6.29]	-0.196*** [-6.29]	-0.195*** [-6.31]	-0.195*** [-6.30]	-0.190*** [-5.91]
Size	-0.0873** [-3.03]		-0.0952* [-2.17]	-0.0917* [-2.09]	-0.0853* [-2.01]	-0.0879* [-2.06]	-0.101* [-2.25]	-0.0789 [-1.88]
leverage	-0.104 [-1.79]		-0.281* [-2.38]	-0.291* [-2.50]	-0.286* [-2.47]	-0.273* [-2.35]	-0.334** [-2.77]	-0.199 [-1.61]
ln(MIND)	-0.138 [-0.36]		-0.522 [-0.55]	-0.526 [-0.55]	-0.567 [-0.59]	-0.585 [-0.61]	-0.602 [-0.64]	-0.396 [-0.41]
Industry Dummy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2550	1116	978	978	978	978	978	941
R ²	0.357	0.444	0.479	0.478	0.477	0.477	0.479	0.493

t statistics in brackets

Table 5

Independent variable	Expected sign	Baseline model	Full model				Economic impact (Eq. (2))
		Eq. (1)	Eq. (2)	Eq. (3)	Eq. (4)	Eq. (5)	
<i>Excess</i>	+	0.4203 ^a (8.2821)	0.4319 ^a (9.8971)				0.093
<i>ExcessDiff</i>	+			0.8499 ^a (6.8730)			
<i>ExcessDummy</i> (4.7389)	+				0.0852 ^a		
<i>ExcessHigh</i>	+					0.1287 ^a (5.6281)	
<i>UCF</i>	−	−0.6795 ^a (−13.9080)	−0.6157 ^a (−14.3660)	−0.7322 ^a (−18.8863)	−0.7397 ^a (−15.2357)	−0.6887 ^a (−17.9060)	−0.153
<i>LEV</i>	+/−		−0.1259 (−1.0353)	−0.1398 (−1.1418)	−0.1292 (−1.0452)	−0.1299 (−1.0516)	−0.030
<i>STDRET</i>	−		−0.3174 ^b (−2.9661)	−0.3057 ^b (−2.8589)	−0.3281 ^b (−3.0412)	−0.3300 ^b (−3.0545)	−0.006
<i>AMIHUUD</i>	+		1.6603 ^a (4.8400)	1.6877 ^a (5.0554)	1.6983 ^a (5.1627)	1.6595 ^a (5.0222)	0.059
<i>ROACORR</i>	+		0.0638 ^a (3.6260)	0.0624 ^a (3.6679)	0.0651 ^a (3.8332)	0.0661 ^a (3.9606)	0.045
<i>LOG (NIND)</i>	?		−0.2076 ^a (−16.6884)	−0.2084 ^a (−16.7446)	−0.2078 ^a (−16.7103)	−0.2075 ^a (−16.1773)	−0.217
<i>DIVERS</i>	+/−		0.0202 ^b (2.8268)	0.0212 ^b (3.0133)	0.0216 ^b (3.0086)	0.0207 ^b (2.9984)	0.039
<i>XLIST</i>	+/−		0.4487 ^a (11.4865)	0.4368 ^a (11.4380)	0.4284 ^a (11.3181)	0.4368 ^a (11.5180)	0.114
<i>SIZE</i>	+	0.3187 ^a (26.8572)	0.2863 ^a (32.1764)	0.2840 ^a (31.4588)	0.2859 ^a (32.7908)	0.2851 ^a (32.0559)	0.619
<i>Intercept</i>		−1.2694 ^a (−11.9593)	−1.0330 ^a (−9.1540)	−0.9751 ^a (−8.1866)	−0.9722 ^a (−8.2238)	−0.9907 ^a (−8.4827)	
Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes	
Year dummies	No	No	No	No	No	No	
<i>N</i>		4561	4561	4561	4561	4561	
Average R ²		0.4291	0.4722	0.4724	0.4682	0.4695	
<i>F</i>		80.19 ^a	113.02 ^a	114.00 ^a	114.35 ^a	115.96 ^a	

	Synchronicity							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Excess		-0.894** [-4.64]	-0.486 [-2.50]					
ExcessDiff				-0.492 [-2.05]				
ExcessDummy					-0.0777 [-1.55]			
ExcessHigh						-0.191 [-1.73]		
position							-0.0575 [-2.08]	
centrality								1.497*** [7.48]
cfr		-0.468 [-1.58]	-0.269 [-0.79]	-0.0738 [-0.25]	0.0783 [0.31]	-0.104 [-0.31]	0.0265 [0.14]	0.169 [0.81]
volatility	0.489** [6.17]		1.654* [2.77]	1.616* [2.79]	1.615* [2.79]	1.686* [2.79]	1.657* [2.75]	1.580* [2.83]
Liquidity	-0.219*** [-12.25]		-0.242*** [-20.05]	-0.243*** [-19.89]	-0.248*** [-18.27]	-0.239*** [-16.05]	-0.246*** [-16.07]	-0.220*** [-10.85]
Size	-0.0910** [-4.42]		-0.126** [-4.37]	-0.125** [-4.46]	-0.115* [-3.54]	-0.117* [-3.70]	-0.122* [-3.37]	-0.101* [-2.92]
leverage	-0.0837 [-2.31]		-0.0894 [-0.52]	-0.0997 [-0.59]	-0.0969 [-0.58]	-0.0835 [-0.47]	-0.136 [-0.82]	0.0254 [0.13]
ln(MIND)	-0.735** [-6.34]		-0.368 [-1.61]	-0.376 [-1.44]	-0.593 [-1.86]	-0.434 [-1.62]	-0.463 [-1.91]	-0.398 [-1.34]
Industry Dummy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummy	No	No	No	No	No	No	No	No
Observations	2550	1116	978	978	978	978	978	941
R ²	0.327	0.462	0.547	0.547	0.544	0.546	0.550	0.568

t statistics in brackets