

Sarbanes-Oxley and Corporate Risk-Taking

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What I Did: Data Differences

- BLZ: Double Differences
 - US v UK
 - Before v After
- Litvak: Triple Difference
 - X-listed v Non-Xlisted
 - Before v After
 - Level-23 v Level-14

This Comment:

- Identify Places of Improvement
- Suggestions
- Illustrations

Places of Possible Improvement: Part I (Risk)

- Rich data, not mined enough
 - Need regressions
- Need controls
 - Firm-level (size, industry, growth, leverage, profitability, volatility, share liquidity, cash liquidity, exchange, etc.)
 - Country-level (esp. if not constant, macro; need model)
- Need more explanatory variables
 - Need model, hard choices
- Firms not the same in space (US v. UK)
 - Observable and not observable differences
- Firms not the same in time
 - unbalanced panels

Places of Possible Improvement: Part II (IPO)

- Doidge, Karlyi, Stulz – strong
 - Declines in IPOs Explained by Changes in Firm Characteristics, not Changes in Law
- Need to track exchanges
 - Esp. in the UK – all increase in AIM
 - If control for firm characteristics, no change in US
 - DKS – inapposite:
 - High R&D firms in UK because AIM
 - Findings here support both negative inference re SOX and DKS thesis of mkt segmentation
- Need many controls

Possible Models (I): Risk Basic Before/After

- Before v After SOX, with Controls
 - Need to ID “Before” and “After”
- Basic Cross-Sectional Results:
 - $DD = US + X$
- Cross-Sectional with Interactions:
 - $DD = US + h1 * US + h2 * US + X$

What I Got with Those Models:

	Panel A: Unsystematic Risk			Panel B: Systematic Risk			Panel C: Total Ri	
Dummy 23	-0.002 (2.15)**	-0.003 (2.79)***	-0.002 (1.92)*	-0.261 (3.22)***	-0.286 (2.73)***	-0.133 -1.35	-0.011 (3.75)***	-0.013 (3.85)***
Dum23 *	0	0	0	0.067	0.059	0.055	0.001	0.001
Sales Growth	-0.92	-0.85	-0.45	-1.28	-1.13	-1.01	-0.84	-0.89
Dum23 *	-0.001	0	0	-0.087	0.008	0.003	0	-0.001
Profitability	-0.81	-0.43	-0.29	-1.09	-0.15	-0.05	-0.07	-0.46
Dum23 *	0	0	0.001	0.106	0.098	0.073	0.007	0.005
Ln Assets	-0.17	-0.21	-1.06	-1.4	-1.31	-1.11	(2.59)***	(2.14)**
Dum23 *	0.001			0.078			0.002	
Tobin's Q	-0.79			-1.11			-0.63	
Dum23 * Country Measure of Disclosure S&P	0	0		0.197 (2.13)**	0.2 (2.15)**		0.01 (3.12)***	0.006 (1.78)*
Dum23 *	0			0.006			0	
Return on Assets	-0.26			-0.85			-0.99	
Dum23 *	0.001	0.001		0.02	0.027		0.001	0.002
Ln GDP Per Capita	-0.87	-1.23		-0.21	-0.27		-0.16	-0.6
Dum23 * Country-Level Governance Spammann	0	0		-0.009	0.005		-0.003	-0.003
Dum23 * Change in Tobin's Q After SOX	-0.24	-0.28		-0.14	-0.08		-1.33	-1.42
Dum23 * Change in Tobin's Q After SOX		0.001	0.001		0.025	0.045		0.003
Index of Level-14 Pairs		-1.12	-1.27		-0.36	-0.64		-1.4
	0.593 (4.65)***	0.622 (4.82)***	0.442 (4.31)***	0.888 (6.94)***	0.916 (7.02)***	0.598 (5.58)***	1.33 (4.55)***	0.982 (2.64)***
Constant	-0.001 (1.85)*	0 -0.54	-0.001 -1.47	-0.028 -0.5	0.003 -0.04	-0.059 -0.81	0.003 -1.46	0.005 (1.75)*
Non-Interacted Variables of Interacted Variables	yes	yes	yes	yes	yes	yes	yes	yes
No Matched Pairs	603	588	735	603	588	735	589	574
No Countries	26	26	39	26	26	39	25	25

What I Got with Those Models:

Dependent Variable	Panel A: Quick Ratio			Panel B: Current Ratio		
Dum23	0.665 (1.65)*	1.469 (2.65)***	1.2 (2.37)**	0.742 (1.83)*	1.578 (2.84)***	1.09 (2.15)
Dum23 * Sales Growth	2.208 (9.67)***	2.167 (9.02)***	1.883 (7.80)***	2.206 (9.36)***	2.152 (8.67)***	1.85 (7.51)
Dum23 * Profitability	-0.764 (2.14)**	-0.386 -1.38	-0.306 -1.13	-0.768 (2.09)**	-0.345 -1.21	-0.20 -0.7
Dum23 * Ln Assets	0.16 -0.39	-0.084 -0.19	-0.23 -0.68	0.281 -0.68	0.038 -0.09	-0.10 -0.4
Dum23 * Tobin's Q	2.065 (5.23)***			2.12 (5.23)***		
Dum23 * SD Pre-SOX Returns	-0.24 -0.34	-0.181 -0.25	-0.449 -0.73	-0.017 -0.02	-0.013 -0.02	-0.11 -0.2
Dum23 * Country-Level Disclosure (S&P)	0.022 -0.04	0.158 -0.3		0.094 -0.18	0.271 -0.5	
Dum23 * Returns on Assets	-0.01 -0.34			0 -0.01		
Dum23 * GDP Per Capita	-0.207 -0.39	-0.033 -0.06		-0.707 -1.36	-0.607 -1.1	
Dum23 * Country-Level Governance Spammann	0.065 -0.18	0.032 -0.08		0.053 -0.15	0.04 -0.1	
Dum23 * Post-SOX Change in Pair Tobin's Q		-1.005 (2.68)***	-0.862 (2.42)**		-0.969 (2.60)***	-0.79 (2.14)
Index Level-14 Pairs	0.631 -0.46	0.432 -0.3	0.007 -0.01	1.935 (2.33)**	1.751 (2.00)**	0.67 -1.1
Non-Interacted Variables of Interacted Variables	yes	yes	yes	yes	yes	yes
Constant	-1.14 (5.07)***	-1.878 (5.23)***	-1.452 (4.23)***	-1.025 (4.46)***	-1.736 (4.88)***	-1.3 (3.84)
No Matched Pairs	404	391	497	411	398	504
No Countries	23	23	34	23	23	34

Bottom Line on What I Got:

- Second Difference Weak, Need Third (extra variable)
 - Not clear substantive or econometric
- Sometimes Quad
- Using R&D & others on LHS – econometric issues
 - Truncated at zero

Possible Methods (II): Risk Panel, Fixed Effects

- Use Monthly/Annual Data
- Firm Fixed Effects
- Basic:
 - “After-SOX” Dummy * US Dummy
- Triple difference:
 - “After-SOX” Dummy * US Dummy * X
- Quad difference:
 - “After-SOX” Dummy * US Dummy * X*Y

What I Am Getting Here:

- Good v. Bad Country Effect
 - Triple Difference
- Complex Quad Interactions
 - Good (high-Growth) Firms from Bad Countries Benefit
 - Others Lose

Possible Methods (III): Other DV

- DV – Tobin's q , Mkt/bk
- What I Get:
 - High-Risk Firms \rightarrow Higher Declines in Tobin's Q , Mkt/bk Ratio
 - In Continuous Interactions, in Groups, etc.

Possible Methods (IV): IPO

- Estimate prob of going public in the US or UK in year t , given no prior trading there
 - From 1990 to 2006
- Cox Proportional Hazard Model
 - Compare hazard ratios of US and UK
- Logit
- Controls
 - Firm-level; country-level