Does Limited Liability Matter?
Evidence from a Quasi-Natural Experiment

Online Appendix

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This online appendix presents additional results to accompany the paper " Does Limited Liability Matter? Evidence from a Quasi-Natural Experiment".

A Online Appendix

A.1 Tests with TSX dummy

In this section we address a potential concern that our results are driven by inclusion of income trusts in the S&P-TSX Composite Index rather than by the enactment of the liability acts.

We obtain the list of S&P/TSX Composite Index constituents directly from the TMX Datalinx. We create TSX_Dummy, which equals one in years the company/income trust is included in the S&P/TSX Composite Index, and zero otherwise. We rerun the main tests, keeping the same specifications and including the TSX_Dummy.

Table A.1: Institutional Ownership: with TSX dummy

	Institutional Ownership			Pension Fund Ownership		
	(1)	(2)	(3)	(4)	(5)	(6)
	All	Energy	Business	All	Energy	Business
$LiabAct_t$	0.00701	0.0673***	-0.0150	0.00807**	0.00926***	0.00851*
	(0.31)	(12.03)	(-0.48)	(3.03)	(5.68)	(2.20)
TSX_Dummy	0.000340	-0.0103*	-0.000252	0.00132	-0.00389***	0.00375
	(0.03)	(-2.51)	(-0.01)	(0.16)	(-7.03)	(0.34)
Controls	Y	Y	Y	Y	Y	Y
Firm FE	Y	Y	Y	Y	Y	Y
Year FE	Y	Y	Y	Y	Y	Y
Observations	1447	416	1031	1447	416	1031
R^2	0.826	0.818	0.831	0.757	0.775	0.755

We repeat the main regressions adding the TSX_Dummy. The control variables are the same as the main regressions, but omitted in this table for brevity. t- statistics are reported in parentheses. Significant levels at 10%, 5%, 1% levels are denoted by *, ** and ***, respectively.

Table A.2: Issuance: with TSX dummy

	Net External Financing			Net Debt Issuance		
	(1)	(2)	(3)	(4)	(5)	(6)
	All	Energy	Business	All	Energy	Business
$LiabAct_t$	0.0733	0.181***	0.0257	0.0467*	0.0415**	0.0618**
	(1.43)	(7.10)	(0.51)	(2.23)	(3.98)	(2.99)
TSX_Dummy	0.0198	-0.000228	-0.0165	0.0317	0.0620***	-0.0276
	(0.51)	(-0.00)	(-0.45)	(0.86)	(6.40)	(-1.02)
Controls	Y	Y	Y	Y	Y	Y
Firm FE	Y	Y	Y	Y	Y	Y
Year FE	Y	Y	Y	Y	Y	Y
Observations	1360	345	1015	1450	374	1076
R^2	0.495	0.588	0.541	0.403	0.543	0.380
	Net Equity Issuance			Convertible Debt/Asset		
	(7)	(8)	(9)	(10)	(11)	(12)
	All	Energy	Business	All	Energy	Business
$LiabAct_t$	0.0163	0.121**	-0.0228	0.0214***	0.0135***	0.0231***
	(0.38)	(3.24)	(-0.68)	(5.48)	(6.48)	(4.00)
TSX_Dummy	-0.0424*	-0.0672	-0.0410**	-0.00150	-0.00403	-0.00189
	(-1.89)	(-1.71)	(-2.35)	(-0.45)	(-1.83)	(-0.32)
Controls	Y	Y	Y	Y	Y	Y
Firm FE	Y	Y	Y	Y	Y	Y
Year FE	Y	Y	Y	Y	Y	Y
Observations	1360	345	1015	1450	374	1076
R^2	0.536	0.574	0.581	0.584	0.638	0.572

We repeat the main regressions adding the TSX_Dummy. The control variables are the same as the main regressions, but omitted in this table for brevity. t- statistics are reported in parentheses. Significant levels at 10%, 5%, 1% levels are denoted by *, ** and ***, respectively.

Table A.3: Investments: with TSX dummy

	ln(Assets)$_t$			CAPEX$_t$/Assets$_{t-1}$			Acquisitions$_t$/Assets$_{t-1}$		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	All	Energy	Business	All	Energy	Business	All	Energy	Business
$LiabAct_t$	0.181**	0.133*	0.155**	0.0428**	0.0404	0.00839	0.0295*	0.0553***	0.00930
	(2.70)	(2.27)	(2.81)	(3.20)	(2.05)	(0.84)	(1.88)	(9.95)	(0.44)
TSX_Dummy	0.290**	0.241**	0.0959	0.0174	0.0522	-0.0125	-0.0499***	-0.0575**	-0.0452**
	(2.52)	(3.59)	(0.77)	(0.61)	(1.09)	(-1.19)	(-3.80)	(-4.24)	(-2.42)
Controls	Y	Y	Y	Y	Y	Y	Y	Y	Y
Firm FE	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year FE	Y	Y	Y	Y	Y	Y	Y	Y	Y
Observations	1445	369	1076	1502	426	1076	1438	408	1030
R^2	0.973	0.977	0.975	0.503	0.507	0.683	0.323	0.299	0.378

We repeat the main regressions adding the TSX_Dummy. The control variables are the same as the main regressions, but omitted in this table for brevity. t- statistics are reported in parentheses. Significant levels at 10%, 5%, 1% levels are denoted by *, ** and ***, respectively.

Table A.4: Profitability: with TSX dummy

	EBITDA$_t$/Assets$_{t-1}$			Sales$_t$/Assets$_{t-1}$		
	(1)	(2)	(3)	(4)	(5)	(6)
	All	Energy	Business	All	Energy	Business
$LiabAct_t$	-0.00332	0.0786**	-0.0126	0.127*	0.00786	0.221
	(-0.13)	(3.03)	(-0.44)	(2.10)	(0.37)	(1.83)
TSX_Dummy	-0.000412	-0.00789	0.0149	0.121	0.213**	-0.0342
	(-0.02)	(-0.39)	(0.47)	(1.46)	(4.42)	(-0.40)
Controls	Y	Y	Y	Y	Y	Y
Firm FE	Y	Y	Y	Y	Y	Y
Year FE	Y	Y	Y	Y	Y	Y
Observations	1438	352	1086	1507	439	1068
R^2	0.611	0.813	0.615	0.768	0.670	0.892
	SG&A$_t$/Sales$_t$			COGS$_t$/Sales$_t$		
	(7)	(8)	(9)	(10)	(11)	(12)
	All	Energy	Business	All	Energy	Business
$LiabAct_t$	0.0209	0.0995	0.0769**	-0.620	-0.264	-0.427
	(1.77)	(1.95)	(2.99)	(-0.99)	(-0.23)	(-1.37)
TSX_Dummy	0.0743	0.00575	0.0212	-0.221	1.204	0.0793
	(0.72)	(0.04)	(0.26)	(-0.95)	(0.92)	(0.55)
Controls	Y	Y	Y	Y	Y	Y
Firm FE	Y	Y	Y	Y	Y	Y
Year FE	Y	Y	Y	Y	Y	Y
Observations	1021	345	676	1434	387	1047
R^2	0.714	0.515	0.745	0.820	0.769	0.914

We repeat the main regressions adding the TSX_Dummy. The control variables are the same as the main regressions, but omitted in this table for brevity. t- statistics are reported in parentheses. Significant levels at 10%, 5%, 1% levels are denoted by *, ** and ***, respectively.

Table A.5: Payouts and Cash: with TSX dummy

	Dividend/Sales			Dividend/l.Asset		
	(1)	(2)	(3)	(4)	(5)	(6)
	All	Energy	Business	All	Energy	Business
$LiabAct_t$	-0.0145*	0.0204***	-0.0312**	0.00367	0.0196***	-0.00301
	(-2.09)	(5.42)	(-2.34)	(0.41)	(19.44)	(-0.36)
TSX_Dummy	0.0186	0.0375***	0.00402	0.00875	0.0185***	0.00268
	(1.76)	(6.00)	(0.97)	(1.35)	(10.58)	(0.45)
Controls	Y	Y	Y	Y	Y	Y
Firm FE	Y	Y	Y	Y	Y	Y
Year FE	Y	Y	Y	Y	Y	Y
Observations	1417	340	1077	1430	349	1081
R^2	0.859	0.912	0.768	0.794	0.891	0.712

We repeat the main regressions adding the TSX_Dummy. The control variables are the same as the main regressions, but omitted in this table for brevity. t- statistics are reported in parentheses. Significant levels at 10%, 5%, 1% levels are denoted by *, ** and ***, respectively.

Table A.6: Risk-taking: with TSX dummy

	Equity Volatility			Cash/Assets		
	(1)	(2)	(3)	(4)	(5)	(6)
	All	Energy	Business	All	Energy	Business
$LiabAct_t$	0.104***	0.0649***	0.118***	0.0182	0.0567	-0.00250
	(6.08)	(7.82)	(6.52)	(1.52)	(1.85)	(-0.26)
TSX_Dummy	-0.00331	-0.0697**	0.00116	0.0296***	0.0724**	0.00580
	(-0.15)	(-4.29)	(0.05)	(3.78)	(3.16)	(0.29)
Controls	Y	Y	Y	Y	Y	Y
Firm FE	Y	Y	Y	Y	Y	Y
Year FE	Y	Y	Y	Y	Y	Y
Observations	880	223	657	1442	356	1086
R^2	0.903	0.916	0.905	0.667	0.671	0.679

We repeat the main regressions adding the TSX_Dummy. The control variables are the same as the main regressions, but omitted in this table for brevity. t- statistics are reported in parentheses. Significant levels at 10%, 5%, 1% levels are denoted by *, ** and ***, respectively.