

# Internet Appendix

## IA Robustness: Measurement

Table IA.1: Explaining variation in Asset Maturity

	Asset Maturity (firm)								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Fixed-Asset Mat.				0.6***	0.4***				
				(0.0)	(0.0)				
Fixed-Asset Sh.					5.3***				
					(0.1)				
log(Assets)						-0.8***	-0.7***	-0.6***	-0.6***
						(0.0)	(0.0)	(0.1)	(0.1)
log(PPE)						1.4***	1.2***	1.1***	1.1***
						(0.0)	(0.0)	(0.0)	(0.0)
log(Emp)						-0.6***	-0.6***	-0.5***	-0.5***
						(0.0)	(0.0)	(0.0)	(0.0)
log(MCap)							-0.0	-0.0	-0.0
							(0.0)	(0.0)	(0.0)
Ebit to Assets							-0.0	-0.0	-0.0
							(0.0)	(0.0)	(0.0)
Leverage							1.1***	0.8***	0.7***
							(0.1)	(0.1)	(0.1)
CapEx to Assets							1.8***	2.0***	2.0***
							(0.3)	(0.3)	(0.3)
M/B ratio							0.0	0.0	0.0
							(0.0)	(0.0)	(0.0)
R&DEx to Assets							-0.0***	-0.0***	-0.0*
							(0.0)	(0.0)	(0.0)
LT debt sh. (1y)							-0.0	-0.1	-0.0
							(0.1)	(0.1)	(0.1)
LT debt sh. (3y)							0.2	0.3	0.3*
							(0.1)	(0.2)	(0.2)
LT debt sh. (5y)							0.8***	0.7***	0.6***
							(0.1)	(0.2)	(0.2)
Time to IPO									0.0***
									(0.0)
Age									-0.0
									(0.0)
Num of obs									-0.0***
									(0.0)
Average year FE	✓	✓	✓	✓	✓	✓	✓	✓	✓
NAICS3 FE	-	✓	-	-	-	-	-	-	-
NAICS FE	-	-	✓	✓	✓	✓	✓	✓	✓
State FE	-	-	-	-	-	-	✓	✓	✓
Observations	13221	13213	12918	12918	12918	12847	12846	6939	6939
Adjusted R <sup>2</sup>	0.040	0.494	0.580	0.887	0.938	0.710	0.723	0.740	0.743

Table IA.2: Explaining variation in Asset Maturity: cross-section of fixed-assets

	Asset Maturity (firm)					
	(1)	(2)	(3)	(4)	(5)	(6)
Buildings to FA	7.8*** (0.3)		5.2*** (0.3)		4.9*** (0.3)	3.3*** (0.2)
Equipment to FA	-2.1*** (0.2)		-1.2*** (0.1)		-1.1*** (0.1)	-0.3*** (0.1)
Leases to FA	-3.2*** (0.4)		-3.0*** (0.3)		-2.1*** (0.3)	-1.5*** (0.3)
Construction to FA	18.8*** (1.7)		12.5*** (1.4)		10.8*** (1.4)	5.1*** (1.1)
Land to FA	19.6*** (1.7)		11.6*** (1.4)		8.7*** (1.5)	8.0*** (1.2)
Other to FA	-7.8*** (0.7)		-5.3*** (0.7)		-4.1*** (0.7)	-3.2*** (0.6)
log(Assets)						-0.3*** (0.0)
log(PPE)						0.8*** (0.0)
log(Emp)						-0.5*** (0.0)
log(MCap)						-0.1** (0.0)
Ebit to Assets						-0.0 (0.0)
Leverage						1.1*** (0.2)
CapEx to Assets						2.4*** (0.4)
M/B ratio						0.0* (0.0)
R&DEx to Assets						-0.0 (0.0)
LT debt sh. (1y)						-0.1 (0.1)
LT debt sh. (3y)						0.3 (0.2)
LT debt sh. (5y)						0.3 (0.2)
No FE	✓	-	-	-	-	-
Average year FE	-	✓	✓	✓	✓	✓
NAICS3 FE	-	✓	✓	-	-	-
State FE	-	-	-	-	-	✓
naics	-	-	-	✓	✓	✓
Observations	4600	4591	4591	4288	4288	4273
Adjusted R <sup>2</sup>	0.322	0.457	0.569	0.568	0.644	0.758

## IB Robustness: Investment

Table IB.1: Across-firms reallocation: Intensive and Extensive margin

The table presents the reduced-form estimates based on Equation ?? where the dependent variable is capital expenditures normalised by lagged total assets based on the yearly panel of Compustat firms for 1965-2007. The investment duration measure is respectively firm-level average asset maturity, firm-level average fixed asset maturity, firm-level average fixed asset share, and the orthogonal components of the latter two. Government long-term bond supply is measured with the weighted-average maturity of Treasury debt. Details for variable definition in Appendix A. Lower-level interactions are not reported for ease of presentation. Standard errors reported in parentheses are double clustered by time (fiscal year-end) and firms.

	Capital Expenditures			
	(1)	(2)	(3)	(4)
TSYMAT × AssetMat	-0.172*** (0.027)			
TSYMAT × FixedAssetMat		-0.056*** (0.019)		
TSYMAT × FixedAssetShare			-2.965*** (0.413)	
TSYMAT × FixedAssetMat (residualised)				-0.101*** (0.032)
TSYMAT × FixedAssetShare (residualised)				-4.819*** (0.680)
Time FE	✓	✓	✓	✓
Firm FE	✓	✓	✓	✓
Firm Controls x TSYMAT	✓	✓	✓	✓
Observations	126522	126522	126522	126522
Adjusted R <sup>2</sup>	0.453	0.452	0.454	0.454

Table IB.2: Across-firms reallocation: Alternative *Asset Maturity* definitions

The table presents the reduced-form estimates based on Equation ?? where the dependent variable is capital expenditures normalised by lagged total assets based on the yearly panel of Compustat firms for 1965-2007. The investment duration measure is the firm-level average asset maturity in column (1), the measure constructed from observations of firms reporting straight-line depreciation in column (2), and the measure constructed without subtracting amortisation from depreciation in column (3). Government long-term bond supply is measured with the weighted-average maturity of Treasury debt. Details for variable definition in Appendix A. Lower-level interactions are not reported for ease of presentation. Standard errors reported in parentheses are double clustered by time (fiscal year-end) and firms.

	Capital Expenditures		
	(1)	(2)	(3)
TSYMAT × AssetMat	-0.172*** (0.027)		
TSYMAT × AssetMat (straight-line depreciation)		-0.119*** (0.027)	
TSYMAT × AssetMat (depreciation w/ amortisation)			-0.167*** (0.027)
Time FE	✓	✓	✓
Firm FE	✓	✓	✓
Firm Controls x TSYMAT	✓	✓	✓
Observations	126522	109745	126522
Adjusted R <sup>2</sup>	0.453	0.426	0.453

Table IB.3: Across-firms reallocation: Robustness to collateral channel

The table presents the reduced-form estimates based on Equation ?? where the dependent variable is capital expenditures normalised by lagged total assets based on the yearly panel of Compustat firms for 1975-2007, where MSA-level real estate prices are available. The investment duration measure is the firm-level average asset maturity. Government long-term bond supply is measured with the weighted-average maturity of Treasury debt. Details for variable definition in Appendix A. Lower-level interactions are not reported for ease of presentation. Standard errors reported in parentheses are double clustered by time (fiscal year-end) and firms.

	Capital Expenditures				
	(1)	(2)	(3)	(4)	(5)
TSYMAT × AssetMat	-0.242*** (0.040)	-0.242*** (0.041)	-0.191*** (0.037)	-0.243*** (0.041)	-0.191*** (0.038)
RE price (State)		-0.003** (0.001)	0.000 (0.000)		
RE price (State) × AssetMat		-0.000 (0.000)	-0.000 (0.000)		
RE price (MSA)				-0.008*** (0.003)	0.000 (0.000)
RE price (MSA) × AssetMat				-0.001* (0.001)	-0.001** (0.001)
Time FE	✓	✓	–	✓	–
Firm FE	✓	✓	✓	✓	✓
State x Time FE	–	–	✓	–	–
MSA x Time FE	–	–	–	–	✓
Firm Controls x TSYMAT	✓	✓	✓	✓	✓
Observations	88976	88976	88791	88976	88915
Adjusted R <sup>2</sup>	0.461	0.461	0.479	0.461	0.484

Table IB.4: Across-firms reallocation: Robustness to different time periods

The table presents the reduced-form estimates based on Equation ?? where the dependent variable is capital expenditures normalised by lagged total assets based on the yearly panel of Compustat firms for 1965-2007 and other sample cuts indicated in column heads. The investment duration measure is the firm-level average asset maturity. Government long-term bond supply is measured with the weighted-average maturity of Treasury debt. Details for variable definition in Appendix A. Lower-level interactions are not reported for ease of presentation. Standard errors reported in parentheses are double clustered by time (fiscal year-end) and firms.

	1965-2007	1965-1985	1986-2007	1965-2019
	(1)	(2)	(3)	(4)
TSYMAT × AssetMat	-0.179*** (0.029)	-0.130*** (0.044)	-0.257*** (0.063)	-0.182*** (0.028)
Time FE	✓	✓	✓	✓
Firm FE	✓	✓	✓	✓
Firm Controls x TSYMAT	✓	✓	✓	✓
AssetMat x Macro Controls	✓	✓	✓	✓
Observations	126522	44746	81168	151316
Adjusted R <sup>2</sup>	0.454	0.530	0.465	0.464

Table IB.5: Across-firms reallocation: Alternative measures of long-term bond supply

The table presents the reduced-form estimates based on Equation ?? where the dependent variable is capital expenditures normalised by lagged total assets based on the yearly panel of Compustat firms for 1965-2007. The investment duration measure is the firm-level average asset maturity. Government long-term bond supply is measured with respectively the weighted-average maturity of Treasury debt, the weighted average duration of Treasury debt, maturity-weighted Treasury debt-to-GDP, and Treasury debt supply in ten-year duration equivalents. Details for variable definition in Appendix A. Lower-level interactions are not reported for ease of presentation. Standard errors reported in parentheses are double clustered by time (fiscal year-end) and firms.

	Capital Expenditures							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
TSYMAT × AssetMat	-0.175*** (0.028)	-0.181*** (0.030)						
TSY WAD × AssetMat			-0.222*** (0.035)	-0.235*** (0.037)				
TSY MWD × AssetMat					-0.198*** (0.057)	-0.140** (0.061)		
TSY 10y-Eq × AssetMat							-0.184*** (0.057)	-0.124** (0.061)
Time FE	✓	✓	✓	✓	✓	✓	✓	✓
Firm FE	✓	✓	✓	✓	✓	✓	✓	✓
AssetMat x Macro Controls	-	✓	-	✓	-	✓	-	✓
Supply x Firm Controls	✓	✓	✓	✓	✓	✓	✓	✓
Observations	115832	115832	115832	115832	115832	115832	115832	115832
Adjusted R <sup>2</sup>	0.445	0.446	0.445	0.446	0.444	0.445	0.444	0.445

Table IB.6: Across-firms reallocation: duration versus irreversibility

The table presents the reduced-form estimates based on Equation ?? where the dependent variable is capital expenditures normalised by lagged total assets based on the yearly panel of Compustat firms for 1965-2007. The investment duration measure is the firm-level average asset maturity. Government long-term bond supply is measured with the weighted-average maturity of Treasury debt. I control for firm and industry-level measures of irreversibility of investment from Kim and Kung (2017) and Kermani and Ma (2022). Details for variable definition in Appendix A. Lower-level interactions are not reported for ease of presentation. Standard errors reported in parentheses are double clustered by time (fiscal year-end) and firms.

	Redeployability (Kim & Kung (2017))			Asset-specificity (Kermani & Ma (2023))			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
TSYMAT × AssetMat	-0.258*** (0.062)	-0.260*** (0.065)	-0.266*** (0.066)	-0.190*** (0.030)	-0.184*** (0.031)	-0.191*** (0.030)	-0.188*** (0.030)
TSYMAT × Redeployability		-0.406 (1.192)					
TSYMAT × Redep. (e-w)			-1.096 (1.582)				
TSYMAT × Mobility					-6.453 (6.233)		
TSYMAT × Customization						16.500** (7.835)	
TSYMAT × Recovery Rate							-0.809 (0.697)
Time FE	✓	✓	✓	✓	✓	✓	✓
Firm FE	✓	✓	✓	✓	✓	✓	✓
Firm Controls x TSYMAT	✓	✓	✓	✓	✓	✓	✓
AssetMat x Macro Controls	✓	✓	✓	✓	✓	✓	✓
Observations	82499	82499	82499	122629	122629	122629	122629
Adjusted R <sup>2</sup>	0.465	0.466	0.466	0.455	0.455	0.455	0.455

Table IB.7: Across-firms reallocation: cyclicalities of firms investment

The table presents the reduced-form estimates based on Equation ?? where the dependent variable is capital expenditures normalised by lagged total assets based on the yearly panel of Compustat firms for 1965-2007. The investment duration measure is the firm-level average asset maturity. Government long-term bond supply is measured with the weighted-average maturity of Treasury debt. Details for variable definition in Appendix A. Lower-level interactions are not reported for ease of presentation. Standard errors reported in parentheses are double clustered by time (fiscal year-end) and firms.

	Capital Expenditures		
	(1)	(2)	(3)
TSYMAT × AssetMat	-0.172*** (0.027)	-0.155*** (0.026)	-0.147*** (0.024)
TSYMAT × Capex cyclicalities quintile		0.392 (0.247)	
Time FE	✓	✓	–
Firm FE	✓	✓	✓
Capex cyclicalities quintile x Time FE	–	–	✓
Firm Controls x TSYMAT	✓	✓	✓
Observations	126522	126522	126472
Adjusted R <sup>2</sup>	0.453	0.453	0.461

## IC Robustness: Mechanism

Table IC.1: Average maturity of U.S. Treasury debt maturity and yield curve

The table presents the estimates from time series of different yield spread measures (column heads) for government bonds on government long-term bond supply (measured with the weighted-average maturity of Treasury debt). Details for variable definition in Appendix A. Standard errors reported in parentheses are Newey and West (1987) standard errors allowing for 36 months of lags.

	y2-y1	y3-y1	y4-y1	y5-c1
	(1)	(2)	(3)	(4)
TSYMAT	0.12*** (0.04)	0.20*** (0.06)	0.26*** (0.08)	0.31*** (0.09)
y1	-0.09*** (0.02)	-0.16*** (0.02)	-0.22*** (0.03)	-0.26*** (0.03)
Unemp.	0.17*** (0.02)	0.28*** (0.03)	0.37*** (0.04)	0.43*** (0.05)
Credit Spread	0.13* (0.07)	0.19** (0.09)	0.22* (0.11)	0.24* (0.13)
GDP Growth	0.03** (0.01)	0.05* (0.02)	0.06* (0.03)	0.06* (0.03)
Linear trend	-0.01* (0.00)	-0.01* (0.01)	-0.01* (0.01)	-0.01 (0.01)
constant	13.03* (7.47)	20.66* (12.37)	24.51 (15.87)	25.82 (18.47)
Observations	516	516	516	516
Sample Start	1965-2007	1965-2007	1965-2007	1965-2007
R-squared	0.63	0.70	0.74	0.76



Table IC.2: Long-term bond supply and the term spread: alternative measures

The table presents the estimates from time series of the term spread (10-year yield minus 1-year yield heads) for government bonds on government long-term bond supply (measured with the weighted-average maturity of Treasury debt, the weighted-average duration of Treasury debt, maturity-weighted Treasury debt to GDP and Treasury debt to GDP). Details for variable definition in Appendix A. Standard errors reported in parentheses are Newey and West (1987) standard errors allowing for 36 months of lags.

	y10 – y1			
	(1)	(2)	(3)	(4)
TSY MAT	0.38*** (0.10)			
TSY DUR		0.32*** (0.07)		
TSY MWD			3.47*** (0.60)	
TSY D/GDP				3.09*** (0.60)
y1	-0.34*** (0.03)	-0.35*** (0.03)	-0.35*** (0.02)	-0.35*** (0.02)
Unemp.	0.58*** (0.06)	0.54*** (0.05)	0.47*** (0.05)	0.45*** (0.05)
Credit Spread	0.31* (0.18)	0.34* (0.18)	0.62*** (0.20)	0.65*** (0.21)
GDP Growth	0.07* (0.04)	0.06* (0.03)	0.07** (0.03)	0.07* (0.03)
Linear trend	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)
constant	10.58 (18.75)	13.35 (17.37)	17.62 (14.10)	17.21 (14.51)
Observations	516	516	516	516
R-squared	0.80	0.81	0.81	0.81

## ID Robustness: Debt

Table ID.1: Maturity of U.S. Treasury debt and maturity of aggregate corporate debt

The table presents the estimates from weighted regressions of firm-level debt maturity on the average maturity of Treasury debt in the panel of U.S. public firms over 1975-2007. In columns (1) to (3), the dependent variable is the firm-year share of debt maturing in more than three years and the weight is equal to the firm-year outstanding debt scaled by total outstanding debt. In columns (4) to (6), the dependent variable is the firm-year share of debt maturing in more than one year and the weight is equal to the firm-year outstanding debt scaled by total outstanding debt. Government long-term bond supply is measured with the weighted-average maturity of Treasury debt. Details for variable definition in Appendix A. Standard errors reported in parentheses are clustered by firms.

	LT Debt Share (>3y)			LT Debt Share (>1y)		
	(1) share(f,t)	(2) share(f,t)	(3) share(f)	(4) share(f,t)	(5) share(f,t)	(6) share(f)
TSYMAT	-5.5*** (1.7)	-3.1*** (0.6)	-2.2* (1.2)	-3.5** (1.4)	-1.9*** (0.6)	-1.2 (1.0)
constant	63.5*** (2.5)	61.7*** (0.1)	62.9*** (2.2)	79.4*** (2.0)	78.0*** (0.1)	78.5*** (1.9)
No FE	✓	-	✓	✓	-	✓
Firm FE	-	✓	-	-	✓	-
Observations	82086	81582	82086	81897	81386	81897
Adjusted R <sup>2</sup>	0.044	0.447	0.014	0.026	0.487	0.005
weights	debt(f,t)	debt(f)	debt(f,t)	debt(f,t)	debt(f)	debt(f,t)