Internet Appendix for Collateral Constraints, Financial Constraints, and Risk Management: Evidence from Anti-Recharacterization Laws

Table A1. HEDGE Phrases

This table documents the list of phrases used to construct HEDGE variables based on corporate annual 10-K filings from the EDGAR database of the U.S. SEC.

COMMODITY_HEDGE phrases: 'commodity futures', 'commodities future', 'commodity option', 'derivative commodity instrument', 'manage commodity price risk', 'hedge commodity price', 'manage fuel price risk', 'hedge fuel price risk', 'natural gas option', 'natural gas swap', 'crude oil hedge', 'oil futures', 'commodity forward', 'manage exposure to (fluctuation|fluctuations|changes|change) in commodity prices', 'manage electricity cost', 'aluminum forward', 'natural gas forward', 'utilizes commodity futures and options', 'diesel fuel hedge contract', 'fuel hedge.'

FX_HEDGE phrases: 'currency forward', 'currency option', 'foreign exchange forward', 'exchange rate contract', 'foreign exchange derivative', 'foreign exchange contract', 'foreign exchange rate contract', 'forward foreign exchange', 'exchange rate derivative', 'forward currency exchange contract', 'currency swap', 'cross-currency swap', 'foreign currency hedge contract', 'manages its currency risk', 'manage currency risk', 'manage our currency risk', 'manage sits exchange rate risk', 'manage our exchange rate risk', 'hedge sits exchange rate risk', 'hedge our exchange rate risk', 'We are exposed to market risk from changes in foreign currency exchange rates and utilize derivative financial instruments to manage our exposure to such fluctuation', 'forward contract.'

INTEREST_RATE_HEDGE phrases: 'interest rate derivative', 'interest rate hedging', 'INTEREST_RATE_HEDGE', 'interest rate swap', 'interest rate contract', 'interest rate cap', 'interest rate collar', 'interest rate protection', 'interest rate lock', 'interest rate forward', 'hedge interest rate risk using derivative', 'mitigate our interest rate risk', 'mitigates its interest rate risk', 'mitigate interest rate risk', 'manage our interest rate risk', 'manages its interest rate risk', 'hedge interest rate risk', 'hedge is interest rate risk', 'hedge is interest rate risk', 'hedges its interest rate risk', 'hedge is interest rate risk', 'manage our interest rate risk', 'manage', 'manage'

Non-COMMODITY_HEDGE phrases: 'no commodity futures', 'no commodities future', 'no commodity option', 'no derivative commodity instrument', 'does not hedge its commodity price risk', 'do not use any commodity derivative', 'does not have any commodity derivative outstanding', 'does not have material commodity price risk', 'no commodities future contract', 'no derivative instrument', 'no derivative contract', 'no interest rate or foreign exchange contract', 'does not have derivative agreement outstanding', 'does not use any derivative', 'no material derivative instrument', 'not enter into any derivative', 'commodity futures modernization act', 'has not used derivative commodity instruments', 'manages commodity price (risk/risks) through (negotiated supply contract/supply contract)', 'no outstanding commodity derivative', 'does not use financial instruments to hedge commodity prices', 'we do not hold or issue derivatives, derivative commodity instruments', 'does not use financial instruments to hedge commodity prices', 'company has not entered into any transactions using derivative financial instruments or derivative or other financial instruments, 'does not use derivative commodity instrument', 'we do not use any derivative or other financial instruments or derivative commodity instruments', 'to hedge', 'not utilize (derivative financial instruments, derivative commodity instrument)', 'It is not the Company's policy to enter into derivative financial instruments.'

Table A1. HEDGE Phrases – Continued

Non-FX_HEDGE phrases: 'no currency forward', 'no currency option', 'no foreign exchange forward', 'no exchange rate contract', 'no foreign exchange derivative', 'no foreign exchange contract', 'no foreign exchange rate contract', 'no forward foreign exchange', 'no exchange rate derivative', 'no foreign currency exchange rate', 'no currency swap', 'no cross-currency swap', 'no foreign currency hedge contract', 'does not have any exchange rate derivative', 'does not have any currency forward', 'manage our currency risk', 'does not have any currency derivative', 'does not have any outstanding foreign exchange derivative', 'does not have any outstanding (exchange rate|foreign currency forward) contract', 'no derivative agreement', 'does not use any derivative', 'no material derivative instrument', 'does not utilize currency derivative', 'does not use currency derivative', 'does not utilize foreign currency derivative', 'does not utilize currency forward', 'no material exchange rate risk', 'not enter into derivative', 'but continues to monitor the effects of foreign currency exchange rate', 'currency swap and interest rate hedging master agreement', 'market risk exposure is not material', 'obligation of such person arising under interest rate or currency swap', 'obligation of such person arising under currency swap', 'losses and gains on (foreign currency hedgelinterest rate and foreign currency hedgelforeign currency and INTEREST RATE HEDGE)', 'no outstanding commodity derivatives, currency swap', 'no outstanding interest rate derivatives, (currency swap|foreign exchange contract)', '(not directly|not) subject to foreign currency exchange rate fluctuations', 'do not engage in forward foreign exchange', 'no foreign currency forward contract', 'no outstanding forward', 'does not currently have any significant foreign currency exposure', 'It is not the Company's policy to enter into derivative financial instruments.'

Non-INTEREST_RATE_HEDGE phrases: 'does not use interest rate derivative', 'does not utilize interest rate derivative', 'did not have any interest rate swap', 'no interest rate derivative', 'did not have any interest rate swap', 'does not have any interest rate contract', 'does not hedge its interest rate risk', 'does not utilize interest rate contract', 'does not use any derivative contracts to hedge its interest rate risk', 'no material interest rate risk', 'does not use derivative', 'manages its interest rate risk exposure by maintaining a mix of', 'manages interest rate risk exposure by maintaining a mix of', 'manages interest rate risk exposure by maintaining a mix of', 'means any interest rate derivative', 'the company (may|may also) enter into (certain foreign currency and interest rate derivative', 'liabilities under interest rate swap', 'changes in fair value of interest rate swap', 'no interest rate contract', 'termination (of|of related|of an) interest rate (swap|cap|collar)', 'no open interest rate (swap|cap|collar)', 'interest rate (swap|cap|collar)', 'no open interest rate derivative', 'It is not the Company's policy to enter into derivative financial instruments.'

Table A2. Anti-Recharacterization Laws and Risk Management – Using Three Different Measures of Industry Classification and Three Different Approaches to Clustering Standard Errors

Panel A (B) of this table documents the results from OLS regressions relating corporate risk management to the adoption of the anti-recharacterization laws for Compustat industrial firms between 1996 and 2003 replacing the Fama-French 49 Industry Classification Codes with different measures of industry classification (replacing clustering standard errors by state of incorporation with different approaches). In Panels A and B, the dependent variable HEDGE in models 1-6 is an indicator set to one if a firm discusses either commodity, foreign exchange, or interest rate hedging contracts in its annual 10-K filings at least once in a year, and zero otherwise. ARLs is an indicator set to one if the state where a firm is incorporated has adopted the anti-recharacterization laws by year t and zero otherwise. Unreported controls include FIRM_SIZE, FIRM_AGE, LEVERAGE, MTB, CAPEX, ROA, RD, RD_RISS, TANGIBILITY, DIVIDEND_PAYER, and CASH_HOLDING. All variables are defined in Appendix A. HQ state-by-year fixed effects are based on the state of headquarter. Industry-by-year fixed effects are based on the 2-Digit SIC, 3-Digit SIC, and 4-Digit SIC codes in models 1-2, 3-4, and 5-6, respectively, in Panel B. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Panel A: Three Different Measures of Industry	Classification					
Dependent Variable:	HEDGE					
Measures of Industry Classification:	2-Digit S	IC Codes	3-Digit Sl	C Codes	4-Digit SIC Codes	
	1	2	3	4	5	6
ARLst	0.028***	0.027***	0.030***	0.029***	0.028***	0.027***
	(4.750)	(4.224)	(5.306)	(5.002)	(4.899)	(4.622)
Controls	No	Yes	No	Yes	No	Yes
HQ State-by-Year FEs	Yes	Yes	Yes	Yes	Yes	Yes
Industry-by-Year FEs	Yes	Yes	Yes	Yes	Yes	Yes
Firm FEs	Yes	Yes	Yes	Yes	Yes	Yes
Observations	40,053	40,053	39,953	39,953	39,845	39,845
Adjusted R ²	0.635	0.639	0.639	0.643	0.642	0.645
Panel B: Three Different Approaches to Cluste	ring Standard Err	ors				
Dependent Variable:			HED	GE		
Approaches to Clustering Standard Errors:	State and	Year Level	Firm I	Level	Firm and Y	'ear Level
	1	2	3	4	5	6
ARLs _t	0.029***	0.027***	0.029***	0.027***	0.029***	0.027***
	(5.598)	(4.109)	(3.040)	(2.873)	(3.876)	(3.534)
Controls	No	Yes	No	Yes	No	Yes
HQ State-by-Year FEs	Yes	Yes	Yes	Yes	Yes	Yes
Industry-by-Year FEs	Yes	Yes	Yes	Yes	Yes	Yes
Firm FEs	Yes	Yes	Yes	Yes	Yes	Yes
Observations	40,066	40,066	40,066	40,066	40,066	40,066
Adjusted R ²	0.635	0.639	0.635	0.639	0.635	0.639

Table A3. Anti-Recharacterization Laws and Risk Management – Using Two Different Geographical Characteristics

This table documents the results from OLS regressions relating corporate risk management to the adoption of the antirecharacterization laws for Compustat industrial firms between 1996 and 2003 and consists of 40,066 firm-year observations replacing HQ state-by-year fixed effects with different geographical characteristics-by-year fixed effects. The dependent variable HEDGE in models 1-4 is an indicator set to one if a firm discusses either commodity, foreign exchange, or interest rate hedging contracts in its annual 10-K filings at least once in a year, and zero otherwise. ARLs is an indicator set to one if the state where a firm is incorporated has adopted the anti-recharacterization laws by year t and zero otherwise. Unreported controls include FIRM_SIZE, FIRM_AGE, LEVERAGE, MTB, CAPEX, ROA, RD, RD_MISS, TANGIBILITY, DIVIDEND_PAYER, and CASH_HOLDING. All variables are defined in Appendix A. Geo. Char.-by-year fixed effects are based on the census division in models 1-2 and census region in models 3-4, respectively. Industry-by-year fixed effects are based on the Fama-French 49 Industry Classification Codes. t-statistics in parentheses are clustered by state of incorporation. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Dependent Variable:	HEDGE				
Measures of Geographical Characteristics:	Census Division		Census	Region	
	1	2	3	4	
ARLst	0.028***	0.026***	0.027***	0.026***	
	(3.841)	(3.215)	(3.412)	(2.939)	
Controls	No	Yes	No	Yes	
Geo. Charby-Year FEs	Yes	Yes	Yes	Yes	
Industry-by-Year FEs	Yes	Yes	Yes	Yes	
Firm FEs	Yes	Yes	Yes	Yes	
Observations	40,066	40,066	40,066	40,066	
Adjusted R ²	0.633	0.638	0.633	0.637	

Table A4. Anti-Recharacterization Laws and Risk Management

This table documents the results from OLS regressions relating corporate risk management to the adoption of the antirecharacterization laws for Compustat industrial firms with treatment and controls based on a cohort approach. This table presents results relating HEDGE to the adoption of the anti-recharacterization laws. The dependent variable HEDGE in models 1-4 is an indicator set to one if a firm discusses either commodity, foreign exchange, or interest rate hedging contracts in its annual 10-K filings at least once in a year, and zero otherwise. ARLs is an indicator set to one if the state where a firm is incorporated has adopted the anti-recharacterization laws by year t and zero otherwise. ARLs⁻³, ARLs⁻², and ARLs⁻¹ is an indicator set to one if the state where a firm is incorporated will adopt the anti-recharacterization laws in 3 years, 2 years, and 1 year, and zero otherwise, respectively. ARLs⁰, ARLs⁺¹, ARLs⁺², and ARLs³⁺ is an indicator set to one if the state where a firm is incorporated has adopted the anti-recharacterization laws in the current year, 1 year ago, 2 years ago, and 3 or more years ago, and zero otherwise, respectively. All variables are defined in Appendix A. Industry-by-year fixed effects are based on the Fama-French 49 Industry Classification Codes. t-statistics in parentheses are clustered by state of incorporation. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Dependent Variable:	, ,	HE	DGE	
	1	2	3	4
ARLs _t	0.018**	0.017**		
	(2.633)	(2.471)		
ARLs ⁻³			0.006	0.004
			(0.703)	(0.502)
ARLs ⁻²			0.001	-0.002
			(0.092)	(-0.164)
ARLs ⁻¹			0.014	0.009
			(1.366)	(0.927)
ARLs ⁰			0.015	0.011
			(1.277)	(0.979)
$ARLs^{+1}$			0.035***	0.031***
			(3.007)	(2.849)
ARLs ⁺²			0.038	0.026
			(1.475)	(1.097)
ARLs ³⁺			0.081***	0.068^{***}
			(3.182)	(2.787)
FIRM_SIZE _{t-1}		0.051***		0.051***
		(13.540)		(13.578)
FIRM_AGE _{t-1}		0.002		0.002
		(0.407)		(0.394)
LEVERAGE _{t-1}		0.019***		0.019***
		(3.559)		(3.567)
MTB _{t-1}		0.000		0.000
		(1.355)		(1.372)
CAPEX _{t-1}		0.020		0.021
		(0.677)		(0.701)
ROA _{t-1}		-0.006***		-0.006***
		(-4.151)		(-4.069)
RD _{t-1}		-0.001		-0.001
		(-0.762)		(-0.774)
RD_MISS _{t-1}		-0.016		-0.016
		(-1.521)		(-1.527)
TANGIBILITY _{t-1}		-0.017		-0.018
		(-1.092)		(-1.089)
DIVIDEND_PAYER _{t-1}		-0.013		-0.012
		(-1.341)		(-1.325)
CASH_HOLDING _{t-1}		-0.061***		-0.061***
		(-4.930)		(-4.934)
Year-by-Cohort FEs	Yes	Yes	Yes	Yes
Firm-by-Cohort FEs	Yes	Yes	Yes	Yes
Industry-by-Year FEs	Yes	Yes	Yes	Yes
Observations	100,606	100,606	100,606	100,606
Adjusted R ²	0.696	0.698	0.696	0.698

Table A5. Anti-Recharacterization Laws, Risk Management, and Matching

This table documents the results using a matched sample and the ± 1 -year window around the adoption of the laws. Matching is a propensity match where a logit model is used to estimate propensity scores based on FIRM_SIZE, FIRM_AGE, CAPEX, ROA, RD, RD_MISS, TANGIBILITY, DIVIDEND_PAYER, and CASH_HOLDING. Each treatment firm is one-to-one matched to a control firm with replacement, matching on year, the Fama-French 49 Industry Classification Codes, and closest propensity score with a maximum difference in the propensity score between the treatment firm and control firm is less than or equal to 0.01. Models 1-5 tabulate the results assessing the influence of the adoption of the anti-recharacterization on HEDGE utilizing the sample in which each treatment firm is matched to one control firm. Model 1 is based on a propensity score matched sample. Model 2 (3) is based on an inverse propensity score weighted analysis using the full (matched) sample. All sample firms for which a propensity score is estimated are retained then our initial results from Table 4 with regression observations being weighted by the inverse of the estimated propensity score are re-estimated. Model 4 (5) is based on the nearest-neighbor matching procedure with the Mahalanobis distance scaled by control (pooled) covariance matrix. The dependent variable HEDGE in models 1-4 is an indicator set to one if a firm discusses either commodity, foreign exchange, or interest rate hedging contracts in its annual 10-K filings at least once in a year, and zero otherwise. ARLs is an indicator set to one if the state where a firm is incorporated has adopted the anti-recharacterization laws by year t and zero otherwise. Unreported controls include FIRM SIZE, FIRM AGE, LEVERAGE, MTB, CAPEX, ROA, RD, RD_MISS, TANGIBILITY, DIVIDEND_PAYER, and CASH_HOLDING. All variables are defined in Appendix A. HQ state-by-year fixed effects are based on the state of headquarter. Industry-by-year fixed effects are based on the Fama-French 49 Industry Classification Codes. t-statistics in parentheses are clustered by state of incorporation. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Dependent Variable:	HEDGE					
_	1	2	3	4	5	
ARLst	0.026**	0.022**	0.018*	0.032**	0.034***	
	(2.566)	(2.440)	(1.768)	(2.577)	(2.883)	
Controls	Yes	Yes	Yes	Yes	Yes	
HQ State-by-Year FEs	Yes	Yes	Yes	Yes	Yes	
Industry-by-Year FEs	Yes	Yes	Yes	Yes	Yes	
Firm FEs	Yes	Yes	Yes	Yes	Yes	
Observations	15,424	36,487	15,424	14,904	14,832	
Adjusted R ²	0.786	0.633	0.784	0.805	0.802	

Table A6. Anti-Recharacterization Laws and Types of Risk Management

This table documents the results from OLS regressions relating corporate risk management to the adoption of the anti-recharacterization laws for Compustat industrial firms with treatment and controls based on a cohort approach. The dependent variable HEDGE in models 1-2 is an indicator set to one if a firm discusses either commodity, foreign exchange, or interest rate hedging contracts in its annual 10-K filings at least once in a year, and zero otherwise. COMMODITY_HEDGE in models 3-4, FX_HEDGE in models 5-6, and INTEREST_RATE_HEDGE in models 7-8 are defined similarly. ARLs is an indicator set to one if the state where a firm is incorporated has adopted anti-recharacterization laws by year t and zero otherwise. Unreported controls include FIRM_SIZE, FIRM_AGE, LEVERAGE, MTB, CAPEX, ROA, RD, RD_MISS, TANGIBILITY, DIVIDEND_PAYER, and CASH_HOLDING. AIRLINE INDUSTRY 1 is an indicator set to one if a firm belongs to SIC code of 4512 or 4513, and zero otherwise. AIRLINE INDUSTRY 2 is an indicator set to one if a firm belongs to SIC codes between 4500 and 4599, and zero otherwise, as in the Fama-French 49 Industry Classification Codes. HIGH FOREIGN SALES is an indicator set to one if it corresponds to the top tercile of the ratio of foreign sales to total sales (set as zero if missing), and zero otherwise. GR is an indicator set to one if a firm foreign income taxes in the Compustat annual file, and zero otherwise. LOW TOTAL DEBT is an indicator set to one if it corresponds to the bottom tercile of LEVERAGE equals zero, and zero otherwise. All variables are defined in Appendix A. HQ state-by-year fixed effects are based on the state of incorporation. Industry-by-year fixed effects are based on the Fama-French 49 Industry-by-year fixed effects are based on the Fama-French 49 Industry-by-year fixed effects are based on the state of incorporation. Justry-by-year fixed effects are based on the state of headquarter. INC State-by-year fixed effects are based on the state of incorporation. Industry-by-year fixed effects are

Dependent Variable:	COMMODI	TY_HEDGE	FX_HEI	DGE	INTEREST_R	INTEREST_RATE_HEDGE	
Underlying Exposure Measure:	AIRLINE INDUSTRY 1 _{t-1}	AIRLINE INDUSTRY 2 _{t-1}	HIGH FOREIGN SALES _{t-1}	GR_{t-1}	LOW TOTAL DEBT _{t-1}	ZERO DEBT _{t-1}	
	1	2	3	4	5	6	
ARLs _t ×UNDERLYING EXPOSURE _{t-1}	0.159***	0.117***	0.033***	0.020***	-0.030***	-0.031***	
	(7.006)	(5.352)	(10.743)	(5.667)	(-4.740)	(-4.734)	
Controls	Yes	Yes	Yes	Yes	Yes	Yes	
Year-by-Cohort FEs	Yes	Yes	Yes	Yes	Yes	Yes	
Firm-by-Cohort FEs	Yes	Yes	Yes	Yes	Yes	Yes	
INC State-by-Year FEs	Yes	Yes	Yes	Yes	Yes	Yes	
Industry-by-Year FEs	Yes	Yes	Yes	Yes	Yes	Yes	
Observations	86,449	86,449	86,350	86,449	86,255	86,255	
Adjusted R ²	0.578	0.578	0.718	0.717	0.668	0.668	

Table A7. Anti-Recharacterization Laws, Risk Management, and SPV Usage

This table documents the results from OLS regressions relating corporate risk management to the adoption of the anti-recharacterization laws for Compustat industrial firms with treatment and controls based on a cohort approach. The dependent variable HEDGE in model 1 is an indicator set to one if a firm discusses either commodity, foreign exchange, or interest rate hedging contracts in its annual 10-K filings at least once in a year, and zero otherwise. COMMODITY_HEDGE in model 2, FX_HEDGE in model 3, and INTEREST_RATE_HEDGE in model 4 are defined similarly. ARLs is an indicator set to one if the state where a firm is incorporated has adopted the anti-recharacterization laws by year t and zero otherwise. Unreported controls include FIRM_SIZE, FIRM_AGE, LEVERAGE, MTB, CAPEX, ROA, RD, RD_MISS, TANGIBILITY, DIVIDEND_PAYER, and CASH_HOLDING. HIGH SPV USAGE is an indicator set to one if the total number of SPV subsidiaries corresponds to the top tercile of the annual cross-sectional distribution, and zero otherwise. All variables are defined in Appendix A. INC state-by-year fixed effects are based on the state of incorporation. Industry-by-year fixed effects are based on the Fama-French 49 Industry Classification Codes. t-statistics in parentheses are clustered by state of incorporation. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Dependent Variable:	HEDGE	COMMODITY_HEDGE	FX_HEDGE	INTEREST_RATE_HEDGE
	1	2	3	4
ARLst×HIGH SPV USAGEt-1	0.013***	0.018***	0.024***	0.010*
	(3.716)	(10.302)	(11.417)	(1.941)
Controls	Yes	Yes	Yes	Yes
Year-by-Cohort FEs	Yes	Yes	Yes	Yes
Firm-by-Cohort FEs	Yes	Yes	Yes	Yes
INC State-by-Year FEs	Yes	Yes	Yes	Yes
Industry-by-Year FEs	Yes	Yes	Yes	Yes
Observations	86,449	86,449	86,449	86,449
Adjusted R ²	0.698	0.578	0.717	0.667

Table A8. Anti-Recharacterization Laws, Risk Management, and Financial Constraints

This table documents the results from OLS regressions relating corporate risk management to the adoption of the anti-recharacterization laws for Compustat industrial firms with treatment and controls based on a cohort approach. The dependent variable HEDGE is an indicator set to one if a firm discusses either commodity, foreign exchange, or interest rate hedging contracts in its annual 10-K filings at least once in a year, and zero otherwise. ARLs is an indicator set to one if the state where a firm is incorporated has adopted the anti-recharacterization laws by year t and zero otherwise. Unreported controls include FIRM_SIZE, FIRM_AGE, LEVERAGE, MTB, CAPEX, ROA, RD, RD_MISS, TANGIBILITY, DIVIDEND_PAYER, and CASH_HOLDING. A firm is classified as financially constrained if the firm is not INVESTMENT GRADE, does not have a CREDIT LINE, DIVIDEND_PAYER equal to zero, or if the HP INDEX, WW INDEX, or HM INDEX is in the top tercile of the annual cross-sectional distribution, and zero otherwise. All variables are defined in Appendix A. INC state-by-year fixed effects are based on the state of incorporation. Industry-by-year fixed effects are based on the Fama-French 49 Industry Classification Codes. t-statistics in parentheses are clustered by state of incorporation. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Dependent Variable:	HEDGE					
Financial Constraint Measure:	INVESTMENT GRADE _{t-1}	CREDIT LINE _{t-1}	DIVIDEND_ PAYER _{t-1}	HP INDEX _{t-1}	WW INDEX _{t-1}	HM INDEX _{t-1}
	1	2	3	4	5	6
ARLst×FINANCIALLY CONSTRAINEDt-1	-0.010	-0.021***	-0.013**	-0.008**	-0.023**	-0.024***
	(-1.416)	(-4.542)	(-2.184)	(-2.638)	(-2.360)	(-12.680)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year-by-Cohort FEs	Yes	Yes	Yes	Yes	Yes	Yes
Firm-by-Cohort FEs	Yes	Yes	Yes	Yes	Yes	Yes
INC State-by-Year FEs	Yes	Yes	Yes	Yes	Yes	Yes
Industry-by-Year FEs	Yes	Yes	Yes	Yes	Yes	Yes
Observations	86,449	86,449	86,449	86,320	86,185	77,232
Adjusted R ²	0.698	0.698	0.698	0.699	0.699	0.716

Table A9. Anti-Recharacterization Laws, Risk Management, and External Financing Needs

This table documents the results from OLS regressions relating corporate risk management to the adoption of the anti-recharacterization laws for Compustat industrial firms with treatment and controls based on a cohort approach. The dependent variable HEDGE is an indicator set to one if a firm discusses either commodity, foreign exchange, or interest rate hedging contracts in its annual 10-K filings at least once in a year, and zero otherwise. ARLs is an indicator set to one if the state where a firm is incorporated has adopted the anti-recharacterization laws by year t and zero otherwise. Unreported controls include FIRM_SIZE, FIRM_AGE, LEVERAGE, MTB, CAPEX, ROA, RD, RD_MISS, TANGIBILITY, DIVIDEND_PAYER, and CASH_HOLDING. HIGH $\pi_{naïve}$ and π_{Merton} are indicator variables set to one if they correspond to the top tercile of the annual cross-sectional distribution $\pi_{naïve}$ and π_{Merton} , respectively, and zero otherwise. LOW NET WORTH [BOOK] is an indicator set to one if it corresponds to the bottom tercile of the stockholders' equity / 1000, and zero otherwise. LOW NET WORTH [MARKET] is an indicator set to one if it corresponds to the bottom tercile of assets + market value of equity – book equity – deferred taxes – total liabilities, and zero otherwise. All variables are defined in Appendix A. INC state-by-year fixed effects are based on the state of incorporation. Industry-by-year fixed effects are based on the Fama-French 49 Industry Classification Codes. t-statistics in parentheses are clustered by state of incorporation. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Dependent Variable:	HEDGE					
Financing Needs Measure:	HIGH $\pi_{na\"ive_{t-1}}$	HIGH $\pi_{Merton_{t-1}}$	LOW NET WORTH [BOOK] _{t-1}	LOW NET WORTH [MARKET] _{t-1}		
	1	2	3	4		
ARLst×FINANCING NEEDSt-1	-0.025***	-0.017***	-0.021***	-0.016***		
	(-8.184)	(-5.029)	(-4.231)	(-4.671)		
Controls	Yes	Yes	Yes	Yes		
Year-by-Cohort FEs	Yes	Yes	Yes	Yes		
Firm-by-Cohort FEs	Yes	Yes	Yes	Yes		
INC State-by-Year FEs	Yes	Yes	Yes	Yes		
Industry-by-Year FEs	Yes	Yes	Yes	Yes		
Observations	54,494	54,494	86,359	83,102		
Adjusted R ²	0.686	0.686	0.699	0.695		