

Conservatism in Risk Disclosure Tone and Stock Price Crash Risk

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The 11th Annual Risk Governance Conference

University of Siegen

October 19-20, 2023

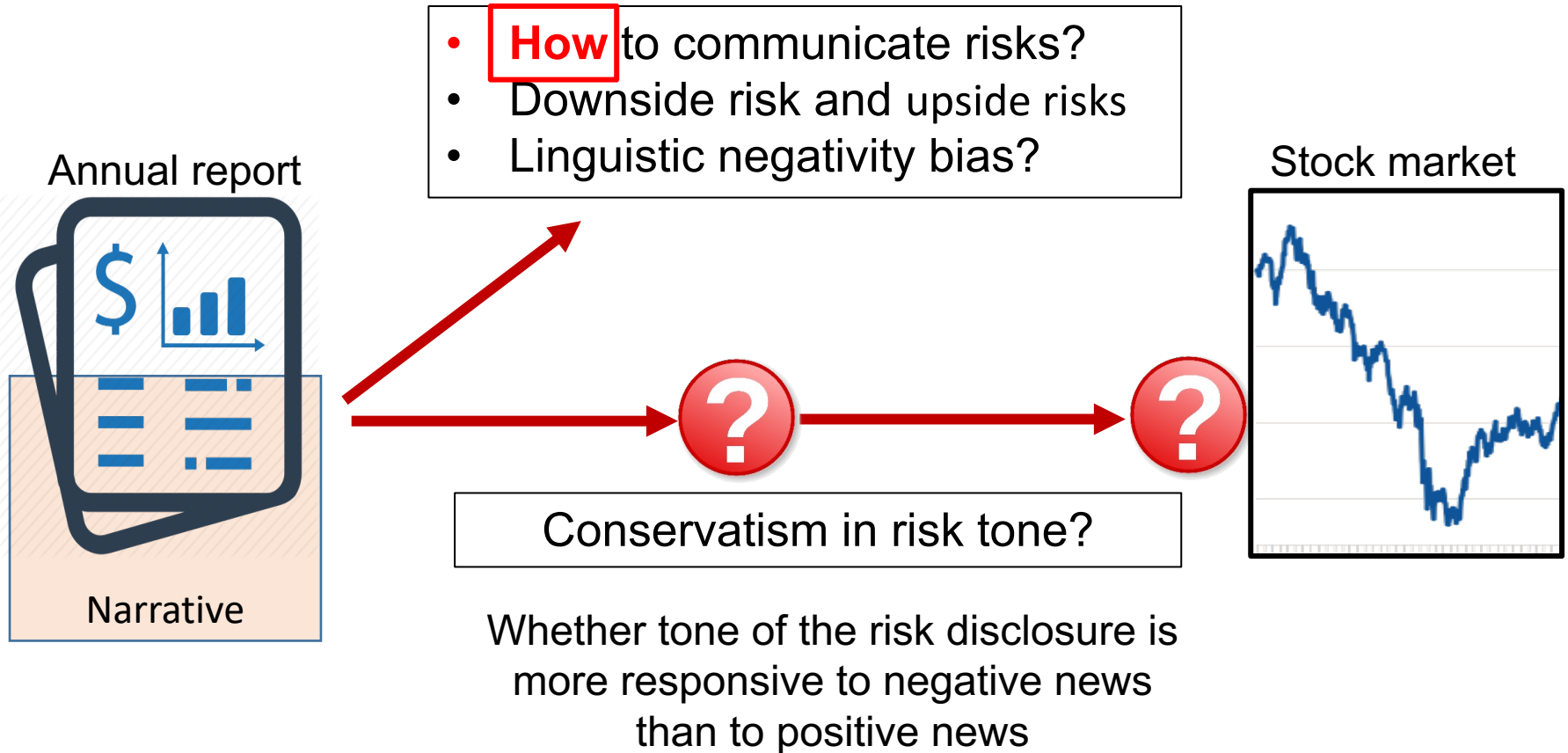
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Overview



What is risk tone? Example from report

Long-term risks

Akzo Nobel N.V.
Holding company registered in the Netherlands.
Page 53 of Annual report 2016

Mitigating actions

- The AkzoNobel Leading Performance System (ALPS) is being implemented to reduce complexity and drive continuous improvement
- Continue the implementation of the Safety Common Platform introduced in 2013 and the Process Safety Management (PSM) framework, which was introduced in 2014. The framework provides a set of common the-art safety requirements for all our manufacturing sites
- Carry on with business continuity planning and make sure there are appropriate risk transfer arrangements in place

Internal - Operational

Management of change

In order to achieve our overall strategy, we have implemented – and continue to implement – numerous changes in our operating model across all functions and businesses in order to further enhance organic growth, and the quality of services, while reducing cost and complexity.

Mitigating actions

- Pave the way to organic growth by embedding commercial excellence in all levels of the organization
- Ongoing focus on core principles and values to set desired behavioral changes in motion. Values and behaviors are included in the performance management process
- Senior management is involved in all critical projects that have been prioritized and are supervised by the Executive Committee to ensure an aligned and integrated change agenda
- Project management and change management are included in the curriculum of the AkzoNobel Leadership Academy
- Consolidate change management by streamlining and aligning the work of a range of supporting processes under the umbrella of Global Business Services blueprints, including the operating model and Responsible, Accountable, Consulted, Informed (RACI) matrices

Long-term risks are existing risks associated with current trends that are anticipated to increase; or risks currently not material, but that could develop into major areas of concern for a business, or for society.

The most significant long-term risks are:

- Failure of national and regional governments to invest in infrastructure
- Dwindling support for research and development of capital
- Potential differential in economic growth between developed and emerging economies

Identify risk related sentences.

First step

The continued development of digital technology poses a threat to business and reputation and could lead to:

- Business value chain disruption/destruction
- Cybercrime
- Concerns over privacy and the concentration of the influence and control over intelligence
- More stringent legal and regulatory requirements

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Counting positive and negative words in risk related sentences.

Second step

The continued development of digital technology poses a threat to business and reputation and could lead to:

- Business value chain disruption/destruction
- Cybercrime
- Concerns over privacy and the concentration of the influence and control over intelligence
- More stringent legal and regulatory requirements

Positive Negative

Strategic performance

Business performance

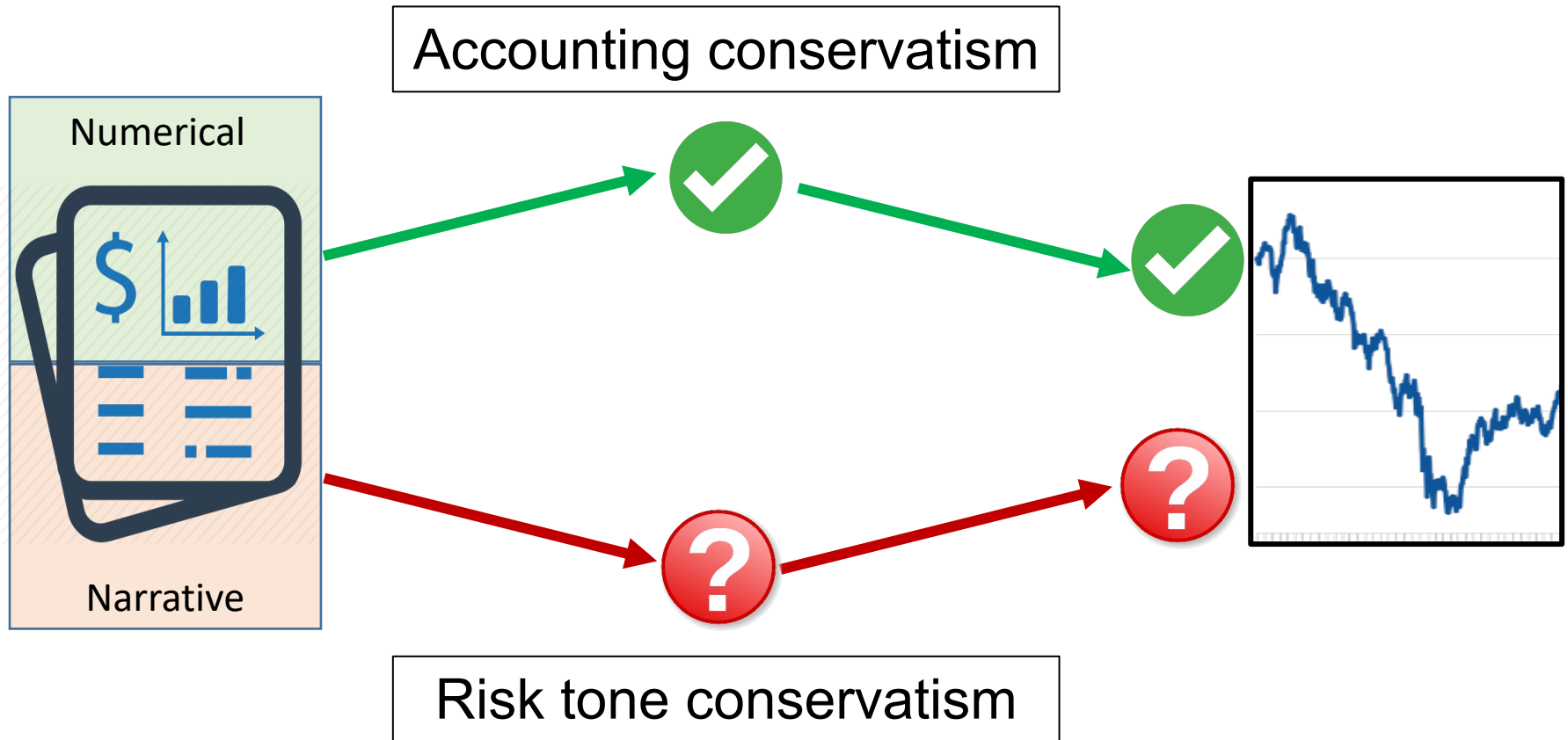
Leadership

Governance and compliance

Financial information

Sustainability statements

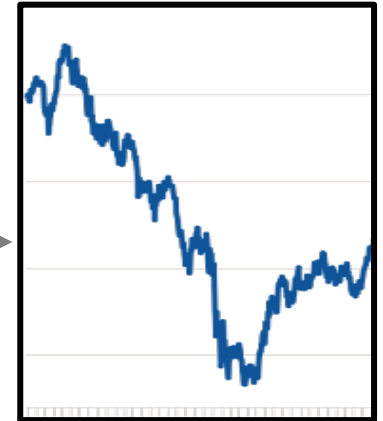
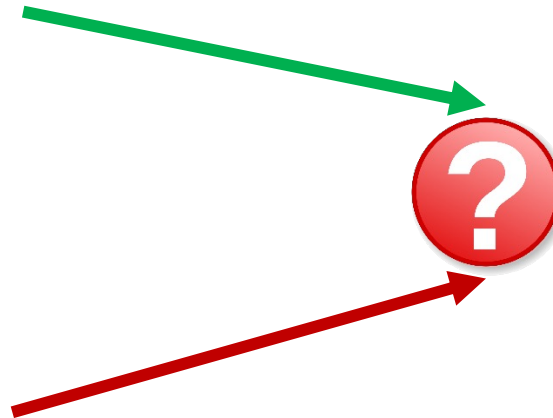
Overview



Whether tone of the risk disclosure is more responsive to negative news than to positive news

Overview

Accounting conservatism



Risk tone conservatism

Research question

- **H1:** What is the responsiveness of risk disclosure tone to bad versus good news? **Risk tone conservatism**
 - Impression management (upside risks)
 - Expectation management (downside risks)
 - Accounting conservatism spills
- **H2:** What is the association with stock price crash risk?
 - Risk sentences is associated with negative stock returns (Kravet & Muslu, 2013)
 - Curbs bad news hoarding behaviour
 - More precise estimates and awareness of risk
- **H3:** What is the association with accounting conservatism?
 - Consensus between 'hard' and 'soft' types of disclosures
 - The emphasis framing theory (Henry & Peytcheva, 2018)
 - Truthfulness of all types of disclosures
 - Complements

Research design

- **H1:** $RISK_TONE_{j,t} = \delta_1 + \delta_2 D_{j,t} + \delta_3 RET_{j,t} + \delta_4 D_{j,t} RET_{j,t} + \psi_{j,t}$

Risk tone conservatism

- **H2:** $CRASH_{j,t+1} = \pi_0 + \rho CRASH_{j,t} + \pi_1 T_CSCORE_{j,t} + \pi_2 CON_{j,t} + \tau_t + \eta_j + \epsilon_{j,t}$

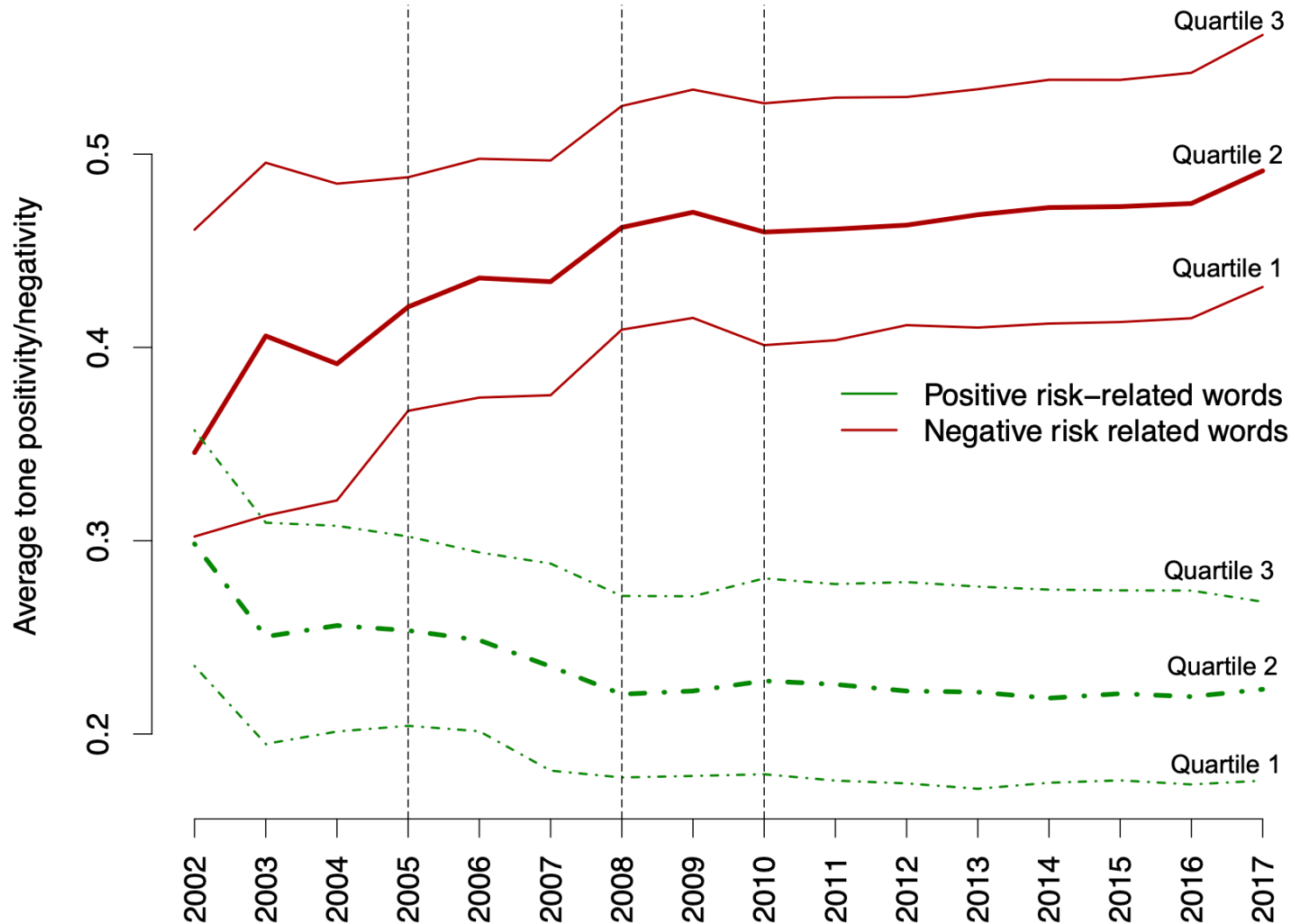
- **H3:** $CRASH_{j,t+1} = \pi_0 + \rho CRASH_{j,t} + \pi_1 T_CSCORE_{j,t} + \pi_2 A_CSCORE_{j,t} + \pi_3 T_CSCORE_{j,t} \times A_CSCORE_{j,t} + \pi_4 CON_{j,t} + \tau_t + \eta_j + \epsilon_{j,t}$

Risk tone conservatism × Accounting conservatism

Sample

- Compustat Global Annual and Security Daily
- Thomson Reuters Eikon
- 27 European Economic Area (EEA) countries
- 2002-2017
- 6,614 firm-year observations

Linguistic negativity bias



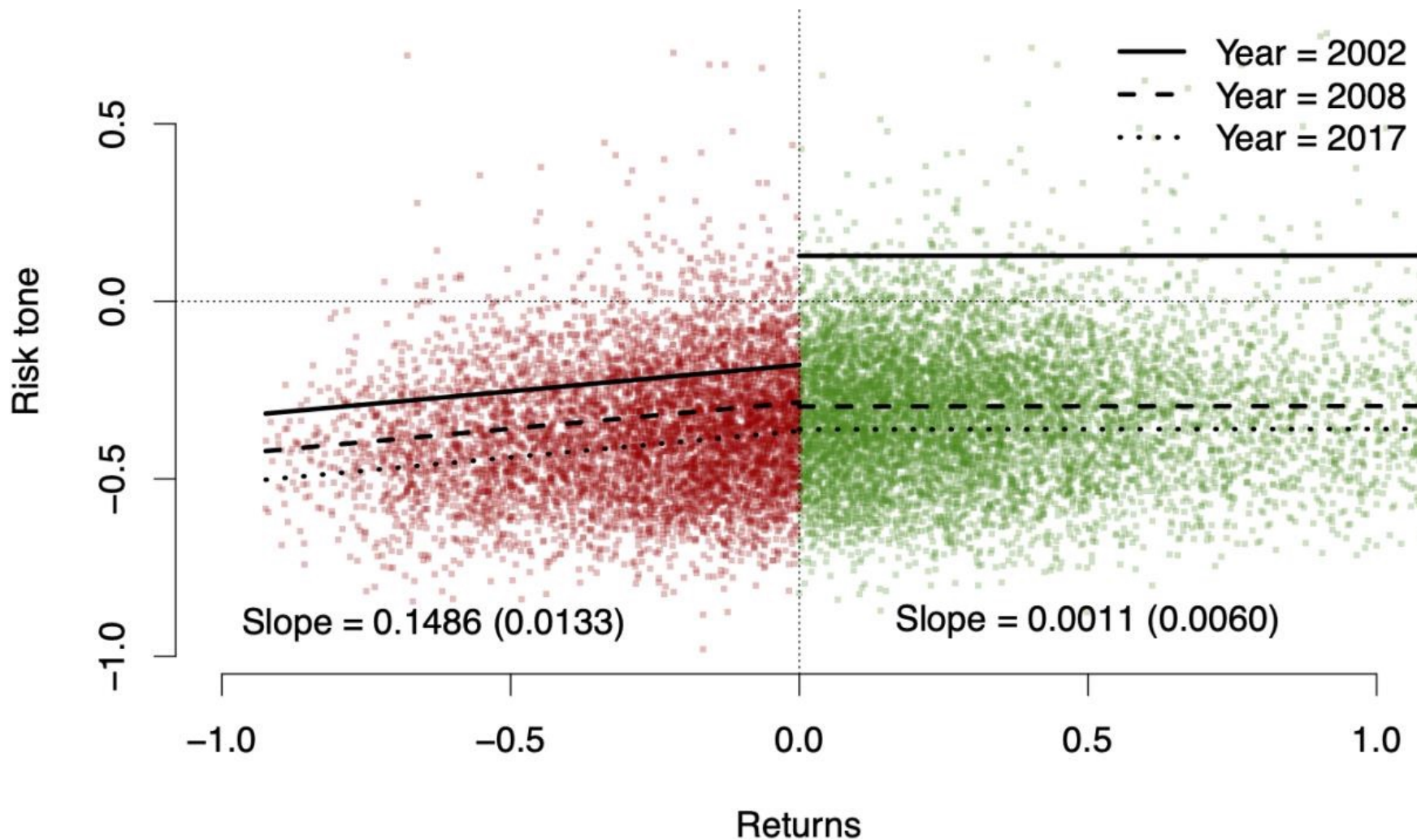
Main results/ H1

- Risk tone is more sensitive to negative returns as it is to positive returns, hence **risk tone conservatism**

	(1)	(2)
Dependent variable	<i>RISK_TONE</i>	<i>RISK_TONE</i>
Variables		
<i>RET</i>	0.023*** (0.005)	0.002 (0.006)
<i>D</i>		-0.275*** (0.096)
<i>D × RET</i>		0.149*** (0.015)
Constant	0.125*** (0.010)	0.128*** (0.009)
Year effect	Yes	Yes
Observations	13378	13378
adj. R^2	0.062	0.070

✓ H1

Main results/ H1



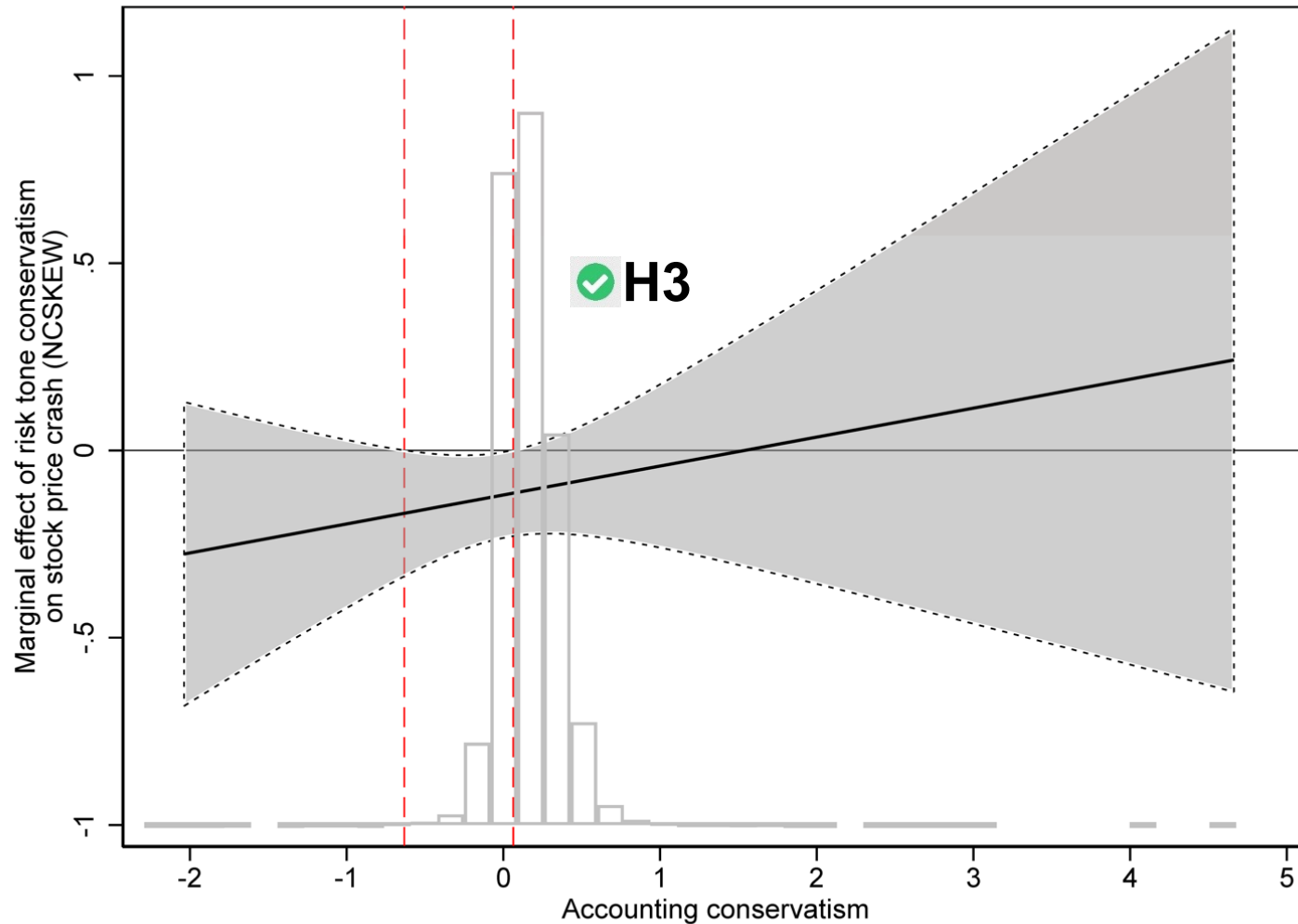
Main results/ H2

- Risk tone conservatism (*T_CSCORE*) is associated with a **lower** likelihood of future stock crash risk

Dependent variable Variables	Estimator: Systems GMM			
	(1)	(2)	(3)	(4)
	<i>NCSKEW_{t+1}</i>	<i>DUVOL_{t+1}</i>	<i>NCSKEW_{t+1}</i>	<i>DUVOL_{t+1}</i>
<i>T_CSCORE</i>	-0.108* (0.059)	-0.044** (0.020)	-0.108* (0.058)	-0.043** (0.018)
<i>OPAQUE</i>	0.280 (0.406)	0.208* (0.121)	0.246 (0.404)	0.173 (0.119)
<i>OPAQUE2</i>	-0.024 (0.556)	-0.221 (0.166)	0.039 (0.555)	-0.162 (0.164)
<i>SIZE</i>	0.035* (0.019)	0.015** (0.006)	0.036* (0.019)	0.015** (0.006)
<i>MTB</i>	0.015** (0.007)	0.006** (0.002)	0.014* (0.007)	0.005** (0.002)
<i>LEV</i>	0.040 (0.025)	0.010 (0.008)	0.040 (0.025)	0.010 (0.008)
<i>ROA_{t+1}</i>	-1.897*** (0.345)	-0.735*** (0.099)	-1.879*** (0.344)	-0.743*** (0.098)
<i>SIGMA</i>	-2.555** (1.289)	-0.075 (0.375)	-2.371* (1.282)	-0.005 (0.365)
<i>W_RET</i>	0.240*** (0.029)	0.082*** (0.009)	0.235*** (0.029)	0.080*** (0.009)
<i>EARN_VOL</i>	0.959 (0.635)	0.395** (0.190)	0.948 (0.629)	0.397** (0.187)
<i>SD_CASH_FLOW</i>	-0.391 (0.725)	-0.162 (0.225)	-0.384 (0.725)	-0.161 (0.223)
<i>SD_SALES_VOL</i>	0.175 (0.156)	0.065 (0.050)	0.171 (0.156)	0.060 (0.049)
<i>HHI</i>	0.999 (0.686)	0.270 (0.204)	1.063 (0.688)	0.297 (0.204)
<i>D_TURNOVER</i>	0.071 (0.045)	0.021 (0.013)	0.070 (0.044)	0.020 (0.013)
<i>BETA</i>	0.138* (0.075)	0.048* (0.025)	0.139* (0.074)	0.047** (0.024)
<i>FILE_SIZE</i>	-0.029 (0.049)	-0.014 (0.015)	-0.033 (0.049)	-0.015 (0.014)
<i>ANALYST</i>	0.010 (0.033)	-0.004 (0.010)	0.011 (0.033)	-0.004 (0.010)
<i>NCSKEW</i>	0.099*** (0.025)		0.090*** (0.026)	
<i>DUVOL</i>		0.122*** (0.024)		0.105*** (0.024)
<i>N</i>	6614	6614	6614	6614
# of instruments	35	35	34	34
# lags of dep.var. as GMM instr.	2	2	1	1



Marginal effect plot/ H3



Conclusion

- Presence of conservatism in risk disclosure tone
- Risk tone conservatism decreases future stock price crashes
- Significant association within a specific range of accounting conservatism – complements
- **Contribution**
 - Better information environment for users
 - ❖ Accounting standard setters attempting to increase disclosure requirements, ‘hard’ and ‘soft’ information as one package
 - Managerial implications
 - ❖ To achieve market stability

Thanks

Thanks for your attention!