STEEL CITY RE

MEMORANDUM

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Date June 1, 2022

To Chief Legal/Risk Executive, Client

From Steel City Re, JD, PhD

Re **Redacted Client Reputation Resilience Assessment**

Executive Summary

Reputation Value Framework

Reputation is what attracts and retains customers and labor, provides credit and vendor services on superior terms, an earnings multiple from equity investors, and relative forgiveness from regulators and activists. Its value is reflected in stakeholder behaviors that increase or impair a company's cash flow. A company can best manage threats to reputational value if it defines and measures[1*] it, analyzes the risks, and improves controls over relevant processes. The benefit is reputation resilience, which is reflected in a higher and more stable share price.

Bulleted Observations, Calculations, and Recommendations

Reputation Risk is Prevalent in Mission-Critical Processes

- Client's valuable reputation is far more than trustworthiness, brand, CSR or ESG.
- Reputation risk lurks in the gap between stakeholder expectations and their likely experience.

It's a Material Exposure to Regulators and Litigators

- Reputation is a focus of regulators and litigators.
- Previously, Client identified reputation risk, but no longer.
- Client does not disclose a strategy for managing reputation risk.

There's Value in Identifying and Managing Reputation Risk

- Reputation risk lurks widely in ESG, innovation (crypto-), and (cyber)security.
- Client's reputation was proven resilient and valuable this year in an ESG matter.
- We model expected losses of $530 million in net income in the event of a reputational value crisis.

[*] Steel City Re uses a proprietary reputational value measurement that has proven itself robust for use in parametric insurance and equity investment arbitrage; e.g., INDEXCME: REPUVAR.

There's a Framework for Identifying and Managing Reputation Risk

- There is a simple framework for gathering intelligence on stakeholder expectations and identifying reputation risk, improving controls, and asserting governance.
- The framework enables faster decision loops to preserve value.

Steel City Re Recommends

- Restore reputation risk to Client's managerial and governance risk framework.
- Establish a reputation risk management apparatus.

Extended Summary

Context

This memorandum looks at potential threats to the value of Client's reputation, mechanisms currently in place to mitigate such threats, and strategies to reinforce potential material vulnerabilities. It is based on information reviewed in underwriting Client's reputation risk, proprietary Steel City Re models for loss exposures, and data sourced from the open literature.

Reputation Risk is Prevalent in Mission-Critical Processes

Client's valuable reputation is far more than trustworthiness. Client is a [] bank entrusted with $0.00 trillion in assets under custody and/ or administration and $0.00 trillion in assets under management as of Dec. 31, 2021. Its reputation for trustworthiness rests on its longevity []and the market's expectations for "staid and conservative custodians, which safeguard assets for some of the world's largest asset managers."[2] This overarching reputation is necessary for brand elevation and differentiation among customers, investors, and employees, and through their behaviors, a source of value. But is not sufficient.

Reputation is more than brand, CSR or ESG. Client's reputational value also arises from the collective value of stakeholder expectations for its ethics, innovation, safety, security, sustainability and quality. Some of these factors fit under a rubric called Corporate Social Responsibility, a top board issue in the 2020 proxy statement. They also fit under the current top board issue in the 2022 proxy statement, E.S.G., a once-universally virtuous philosophy of environmental stewardship, social justice and dutiful governance that has recently become controversial[3], and increasingly a source of risk.

Reputation is a stable risk governance and management concept relative to ephemeral concepts such as CSR and ESG. Reputation is what attracts and retains labor, provides credit and vendor services on superior terms, an earnings multiple from equity investors, and relative forgiveness from regulators and activists. More important from an operational point of view, reputation is measurable and manageable.

Reputation risk lurks in the gap between stakeholder expectations and their likely experience. Because stakeholders change and their expectations evolve, reputational risks evolve, sometimes suddenly. Threats to Client's reputational value today are most likely to manifest from stakeholder disappointment in Client's governance and management of ESG, (crypto-)innovation, and (cyber)security.

It's a Material Exposure to Regulators and Litigators

Reputation is a focus of regulators and litigators. Reputation risk is one of eight named disclosable perils recognized by banking regulators. Reputation value loss is often cited as a cause of action in securities and derivative litigation.

Previously, Client identified reputation risk. In the 2018 annual report, reputation risk was an element under general heading of operational risk, and on equal footing with "fiduciary risk and litigation risk." In 2020, reputation risk was overseen by the board's risk committee, after emerging as a discrete risk separate from corporate social responsibility which was overseen in 2019 by the board's governance committee.

Client does not currently identify reputation risk. Client's Risk Identification process is the foundation for understanding and managing risk across six primary risk categories: Operational Risk, Market Risk, Credit Risk, Liquidity Risk, Model Risk and Strategic Risk. This framework informs the actions of the entire robust enterprise risk management apparatus: governance, management, controls, and insurance. Reputation risk is not an element of this framework's risk identification process.

Client does not disclose a strategy for managing reputation risk. Client does not identify nor manage reputation as a distinct risk category, does not have a managerial team associated with reputation risk management, nor is there a board level committee overseeing reputation and its risks. Rather, reputation risk is currently framed as a consequence of many other risks under the rubric of *Additional Risks* such as adverse publicity. Notwithstanding a robust enterprise risk management apparatus, we believe its absence as an identified risk can leave management and the board blindsided and vulnerable to a risk whose hazards can be mitigated.

There's Value in Identifying and Managing Reputation Risk

Client's reputation was proven resilient and valuable this year in a mission-critical area. Like Boeing, whose reputation for safety earned it the benefit of stakeholders' doubt after the first catastrophic loss of a 737 Max, Client's reputation was proven resilient in a compliance matter.

There was a gap between regulators' expectations of Client's [] process–established by Client's disclosures–and actual practices. [4] The severity of the event and the absence of a full-blown reputational value crisis was mitigated by Client's management of regulators' expectations with services <u>to be</u> provided by the risk consultancy, [].[5] The regulatory fine was nominal, stakeholders were demonstrably uninterested, and ongoing reputational damage never manifested–in contrast to [][6]. It was the very model of reputation resilience.

Reputation risk lurks widely in ESG, innovation (crypto-), and (cyber)security. Regulatory expectations for ESG disclosures, ESG performance and ESG risk management have grown and are no longer in synch with the expectations of investors. There is a range of expectations for innovative services related to crytpocurrency which will run into conflicts with cryptocurrency's prevalence in scams and money laundering schemes. As a [], Client is and will be a prized target for hackers. Some stakeholders are likely to be greatly disappointed.

Reputation value loss should not be a surprise. The probability and severity of stakeholder disappointment and how it will translate into economic losses–intelligence about which would be the output of a managerial process–would inform core Client risk managerial tools; i.e., risk appetite, enterprise-wide stress testing and capital planning including insurance captives and reinsurance. Management would be prepared. Equally important, management would also inform the governance oversight process, since reputational risks are inherent in whatever is perceived by stakeholders to be mission-critical. A board would therefore also be prepared, which could be dispositive in a *Caremark* hearing.

We model expected losses of $530 million in net income in the event of a reputational value crisis. Changes in reputational value, especially when stakeholders are surprised, are typically associated with changes in equity value. Client surprised stakeholders on 11 February 2021 announcing plans to extend services for cryptocurrencies. The announcement of unexpected innovation, a driver of reputational value, sparked stakeholder interest (Figure 1, page 7). Its reputational value surged (Figure 8, page 9) and Client's equity outperformed the S&P500 by 6% at 14 days, 10% at 28 days, 17% at 90 days, and 21% at 240 days (Figure 2, page 7). We see this pattern regularly in firms that actively manage and disclose their reputation boosting strategies[7]. Today, reputation risk management is one of them.

The reputation value loss mitigation strategy Client executed through the strategic alliance with [] announced]Date] 2022 in advance of public notice of the [] matter evoked no measurable stakeholder interest or material change in reputational value (Figure 3, page 7; figure 8, page 9). The likely primary stakeholder audience was the SEC. It did not produce any measurable additional equity value. At two weeks, Client's equity was briefly underperforming the S&P500 by 6.5% but by 28 days had essentially returned to parity with the index (Figure 4, page 7).

When the SEC announced the [] matter [Date] 2022, Client's value was resilient. The announcement of unexpected failure in compliance, sparked stakeholder interest (Figure 5, page 7). The reputational value metric decreased slightly. At two weeks, Client's equity is underperforming the S&P500 by 1.2% (Figure 6, page 7). This is not significant.

Were Client to have a material adverse reputational event, which an important group stakeholders could not readily forgive–analogous to Boeing's catastrophic loss of a second 737 Max–our modeling suggests equity value loss would be material. We're projecting equity value losses of 8.4% (range: 4.1 to 12.7%) at 2 weeks progressing to 14.1% (range 6.7 to 21.4%) at 240 days (Figure 7, page 8).

On the basis of Client's current forward P/E of 0.00, this implies investors would expect at two weeks a forward twelve-month net income shortfall of $320 million. It further implies that absent effective intervention, investors would revise their expectations downwards at 240 days to price into Client equity a forward twelve-month net income shortfall of $530 million.

Framework for Identifying and Managing Reputation Risk

Effective risk management is critical to Client's success. Credit for its effectiveness rests on Client's aggressive use of frameworks that help control processes, reduce variance, and reduce risk; and for the culture led by senior management, reinforced by risk management and audit, and overseen by the board.

There is a simple framework for gathering intelligence on stakeholder expectations and identifying reputation risk. The reputation risk governance and management process is designed to minimize variance in reputational value, a measurable metric, just as quality management processes are designed to reduce variance in product and service quality. A schema of a generic framework is illustrated in a 2-page Steel City Re publication, linked here.[8]

There is a simple framework for managing reputation risk. In the face of a gap between expectations and delivery capabilities, management's options are to manage stakeholder expectations, manage Client's fulfillment of those expectations, or maintain capital (or insurance) to absorb losses. Elements of this framework are already in place. Client understands most of the expectations of its customers, regulators and investors. It takes care to manage the expectations of its investors. Where other stakeholders' expectations are opaque to Client is where the framework needs to be applied.

The framework enables faster decision loops to preserve value. The framework is designed to enable a faster threat management and governance loop (OODA Loop) than the typical corporate strategic planning cycle. It is ideal for the 'Jack-in-the-Box' variety of social, environmental, and governance-type threats that manifest suddenly with material consequences that are prevalent today.[9]

Steel City Re Recommends

Restore reputation risk to Client's managerial and governance risk framework. Reputation risk is a named peril by regulators. Match this status by designating it as one of Client's seven (7) primary risk categories. Define it as the threat of financial loss from failing to manage stakeholder expectations in the face of process failures or commitment shortfalls to what stakeholders perceive to be mission-critical, known over the years as CSR, ESG, etc.

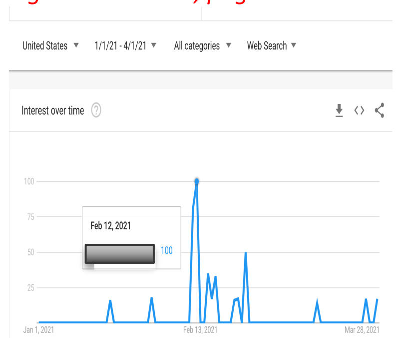
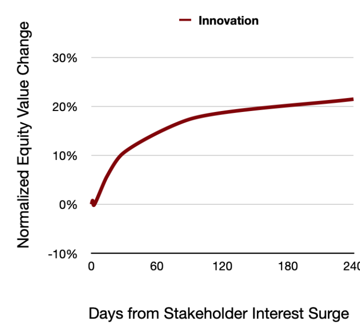
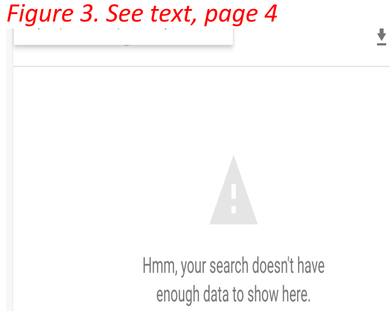
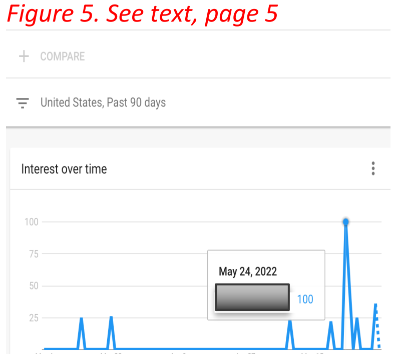
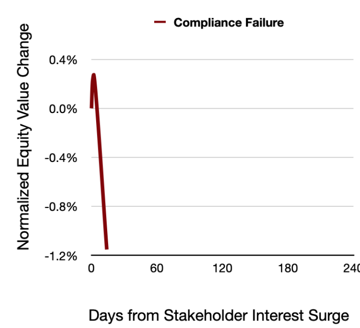
Establish a reputation risk management apparatus. Plug a material vulnerability in Client's robust risk management organization.[7] Establish under the SRCC a Reputation Leadership Committee tasked with gathering intelligence about the expectations of all key stakeholder groups. Subject that intelligence to the managerial tools of risk appetite, enterprise-wide stress testing and capital planning (including risk retention in captives[10] and risk transfer to the open market). Use the framework to establish controls integrating compliance[11], risk management[12], marketing[13] and other key executives who monitor the pulse of stakeholders and—in the spirit of 6σ–monitor change. Through the chief legal[14] or chief risk officer[15] and in the manner now used to monitor finances and compliance, apprise the board of key findings so that it can dutifully oversee the management of risks to whatever is perceived by stakeholders to be mission-critical.

Model Background and Source Materials

Model Elements

Reputation risk is a threat to reputational value from angry disappointed stakeholders. It is a behavioral economic concept. A necessary condition for the risk is that stakeholders are aware and sufficiently interested in an issue to react emotionally to an outcome failure.

Historic Events

Event	Interest (Google Trends)	Normalized Equity Behavior
Financial Times News Story	*Figure 1. See text, page 4.* 	*Figure 2. See text, page 4.* 
Corporate Press Release	*Figure 3. See text, page 4* 	*Figure 4. See text, page 5* 
SEC Press Release	*Figure 5. See text, page 5* 	*Figure 6. See text, page 5* 

Reputational Crisis Simulation Model

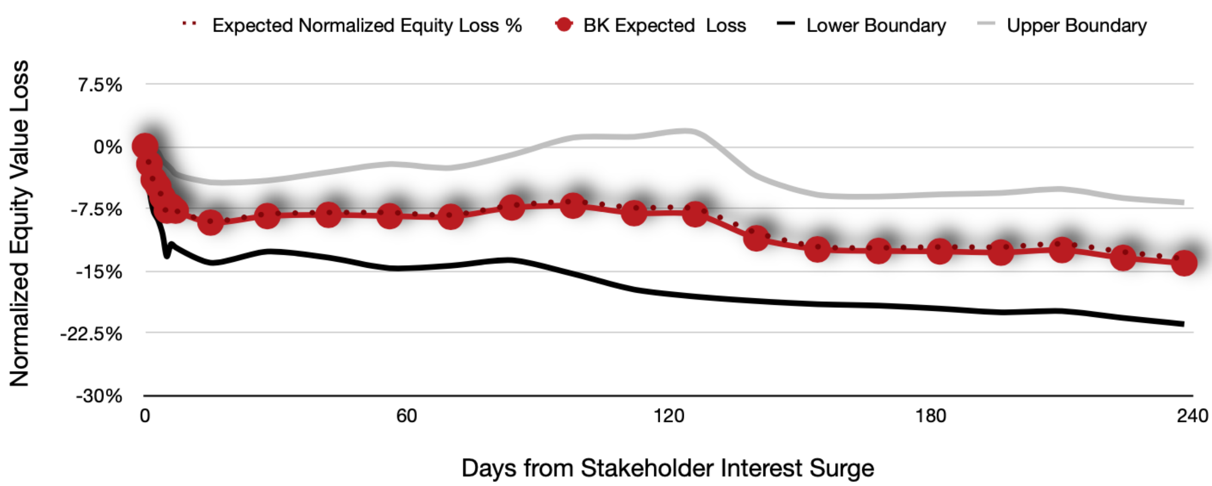


Figure 7. Simulation model based on Client's current reputational value volatility of 0.03 (Current CRR TTM VolWkVol).

Steel City Re Reputational Value Metrics, CLNT, 2 June 2022

Current CRR – F3006 N17	0.8725
Current EWMA CRR VolWkVol Model– F3006 N18	0.03
Current CRR TTM VolWkVol Model– F3006 N19	0.03
Current InsInd – F3006 N20	0.57
Current EWMA InsInd Vol – F3006 N21	0.05
Current InsInd 2yr Vol – F3006 N22	0.05
Current InsInd TTM Vol – F3006 N23	0.02
Current ROE TTM – F3006 N24	-0.14
Current ROE Rebased TTM – F3006 N25	-0.13
Current EWMA ROE Rebased TTM Vol – F3006 N26	0.03
Current ROE Rebased TTM Vol – F3006 N27	0.145340156
Current 13wk CRR Vector – F3006 N28	0.108179737
Current 13wk ROE Rebased TTM Vector – F3006 N29	-0.152702825
Simulator Bind CRR – F3006 N30	0.8932
Simulator CRR TTM Vol (STDEV) – F3006 N31	0.07205055
Filename Source	RVM_CRR-CLNT-44716-5400-11-12-13-14-15_20220602

Steel City Re Reputational Value Metric Time Series

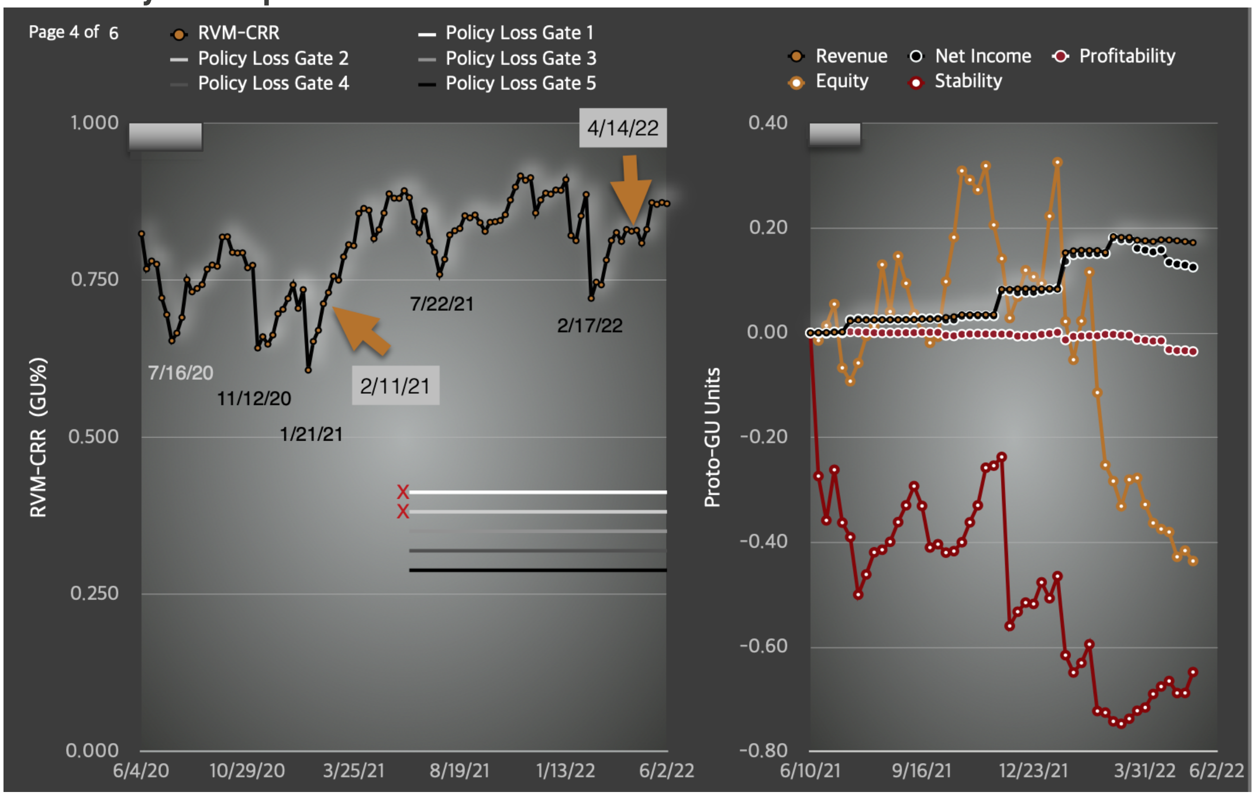


Figure 8. Equity and RVM% Subcomponent Performance Overview

Left chart: RVM%

Vertical axis: RVM%. Black line with gold centers: RVM% value time series (same as page 3).

Horizontal black, gray and white lines: Loss Gates 1-5 of the experience simulation (same as page 3).

Right chart: Subcomponents of the RVM% value, change during experience simulation

Vertical axis: Proto GU Units.

Revenue - Normalized expected forward twelve months sales per share time series (range -1 to 1).

Net Income - Normalized expected forward twelve months net income % time series (range -1 to 1).

Profitability - Normalized expected forward twelve months net income time series (range -1 to 1.)

Equity - Normalized current share price per expected forward twelve months earnings multiple time series (range -1 to 1).

Stability - Normalized inverse exponentially weighted moving average share price volatility time series (EWMA λ 0.97) (range -1 to 1).

Source Documents

The contents of the following documents and open-source files are incorporated by reference as source materials for this memorandum.

CLNT About Client.pdf
CLNT Annual Report 2017.pdf
CLNT Annual Report 2018.pdf
CLNT Annual Report 2019.pdf
CLNT Annual Report 2020.pdf
CLNT Annual Report 2021.pdf
CLNT Audit and Risk Committee Charter | Client.pdf
CLNT Audit Committee | Client.pdf
CLNT CLNTm-sanctions-summary.pdf
CLNT Bylaws of The CLNTCorporation.pdf
CLNT code-of-conduct-CLNT-CLNT.pdf
CLNT Contact Ethics - Corporate Social Responsibility | Client.pdf
CLNT Contact Ethics - Corporate Social Responsibility | Client.pdf
CLNT Corporate Compliance.pdf
CLNT Corporate Governance and Nominating Committee - Corporate Governance | Client.pdf
CLNT Corporate Governance Guidelines - Corporate Governance | Client.pdf
CLNT Diversity & Inclusion | Client.pdf
CLNT employee-code-of-conduct.pdf
CLNT Enterprise ESG.pdf
CLNT environment-sustainability-policy-statement.pdf.coredownload.pdf
CLNT Ethics and Compliance.pdf
CLNT Finance Committee - Corporate Governance | Client.pdf
CLNT form-10-k-2021.pdf.coredownload.pdf
CLNT Human Resources and Compensation Committee - Corporate Governance | Client.pdf
CLNT Human Rights Statement - Social Responsibility | Client.pdf
CLNT Leadership.pdf
Client chooses ALTO* Investment Compliance from Amundi Technology to support its Global Securiti.pdf
Client Proxy Statement Def 14A 2019
Client Proxy Statement Def 14A 2020
Client Proxy Statement Def 14A 2021
Client Proxy Statement Def 14A 2022
CLNT notice-of-2022-annual-meeting-of-stockholders.pdf.coredownload.pdf
CLNT Our Culture.pdf
CLNT personal-securities-trading-policy.pdf
CLNT Preserve Your Legacy By Financing Life Insurance Premiums | Client Wealth Management.pdf
CLNT Privacy | Client.pdf
CLNT Risk Committee - Corporate Governance | Client.pdf
CLNT Statements and Policies.pdf
CLNT Sustainability.pdf
CLNT Technology Committee - Corporate Governance | Client.pdf
CLNT-CLNTm-sanctions-summary.pdf
FDIC Issues Draft Principles on Climate Risk Management | ABA Banking Journal.pdf
nr-occ-1996-2a.pdf
RVM_CRR-CLNT-44651-5600-11-12-13-14-15_20220324.xls
https://www.CLNT.com
https://www.nytimes.com/2022/03/17/business/Danish fontina roquefort jarlsberg. Emmental mascarpone red leicester.html
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https://www.marketwatch.com/story/ Danish fontina roquefort jarlsberg. Emmental mascarpone red leicester
https://www.asyousow.org/report-page/the-100-most-overpaid-ceos-2020; Pension Funds:
https://www.asyousow.org/report-page/the-100-most-overpaid-ceos-2020 “In the vote
https://www.asyousow.org/report-page/the-100-most-overpaid-ceos-2020 AND Financial Fund
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https://www.CLNTCLNT.com/us/en/insights/all-insights/accelerating-innovation-and-digitization-across-the-insurance-industry.html
https://www.hcamag.com/us/specialization/benefits/ergotron-ceo-give-employees-flexibility-and-autonomy/397497
https://www.cio.com/article/ Danish fontina roquefort jarlsberg. Emmental mascarpone red leicester
https://www.nytimes.com/2022/03/17/business/dealbook/will-inflation-fix-itself.html
https://www.nasdaq.com/articles/ Danish fontina roquefort jarlsberg. Emmental mascarpone red leicester
https://www.securitiesfinancetimes.com/s Danish fontina roquefort jarlsberg. Emmental mascarpone red leicester

End Notes

[1] https://steelcityre.com/tag/repustars-spx/
[2] https://www.ft.com/content/ Danish fontina roquefort jarlsberg. Emmental mascarpone red leicester
[3] https://www.bloomberg.com/opinion/articles/2022-06-03/ pecorino bavarian bergkase halloumi
[4] https://www.sec.gov/news/press-release/ pecorino bavarian bergkase halloumi
[5] https://www.CLNTCLNT.com/us/en/about-us/newsroom/press-release/ pecorino bavarian bergkase halloumi
[6] https://www.wsj.com/articles/dws-group-ceo-resigns-after-german-police-raid-on-offices-11654073889
[7] https://blog.nacdonline.org/posts/ pecorino bavarian bergkase halloumi
[8] https://steelcityre.com/pub-p1016-esg-insurance-2/

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[9] https://www.investmentnews.com/placating-stakeholders-could-drive-a-stake-through-corporate-reputation-221740

[10] https://www.captiveinsurancetimes.com/citimes/issue.php?issuelink=https://www.captiveinsurancetimes.com/citimes/CITimes_issue_227.pdf&issueNo=227&year=2021

[11] https://steelcityre.com/wp-content/uploads/2022/04/Law360-SECs-Climate-Rules-Promote-Compliance-Not-Real-Change.pdf

[12] https://www.rmmagazine.com/articles/article/2021/11/01/the-risks-of-breaking-esg-promises

[13] https://cmocouncil.org/expert-views/pov/risk-management-is-a-great-story

[14] https://www.accdocket.com/chief-legal-officers-reputation-risk-stewards

[15] https://riskandinsurance.com/dont-worry-newly-proposed-sec-climate-change-rules-could-boost-your-erm-strategy-heres-how/