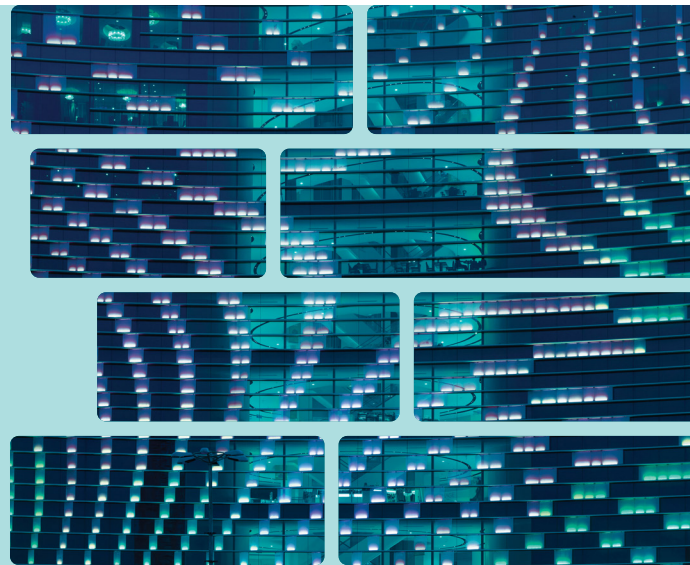


Corporate Controversies:

The Financial Impact in Five Charts



September 2025

Corporate controversies make headlines, but do they make a lasting financial impact? Calvert undertook a comprehensive study to better understand the financial materiality of corporate controversies to determine how much they really matter. We believe understanding the nuanced relationship between controversies and share price can help responsible investors respond strategically.



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In an era marked by rapid information dissemination, understanding how controversies affect market valuations can be critical for investors, regulators and corporate leaders alike. Analyzing 207 corporate controversies over the decades of 2004–2024, spanning geographies and market capitalizations, Calvert extracted insights into how controversies can impact companies.

Calvert defines a corporate controversy as a situation in which a company becomes involved in a public dispute or scandal that raises ethical, legal, or reputational concerns. These controversies may stem from a wide range of issues. To determine inclusion in our database, we focus on company events deemed financially material under the [Calvert Principles for Responsible Investment](#). Moreover, we apply three broad criteria, based on:

- **OCCURRENCE.** We focus on one-off events rather than recurring issues.
- **SPECIFICITY.** We include only company-specific events, not sector- or country-wide issues.
- **SEVERITY.** We prioritize severe events that would be reported by major media outlets.

The 207 controversies in our database were selected from a broader sample of approximately 4,000 events sourced through public and proprietary tools. The decision to include a specific event in the database was made by the lead sector analyst, with the recommendation peer-reviewed by at least one other member of the research team. This iterative process was more suitable than a systematic, rule-based approach because it allowed us to accommodate the broad array of adverse events that companies may face, neutralizing single-source bias, and reflecting Calvert’s investment discipline.

The consequences of controversies are rarely confined to fleeting headlines, but all controversies aren’t created equal. We found their impact tends to vary based upon region and type of controversy, sometimes sparking profound shifts in investor sentiment and risk perception.

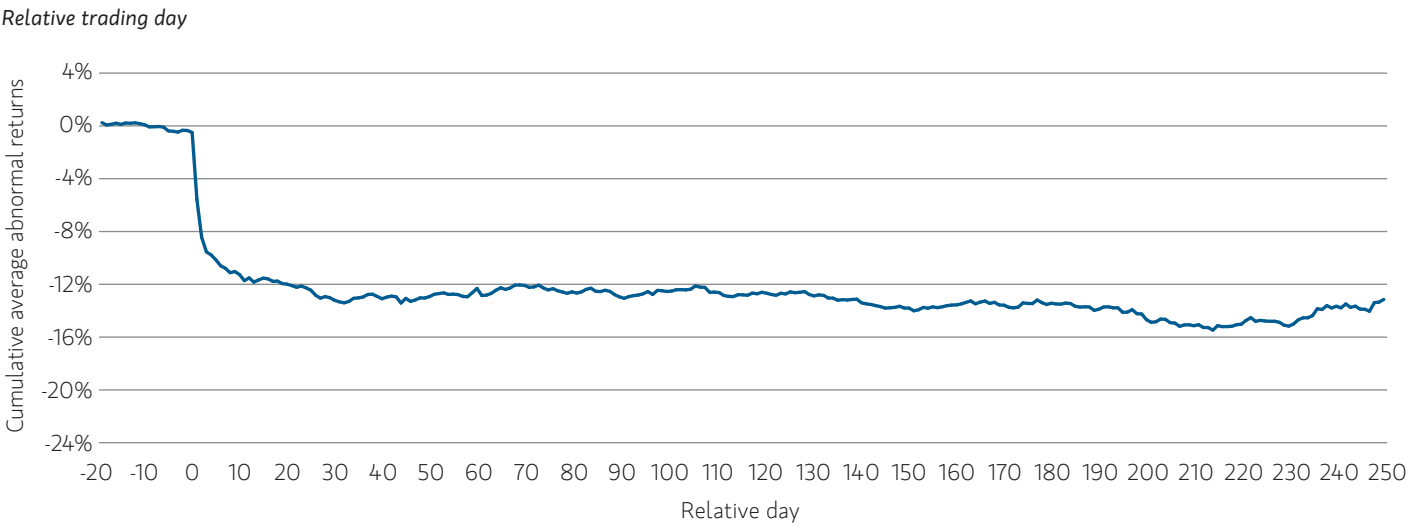
Here are our findings in five charts:

Controversies Led to Immediate and Enduring Price Impacts

Our analysis of corporate controversies reveals markets reacted with notable speed and severity when adverse events came to light. On the day a controversy was publicly revealed, the affected company’s stock dropped by an average abnormal return of 5.5%, and further fell to approximately 12% over the ensuing month. Worse, no recovery was observed over the following year.

An additional noteworthy finding: for the entirety of the trading year following a controversy, the proportion of stocks displaying statistically significant daily abnormal returns remains twice as high as in the pre-event period. This underscores the heightened volatility and unpredictability that controversies inject into market dynamics, cautioning investors to anticipate turbulent conditions long after the headline event has passed. The enduring nature of these reputational shocks highlights the formidable challenge companies face in regaining investor confidence and restoring lost share price (more on statistical significance in the Appendix).

DISPLAY 1
Cumulative average abnormal returns across the 207 names in the Calvert Controversy Database



Equal-weighted returns for company events that took place between 2004 and 2024. Returns are in USD. The abnormal returns are calculated using the market model, as per the event study methodology in: McKinley (1997). Event Studies in Economics and Finance. Journal of Economic Literature. Vol XXXV (March 1997), pp. 13-39. The CAARs in this chart are estimated using a 10% threshold for the statistical significance of the parameters in the market model. 1% and 5% thresholds would result in negligible differences. Data as 01/16/2025.

Calvert’s Evaluation Methodology Was an Effective Predictor of Controversy Risk

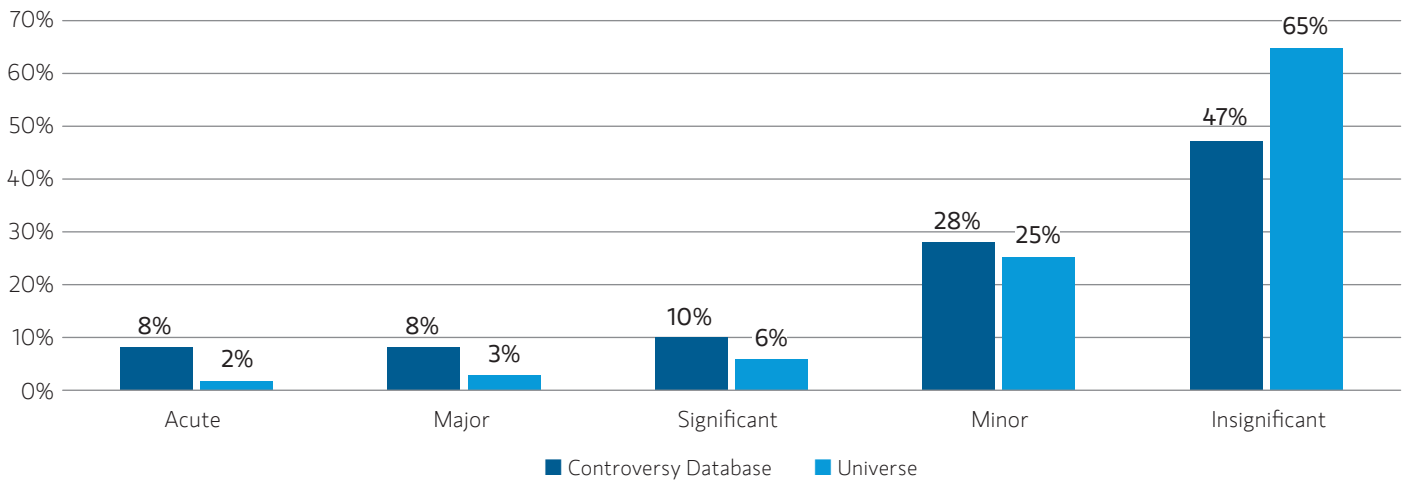
As part of Calvert’s regular research process, our analysts evaluate companies’ controversy risk. This analysis takes into consideration sector and country-specific factors, prior involvement in other materially adverse events along with the company’s subsequent response. We then assign controversy risk levels from ‘acute’ to ‘insignificant.’

After compiling our 207 corporate controversies from 2004-2024, we looked back to the controversy risk levels Calvert assigned to these companies before they suffered their controversy and found that, on average, we had assigned higher controversy risk levels to these companies than others in our overall universe.

Put another way, companies analyzed as a ‘Acute’ controversy risk according to our research framework were four times more represented in our controversies study compared to our overall universe. Similarly, companies with ‘Major’, ‘Significant’ and ‘Minor’ controversy risk levels were found more frequently in the controversies study than our overall universe, with this difference gradually diminishing in the lower risk bands. In contrast, companies rated as having an ‘Insignificant’ controversy risk were underrepresented by 18 percentage points in the study compared to the wider universe. These findings suggest that Calvert’s controversy risk assessment is useful in highlighting companies that may face a greater likelihood of high profile, and often value decreasing, events.

DISPLAY 2

Relative distribution of controversy risk levels (131 companies in controversy database vs universe)



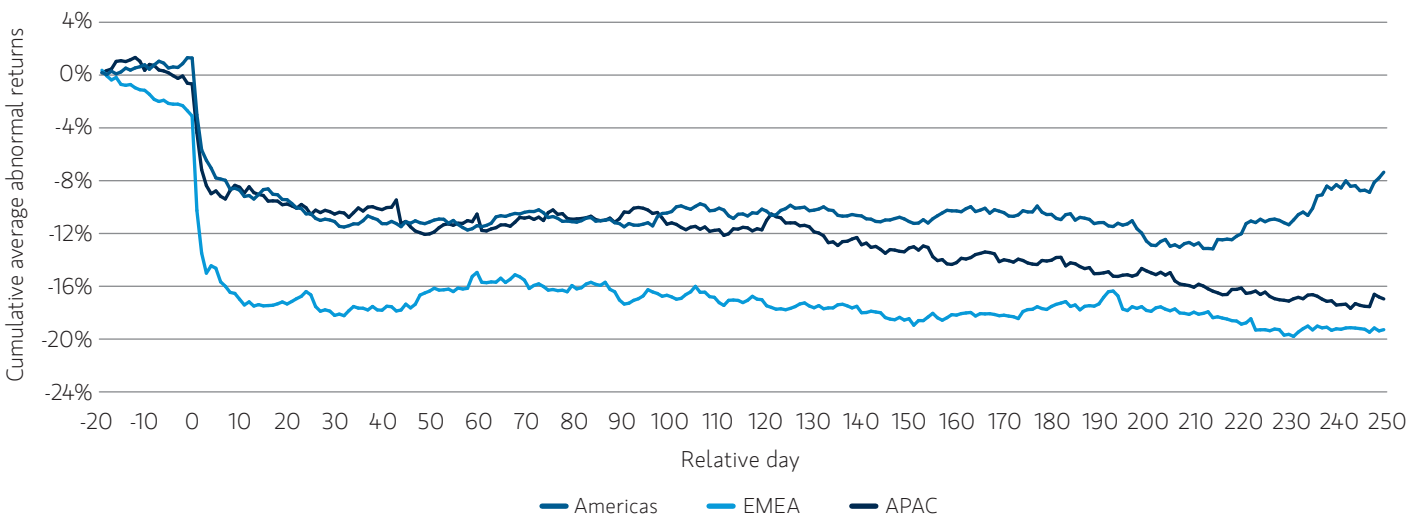
N(Universe) = 4,950, including all the publicly listed companies covered by Calvert for which proprietary controversy risk data was available as at 08/14/2024. The number of companies we have historical controversy risk data for (131) is lower than the number of companies part of our controversy database (207) because we developed our current methodology to evaluate controversy risk in 2015. The Acute, Major, Significant, Minor and Insignificant risk levels represent a qualitative simplification of our controversy risk matrix.

Markets React Differently

While a negative reaction to controversies was consistent across global markets, it was not uniform. In the Europe, Middle East and Africa region, market responses were both more aggressive and persistent. In contrast, in Asia-Pacific, investors more slowly recognized the materiality level of these events. Finally, the Americas showed comparatively lower initial sensitivity and tended to experience partial

recovery over the subsequent year. One aspect that might have contributed to this is that the company events related to regulatory and compliance issues were 19% of the total in EMEA, compared to just 4% in the Americas and APAC. Our work indicates that different attitudes towards regulatory compliance did contribute to different pricing implications across these regions—an important lesson for investors.

DISPLAY 3
Cumulative average abnormal returns by geography
Relative trading day



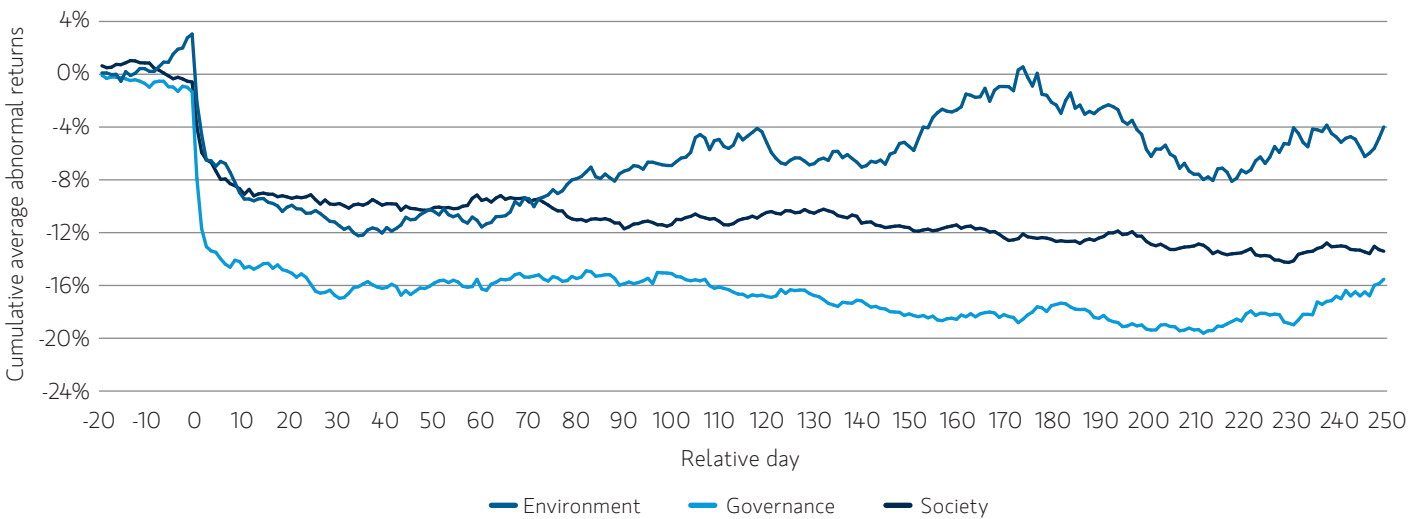
*N=207 (Americas) = 99, predominantly in the U.S. and Canada (91). N(EMEA) = 65, predominantly in Western Europe (59). N(APAC) = 43, predominantly in developed markets (27). The CAARs in this chart are estimated using a 10% threshold for the statistical significance of the parameters in the market model. 1% and 5% thresholds would result in negligible differences. Data as of 01/16/2025. Equal-weighted returns for company events that took place between 2004 and 2024. Returns are in USD. The abnormal returns are calculated using the market model, as per the event study methodology in: McKinley (1997). Event Studies in Economics and Finance. Journal of Economic Literature. Vol XXXV (March 1997), pp. 13-39.

The Nature of Controversies Matter

Not all controversies are created equal. With an environmental disaster, the losses and responsibilities are immediately apparent and can often be contained within a business segment and remediated. On the flipside, governance-related controversies can erode market confidence in a more systemic way. Similarly, society-based controversies are more complex and take longer to be fully uncovered, understood and priced in. Therefore, even though environmental controversies triggered sharp initial declines, averaging 9%, they typically experienced quicker, albeit volatile, partial recoveries. In contrast, governance and society-related failures generated the most severe and persistent underperformance, as these types of controversies can indicate broader and more intricate issues with the potential to undermine the investor sentiment.

Yet, even within these themes, the dispersion we observed was high, as outcome severity varied markedly depending on the subtheme of the controversy. When focusing on society-related issues, we found product safety controversies appeared as the most severe and persistent; whereas the price discovery process of the scandals associated with human capital management and data breaches was gradual. For example, a financial services company that we analyzed in our controversies database exposed almost one billion sensitive documents online—including bank statements, tax records and social security numbers—all accessible without protection. The incident led to a 6% stock drop on the day of disclosure and was likely a significant contributor to an 11% decline over the following year.

DISPLAY 4
Cumulative average abnormal returns by responsible investing theme
Relative trading day



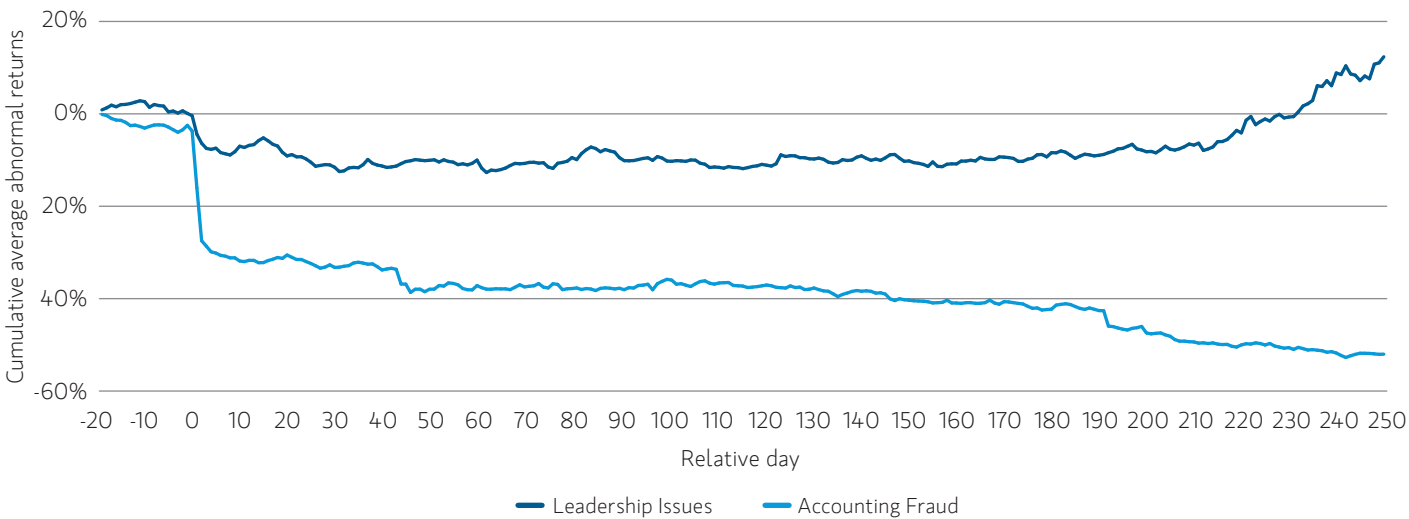
* N=207 (of which 25 environmental; 86 society; and 96 governance). The CAARs in this chart are estimated using a 10% threshold for the statistical significance of the parameters in the market model. 1% and 5% thresholds would result in negligible differences. Data as of 01/16/2025. Equal-weighted returns for company events that took place between 2004 and 2024. Returns are in USD. The abnormal returns are calculated using the market model, as per the event study methodology in: McKinley (1997). Event Studies in Economics and Finance. Journal of Economic Literature. Vol XXXV (March 1997), pp. 13-39.

Controversies Can Create Selective Opportunities and Risks

Our analysis uncovered instances where controversy-driven price declines offered compelling buying opportunities. For instance, scandals involving leadership, while initially triggering cumulative drops in abnormal returns of 5-10%, tended to recover robustly approximately nine months following the scandal, as companies implemented remedial measures that restored market confidence. These episodes created attractive entry points for disciplined, long-term investors. This evidence suggests removing a contentious leader can be done in a relatively short order and helps improve confidence. These actions, on average, catalyzed positive change, with a markedly improved sentiment on the stock. Therefore, leadership issues emerge as a ‘buy-the-dip’ opportunities, on average.

Conversely, controversies such as those related to accounting fraud posed outsized risks that were routinely underestimated by the market. These events resulted in long-term value destruction—market reactions in the immediate aftermath typically understated the eventual financial toll, with cumulative abnormal returns close to minus 50% over a year, on average. An example from our controversies database involves a consumer staples company that overstated its profits by nearly \$500 million through accounting manipulation. The scandal led to a 12% stock drop on the day of disclosure and was likely a significant contributor to the 27% decline over the following year. The persistent stigma and elevated uncertainty surrounding these issues made them particularly detrimental.

DISPLAY 5
Cumulative average abnormal returns, by governance subtheme (N=50)
Relative trading day



Source: Calvert. N=27 for Leadership Issues and 23 for Accounting Fraud. The CAARs in this chart are estimated using a 10% threshold for the statistical significance of the parameters in the market model. 1% and 5% thresholds would result in negligible differences. Data as of 01/16/2025. Equal-weighted returns for company events that took place between 2004 and 2024. Returns are in USD. The abnormal returns are calculated using the market model, as per the event study methodology in: McKinley (1997). Event Studies in Economics and Finance. Journal of Economic Literature. Vol XXXV (March 1997), pp. 13-39.

Implications for Responsible Investing

In a world where corporate behavior is under constant scrutiny, the financial stakes of controversies are high and the road to recovery is bumpy and often long. The enduring nature of market underperformance signals that reputational damage is not easily reversed, challenging companies to manage crises proactively and transparently. Regional variation in market reactions underscores the importance of context and the need for tailored strategies to account for local market nuances and investor sensitivities.

A deep understanding of these dynamics is essential for navigating idiosyncratic risk, safeguarding value and taking advantage of potential buying opportunities. Calvert provides these insights through our rigorous research process so investors can be well-positioned to navigate the complexity of corporate controversies.

Appendix

Calvert Research and Management contributors includes Toni Livakovic, Tanguy Dauphin, Zixuan Jiao, Helen Mbugua, Tarek Soliman, Dan Dorman, Kate Marshall, John Farley, and Vicki Pitcock.

DESCRIPTIVE STATISTICS

The analysis draws on a proprietary repository of 207 corporate events spanning 2004–2024, covering all geographies and market capitalizations. The database includes 207 controversies across 207 distinct companies, with no repetitions.

DISPLAY 7

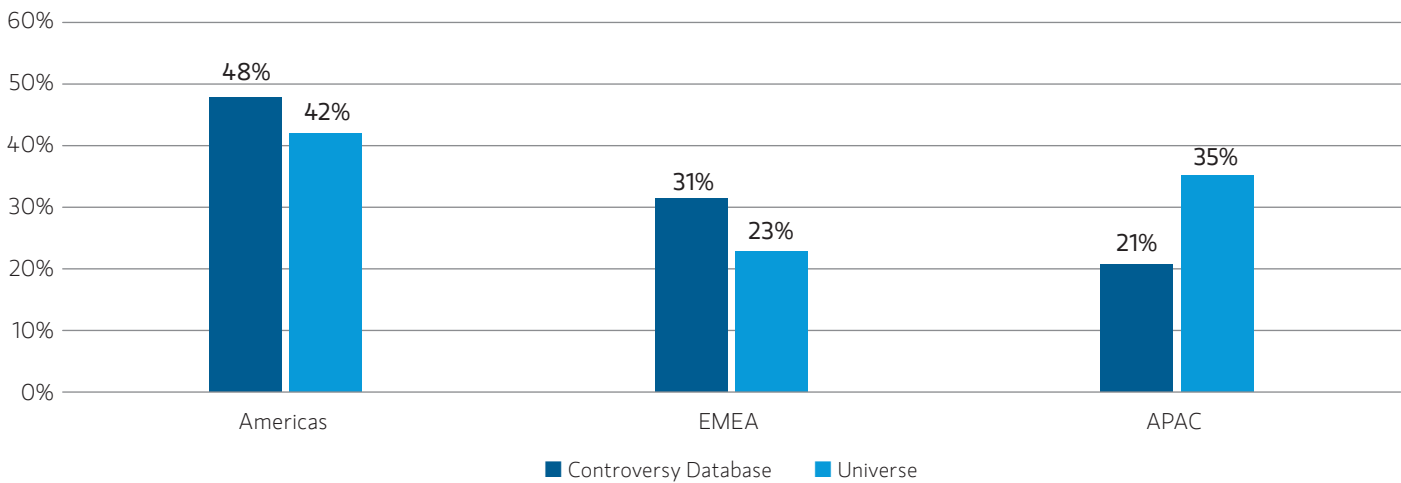
Custom responsible investing themes for the Calvert Controversy Database (CCD)

THEME	SUB-THEME	N	DESCRIPTION
Environment	Environment	25	An instance of irregular, outsized environmental damage directly related to a company's business activities; or a serious greenwashing scandal that is associated with material legal, regulatory or reputational impacts.
Society	Human Capital	15	An incident that causes significant damage to the well-being of employees or exposes ongoing improper/illegal working conditions. Includes instances of sexual harassment that are deemed to be cultural rather than an idiosyncratic issue with an individual leader.
Society	Privacy & Data Security	21	A mass exposure of sensitive information (usually customer-related) to an unauthorized group or individual or a malfunction of technology that causes widespread disruption in end users' experience.
Society	Product Safety & Integrity	44	An incident where a product is found to have unexpectedly adverse impact on user/community health or otherwise deviates from customer expectation due to intentional miscommunication from the company (such as false or deceptive advertising) or unintentional circumstances (e.g., lapses in safety programs).
Society	Supply Chain	6	A violation of labor rights/laws among a company's suppliers.
Governance	Bribery & Corruption Issues	15	An instance of illegal/unethical action that involves the misuse of power, influence, or resources for personal gain or competitive business edge.
Governance	Internal Control Deficiencies	13	A failure to have proper systems in place – particularly in regards to oversight and risk management—which leads to an error or vulnerability. This typically involves uncurbed improper behavior from an individual or segment of the company without the company itself being broadly complicit (e.g. insider trading).
Governance	Leadership Issues	27	Inappropriate conduct from individual leaders that is deemed reprehensible or illegal. This includes cases like inappropriate relationships with employees, surveillance scandals, inappropriate (such as discriminatory) public comments, and/or conflicts of interest. These matters typically lead to the resignation of the individual in question. Succession planning and execution issues also included.
Governance	Misleading Communication (Accounting Fraud)	23	An intentional miscommunication made by the company. This is usually in regards to accounting fraud, or to the intentional misrepresentation of the company's characteristics, products or processes to key stakeholders (such as investors, and regulatory authorities).
Governance	Regulatory Compliance Issues	18	An incident allowing bad actors (sanctioned countries, criminal organizations, etc.) to make use of the business' funds or services or involving a breach of antitrust regulations.

* The basis for this classification is a simplified version of the 17 Calvert's proprietary responsible investing themes. These are: 1. Biodiversity & Land; 2. Climate & Energy; 3. Corporate Ethics & Behavior; 4. Employee Health & Safety; 5. Environmental Opportunities; 6. Human Capital & Labor Management; 7. Overall Risk Management; 8. Packaging & Electronic Waste; 9. Pollution & Waste; 10. Privacy & Data Security; 11. Product Safety & Integrity; 12. Social Opportunities; 13. Stakeholder Relations; 14. Supply Chain; 15. Supply Chain Labor; 16. Water; 17. Calvert Corporate Governance. We opted for this customized approach to achieve a more flexible, balanced, and granular definition of the controversies in our database.

DISPLAY 8

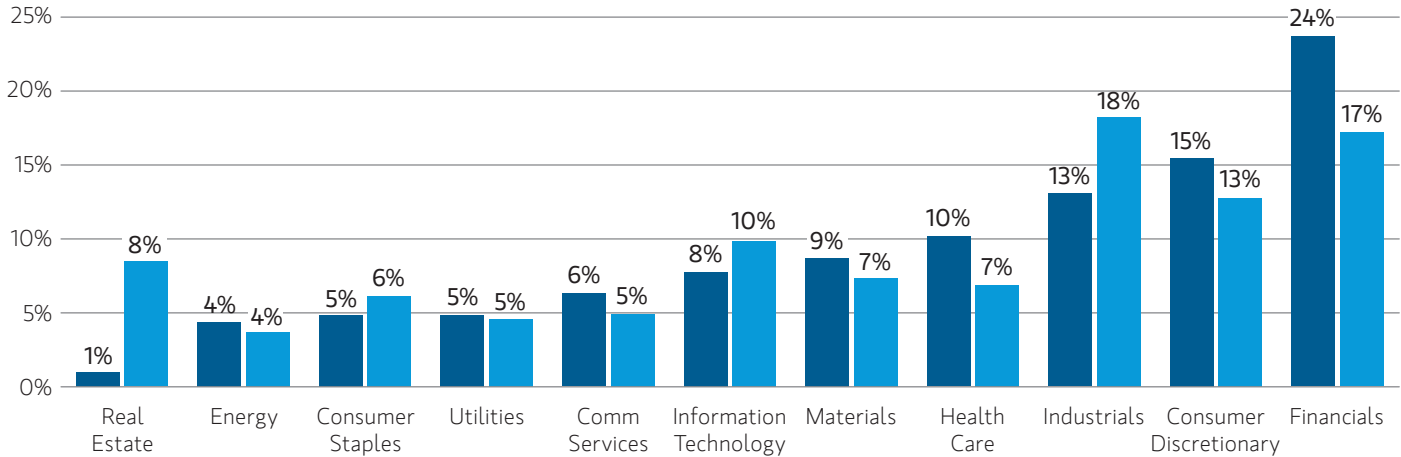
Percentage of company events by region in the Calvert Controversy Database (vs universe)



* N(Universe) = 4,950. N(Database) = 207.

DISPLAY 9

Percentage of company events by GICS sector in the Calvert Controversy Database (vs universe)



* N(Universe) = 4,950. N(Database) = 207.

DISPLAY 10**5-year total returns distribution of the stocks in the Calvert Controversy Database (CCD)**

Past performance is no guarantee of future results

	(T)	(T+3D)	(T+1W)	(T+1M)	(T+6M)	(T+1Y)	(T+3Y)	(T+5Y)
Maximum	9%	9%	14%	26%	74%	521%	331%	306%
3rd quartile	0%	1%	1%	1%	7%	8%	25%	38%
Median	0%	-3%	-5%	-8%	-7%	-9%	-6%	-1%
1st quartile	-4%	-13%	-14%	-20%	-20%	-27%	-39%	-41%
Minimum	-61%	-81%	-88%	-98%	-100%	-100%	-100%	-100%
Average	-4%	-9%	-10%	-11%	-8%	-7%	-2%	8%

* Total returns include capital appreciation and dividend distributions. The table illustrates the interquartile range and average total returns of the stocks in the database, starting from the day the controversy becomes known to the public (t) to five years later (t+5y). On average, absolute total returns move into positive territory only after five years since the event, whilst median total returns remain negative at the end of the period (-1%). The fact that the minimum of the distribution results in the full loss of shareholder value within one to six months following the controversy highlights that, in extreme cases, a single high-profile controversy can trigger bankruptcy – something observed in only two corporate controversies in our database (~1% probability). Prior to the controversies occurring, the companies in our database had an average (median) market capitalization of \$57 billion (\$21 billion) and an average (median) one-year forward Price to Earnings ratio of 20 (14).

Methodology

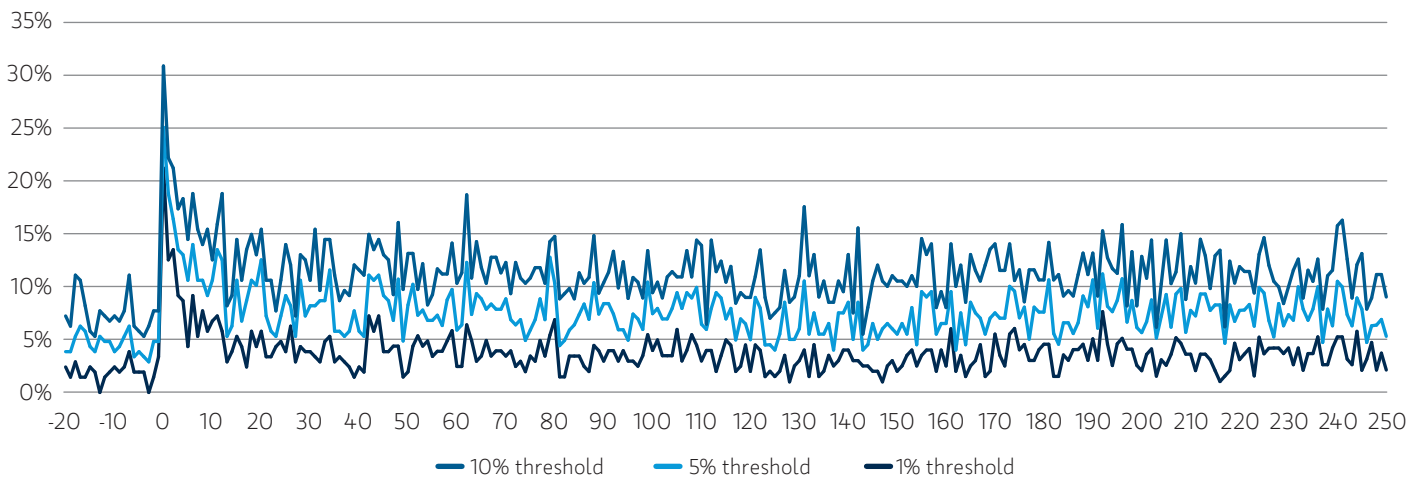
The database was designed to serve as a curated library for controversy risk evaluation and to enable rigorous quantitative analysis of pricing implications in equity markets. For this study, an Event Study analysis was conducted based on the methodology in MacKinlay (1997). Event Study analyses revolve around the concept of abnormal return. The rationale is that to best gauge the impact of an event on the pricing of a certain security, it is important to establish what the market expectations about that security were before the event, and how they changed after the event. It follows that the abnormal return is defined as the actual return of the security minus its ‘normal’, expected return. We derived the expected returns for the securities in our database, using the market model, and we estimated the model’s parameters with daily returns over the course of one trading year preceding the controversy (between t-270 and t-20). Abnormal returns were then calculated for securities beginning twenty trading days before, and extending up to one year after, each controversy (between t-20 and t+250). We shifted the timeline backwards by twenty trading days to be able to control for the anticipation effect, i.e. the potential leak of information ahead of the time the controversy becomes known by market participants. Event studies typically focus on short-time periods. However, the varied characteristics of the controversies in our database required a longer horizon to fully appreciate the nature of the price discovery process. Therefore, we extended the timeline to one trading year following the event to reach a balanced compromise that reduces the impact of confounding events, while allowing us to capture the most important points of the price discovery process. We manually checked for confounding events and removed three controversies on this basis. Each event was tracked individually, and subsequently aggregated, supporting robust statistical inference regarding the persistence and magnitude of market reactions.

Statistical significance

The statistical significance is tested daily for each abnormal return (between t-20 and t+250), as well as through different time periods for each cumulative average abnormal return. We test for statistical significance only at the single company level. We do not conduct these tests at different portfolio-levels (such as by theme, geography, etc.) because this would dilute the idiosyncratic nature of each controversy. Moreover, the composition of the database would make this exercise unpractical considering the issue of clustering, i.e., the fact that, depending on the event windows we would choose for the statistical significance test, there might be situations of overlapping timelines. We test statistical significance based on the approach set forth in MacKinlay (1997).

DISPLAY 11

Percentage of single-day company abnormal returns that are statistically significant (N=207)



DISPLAY 12

Percentage of company cumulative abnormal returns that are statistically significant (N=207)

THRESHOLD FOR STATISTICAL SIGNIFICANCE	TIME HORIZON				
	Three days [t ₋₂₀ ; t ₃]	One week [t ₋₂₀ ; t ₅]	One month [t ₋₂₀ ; t ₂₀]	Three months [t ₋₂₀ ; t ₆₀]	One year [t ₋₂₀ ; t ₂₅₀]
10%	99%	99%	97%	92%	84%
5%	98%	97%	96%	91%	82%
1%	96%	96%	93%	90%	71%

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