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Institute of Financial Services Zug IFZ

Corporate Crises in Germany, Austria, and Switzerland

Empirical Evidence on Risk Drivers
ERM Report 2025

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Foreword

Crises remain among the most revealing tests of corporate governance and risk management. They expose not only external shocks but also internal weaknesses, flaws in strategy, structure, or culture that often remain hidden in prosperous times. Over the past few years, the DACH region (Germany, Austria, and Switzerland) has witnessed several such cases, showing that even well-established firms can lose substantial value when risk awareness fades and early warning systems fail.

The ERM Report 2025 examines this vulnerability from an empirical and decision-oriented perspective. Building on the methodology of the Mercer Management Consulting study (1998) and the framework of Kaplan and Mikes (2012), it identifies the risk drivers that have triggered severe corporate crises, defined as monthly share-price drops of 25 % or more, across 669 listed firms in Germany, Austria, and Switzerland between 2018 and 2024. Using large-scale data analysis and AI-supported content classification, the study offers transparent evidence on where and why value destruction occurs, and which risk types dominate in practice.

The findings are clear: Almost one in three listed firms suffered at least one severe loss, and about one-third of these were repeat events. Strategy and external risks together account for more than 80 % of all observed crises, confirming that corporate value is destroyed more by misjudged strategic choices and underestimated environmental shocks than by compliance breaches. Internal control failures, although less frequent, still caused disproportionately deep losses when they occurred.

These results underline a central message: Enterprise Risk Management (ERM) is not about avoiding risk, but about taking the right risks. Its purpose is to align risk exposure with strategic intent and to improve decision quality under uncertainty. Effective ERM integrates foresight, governance, and judgment. It helps management and boards distinguish between acceptable volatility and existential threat, between risk appetite and risk blindness.

Uncertainty cannot be eliminated, but it can be better understood and managed as a driver of progress. A firm's ability to weather storms depends on how seriously executives take risk management when the sun is still shining. When ERM is treated as a strategic instrument rather than a compliance exercise, it protects and creates enterprise value.

Our sincere thanks go to all contributors and cooperation partners, particularly to the research team at the Institute of Financial Services Zug (IFZ), to Swiss GRC, and to the Institut für Controlling at the Kiel University of Applied Sciences (HAW), for their collaboration and commitment to evidence-based risk management.

We hope that the insights from this report encourage executives, board members, and investors alike to view ERM not as an obligation but as a cornerstone of strategic foresight and sustainable value creation.

We wish you an insightful and engaging read of the ERM Report 2025.

Prof. Dr. habil. Stefan Hunziker
Head Competence Center Risk and Compliance Management

Institute of Financial Services Zug IFZ

Management Summary

The ERM Report 2025 analyzes the causes of severe corporate crises in Germany, Austria, and Switzerland from 2018 to 2024. Building on the methodology of the Mercer Management Consulting study (1998) and the risk framework of Kaplan and Mikes (2012), the study identifies and classifies the reasons behind extreme share-price drops of 25 % or more among 669 publicly listed companies. By combining financial data with Artificial Intelligence (AI) powered content analysis of corporate disclosures and analyst reports, the report offers empirical evidence on where and why company value is destroyed.

Nearly one in three listed companies in the Germany–Austria–Switzerland (DACH) region experienced at least one major crisis during the period studied, with about one-third being repeat occurrences. The median share-price decline was approximately 30 %, with smaller firms proving significantly more vulnerable than larger ones. Most crises stemmed from strategy and external risks, accounting for over 80 % of all events. At the same time, internal control and compliance failures, though less common, often resulted in the deepest individual losses. Common sources of severe value loss include strategic errors such as excessive leverage, failed acquisitions, or overdependence on key customers, closely followed by external shocks from inflation, interest-rate fluctuations, and geopolitical disruptions.

Country-specific patterns indicate that German companies tend to be more crisis-prone, likely due to higher exposure to cyclical and energy-intensive industries. In contrast, Swiss companies exhibit relatively greater resilience but a higher incidence of governance-related events. Across all markets, the technology sector was notably affected, while industrial firms demonstrated relative stability. Two years after a crisis, the average affected company had only recovered to its pre-crisis level, whereas the overall DACH market had grown by roughly 15 %, highlighting the lasting impact of corporate crises on company value.

The findings emphasize that most corporate failures are not acts of fate but result from strategic choices and inadequate preparedness. ERM can make a significant difference when integrated into leadership and strategy rather than merely compliance. Its goal is to align risk exposure with strategic objectives, enhance resilience, and improve decision-making in uncertain conditions. Companies that view ERM as a management discipline, rather than an obligation, are better positioned to handle volatility, maintain performance, and generate lasting value.

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Part I: Concept and Methodology

Part I of the ERM Report 2025 sets out the study's relevance and objectives, defines and clarifies key terms and concepts, and outlines the methodological approach used to identify corporate crises and categorize the risk drivers.

1. Background and Objectives

Recent corporate breakdowns in the DACH region (Germany, Austria, and Switzerland) illustrate how quickly firm value can evaporate when governance and risk management fail. The collapse of Wirecard AG in 2020, following revelations that € 1.9 billion in cash never existed, ranks among Europe's largest accounting frauds since the Second World War.[1] The emergency takeover of Credit Suisse AG by UBS Group AG in 2023 exposed years of weak management decisions and ineffective controls, proof that even "too big to fail" institutions can collapse when incentives, culture, and governance misalign. Likewise, the insolvency of the SIGNA Group in 2023 turned a former growth story into one of Austria's most prominent corporate scandals, as opaque ownership structures and excessive leverage from the ultra-low-interest era combined with limited transparency and poor internal oversight.[2]

Different names, common patterns: weak governance, unsound decision-making, inadequate oversight, and blurred transparency. Beyond such headline cases, many companies, especially since 2020, have faced crises that threaten not only success but also survival. The German automotive industry serves as a telling example. These events show that nearly all corporations must navigate uncertain, unforeseen external developments that create both threats and opportunities.

Unforeseen and unmanaged risks can escalate into severe corporate crises. Some evolve gradually, beginning as strategic crises that erode performance, then liquidity, and, if unresolved, lead to insolvency. Others are disruptive, triggered by external shocks such as the coronavirus disease 2019 (COVID-19) pandemic, which directly affect operations and require immediate structural responses to secure long-term viability.

The early identification, quantification, and effective management of such risks are core responsibilities of ERM. Yet ERM is often criticized as a compliance exercise aimed merely at satisfying auditors. While rule-based controls can prevent internal failures, they are insufficient for anticipating or mitigating strategic and external risks.[3]

To protect companies from crises that threaten their existence, risk management must identify and assess potential crisis triggers early and apply appropriate responses. Because different risk types require different approaches, the ERM Report 2025 aims to determine the risk factors underlying corporate crises among publicly listed firms in the DACH region. Each risk driver leading to a corporate crisis is classified according to Kaplan and Mikes (2012) main risk categories and related subcategories. On this empirical basis, the study derives actionable recommendations for integrated ERM to reduce the frequency and severity of significant losses and to strengthen long-term resilience and crisis preparedness.

By pinpointing the most material risk drivers and showing how they destroy value, the report contributes to a more stable corporate, financial, and economic system. Boards, executives, investors, and analysts gain greater transparency and practical insight for improved strategic decision-making.

The ERM Report 2025 methodology follows the methodology of Mercer Management Consulting's (1998) study of crisis events, measured as extreme one-month stock declines. Mercer analyzed U.S. Fortune 1000 firms and identified months with losses of 25 % or more, linking each event to its primary cause using defined risk categories. The present study applies a comparable approach to the DACH region to ensure methodological consistency and clear attribution of risk drivers. For each crisis, underlying risk factors are classified according to Kaplan and Mikes (2012) main risk categories and defined subcategories. Severe monthly share-price declines serve as a market-based proxy for corporate crises, ensuring empirical comparability across firms. The analysis uses a large language model (LLM)–assisted content review of company disclosures and analyst reports to identify and validate these drivers systematically. Based on this evidence, we develop actionable recommendations.

[1] Jakubeit (2021)
[2] Reinhart (2025)
[3] Power (2009), pp. 849

2. Fundamental Concepts and Definitions

This chapter defines key terms and outlines the theoretical foundations for the ERM Report 2025.

2.1 Risk and Risk Categories

There is no universal consensus in the literature on how to define risk. Debates typically center on whether only existence-threatening consequences should be included, whether opportunities should also be considered, and whether risks affect exclusively financial values or extend to other dimensions.[4]

We adopt a broad definition of risk and view it as potential positive or negative deviations from planned business objectives arising from future uncertainty. Positive deviations are referred to as opportunities, while negative deviations are downside risks. Deviations arise from uncertain future events, unforeseen developments of relevant environmental factors, or management decisions (risk factors). Business objectives may include financial outcomes such as net income, operating profit, or cash flow, as well as non-financial objectives such as corporate reputation or carbon footprint. Risks can be characterized by their likelihood of occurrence and their potential magnitude of loss or opportunity, and they may be measured over different time horizons. Almost every impact of a risk can be translated into financial terms. Focusing solely on financial effects, however, is necessary but insufficient. Understanding the source of a risk is essential to choosing the appropriate management response.[5]

Because firms face a variety of risks that require different identification, quantification, and mitigation approaches, the first step in building an effective risk management system is to recognize the qualitative differences among the risks an organization faces. Risk categories provide structure and accountability. They assign ownership and organize responsibility. Without such categorization, risk managers may overlook significant exposures, confuse causes with impacts, or apply inappropriate instruments.[6] Traditional categories, such as *financial, operational, strategic, and external risks,* help structure risk inventories but can obscure underlying root causes, blur impact pathways, misalign ownership, and lead to poor decisions.

In this report, we therefore follow Kaplan and Mikes (2012) and use a classification based on management control that groups risks into three fundamental categories:[7]

– Preventable (Internal) Risks
– Strategy Risks
– External Risks

Each category differs in its causes, degree of controllability, and suitable methods for identification, mitigation, and control. This taxonomy creates a shared understanding of root causes, separates firm-specific from externally driven factors, and links each risk type to distinct management approaches. Preventable risks require formal rules, internal controls, and compliance mechanisms. Strategy risks originate from the firm's business model and must be consciously accepted within its risk-bearing capacity. They call for a defined risk appetite, explicit risk-return trade-offs,

[4] Rieg et al. (2025)

[5] Rieg et al. (2025), Hunziker (2025a)

[6] Rieg et al. (2025)

[7] Kaplan & Mikes (2012)

and governance structures aligned with performance objectives. External risks, largely beyond managerial control, are best addressed through scenario analysis, stress testing, early-warning systems, and the creation of financial and operational buffers.

Category I: Preventable (Internal) Risks	Category II: Strategy Risks	Category III: External Risks
These risks are internal, controllable, and undesirable. They include misconduct and policy breaches by employees or managers as well as failures in routine processes. Companies may tolerate minor, non – material errors, but should otherwise eliminate these risks as they offer no strategic benefit.	Strategy risks arise when a company consciously accepts risks to achieve above average returns from its strategy. Examples include credit risk at banks and R&D in high tech or pharmaceuticals. Unlike preventable risks, they are not inherently undesirable: high-return strategies typically require taking meaningful risk.	External risks arise from events outside the company and beyond its control. Typical sources are natural disasters, political instability, and major macroeconomic shifts such as currency crises, inflation, or pandemics. These risks cannot be prevented, so management focuses on early identification and on limiting impact when they occur.

Figure 1: Overview of risk categories and definitions from Kaplan and Mikes (2012)
Source: Own illustration based on Kaplan and Mikes (2012)

Events across all three categories can materially affect corporate strategy and, in extreme cases, threaten a company's existence. Precise classification ensures that appropriate identification and control procedures are applied to each risk type, enabling organizations to manage risks more actively and cost-effectively. Categorization also helps to counter cognitive biases and to assess risks more realistically. However, concentrating on only one risk type while neglecting the others inevitably increases vulnerability in the overlooked areas.[8]

In the ERM Report 2025, these three categories are further divided into detailed subcategories. This additional granularity enables a systematic analysis of severe corporate threats that lead to major crises, and reveals the specific risk drivers, such as leadership failures, customer concentration, or supply chain dependencies behind the most frequent and severe share-price declines.

[8] Kaplan & Mikes (2012)

2.2 Enterprise Risk Management

Companies operate in a complex, volatile, and ambiguous environment that constantly exposes them to a wide range of uncertainties, risks, and opportunities for future growth and success. Therefore, firms must develop and strengthen their ability to identify, evaluate, aggregate, control, and mitigate both risks and opportunities. This ability is known as ERM. However, in both theory and practice, there are many different interpretations and definitions of ERM, along with numerous guidelines, frameworks, and tools.

Empirical studies have investigated whether firms with an ERM system achieve higher firm value than those without one. Today, there is a growing consensus among academia and corporate practitioners that ERM is a value-creating activity. Still, the positive impact depends on ERM maturity, particularly its governance structure, risk appetite articulation, aggregation methods, use of scenarios, and key risk indicators (KRIs), as well as its alignment with corporate strategy, the firm's risk profile, and industry context.

In this report, we follow the definition of Rieg et al. (2025):

"Enterprise risk management (ERM) consists of all organizational regulations and activities for the systematic, continuous and company-wide identification, assessment, reporting and management of all key risks of a company as well as its support through suitable adequate methods and tools. The aim of ERM is to secure the company's long-term existence and to support management's decision for an improved value-creation through achieving the planned corporate objectives, reducing risk and capital costs and taking opportunities within the firm's risk-taking capacity." [9]

This definition highlights the two primary value drivers of ERM:

1. **Higher decision quality:** A central rationale for ERM is to enhance decision quality. By integrating risks and opportunities into decision processes, ERM weighs the upside and downside of each choice and provides a clear, evidence-based foundation for action. It should therefore be understood as a management instrument for value creation, rather than merely a reporting or compliance function.[10]

2. **A complete overview that enables informed risk-taking:** ERM provides a comprehensive and connected view of risks, opportunities, and their interdependencies. This allows senior management and boards to understand the overall risk exposure and its implications for strategic opportunities. With transparent, quantified exposures, strategic choices become more deliberate, and risk-taking aligns more closely with the defined risk appetite.[11]

In essence, ERM provides a consolidated overview of all material risks and opportunities, enabling management and supervisory bodies to assess the overall risk position better and make more informed strategic decisions. The aggregation of risks enables diversification effects and the use of natural risk buffers, so that only residual risks need to be actively managed.[12]

[9] Rieg et al. (2025), pp. 13

[10] Hunziker (2025 a), Kaplan & Mikes (2012)

[11] Hunziker (2025 a)

[12] Hunziker (2025 a)

Enterprise Risk Management Across Risk Categories
According to Mikes and Kaplan (2015), a company's ERM is most effective when it is tailored to the nature and controllability of its risks and adapted to the organization's specific context and relevant risk categories (Figure 2).

Risk Category	Origin	Required Management Approach
Preventable (Internal) Risks	Arising from within the organization	Monitoring operational processes, clear rules and values, internal controls, and active prevention
Strategy Risks	Taken for superior strategic returns	Systems to reduce probability and strengthen the ability to manage or contain events
External Risks	Originating outside the company	Focusing on early identification and mitigation of their impact

Figure 2: Risk categories, their origins, and the required management approaches
Source: Own illustration based on Kaplan and Mikes (2012)

Preventable (internal) risks occur within the organization and are best managed through active prevention mechanisms such as internal controls, clear rules, defined roles and expectations, transparent and clear processes, and internal audits. Such mechanisms enable early identification and either reduce or avoid these risks.

Strategy risks are intentionally undertaken to gain competitive advantages and higher returns. They are managed through disciplined identification, translating into concrete mitigation efforts with assigned ownership and timelines, along with ongoing monitoring as part of strategic reviews. Although some residual risk always remains, a mature ERM system can reduce both the likelihood and impact of such events. Since they cannot be controlled solely through rule-based controls, strategy risks require an interactive, decision-focused approach that enhances response capabilities when events occur. A well-developed ERM system allows firms to pursue attractive, higher-return initiatives more selectively and confidently than competitors while staying within their defined risk appetite.

External risks are beyond a company's control and arise from factors such as natural disasters, pandemics, or geopolitical conflicts. Managing these risks involves focusing on resilience and preparedness. Stress testing, scenario planning, wargaming, diversification, and insurance strategies are key tools for cushioning the effects of such shocks and maintaining operational continuity during crises.

Therefore, effective ERM considers all three categories in a proportionate manner to ensure both resilience and long-term corporate stability.[13]

[13] Kaplan & Mikes (2012)

2.3 Corporate Crises, Crisis Management & Organizational Resilience

Companies today operate in an environment where unexpected and insufficiently prepared events can quickly escalate into severe disruptions and turn into corporate crises. Effective crisis management and organizational resilience are therefore vital for maintaining long-term stability and protecting company value.

If risks are overlooked, misjudged, or poorly managed, they can develop into corporate crises. A corporate crisis is a major event that disrupts normal operations, causes significant harm to stakeholders, damages a company's reputation, and may threaten its very existence. Routine problems can be handled through standard procedures. However, crises require decisive leadership, clear authority, and practiced responses. They compress time, increase pressure and scrutiny, and often force swift action under uncertainty, with decisions based on assumptions rather than complete facts.

In this study, corporate crises, measured as severe monthly declines in share prices, serve as market-based indicators of failed risk management and resilience gaps. Organizations that understand the risk factors behind such crises are better positioned to recognize early warning signs, respond effectively, and prevent minor issues from developing into full-scale breakdowns.

Therefore, crisis management involves anticipating potential disruptions and implementing preventive measures before they happen. Once the underlying risk factors are identified, risk management becomes more effective. Careful preparation, strong leadership, and strategic use of technology are crucial in enhancing organizational resilience. The aim is to reduce the negative impact of shocks, minimize losses, and ensure continuity.[14]

Resilience, derived from the Latin *resilire* ("to rebound"), describes the capacity of a system or organization to regain functionality after a significant disruption, and ideally to emerge stronger. In a business context, organizational resilience is the ability to absorb shocks, adapt under stress, and evolve in response to change. It depends not only on structures and resources but also on leadership, culture, and strategic risk management.[15]

Traditional risk management concentrates on identified risks and estimates the likelihood of known events. It often misses the potential severity of impacts, especially from unforeseen shocks. Managing both aspects requires a dual approach:

1. Likelihood of known risks → classic risk management
2. Severity of outcomes for both known and unknown events → resilience

Combining these perspectives enables organizations to not only assess event probability but also understand outcome severity, thereby enhancing their ability to absorb shocks, adapt, and recover when necessary.[16]

[14] Vašíčková (2020), Sun (2023), Behringer (2020), Duchek (2020)

[15] Behringer (2020), Wieland & Durach (2021), Bertelsmann Stiftung (2017)

[16] Soufi et al. (2021)

3. Research Design

The aim of the ERM Report 2025 is to identify risks that have triggered past corporate crises and translate them into actionable recommendations for effective ERM. In pursuing this goal, we follow the research design of the 1998 Mercer Management Consulting (MMC) study of *Fortune 1,000* companies in the United States.

3.1 Mercer Management Consulting Study (MMC)

Methodologically, our study builds upon the MMC analysis, which examined the key risk factors driving severe monthly share-price drops among U.S. Fortune 1,000 companies from June 1993 to May 1998. Severe monthly share price declines served as indicators of corporate crises. Companies in chronic distress (P/B ≤1 or no positive income for five years) and events caused by restructurings (such as spin-offs, split-offs, tracking-stock issuances) were excluded to focus on genuine operating or strategic shocks. After these exclusions, MMC reviewed each firm month by month and retained only the single worst calendar-month decline per company. This "one-event-per-firm" rule resulted in a final sample of exactly 100 extreme one-month losses of 25 % or more.

Approximately 10 % of America's largest corporations experienced a decline of at least 25 % of market capitalization in a single month during the five-year period. The pattern was far from random. Companies ranked 501–1,000 (the smaller firms by revenue) proved especially vulnerable, accounting for nearly two-thirds of the events. Industry-wise, health-care providers, telecommunications and information-services firms, and large retailers were over-represented sectors characterized by rapid demand shifts, technological disruption, or intense margin pressure, where capital markets quickly punish managerial missteps.

To identify the primary risk driver behind each share price collapse, MMC analyzed event analyst reports and grouped the causes into four categories and several subcategories (Figure 3).

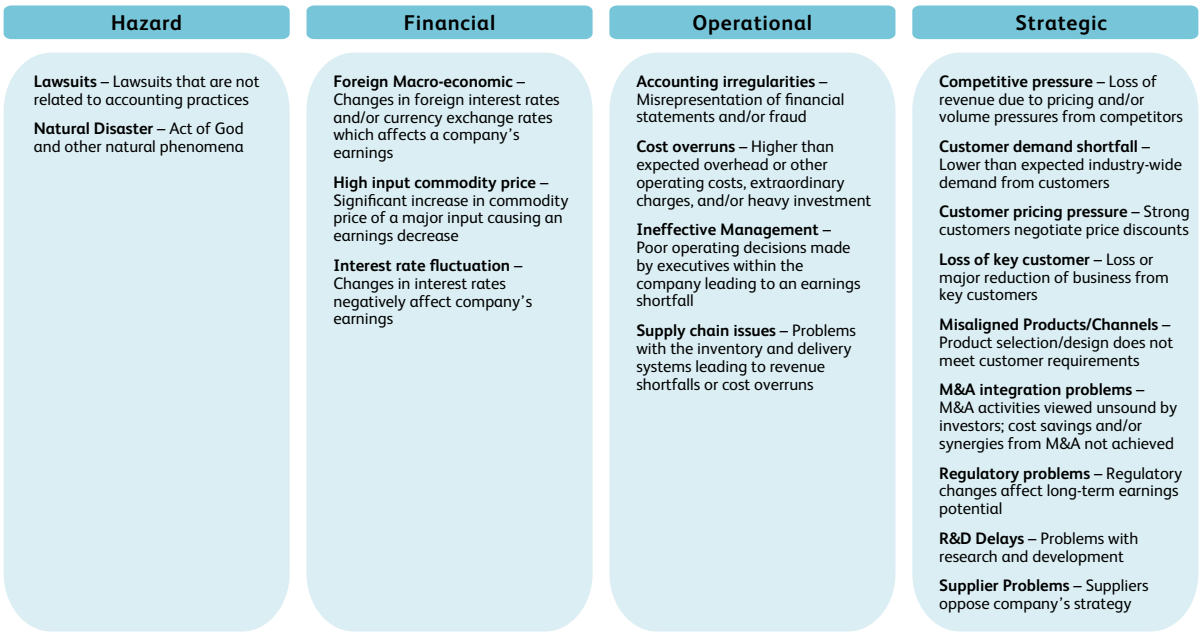

Figure 3: Risk categories and subcategories of the MMC study
Source: MMC Study, 1998

The results of the MMC study (Figure 4) reveal a clear pattern: Strategic drivers were predominant at 58 %, led by customer-demand shortfalls at 24 % and competitive pressure at 12 %. Fewer incidents stemmed from M&A integration, product misalignment, or price wars. About one-third of events originated from operational failures, such as cost overruns (11 %), accounting irregularities (7 %), and management ineffectiveness (7 %), and supply-chain issues (6 %). Financial exposures accounted for only 6 % of total exposures, and no events were linked to insurable hazards.

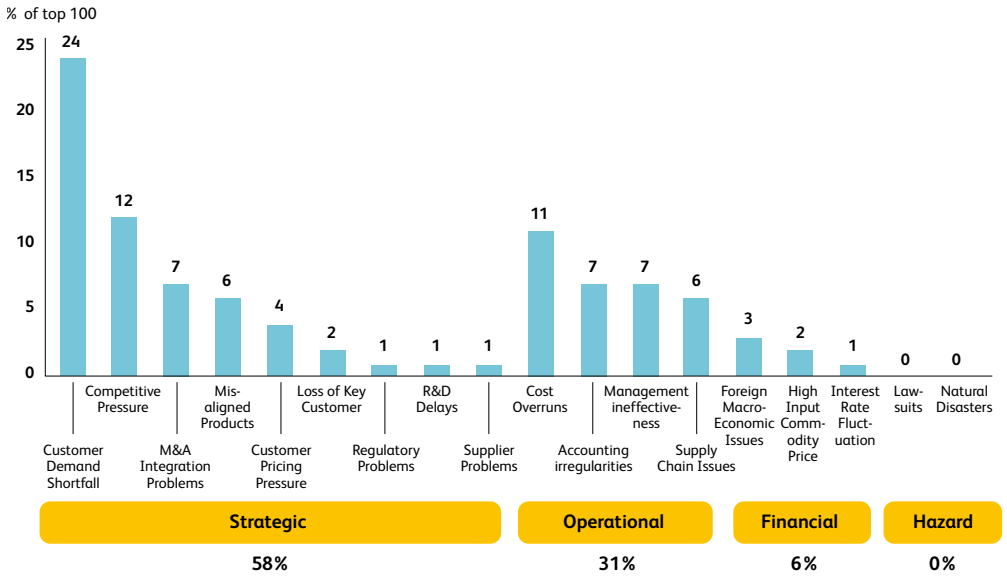

Figure 4: Distribution of corporate crises across risk categories in the MMC study
Source: MMC Study, 1998

In essence, MMC demonstrated that severe stock drops happen frequently enough to matter: A typical Fortune 1,000 company faced about a 10 % chance of losing a quarter of its value in a single month due to firm-specific issues. The leading causes were strategic, not insurable risks, indicating that many crises could, in theory, be anticipated and mitigated through disciplined ERM.

3.2 Operationalization of Corporate Crisis Events

In line with MMC, we define a corporate crisis as a monthly share-price decline of 25 % or more. This ensures comparability with prior research while focusing on genuinely extreme, idiosyncratic events beyond normal volatility. The 25 % cutoff is stricter than the commonly used 20 % *bear-market* convention (a market custom applied to indexes) and therefore isolates actual crisis events at the firm level.

For each event, we analyze public disclosures (press releases, ad hoc announcements, analyst reports, and relevant media coverage) to identify underlying risk drivers. Identified risks are mapped to the three main categories of Kaplan and Mikes (2012) and further refined into 17 subcategories, developed during the analysis.

3.3 Sample Construction

Our study covers publicly listed firms in Germany, Switzerland, and Austria from 1 January 2018 to 31 December 2024.

The initial dataset comprised issuers listed on the Frankfurt Stock Exchange (Xetra), the SIX Swiss Exchange, and the Vienna Stock Exchange. Secondary and parallel listings were excluded. Delisted or acquired issuers were retained if traded at any point during the observation window. Only firms headquartered in the DACH region were included. Table 1 provides a detailed description of the sample creation process.

Initial company sample	**824**
– Insufficient Bloomberg data	-78
– Market-to-book ratio < 1	-37
– Non-positive net income	-40
Final company sample	**669**
Companies ≥25% share-price decline	**213**
Observations ≥25% share-price decline	**856**
– Observations COVID-19 (February & March 2020)	-152
– Observations in head-to-head months	-109
– No available news	-124
Final observations sample	**471**

Table 1: Company and observation samples of listed firms in Germany, Austria, and Switzerland

Firm financials were extracted from Bloomberg.[17] Because financials were incomplete, 78 companies were removed.

Following the procedure adopted in the MMC study, a two-step screening process was applied:

1. **Valuation filter:** Firms were required to exhibit a market-to-book ratio (P/B) ≥1 in at least one year between 2018 and 2024. This criterion removed 37 firms considered structurally undervalued or financially distressed.

2. **Profitability filter:** To exclude persistently loss-making entities and minimize noise from extraordinary items, each firm had to report positive net income in at least one fiscal year during the observation window. This step has removed an additional 40 firms.

After those steps, the final company sample consists of 669 companies (411 German, 55 Austrian, 203 Swiss).

Monthly stock prices were obtained from the Bloomberg database for all 669 firms. Over the observation period, 213 firms experienced at least one month with a ≥25 % decline in share price. These monthly stock drops are referred to as observations in the report.

[17] Throughout the ERM Report 2025, all financial figures are reported in euros for consistency.

Over the observation window, 213 firms experienced at least one ≥25 % monthly decline, yielding 856 firm-month observations. To ensure analytical clarity:

– COVID-19 months (Feb-Mar 2020) were excluded (-152 observations) as an extraordinary *system-wide* shock.
– Adjacent months (–1/+1) around the same crisis were merged (–109 observations) to avoid double-counting.
– Observations lacking reliable information on potential causes were removed (–124).

After these eliminations, 471 company crisis observations remained for the final analysis.

Table 2 presents the geographical breakdown of the analyzed company sample (n=213) and the corresponding number of crisis observations (n=471) across Germany, Austria, and Switzerland.

Analyzed company sample	**213**
Germany	164
Austria	11
Switzerland	38
Analyzed observations sample	**471**
Germany	348
Austria	17
Switzerland	106

Table 2: Geographic distribution of the final sample and crisis observations in Germany, Austria, and Switzerland

3.4 Identification of Risks Causing Corporate Crises

To identify the risk drivers behind each crisis, we searched the Refinitiv Eikon database for all relevant company and analyst documents issued within one month before and after each price drop. The three-month search window yielded more than 2,800 documents.

A structured content analysis was then performed to code and classify the underlying risks. The framework combined both deductive and inductive approaches:

– Step 1 – Deductive: Categories derived from established theory and frameworks, ensuring academic rigor and comparability.
– Step 2 – Inductive: Emerging risk patterns identified through automated text analysis, allowing additional subcategories to emerge.

This process resulted in 17 distinct subcategories across the three Kaplan and Mikes risk categories, providing enough detail to associate specific risk drivers (e.g., leadership failures, customer concentration, supply-chain dependency) with appropriate management responses.

The results of the risk categorization are shown in Figure 5.

Category I: Preventable (Internal) Risks

Compliance & Policy Violations – Actions or omissions that violate binding rules such as laws, regulations, or internal policies.

Governance & Reporting Risks – Weaknesses in controls or processes within the oversight and decision-making system that may lead to inaccurate, incomplete, or delayed reporting.

Operational Management Failures – Execution problems in core processes due to inadequate planning, supervision, resource allocation, or liquidity shortfalls stemming from weak management.

IT & System Failures – Internal technology disruptions, poor data governance, or outdated systems that hinder performance.

HR & Workplace Risks – Adverse developments in working conditions, employee rights, succession planning, or personnel decisions.

Risky Incentive Structures – Bonus or incentive programs that encourage excessive risk-taking, unethical conduct, or short-termism.

Category II: Strategy Risks

Capital Allocation and M&A Risks – Risks arising from financing choices (capital – structure mix, instruments, timing, liquidity buffers, refinancing strategy), acquisitions, and divestments that fail to deliver targeted value.

Market Risks – Risks arising from misjudgment of market conditions, poor market-entry timing, or misaligned products/pricing.

Innovation, Research & Development Risks – Risks from failed or delayed innovation, heavy investment in uncertain technologies, or inability to commercialize R&D.

Customer Risks – Risks from customer concentration, price pressure, loss of key accounts, or failure to meet changing needs.

Strategic & Leadership Failures – Risks stemming from flawed strategy, weak execution/governance, poor capital allocation, or leadership gaps (e.g., succession, decisionmaking).

Category III: External Risks

Macroeconomic & Financial Volatility – Risks arising from swings in the global economy and financial markets (growth, inflation, rates, FX, liquidity).

Regulatory & Legal Change – Risks resulting from sudden or significant changes in laws, regulations, or compliance requirements.

Geopolitical Conflicts & Natural Disasters – Disruptions from events outside the organization's control, such as natural disasters, health crises, or geopolitical conflict.

Disruption & Stakeholder Shifts – Risks arising from rapid technological developments, disruptive market participants, or changing social values and stakeholder expectations.

Cybersecurity & Digital Infrastructure – External threats targeting systems, data, or IT infrastructure.

Supply Chain Fragility & Resource Dependence – Vulnerability to disruption, cost spikes, or quality shortfalls caused by concentrated suppliers, scarce or price-volatile inputs, logistics bottlenecks, and limited multi-tier visibility.

Figure 5: Developed risk categories and subcategories, including definitions, used for the analysis
Source: Own illustration, partially based on Kaplan and Mikes (2012)

3.5 LLM Support and Prompt Design

To analyze the large number of unstructured documents, we used an LLM, specifically, an advanced OpenAI GPT mode, to assist in classifying the risk factors behind each share-price drop and mapping them to predefined risk categories.

The prompt was developed iteratively through trial, feedback, and refinement in collaboration with risk-management specialists to ensure rigor and reproducibility. For each event, the model produced five outputs:

1. Main risk category (Kaplan and Mikes, 2012)
2. Subcategory
3. Short rationale for classification
4. Source reference in the document
5. Confidence level (0 % – 100 %)

When confidence fell below 50 % , the model returned "No classification – insufficient evidence." This rule prevented speculative outputs and enabled efficient human review.

All LLM classifications with 50 % – 65 % confidence were manually reviewed by a risk-management expert. In total, about one-third of the AI-generated classifications were expert-validated. The agreement between AI and human judgment was approximately 65 % at the main-category level and 75 % at the subcategory level. In a smaller subset with higher AI confidence, alignment was substantially higher. Through iterative testing, structured feedback, and expert review, overall classification quality met the standards required for a rigorous content analysis.

Methodological Limitations
Despite the increasing use of LLMs in management research, several limitations persist. LLMs depend on statistical patterns in text rather than causal reasoning and are sensitive to prompt wording. Corporate disclosures are often ambiguous and multi-causal, which leaves room for interpretation. While LLMs provide consistency and scalability, they lack normative judgment, whereas human experts may introduce bias or fatigue when reviewing extensive texts. Finally, reliance on public disclosures can lead to disclosure and media-salience bias, although this is partly mitigated by using multiple independent sources and transparent classification processes and rules.

Part II: Results

Part II of the ERM Report 2025 presents the key findings on the risk drivers behind corporate crises among listed companies in Germany, Austria, and Switzerland during 2018 – 2024.

4. Corporate Crises and Risk Drivers

This chapter first explores the characteristics and frequency of corporate crises, defined as monthly share-price drops of ≥25 %. It then examines the underlying risk drivers, categorizing each event using the Kaplan and Mikes (2012) framework and detailed subcategories developed in the study. The main goal is to transform empirical evidence about the origins of risk into practical recommendations for integrated risk management.

Figure 6 summarizes the dataset analyzed. It comprises 669 listed firms from Germany (411), Austria (55), and Switzerland (203) over the period 2018 to 2024. About one-third of these firms, 213 companies, experienced at least one ≥25 % monthly share-price drop. Because a single firm may face multiple events, these 213 companies account for 471 severe declines, an average of 2.2 per affected firm over the seven years.

Sample Firms	Firms with ≥25% Drop	Incidence (% of Firms)	Observations of ≥25% Decline
669	213	32 %	471

About 1/3 of firms recorded a severe share price drop of ≥25 %

Figure 6: Analyzed sample of corporate crises defined as ≥25 % monthly share-price declines between 2018 and 2024

4.1 Severity of Corporate Crises

Figure 7 shows the distribution of the 471 crises by decline magnitude. Consistent with the MMC study, most losses are moderate: Roughly two-thirds fall just above the 25 % threshold, within the 25–35 % range. Deeper crashes are progressively rarer and about one-third exceed 35 %. Across all events, the median decline is -30.6 % and the mean is -35.3 %. A mean that is more negative than the median signals a long tail of extreme losses driven by a few particularly severe events.

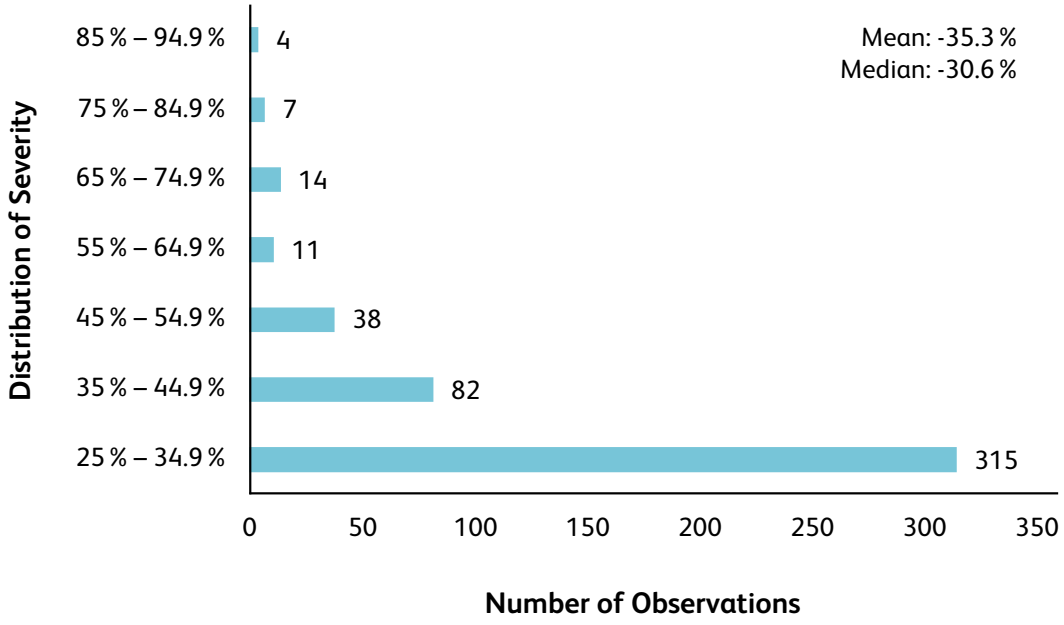

Figure 7: Distribution by severity of share-price declines (≥25%), including mean and median levels (observation n=471)

4.2 The Size Effect: Smaller Revenue, More Severe Drops

Next, we examine whether crisis incidence differs by company size. The sample (n=669) was split into large and small (above- and below-median) revenue groups. We then mapped the 213 crisis firms into these two groups (Figure 8).

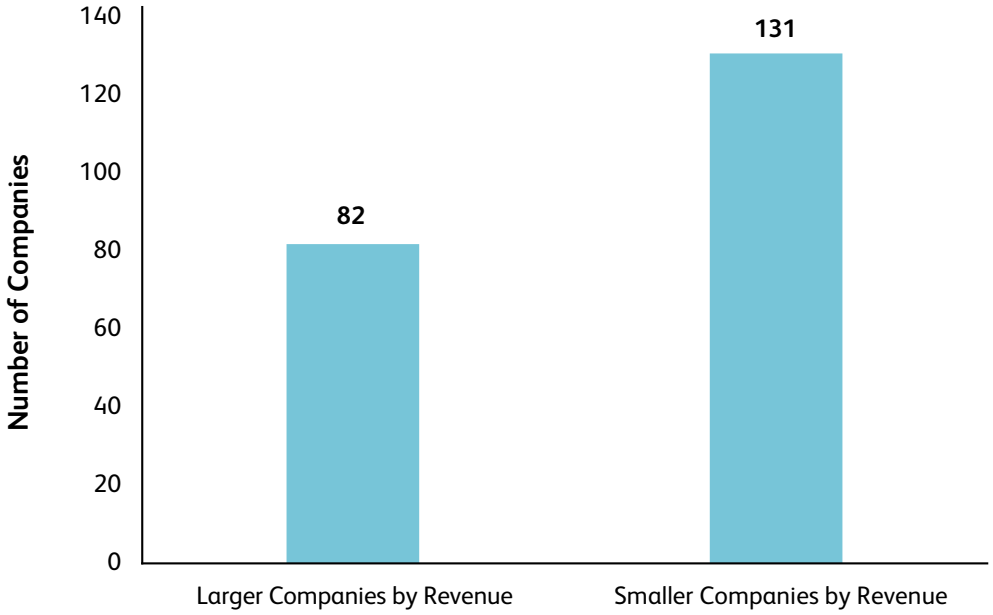

Figure 8: Distribution of companies by revenue size (company-crisis sample n=213)

In the DACH region, 131 firms (62 %) of all crisis cases fall into the lower-revenue group, while 82 firms (38 %) belong to the higher-revenue group. This mirrors the MMC U.S. findings, which show that 69 % of significant one-month stock drops affected smaller Fortune 501–1000 firms, compared with 31 % of the largest Fortune 1–500 firms.

The size effect, therefore, remains valid: Smaller firms are more likely to experience extreme share-price crashes, probably due to thinner buffers, concentrated customer bases, and less diversified operations.

4.3 Corporate Crises Across Germany, Austria, and Switzerland

Table 3 shows how the sample of firm crises is distributed across Germany, Austria, and Switzerland.

Country	Sample Firms	% of Sample	Firms with ≥25% Drop	% of Share Price Decline	Interpretation
Germany	411	62 %	164	77 %	**Overrepresented (crises-prone)**
Austria	55	8 %	11	5 %	**Slightly underrepresented**
Switzerland	203	30 %	38	18 %	**Underrepresented (crises-resilient)**
	669		**213**	**32%**	

Table 3: Country distribution of the initial sample and severe share-price declines (≥25 %) in Germany, Austria, and Switzerland

Germany: Of the 411 German firms in the sample, 164 experienced at least one ≥25 % share-price decline. Although German companies represent 62 % of the DACH sample, they account for 77 % of all severe stock drops, indicating a clear overrepresentation. This suggests that German firms may be more crisis-prone than their counterparts in Austria and Switzerland.

Switzerland: Of the 203 Swiss firms in the sample, 38 experienced at least one ≥25 % share-price decline. Swiss companies make up 30 % of the overall sample but only 18 % of all severe share-price drops, pointing to underrepresentation and a comparatively more resilient profile than German firms.

Austria: Of the 55 Austrian firms in the sample, 11 experienced at least one ≥25 % share-price decline. Austrian firms account for 8 % of the total sample but only 5 % of all severe events, suggesting a slight underrepresentation relative to the DACH average. Given the small Austrian subsample, these results should be interpreted with caution. Austria remains included in the overall dataset. However, due to its limited sample size, cross-country comparisons focus primarily on Germany and Switzerland.

4.4 One-Off vs. Repeat Hits: Corporate Crises Frequency

Figure 9 investigates whether crises are isolated incidents or recurring patterns. Most severe share-price drops are one-off episodes. About two-thirds of affected firms (68 %) experienced one or two events between 2018 and 2024.

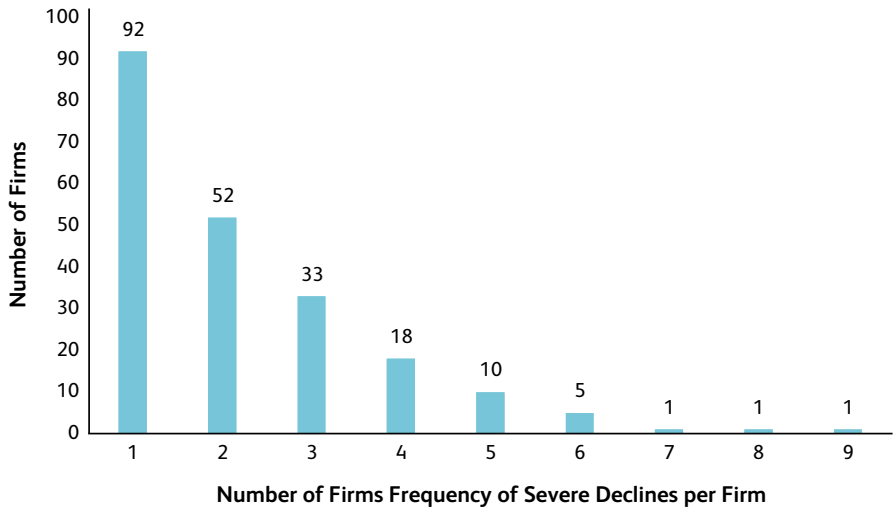

Figure 9: Distribution of firms by number of severe share-price declines (≥25%) (observation n=471)

The remaining 32 % were repeaters with three or more crashes, often indicating structural weaknesses rather than random shocks. Overall, roughly one-third of listed DACH firms appear insufficiently crisis-prepared, underscoring the need for more disciplined, forward-looking risk management.

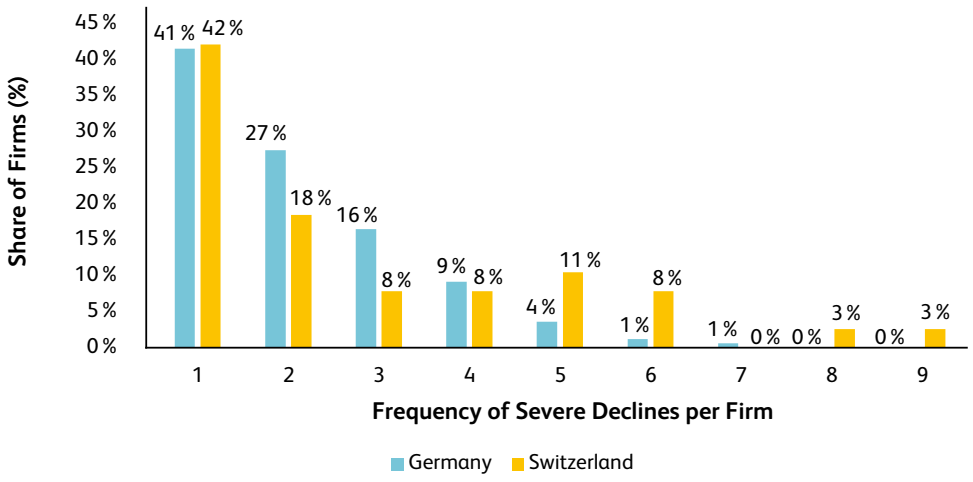

Figure 10: Frequency of severe share-price declines (≥25%) among firms in Germany (164) and Switzerland (38) between 2018 and 2024

Figure 10 compares Germany and Switzerland. Both markets show similar profiles for single-event crises, but Germany exhibits a thicker mid-frequency band (2–4 events), implying more widely distributed structural fragilities. Switzerland has fewer mid-frequency cases but a thin tail of chronic outliers (5+), which should be interpreted with caution given the smaller base.

A closer look illustrates these patterns:

– Promaxima AG (Switzerland) suffered several severe declines during an extended internal crisis. Governance issues and reporting delays led to repeated postponements, missed deadlines, and temporary trading suspensions. Shareholder disputes resulted in board changes, and a delisting was threatened but ultimately not executed. A forced asset sale due to liquidity stress, along with ongoing legal disputes and compliance issues, eroded credibility and raised doubts about the company's ability to continue operating.

– Varta AG (Germany) likewise exemplifies recurrent crises. The drop in 2022 followed a profit warning linked to rising input and transport costs. Subsequent crashes stemmed from strategic risk factors, notably collapsing demand from its primary customer, which led to liquidity shortages, unsustainable leverage, and delisting in March 2025.

4.5 Yearly and Monthly Dynamics of Company Crises

During the observation period (2018 – 2024), companies faced a wide range of risks. To illustrate their impact, we analyzed the annual distribution of the 471 share-price declines of ≥25 %.

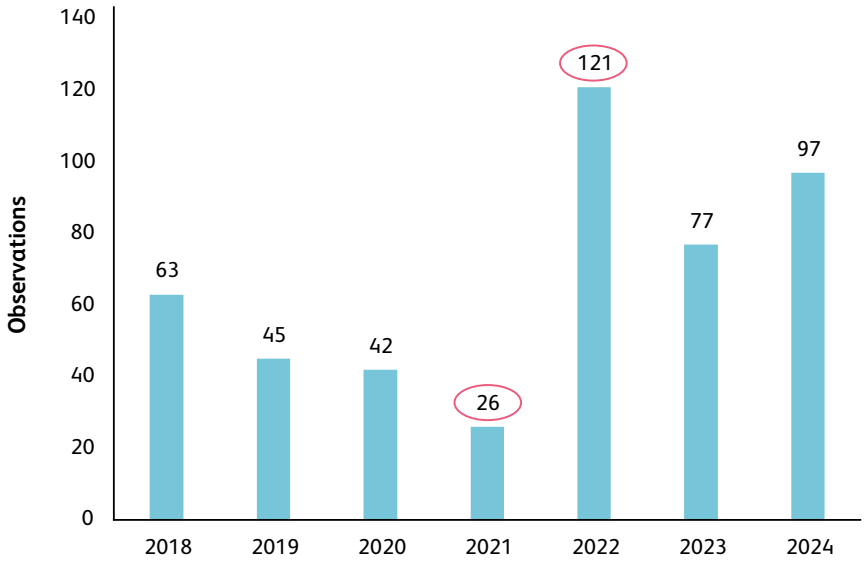

Figure 11: Severe share-price declines (≥25%) by year 2018–2024 (observation n=471)

Annual Patterns

The pre-COVID years of 2018 and 2019 experienced a moderate, gradually declining number of corporate crisis events (Figure 11). When COVID-19 hit in 2020, the number of crises appeared lower. However, the extraordinary shock of February and March 2020 was intentionally excluded from the dataset to prevent over-representing a single systemic event. 2021 turned out to be the calmest year in the sample, with the fewest severe declines. Extremely low interest rates supported favorable financing conditions, vaccine-driven reopenings increased demand and profits, and extensive government aid programs, especially in Germany and Austria, provided an additional safety net. The temporary suspension of insolvency-filing requirements in Germany (March 2020 – September 2020, extended for exceptional cases to April 2021), along with generous state subsidies, helped firms that might otherwise have fallen into distress. As a result, profit warnings were infrequent, refinancing remained available, and market valuations stayed higher than what sentiment alone might have suggested.

The situation changed dramatically in 2022. Inflation peaked, Russia's invasion of Ukraine caused multiple disruptions, central banks tightened monetary policy, energy prices soared, and supply chains faced further blockages. This led to a wave of profit-guidance reductions and re-ratings. In 2023 and 2024, the number of severe share-price drops decreased from 2022 levels as supply-chain pressures and inflation gradually eased, but the figures still remained well above pre-COVID levels. Several headwinds continued: inventory destocking after earlier shortages, reduced demand for electric vehicles in Europe and the U.S., and high interest rates that prolonged costly financing and refinancing challenges.

Cross-Country Comparison

Switzerland's higher count in 2018 was driven mainly by a few significant corporate problems, most notably GAM Investment AG (governance and reputation crisis combined with operational execution failures) and Aryzta AG (profit warnings, cost inflation and Brexit pressure). Aryzta AG alone accounted for roughly 20 % of all Swiss crisis events that year, illustrating how outliers can skew results (Figure 12).

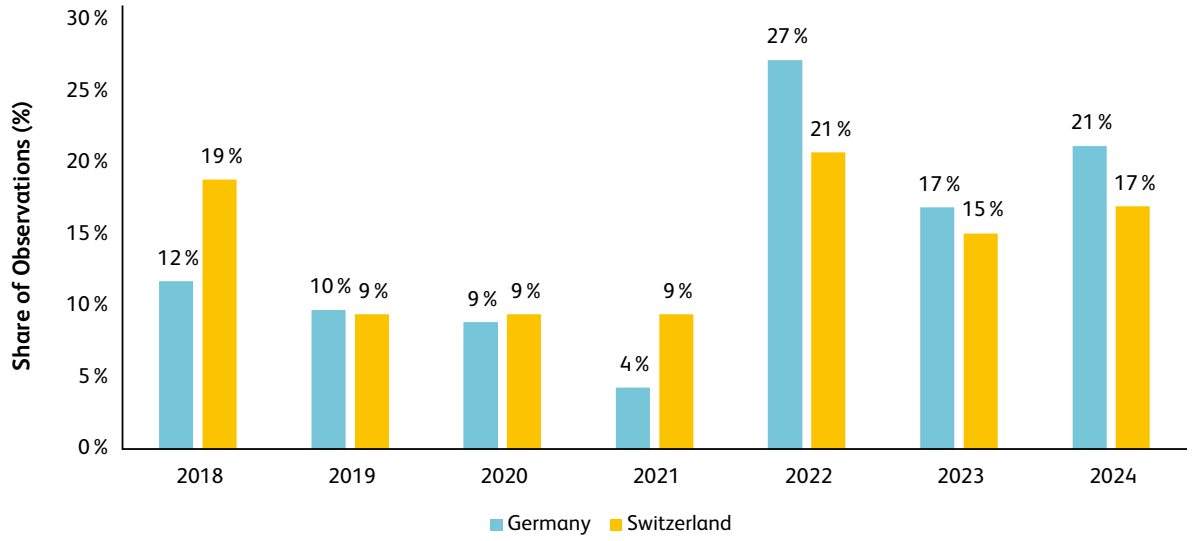

Figure 12: Severe share-price declines (≥25%) by year for observations of German firms (348) and Swiss firms (106) between 2018 and 2024

German firms hit a clear peak in 2022, reflecting the country's sector makeup: Industrials like automotive, chemicals, and machinery are highly energy-dependent and sensitive to demand shocks, leaving them exposed during the energy-price spike. In contrast, Switzerland's larger-cap market is more focused on healthcare, finance, and food sectors that showed greater resilience to geopolitical shocks.

Although both countries experienced normalization in 2023 and 2024, the overall level of crises remained high. Switzerland's independent central bank (SNB) could adjust monetary policy to local conditions, and the Swiss franc's safe-haven role further softened external shocks. As shown in Figure 12, Swiss firms continued to have fewer stock drops than German firms.[18]

Monthly Patterns
We also analyzed whether share-price declines cluster in specific months, assuming that quarterly reporting cycles might trigger such movements.

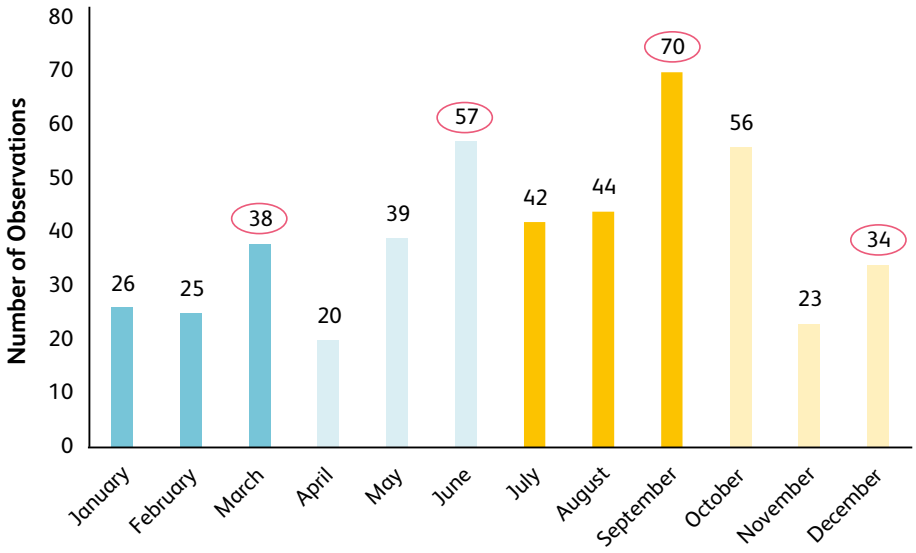

Figure 13: Monthly distribution of severe share-price declines (≥25%) (observation n=471)

Indeed, Q3 accounted for roughly one-third of all ≥25 % drawdowns, while Q1 was the lowest at about 19 % (Figure 13). Significant moves concentrated around disclosure periods, particularly in Q3, when half-year results and outlook revisions increased the frequency of profit warnings. Within the year, September was the single most volatile month (70 events), followed by June (57 events), and October (56 events). This pattern confirms that event risk clusters around reporting cycles and is often triggered by corporate announcements, a finding consistent with the original MMC study, which found that most major stock declines followed new disclosures or changes in guidance.

[18] FuW (2022), Domjahn (2023)

4.6 Industry Breakdown of Company Crises

Figure 14 compares industries using the Bloomberg Industry Classification Standard (BICS). Blue bars represent each industry's share of the entire sample, while yellow bars show its share among crisis firms (≥25 % share-price declines). This side-by-side view highlights which sectors are over- or under-represented relative to their market presence.

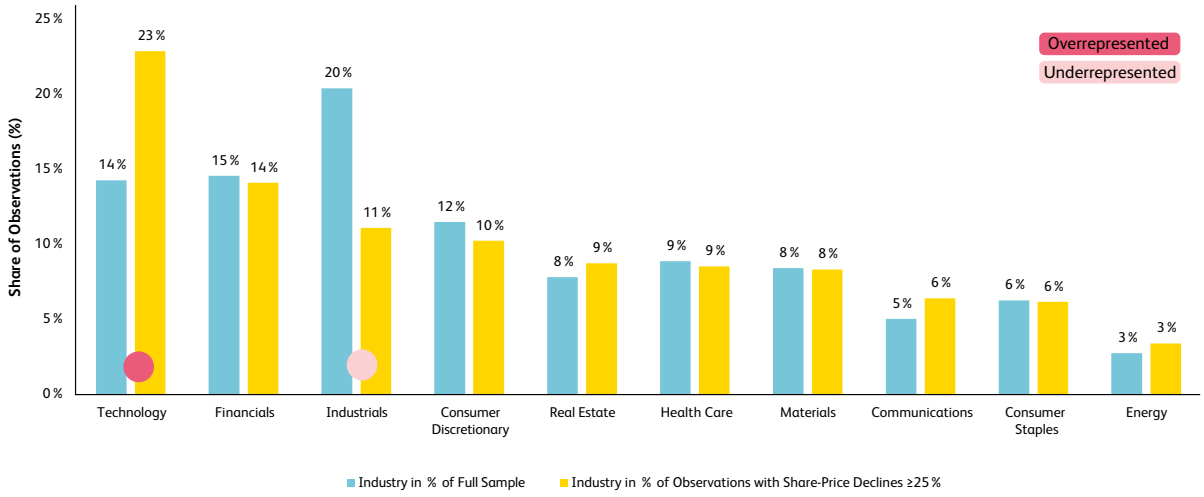

Figure 14: Severe share-price declines (≥25%) by industry (BICS classification) (company crisis sample n=213) vs. industry's weight in the overall company sample (n=669)

Two clear patterns emerge:

First, the technology sector is significantly overrepresented among major share-price declines. In 2022, when inflation surged, interest rates rose, and lockdowns disrupted supply chains, many technology companies experienced heavy losses. The global semiconductor shortage, exacerbated by China's lockdowns and supply constraints stemming from the war in Ukraine, led to substantial revenue shortfalls, guidance cuts, and de-ratings. Examples include WISeKey AG, Basler AG, and Cherry SE, demonstrating how external shocks directly caused missed targets and collapses in valuation.

By 2024, the situation had improved but remained difficult: demand recovered unevenly, interest rates remained high, and refinancing became tougher. Highly leveraged business models faced liquidity pressures, and several tech companies again saw notable declines in share prices as customers postponed projects and reduced inventories.

In contrast, the industrial sector is notably less represented among stocks with ≥25 % share-price drops, indicating greater resilience than most other industries. This is especially impressive given their heavy exposure to input costs, energy prices, and foreign exchange fluctuations. Many industrial firms, particularly in machinery, electrical equipment, and building systems, operate on contract-based models with longer order backlogs, diverse end markets, and strict project management processes. These elements might serve as natural shock absorbers, lowering the risk of sudden profit collapses.

Apart from these two sectors, most other industries in the DACH sample show distributions that roughly match their overall market share, suggesting that the incidence of crises is not systematically skewed outside of technology and industrials.

4.7 The Recovery Gap Remains

Figure 15 compares the post-crisis stock performance of the 213 companies that experienced a ≥25 % monthly share-price drop with the average total-return indices of the three DACH markets. Month 1 marks the point of the crash, and the following months trace performance relative to the pre-event level (set at 100 %).

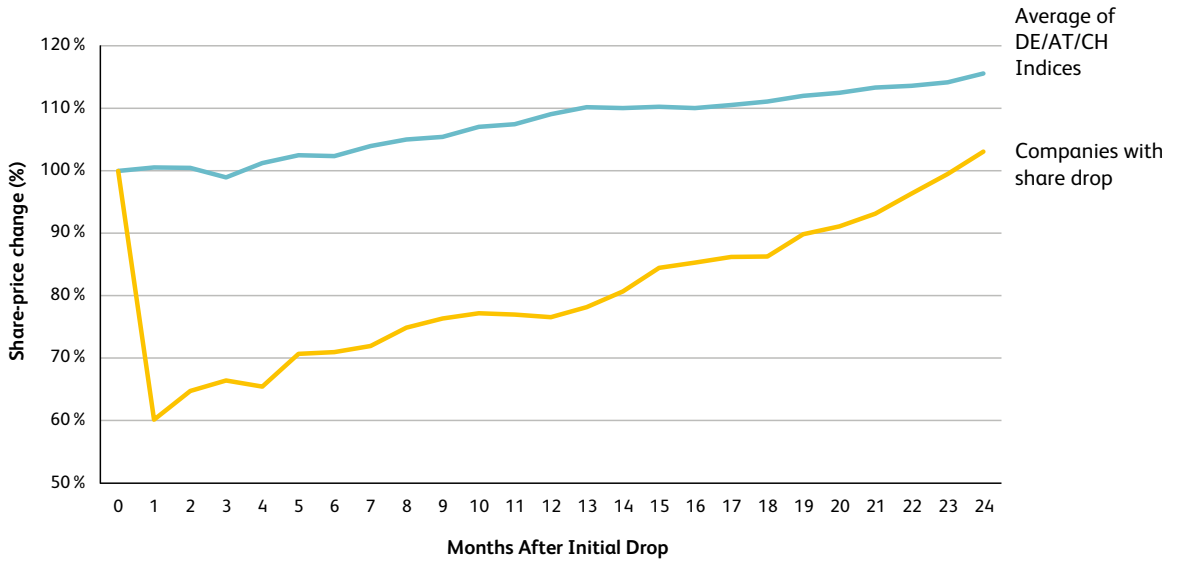

Figure 15: Post-drop performance comparison between affected stocks (≥25% decline) and DACH indices over 24 months
Note: Benchmark = average of Austrian Traded Index Total Return (TR), Prime All Share TR – Prime All Share Performance Index (Germany), and Swiss Performance Index TR (Switzerland). Months with missing index data were omitted. For each event-month, stock performance is the 1%-winsorized mean across firms, using each firm's most severe monthly share-price drop (≥25%) in the observation period.

Immediately after the event, the average share price of the affected firms fell to about 60 %, representing a 40 % loss in market value. Over the next two years, these firms barely recovered, reaching roughly 103 % after 24 months, only just returning to their pre-crisis level.

By contrast, the broader DACH market indices rose steadily from 100 % to around 115 % over the same period, reflecting sustained positive market performance. This divergence underscores a persistent recovery gap: Even two years after the crisis, the average affected firm has merely regained its starting point. It continues to lag the overall market.

In short, severe firm-specific shocks leave long-lasting scars, not only in value destruction at the event but also in missed participation in subsequent market upswings.

4.8 Mapping Risk Categories

This section maps the risk drivers behind corporate crisis events. Drivers were identified through an LLM-assisted (ChatGPT) content analysis of firm-specific documents collected around the months with severe share-price declines. We then classified each driver using the Kaplan and Mikes (2012) framework and 17 predefined subcategories.

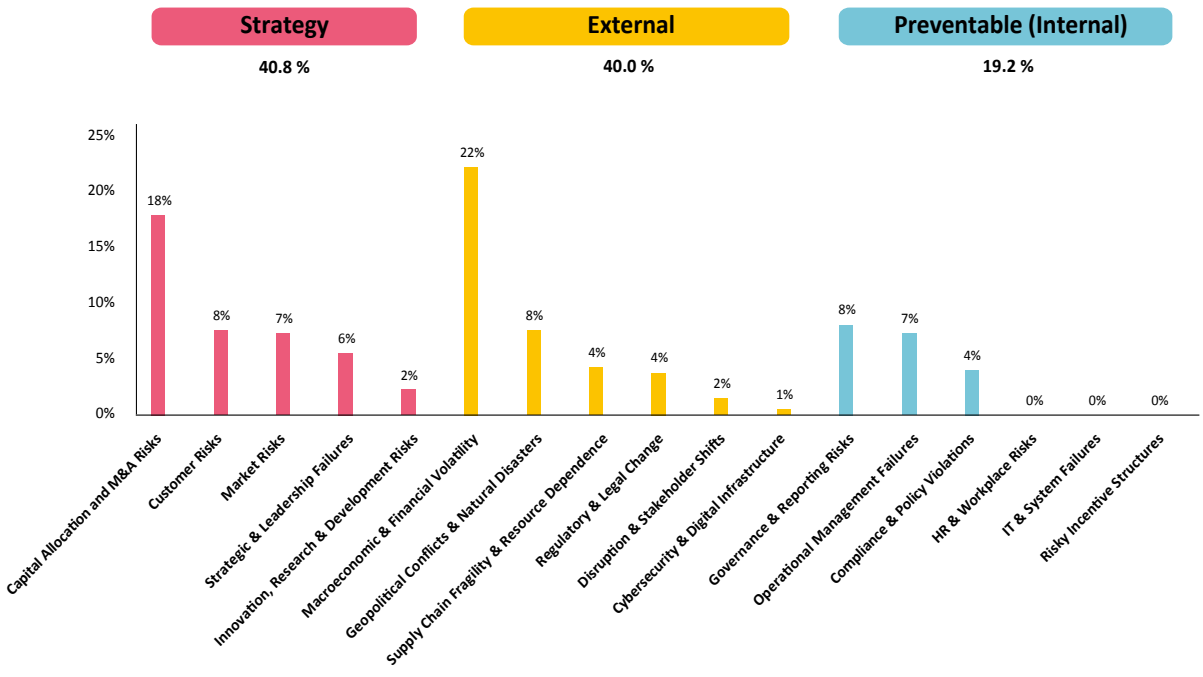

Figure 16: Distribution of severe share-price drops (≥25%) by Kaplan and Mikes (2012) main risk categories and defined subcategories (observation n=395)

Of the 471 severe share-price drops analyzed, the GPT-based review could not classify 75 events because the disclosed documents provided insufficient or nonspecific evidence. Among the remaining 395 observations, strategy risks accounted for 41 % (n=161) and external risks for 40 % (n=157), together representing 81 % of identified crisis events. Internal (preventable) risks made up the remaining 19 % (n=77) (see Figure 16).

In the following subsections, we examine each Kaplan and Mikes category in detail, including its subcategories and illustrative case patterns.

Strategy Risks

Consistent with the MMC findings, our results indicate that the most severe share-price declines in the DACH region originate from strategy risks (40.8 %, n=161), followed by external risks. In other words, the most substantial losses in shareholder value are mainly associated with strategic managerial decisions and major external shocks, rather than routine operational breakdowns. Firms take strategic risks when entering new markets, launching innovative products, choosing capital structures, or pursuing acquisitions. These moves can create substantial value, but when they fail, losses are often severe.

Put simply: no risk, no return. In line with Kaplan and Mikes (2012), strategy risks are not inherently undesirable, because superior returns usually require taking meaningful risks. Yet when strategic bets fail, the impact on value can be extreme. Firms can mitigate many exposures through hedging and insurance, but the most significant remaining exposure often comes from strategic decisions that can disrupt or even ruin a business.

Capital Allocation & Mergers and Acquisition Risks (≈18%): Large value losses in this area often follow a recognizable pattern. Companies take on debt, frequently using short-term bridge financing, while markets are stable. When conditions tighten and interest rates rise, refinancing becomes expensive or inaccessible. Liquidity diminishes, and equity raises dilute existing shareholders. Subsequent write-downs reveal overpayment or failed projects. Once cash options are exhausted, comprehensive financial restructurings are announced suddenly or reported in financial reports, causing sharp price declines.

Examples: ERWE Immobilien AG faced a highly leveraged balance sheet and a 2023 bond maturity that could not be refinanced in a higher-rate market. TUI AG twice raised equity to repay COVID-era state aid, culminating in a highly dilutive rights issue. While these moves strengthened balance sheets, they alarmed investors about liquidity and leverage and accelerated selling.

Customer Risks (≈8%): Dependence on a small number of customers or partners is the core driver. When a key client postpones projects, reduces orders, or terminates a contract, revenue visibility collapses.

Example: In August 2021, Cembra Money Bank AG fell sharply after the Migros-Genossenschafts-Bund decided to issue its own credit card and Cembra announced a temporary net profit reduction of 10–15 %.

Market Risks (≈7%): Earnings can be heavily exposed to market conditions even when short-term cost savings support margins.

Examples: Zalando SE declined sharply after another weak quarter and a lowered 2023 revenue outlook (profit guidance unchanged), reflecting soft consumer demand, intensified competition, and a shrinking online-fashion customer base.

Strategy & Leadership Failures (≈6%): Leadership gaps and aggressive growth without discipline can erode confidence rapidly.

Examples: At Evotec SE, the abrupt resignation of a long-standing CEO created a strategy vacuum. It triggered a sharp sell-off, underscoring the importance of succession planning and immediate reaffirmation of the roadmap. In late 2018, HelloFresh pursued rapid expansion and introduced lower-priced brands to broaden its customer base. The company continued to report sizable losses, reflecting management's prioritization of rapid growth over sustainable margins.

External Risks

External risks originate from events outside a company's direct control, such as macroeconomic shocks, geopolitical conflicts, pandemics, technological disruptions, or climate events (40 %, n=157). Although these risks are uncontrollable, they do not impact all firms equally. Some fail under the pressure, while others adapt or even benefit.

Approximately 40 % of severe share-price drops in the DACH region were linked to external factors, highlighting firms' significant vulnerability to environmental shocks. However, these external triggers rarely cause losses on their own. Instead, they often reveal underlying weaknesses in strategy, business models, or operations. Simply put, the external event is the cause, but the damage spreads through the firm's strategy.

Although these risks often seem "obvious in hindsight," they remain a major cause of value destruction, underscoring the importance of resilience-focused risk management.[19]

Macroeconomic & Financial Volatility (≈22%): This was the most common driver, accounting for around one-fifth of all corporate crises. Between 2020 and 2024, firms operated in a prolonged "permacrisis" of pandemic aftershocks, inflation, rising interest rates, energy turmoil, and geopolitical tension.

Macroeconomic shocks affected firms on two fronts:

- Earnings side: Demand softened, costs rose faster than prices, customers reduced inventories, and currency movements eroded margins.
- Valuation side: Higher interest rates and wider credit spreads compressed multiples such as the price-to-earnings ratio.

Across the sample, industrial and technology suppliers reported weaker demand as customers delayed capital expenditure projects and ran down inventories.

Examples: LEM Holding SA (Switzerland) reported a weak first half of 2024, citing a global electronics downturn, weak electric vehicle demand, and persistent overstocking. The company cut its FY 2024/25 outlook, which triggered a sharp sell-off in its shares. Manz AG faced a similar dynamic as e-mobility and battery clients postponed investments, forcing substantial revenue and earnings downgrades. The company filed for insolvency in February 2025, highlighting the consequences of weak demand and its inability to sustain its capital commitments.

When interest rates rose and valuations became unstable, many firms adopted a defensive "finance-first" stance, suspending dividends, delaying bond issues, or tightening liquidity. Markets reacted negatively.

Examples: LEG Immobilien SE's decision in March 2023 to suspend its dividend amid rising financing costs led to a steep price decline. PREOS AG and Hypoport SE faced similar reactions as tighter refinancing conditions eroded financial flexibility and market confidence. PREOS AG subsequently entered insolvency proceedings in 2024.

A parallel pattern was cost and energy inflation. In 2022, when inflation peaked and companies could not raise prices quickly enough, input and transport costs compressed margins and forced guidance cuts.

Examples: Varta AG withdrew its earnings guidance in September 2022 as energy and material costs outpaced price adjustments. Hornbach AG & Co. KGaA and Schweiter AG revised their profit expectations after rising inflation and higher input costs reduced their earnings before interest and taxes (EBIT).

[19] Hunziker et al. (2024)

Geopolitical Conflicts & Natural Disasters (≈8%): These risks are generally predictable, but not in terms of timing. In 2020, pandemic lockdowns caused activity to collapse so quickly that many companies withdrew their guidance entirely.

Examples: Heavy industrial firms like Thyssenkrupp Steel AG reported significant losses as end markets lost momentum. In 2022, the war in Ukraine created a similar chain reaction. Nordex SE combined war-related uncertainty with ongoing China lockdowns, showing how geopolitical tension can amplify multiple external shocks. Raiffeisen Bank International (Austria) share price also fell due to sanctions risk and Russia exposure.

Climate events are now also impacting results directly. In August 2023, wildfires on Rhodes forced TUI AG to evacuate guests and cancel trips, costing around €25 million and leading to a softer full-year outlook.

Preventable (Internal) Risks

Preventable risks are internal, controllable exposures that develop within the organization and do not offer any strategic advantage (19.2 %, n=77). Most compliance breaches, control weaknesses, or operational errors can be prevented through clear rules, strong internal controls, and effective compliance systems. Even when such issues happen, they rarely lead to share price declines of 25 % or more. In our sample, the major drops are mostly associated with these risks, driven by accounting and reporting violations or serious compliance and governance failures.

That nearly one-fifth of all severe share-price drops were caused by preventable risks highlights the harmful impact of governance failures and operational misconduct, areas where companies, in principle, have full control and responsibility.

Governance & Reporting Risks (≈8%): This is the dominant subcategory within preventable risks. The pattern is clear: Reporting delays, restatements, and transparency problems consistently trigger significant value losses.

Examples: Promaxima AG, a Swiss real estate company, repeatedly postponed publication of its audited 2020 accounts, alarming investors and triggering a significant sell-off. BayWa AG, a German consumer-staples group, withdrew its 2024 EBIT forecast and postponed the release of its half-year 2024 financial statements due to ongoing impairment testing, resulting in a sharp decline in value. At Gateway Real Estate AG, BaFin ordered a special audit for suspected property overvaluation in the 2023 interim statements, and publication of the audited 2023 accounts was pushed into mid-2024. Such events illustrate how lapses in transparency, accuracy, and timeliness of financial reporting can rapidly undermine investor trust.

Operational Management Failures (≈7%): Operational errors can lead to large losses by exposing deeper organizational and control weaknesses, rather than merely reflecting isolated mistakes.

Examples: Siemens Energy AG uncovered major defects in its onshore wind turbines, wrinkled rotor blades, and faulty gears, leading to repair costs exceeding €1 billion and a withdrawal of its 2023 outlook. The share price plunged, highlighting how inadequate quality controls can let defects reach customers and inflict lasting damage to credibility. Friedrich Vorwerk Group SE issued a profit warning after Q4 EBIT fell to €2.8 million, despite substantial revenue. High subcontracting costs, rising material prices, and the impact of a cyberattack eroded profitability and visibility. The case shows that strong topline results cannot compensate for operational gaps and markets punish weaknesses swiftly.

Cross-Country Comparison: Germany vs. Switzerland
Comparison of subcategories reveals systematic national differences:

– Switzerland shows a higher share of strategy-driven triggers, particularly in capital allocation and M&A risks, but also a noticeable proportion of preventable issues, especially governance and reporting weaknesses.
– Germany, by contrast, is more exposed to external drivers: Macroeconomic & financial volatility occurs roughly twice as often as in Switzerland, reflecting higher sensitivity to interest-rate, energy, and demand swings. Regulatory and market changes also play a larger role.

Overall, Swiss crises more often originate from managerial decisions and control lapses, whereas German crises more frequently stem from external shocks, sometimes amplified by weaknesses in basic controls.

Distribution of Share Price Declines
To examine how the three risk categories relate to the severity of share-price declines, we conducted a box-plot analysis.[20] Figure 17 compares the median, spread, and outliers of the percentage decline across the three categories.

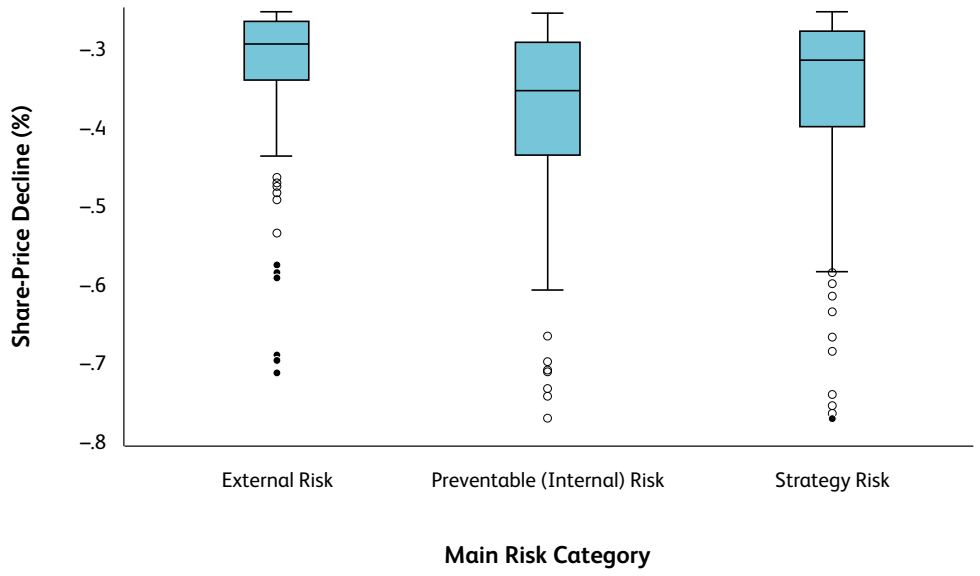

Figure 17: Distribution of share-price declines across the three main risk categories (box plot representation)

External Risks. Among the three main categories, external risks show the smallest typical drop, with a median decline of around -29 % and the tightest spread. Only a few extreme outliers appear. This pattern likely reflects the importance of organizational preparedness. Firms are only hurt by external shocks to the extent that their buffers, diversification, and resilience allow. Well-prepared companies can withstand the impact, while those that are not prepared cannot.

[20] A box plot is a graphical summary of a distribution: the box spans the 25th–75th percentiles, the thick line marks the median, whiskers extend from Q1 downward and from Q3 upward to the most extreme data points that are still within 1.5×IQR of the quartiles, and the points beyond the whiskers are outliers.

Preventable (Internal) Risks. Losses linked to preventable risks tend to be the most severe, with a median drop of -35 % and a wide interquartile range. This broad dispersion indicates that outcomes vary greatly and that internal failures are less predictable. Several outliers fall as low as -60 % to -80 %, highlighting that when controls collapse, the consequences can be catastrophic.

Strategy Risks. Strategy-related events produce mid-range losses, more frequent than internal breakdowns but less dramatic than preventable crises. The median decline of about -32 % and the widespread nature of the deterioration indicate that strategic bets carry substantial uncertainty. While most remain moderate, some failures also reach -60 % to -80 %, underscoring that flawed strategic choices can destroy immense value when they unravel.

Cross-Country Comparison
We then analyzed country-specific differences in the distribution of risk categories leading to corporate crises. Table 4 presents the results for Germany, Austria, and Switzerland (the Austrian data should be interpreted cautiously due to the small sample size).

	Strategy		External		Preventable (Internal)		
Germany	116	40 %	123	42 %	53	18 %	292
Austria	5	45 %	5	45 %	1	9 %	11
Switzerland	40	43 %	29	32 %	23	25 %	92
	161		**157**		**77**		**395**

Table 4: Distribution of corporate crises across risk categories and countries (Germany, Austria, and Switzerland; observation n=395)

Germany: Internal (preventable) drivers account for 18 % of severe drawdowns, compared to 25 % in Switzerland. This suggests that internal factors play a minor role in German cases. Strategy-related causes are common (around 40 %). Nonetheless, Germany's overall profile shows a higher exposure to external forces (42 %), especially during the recent "permacrisis" years marked by COVID-19, the war in Ukraine, energy price spikes, supply-chain disruptions, and stress on the auto industry.

Switzerland: Swiss cases reveal a higher proportion of strategy-driven crises (43 %) and a larger share of preventable triggers (25 %) than Germany. This pattern suggests that Swiss corporate crises are more often rooted in managerial decisions and governance issues, whereas macroeconomic and sectoral shocks primarily drive German crises. Switzerland's economic structure, which is less industrial and more service-oriented, together with a strong Swiss franc, makes it less sensitive to global shocks (32 %).

5. Summary

The ERM Report 2025 empirically identifies and analyzes the drivers of severe corporate crises among 669 listed firms in Germany, Austria, and Switzerland from 2018 to 2024. Anchored in Kaplan and Mikes (2012) risk categories and inspired by the research design of the Mercer Management Consulting study (1998), our study traces the origins of ≥25 % monthly share-price declines. It translates these declines into actionable insights for ERM.

From 856 observed declines, excluding the systemic COVID-19 shock (February–March 2020), and applying de-duplication and disclosure filters, yielded 471 firm-specific events. Ad-hoc announcements, analyst reports, and news items were analyzed using a custom-trained LLM, mapped to Kaplan and Mike's three main categories and 17 subcategories, and validated by a risk management expert.

Empirical evidence shows that severe value losses are common. Roughly one-third of the firms experienced at least one decline of ≥25 % in their share price over the seven years. About two-thirds of all events fall within the 25 % – 35 % range, while deeper losses become less frequent. The median drop is -30.6 %, and the mean is -35.3 %, indicating a long-tailed distribution where a few extreme crashes lift the average, while low-probability, high-impact events are rare.

Crises tend to be concentrated among smaller firms: 62 % of crisis firms have median revenue or lower, while 38 % have median revenue or higher. This aligns with MMC's U.S. findings and market experience that smaller firms are more vulnerable to significant value drops. About two-thirds of affected firms experienced one or two severe declines. Meanwhile, one-third experienced three or more declines, suggesting recurrent declines often reflect strategic fragility or weak financial preparedness rather than mere coincidence.

A distinct pattern develops over time. After a notably calm 2021, supported by government aid and very low interest rates, crises peaked in 2022 amid inflation, energy shocks, supply chain disruptions, and geopolitical conflicts. Levels in 2023 and 2024 declined but stayed above pre-COVID levels. Germany's cyclical, energy-heavy sectors were more vulnerable to post-pandemic shocks and refinancing pressures, while Switzerland's defensive large caps in healthcare, finance, and staples, bolstered by the SNB's policies and the franc's safe-haven role, demonstrated greater resilience.

Within the year, sharp declines most often occur in Q3, when half-year results, guidance updates, and profit warnings tend to cluster. At the same time, Q1 records the fewest events, showing a strong connection between declines and disclosure cycles. Across countries, Germany appears more prone to severe decreases than its sample share would suggest, confirming higher crisis risk, while Switzerland is less affected, indicating greater stability. Austria's small sample size limits firm conclusions across countries.

By industry, the technology sector experiences significant downturns, peaking in 2022 amid inflation, rate hikes, and supply-chain stress, then re-emerging in 2024 as demand recovers and refinancing challenges diverge. Industrials seem more resilient, supported by diversified end markets and contract-based models, while most other sectors roughly match their population weights.

After a severe share drop of at least 25 %, the average stock declined to about 60 % of its pre-crisis value and reached only approximately 103 % two years later, barely regaining its starting point. During the same period, DACH market indices rose to around 115 %, indicating that crisis-hit firms recovered slowly and lagged the market.

Risk-Category Findings
Severe drawdowns (≥25 %) originate mainly from:

– Strategy risks (≈41 %)
– External risks (≈40 %)
– Preventable (Internal) risks (≈19 %)

Within strategy risks, capital allocation and M&A (≈18 %) are the dominant drivers. Many cases follow a typical cascade: Firms increase leverage and rely on short-term bridge financing that appears manageable in calm markets. When conditions tighten, refinancing costs surge, liquidity compresses, and management resorts to dilutive equity raises, write-downs, or debt restructurings, typically disclosed in ad-hoc statements that trigger steep share price drops.

Among external risks, macroeconomic and financial volatility (≈22 %) and geopolitical and climate shocks (≈8 %) are major drivers. The preventable (internal) category is dominated by governance and reporting failures (≈8 %), such as disclosure delays, restatements, and special audits, which quickly erode market trust.

Country patterns differ: Germany exhibits greater exposure to external shocks, while Switzerland shows a higher share of internal and strategic drivers, reflecting differences in sector structure, currency environment, and governance culture.

Conclusion
In the DACH region, markets penalize strategic misjudgments and external vulnerabilities most heavily. Significant drops in value rarely come from compliance or IT-failures; they usually result from misaligned strategies or negative changes in the environment. Shocks reveal hidden weaknesses, and the extent of loss depends on strategic quality, governance, and financial strength.

While companies cannot completely protect themselves from external events, they can significantly influence outcomes through disciplined capital allocation, strong governance, and an adaptive risk culture.

Ultimately, ERM determines whether uncertainty becomes a path to resilience and long-term value creation or a cause of value loss.

6. Recommendations for Practice

"You are insured and hedged against many risks, but not the greatest ones, the strategic risks that can disrupt or even destroy your business. Learn to anticipate and manage these threats systematically and, in the process, turn some of them into growth opportunities".[21]

The ERM Report 2025 finds that severe corporate crises in the DACH region were driven by strategy-related risks (≈41 %) and unexpected external disruptions (≈40 %). About one-third of all listed firms experienced at least one monthly share-price drop of 25 % or more, and one-third of those experienced repeated significant declines. Smaller companies proved especially vulnerable: 62 % of crisis firms had revenues below the sample median. These patterns provide the empirical basis for the following practical recommendations.

1. View ERM as a Strategic Decision-Making Tool
Risk management should be seen as a strategic tool rather than just an administrative task. Its goal is to assist leaders and boards in making better decisions under uncertainty, thereby protecting and increasing company value. When risk considerations are integrated into investment, planning, and portfolio choices, uncertainty becomes more manageable and clearer. A company's ability to withstand crises depends on how seriously it considers risk management when the environment seems calm. Modern ERM should show that strong systems can reduce volatility and costs while boosting value creation.

2. Incorporate ERM into Strategy Development
A key takeaway from the study is that risk management and strategy development must be closely linked. About 41 % of the significant value losses identified came from strategic decisions, such as expansions, acquisitions, product launches, or leverage choices. These risks are tied to leadership quality and decision discipline. Embedding ERM into strategic planning helps ensure that major decisions are tested against assumptions, scenarios, and downside risks before approval. Risk managers should actively question assumptions, connect risks to financial outcomes, and include scenario planning in board discussions. When this becomes routine, risk management shifts from being a constraint to a driver of sound strategic growth.

3. Strengthen Financial and Structural Resilience
The empirical results also highlight the importance of financial and structural resilience. Smaller listed firms proved disproportionately vulnerable to crises: They operate with thinner equity, tighter liquidity, and greater dependence on a single customer or market. Building resilience, therefore, starts with the balance sheet. Companies should maintain strong equity ratios and liquidity buffers, regularly stress-test refinancing capacity, and establish contingency financing options. For larger organizations, the challenge is less about accumulating capital and more about maintaining transparency and discipline in capital allocation. Resilience depends not on size but on preparedness.

4. Eliminate Preventable Risks through a Consistent Compliance Culture
Preventable internal risks remain another critical area. About 19 % of the observed severe drawdowns stemmed from governance, reporting, or control failures that were entirely within management control. These risks offer no upside and must be eliminated through clear rules, reliable controls, and a culture of integrity. As Dr. Max Steiger, Chief Compliance Officer at Unzer GmbH, emphasizes, compliance can be a true competitive advantage when viewed not just as a set of rules but as a lived culture. Value orientation, open communication, and a strong culture of speaking up make organizations more resilient and build stakeholder trust.[22]

[21] Slywotzky & Drzik (2005)

[22] Steiger (2025)

5. Develop a Systematic Approach to Prepare for External Shocks
External shocks such as pandemics, energy crises, and geopolitical disruptions accounted for about 40 % of all significant losses in the study. Although they cannot be entirely prevented, their effects can be diminished. Crises turn critical only when companies are unprepared. Organizations should formalize stress tests, scenario planning workshops, and supply-chain mapping, supported by early-warning indicators for liquidity, demand, and cyber risks. Clear crisis playbooks that specify decision-making authority and communication channels help ensure quick, coordinated responses when shocks happen. Often, surviving a crisis depends less on the shock itself and more on how quickly and effectively organizations respond.

6. Make Risk Learning and Post-Event Reviews a Standard Practice
A key finding of the study is that about one-third of affected companies faced repeated significant setbacks. This indicates that many organizations do not learn systematically from past events. Conducting post-event reviews, documenting root causes, and incorporating lessons learned into updated risk registers and training are crucial. Embedding these feedback loops transforms ERM from a static record-keeping task into a continuous learning process, strengthening organizational memory.

7. Adopt a Proportional Approach to ERM Maturity
Since companies vary in size, structure, and complexity, ERM maturity should correspond to each company's specific characteristics. Smaller firms benefit most from focusing on core resilience factors such as liquidity, key-person risks, and customer concentration, while large corporations should invest in advanced analytics, quantified risk appetite frameworks, and predictive dashboards. Customizing ERM to the context helps avoid under-management and over-engineering.

8. Strengthen Board Oversight and Risk Communication
The study also emphasizes the importance of governance. In many organizations, board involvement in risk management remains limited, and reporting often lacks decision-making relevance. Boards should receive brief, quantified insights linking exposures to EBIT, free cash flow, and risk capacity. Scenario workshops can improve risk literacy and foster constructive challenge of management assumptions. Good governance does not mean avoiding risks; it means ensuring that risk-taking is intentional, transparent, and aligned with corporate goals.

9. Advance the Use of AI and Data Analytics in ERM
The application of AI and data analytics will advance ERM professionalism. This study itself illustrates this potential: an LLM-based analysis classified and interpreted 395 crisis events, achieving approximately 75 % agreement between AI results and expert validation. Future systems should expand on this experience to enable continuous risk detection through AI-supported text mining, sentiment analysis, and automated early-warning alerts. However, these insights must still undergo expert validation to maintain context and accountability. When managed responsibly, AI enhances transparency, response speed, and the empirical foundation of strategic decisions.

10. Shift the Narrative from Risk Aversion to Risk-Informed Ambition
Ultimately, risk management must evolve from a culture of caution to a culture of confidence. Firms rarely fail because they take risks; they fail because they take them without understanding. Effective ERM equips leadership to act with clarity in the face of uncertainty, linking courage with control. It ensures that uncertainty becomes a source of resilience and long-term value creation rather than a trigger for destruction. The evidence from the ERM Report 2025 makes this clear: Companies that integrate risk thinking into their decisions, governance, and culture are not only better protected against crises but also better positioned to thrive in them.

Part III: Guest Contribution

Swiss GRC: Strategic Value Creation Through Organizational Resilience

Resilience is no longer an insurance policy or a compliance checkbox. In today's capital markets, marked by global interconnection, technological concentration, and persistent geopolitical and economic uncertainty, it has become a defining strategic capability. High-profile value losses show that restoring operations after a shock or producing routine regulatory reports is no longer sufficient. Deliberately built, regularly tested, and adequately financed, resilience has become a measurable source of shareholder value and a critical defense against sudden declines in market capitalization.

When boards and executives view resilience as an investment rather than a cost, decision-making changes. Forward-looking leaders see it as a platform for protecting strategic options, improving the speed and quality of decisions, and strengthening investor trust. The result is not only lower downside volatility but also the creation of opportunities that traditional risk management often overlooks. Resilience is therefore not just about surviving disruption, it positions organizations to thrive when uncertainty opens new avenues for growth. Today's market environment makes this perspective urgent:

- **Accelerating shocks:** Risks once thought isolated – cyberattacks, supply chain failures, geopolitical tensions – now spread quickly across industries and borders, eroding enterprise value and investor confidence.
- **Stricter supervision:** Regulators are embedding resilience into prudential frameworks. In Switzerland, FINMA's comprehensive revision of insolvency rules for financial institutions, effective since 1 October 2025, strengthens early-intervention powers and mandates more precise recovery planning. In Germany, BaFin has raised supervisory expectations through its Minimum Requirements for Risk Management (MaRisk) and Banking Supervisory Requirements for IT (BAIT), sharpening the focus on contingency planning, cyber resilience, and outsourcing risks. Across the European Union, the Digital Operational Resilience Act (DORA) and the Artificial Intelligence Act elevate operational continuity, data governance, and cyber preparedness to board-level priorities.
- **Capital-market signals.** Investors increasingly reward demonstrable resilience with lower funding costs and sustained valuations, treating operational preparedness as a marker of long-term creditworthiness.

Compliance is now only the starting point. Organizations that can demonstrate robust operations, adaptive capacity, and credible recovery strategies secure a tangible advantage in capital markets and protect shareholder value.

This article examines how resilience can be developed as a source of value creation. It outlines the shift from cost-center insurance to a strategic asset embedded in governance, operations, and financing. It also highlights two mechanisms with direct relevance for capital markets: AI-driven early-warning systems that identify emerging risks before they escalate, and resilience-linked financing that ties the cost of capital to proven performance. Finally, it offers practical recommendations for boards and executives to embed resilience as a measurable strategic advantage that protects and grows enterprise value.

I. Resilience as a catalyst for sustainable value

Traditionally, resilience has been treated as a defensive posture: a collection of continuity plans, insurance contracts, and crisis manuals designed to minimize losses when disruptions occur. These instruments remain essential but are insufficient in a world where value is increasingly tied to trust, reputation, and the ability to adapt quickly. For decades, risk management and resilience were viewed as overhead costs, necessary for regulators and stakeholders but not central to strategy.

This perspective is now outdated. Organizations that approach resilience as a catalyst for sustainable value outperform those that regard it merely as a compliance necessity. Research by McKinsey (2022) has shown that companies investing in resilience-oriented practices, such as diversified supply chains, robust cybersecurity protocols, and

adaptive workforce strategies, rebounded faster from the COVID-19 crisis and captured disproportionate market share as economies reopened. Likewise, firms that maintained customer trust during technology outages or reputational crises restored their share prices more quickly and faced lower financing costs in subsequent quarters.

Resilience contributes to sustainable value in three distinct ways:

- **Preserving trust:** Customers, regulators, and investors reward firms that demonstrate continuity under stress. In a digital economy where service disruptions are visible instantly, trust becomes currency.
- **Enhancing decision quality:** Resilient organizations collect, integrate, and act upon better information, shortening decision loops and improving strategic agility.
- **Protecting optionality:** By maintaining access to liquidity, suppliers and markets during shocks, resilient firms preserve choices that others may lose. This optionality often enables entry into new opportunities while competitors are still recovering.

Seen through this lens, resilience is not simply a means of defense but a powerful catalyst for sustainable value and a multiplier of strategic freedom.

II. The evolving logic of disruption

The logic of disruption has shifted dramatically. In the past, resilience was primarily measured by how quickly a company could restore operations to their pre-crisis state. A storm that damaged a manufacturing plant or a technical failure that halted trading systems required recovery to baseline operations. While that definition once served well, it no longer reflects the realities of today's interconnected markets. Modern disruptions unfold through three powerful and interrelated dynamics that challenge traditional risk metrics:

1. Cascade effects across systems
Economic activity now relies on tightly linked digital and physical networks. A cyber incident affecting a single cloud provider or a central software platform can simultaneously disrupt banks, hospitals, logistics hubs, and e-commerce providers across continents. Local failures quickly become global shocks, propagating through supply chains, payment networks, and critical infrastructure. The 2021 outage of a large US cloud platform, which temporarily disabled services for airlines, retailers, and governments worldwide, demonstrated how a single point of failure can have far-reaching financial and reputational consequences.

2. Compressed decision windows
Digital interconnection and the speed of information flow accelerate the emergence of crises. Events that once unfolded over weeks can now destroy market value within hours. High-frequency trading algorithms can magnify sudden market moves, while social media spreads both accurate data and misinformation instantaneously. This leaves boards and executive teams with minimal time for deliberation and requires decision frameworks that favor rapid escalation and pre-authorized actions.

3. Technological concentration
A small group of hyperscale cloud providers, global payment systems, and artificial intelligence platforms now underpins critical services worldwide. Their operational resilience or fragility has become systemic. The increasing reliance on a few technology giants introduces unavoidable single points of failure and raises the stakes for firms that depend on these services for essential operations. Concentration risk means that an outage or security breach at a single major provider can ripple across multiple sectors at once.

These dynamics render traditional recovery metrics inadequate. Measuring the time it takes to return to normal operations is no longer enough. The central question for boards and executives has become: How well can the organization adapt and transform as conditions change around it? Resilience today demands proactive scenario planning, flexible operating models, and decision processes that emphasize speed, clarity, and continuous learning.

III. Capabilities and pillars of resilient organizations

Resilient organizations do more than withstand disruption. They cultivate capabilities that enable them to sense change early, absorb shocks, adapt quickly, and turn crises into opportunities for renewal. These capabilities – anticipation, absorption, adaptation, and transformation – work together to create strength that is both dynamic and lasting.

Anticipation is the first line of defense. It is the ability to detect weak signals and translate them into actionable insight through horizon scanning, scenario analysis, and rigorous risk-data aggregation. Without dependable information, anticipation collapses into speculation. Leading firms invest in systems that convert scattered indicators – geopolitical developments, supplier health, or shifts in customer sentiment – into clear exposure assessments that guide early action.

Absorption follows as the capacity to maintain critical functions even when parts of the organization falter. True resilience recognizes that not every failure can be prevented, so companies design operating models with built-in fallback modes: redundant payment channels, prearranged supplier contracts, and adequate liquidity reserves. These measures ensure that disruptions remain contained rather than cascading through the enterprise.

Adaptation is the ability to reconfigure operations and resources as conditions evolve. It may involve moving production to alternate facilities, reallocating staff to essential roles, or revising governance structures during a crisis. Effective adaptation depends on trust and delegated authority. Leaders must empower teams to make fast, responsible decisions without waiting for lengthy approvals.

Finally, transformation ensures that disruption becomes a catalyst for improvement. Resilient organizations institutionalize lessons learned, redesign digital architectures after cyber incidents, diversify supply chains in response to geopolitical shocks, and even pivot business models during economic downturns. In this way, crises drive long-term renewal rather than merely interrupt operations.

These capabilities are anchored in several organizational pillars. Strong board governance integrates resilience into strategic oversight and holds executives accountable for preparedness and response. A unified data architecture provides a single, reliable source of risk and resilience information, enabling consistent, timely decision-making. Regular scenario rehearsals convert paper plans into tested capabilities, building the muscle memory needed when real crises strike. Robust digital infrastructure treats technology resilience as a strategic priority, safeguarding core services against systemic failure. And perhaps most important, a culture that rewards openness, rapid escalation of issues, and learning from near misses ensures that people at every level are ready to act when it matters most.

Together, these capabilities and supporting pillars create organizations that do more than survive. They anticipate and absorb shocks, adapt with speed, and transform disruptions into lasting value.

IV. AI early-warning systems for resilience

Artificial intelligence is emerging as one of the most effective tools for strengthening organizational resilience and creating strategic value. Early warning systems driven by AI can analyze vast and diverse datasets, including transaction flows, cyber threat intelligence, supplier performance data, and social media signals, to identify anomalies that human analysts might miss. The benefit lies in the extra time these systems can provide. Even a small extension of foresight – whether a few hours or several days – can significantly change outcomes. Detecting irregular payment patterns in advance may allow a bank to avoid a liquidity squeeze. Recognizing signs of supplier distress weeks before a contract failure gives companies the chance to adjust procurement strategies and prevent costly shortages. In financial markets, identifying emerging volatility early can help preserve capital and maintain investor confidence.

AI, however, introduces its own risks. Models can drift as data evolves, be manipulated by attackers, or reflect hidden biases. Strong governance is essential. Transparency, independent validation, and continuous human oversight must be built into every stage so that AI-generated alerts guide sound decisions rather than create confusion. Best practice is to embed these alerts into tested response plans, ensuring that detection automatically triggers a structured, well-understood course of action.

When implemented with care, AI early warning systems do not remove uncertainty but give leaders more time and better information for critical decisions. The result is lower volatility, faster containment of emerging threats, and stronger protection of enterprise value.

V. Financing and governing resilience for lasting value

Capital markets are beginning to reward resilience in ways that directly influence corporate financing. Resilience-linked financing extends the logic of sustainability-linked loans by tying the cost of capital to demonstrable outcomes such as validated stress tests, remediation of vulnerabilities, and independent assurance of continuity. For lenders and investors, this provides a clearer view of long-term creditworthiness. Organizations that can prove their resilience present lower risk profiles, earn tighter spreads, and enjoy more favorable terms. For boards, this development reframes spending on resilience from a defensive cost to an investment with measurable financial returns, much as strong environmental, social, and governance performance has reshaped investor expectations.

To capture this value, organizations need a disciplined approach that elevates resilience to a strategic priority:

- **Integrate resilience into governance:** Boards should adopt explicit resilience charters, assign clear accountabilities, and require regular reporting so that preparedness is embedded in strategic decision making.

- **Maintain a unified risk and resilience register:** A consolidated and auditable view of exposures across financial, operational, digital, and third-party domains provides decision makers with the reliable data needed under stress.

- **Institutionalize scenario planning and stress testing:** Regular, organization-specific rehearsals reveal vulnerabilities, build muscle memory, and generate credible evidence for supervisors and investors.

- **Invest in strong technology architecture:** Integrated GRC platforms that centralize risk data and automate compliance enable a shift from reactive identification to proactive management.

- **Deploy AI early warning systems with oversight:** Artificial intelligence should augment, not replace, human judgment. Transparent governance, validation, and integration into tested playbooks are essential.

– **Strengthen ecosystem and third-party resilience:** Resilience must extend to critical suppliers and partners through contractual continuity clauses, verified failovers, and joint rehearsals.

– **Link resilience to capital planning:** Providing investors with validated rehearsals, remediation dashboards, or continuity certifications supports access to resilience-linked financing and lowers the cost of capital.

– **Measure assurance rather than activity:** Track indicators such as rehearsal fidelity, remediation speed, and decision quality to demonstrate actual readiness.

– **Embed resilience in culture and incentives:** Reward early escalation and openness, conduct after-action reviews, and foster psychological safety so that concerns surface before issues escalate.

– **Engage externally to reinforce systemic resilience:** Collaborating with regulators, investors, and industry peers builds trust and strengthens market stability.

Resilience has therefore moved beyond its traditional role as a defensive safeguard. In a world defined by deep interconnection, technological concentration, and rapid shocks, companies that treat resilience as an engine of value will not only protect but also grow their enterprise worth. With AI early warning systems extending foresight and financing mechanisms now linking preparedness to capital efficiency, resilience has become quantifiable and investable. Boards and executives who act now – by embedding resilience into governance, technology, culture, and capital strategy – will set the competitive benchmark for the decade ahead.

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Part IV

Appendix – LLM (OpenAI ChatGPT) Prompt

ROLE & GOAL
You are an experienced risk-management analyst.
Your task is to read:
- the full plain text of the attached press-release / ad-hoc / analyst-note PDFs (provided below) and
- the sub-category mapping contained in "Risikokategorien_GPT.xlsx",
  then identify the root cause(s) that most plausibly triggered a previously confirmed ≥25 % drop in the company's share price.

TARGET COMPANY
>> For each PDF the target company is the file name up to the first "_" or "."
TARGET_COMPANY = "xxx"
Analyze **only** events that relate to this company (or its clear aliases).

ENTITY-FILTER RULES
0. Parse TARGET_COMPANY from the file name.
1. Build an alias list from the PDF (exact legal name, common abbreviations, ticker).
2. Keep an event sentence only if it
   a) contains an alias, **or**
   b) uses an anaphor ("the company", "our group") whose nearest named entity ≤ 2 sentences earlier is an alias.
3. Discard sentences referencing any other company.
4. If, after filtering, no event reaches ≥50 % confidence, output
   "No classification – insufficient evidence (entity ambiguity)".

MAIN RISK CLASSES (Kaplan–Mikes)
- Strategic – risks deliberately taken in pursuit of return (e.g., market entry, product bets, M&A).
- Internal / Preventable – controllable, undesired failures (e.g., compliance breaches, fraud, operational errors).
- External – uncontrollable outside-in shocks (e.g., macro downturn, regulation change, natural disaster).

SUB-CATEGORY LIST
Use exactly the "Subcategory" names from the Excel file (column "Subcategory").

CONFIDENCE LADDER (applies separately to Main & Sub)
- Confirmed >70 %
- Plausible 50 %–70 %
- <50 % → treat that level as "No classification".

SELECTION & PRIORITISATION
1. Build a dated timeline from entity-filtered events.
2. Discard pure sentiment phrases.
3. Retain events that plausibly explain a ≥25 % drop and explicitly state a causal issue.
4. **Primary Root Cause** = earliest event that names the underlying cause (not just a symptom).
5. If several causes jointly explain the drop, list up to three by descending Main-level confidence.
6. For each cause assign one Main class & one Sub-category; give separate confidence estimates.

OPTIONAL DEBUG
If the flag 'SHOW_CANDIDATES = TRUE' appears anywhere in the prompt, append
"Candidate Events with Scores" (all events ≥30 % confidence **after entity filtering**).

OUTPUT FORMAT (strict, plain text)

Root Cause | Main Class | Sub-Category | Main Conf | Sub Conf
- short factual description (≤ 25 words) | Strategic | Internal (Preventable) | External | Excel-subcategory name | nn % | nn %

[repeat line for Secondary | Tertiary causes if Main Conf ≥50 %]

Evidence:
- Bullet-point list of the exact sentences supporting each cause
(document name + page/paragraph; highlight alias that ties it to TARGET_COMPANY).

List of Abbreviations

AI	Artificial Intelligence
BICS	Bloomberg Industry Classification Standard
COVID-19	Coronavirus Disease 2019
DACH	Germany (D), Austria (A), Switzerland (CH)
EBIT	Earnings Before Interest and Taxes
ERM	Enterprise Risk Management
LLM	Large Language Model
MMC	Mercer Management Consulting
P/B	Price-to-Book ratio
SNB	Swiss National Bank
SPI	Swiss Performance Index
TR	Total Return

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Publishing Institutions

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The Institute of Financial Services Zug IFZ at Lucerne University of Applied Sciences and Arts is the leading applied university institute in the financial sector in Switzerland. Since 1997, the IFZ has been providing added value for the financial industry and financial professionals across various sectors through continuing education, application-oriented research, and consulting. The IFZ's educational offerings include, for example, the MSc in International Financial Management and the MSc in Banking and Finance. In the field of continuing education, the IFZ offers numerous recognized courses, such as the CAS in Governance, Risk and Compliance and the MAS/DAS in Corporate Finance/Controlling.

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Kiel University of Applied Sciences is the largest university of applied sciences in the state of Schleswig-Holstein. In the winter semester 2025/26, it educates more than 8,100 students across six departments. The Institute for Controlling is part of the Department of Business. Together with colleagues from external accounting and taxation, we teach in several bachelor's and master's degree programs focusing on Accounting, Controlling, and Taxation. Furthermore, the Institute for Controlling has a research and consulting focus in the areas of Enterprise Risk Management and Risk Governance, particularly in coordination with Controlling. Institute members are active in numerous academic and transfer organizations, such as the International Controller Association and the Risk Management Association, as well as on supervisory boards.

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Recommended Literature

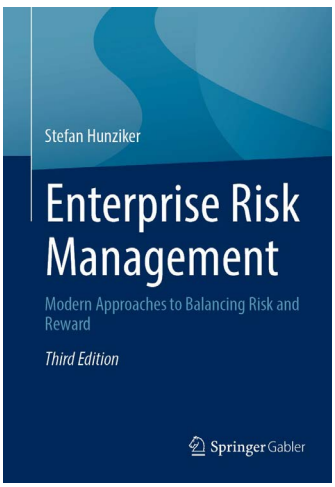
Enterprise Risk Management – Modern Approaches to Balancing Risk and Reward (3rd edition)

Prof. Dr. habil. Stefan Hunziker

257 pages, available at Springer (also as an e-book)

This textbook demonstrates how Enterprise Risk Management creates value in strategic- and decision-making-processes. The author introduces modern approaches to balancing risk and reward, based on many examples of medium-sized and large companies from different industries. Since traditional risk management in practice is often an independent stand-alone process with no impact on decision-making processes, it is unable to create value and ties up resources in the company unnecessarily. Herewith, he serves students as well as practitioners with modern approaches that promote a connection between ERM and corporate management.

The author demonstrates in a didactically appropriate manner how companies can use ERM in a concrete way to achieve better risk-reward decisions under uncertainty. Furthermore, theoretical and psychological findings relevant to entrepreneurial decision-making situations are incorporated. This textbook has been recommended and developed for university courses in Germany, Austria and Switzerland.



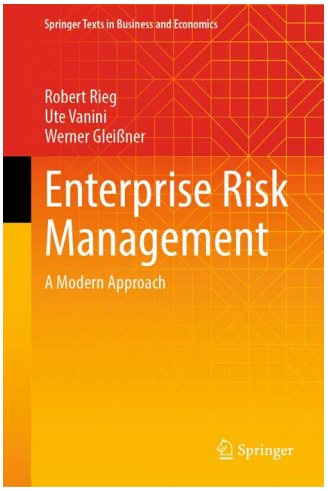
Enterprise Risk Management – A Modern Approach (1st edition)

Prof. Dr. Dr. habil. Robert Rieg, Prof. Dr. Ute Vanini, Prof. Dr. Werner Gleißner

294 pages, available at Springer (also as an e-book)

The book helps readers to answer a pressing question for businesses: how can they evaluate risks and opportunities to develop appropriate risk-adjusted strategies that allow them to generate maximum profit at acceptable risk levels?

This book focuses on a hands-on approach to risk management which includes a step-by-step guide on how to identify, analyze, quantify and aggregate various risks in organizations. It guides the reader through what-if simulation and scenario analyses as well as Monte Carlo simulations in Excel with applications to traditional non-financial businesses and platform companies like Spotify. This management-oriented perspective sets it apart from often compliance-related textbooks, which mostly focus on financial industries. Its approach is applicable to a wide range of industries and based on a strategic and value-based view of balancing risks and opportunities in businesses. The mathematical and technical details are presented in an easy-to-follow format and illustrated throughout with examples and simple calculations. Additional material for lecturers and students (exercises, cases, templates) is provided online.



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