



# Risk Management

*Risk management includes all efforts undertaken by a business to minimize and control hazards that threaten its operations. In the past, uncertainties about quantifying risk led to difficulties in evaluating perceived threats and their possible impact on a company's finances. But new models exist, allowing businesses to more accurately measure risk and even gain a competitive edge in markets once considered too risky.*

All companies seeking success in the modern marketplace need to maintain balance between minimizing risk and maximizing opportunities. Risk is any event or action that can impede an organization's ability to implement its strategies and achieve its objectives. While companies continuously face myriad risks, from project failure to industrial accidents, some of the most complex risks relate to social, environmental, and political issues, and managing those risks effectively lies at the heart of successful sustainability strategy.

Social risks are challenges to business practices that emerge from concerns of society. These may include diseases that curtail the workforce, environmental issues that create tension within local communities or trigger financial penalties, human rights violations that damage a company's reputation or lead to litigation, and objections by stakeholders (i.e., an individual or group directly or indirectly affected by a company's policies or actions) due to negative perceptions of business practices.

Environmental risk, often considered a subset of social risk, includes those issues stemming from environmental issues that can impact a company. These include concerns about climate change and potential legislation to minimize corporate impact. It can also include concerns about pollution, both as a result of production and of discarding products like computers and cell phones. Companies can

be fined for the pollution generated during manufacturing, and some are held responsible for the proper end-of-life disposal of a product.

Political risk is the exertion of political power in a way that threatens a company's value. This can include the specter of nationalization or forced partnerships facing companies doing business in Venezuela, Bolivia, and other areas of Latin and South America that are drifting farther to the left. It also includes the changed international political landscape heralded by September 11, 2001, and followed by bombings in London, Madrid, and Mumbai, which have impacted the ways in which business is conducted.

The distinction between social and political risk is often blurred. Issues may be experienced differently by different sectors in varied locations—for instance, concerns about climate change may lead to legislation in one geography that can penalize a company but then spur innovation across its manufacturing practices, leading to market success where legislation is not yet in place.

The widely used terms *environmental risk*, *social risk*, and *political risk* are also known as *above-ground risks* (by the mining, oil, and gas industries), *nontechnical risks*, and *non-commercial risks*.

## Risk and Sustainability

Issues such as political corruption, child labor, obesity, global terrorism, predatory governments, and environmental pollution pose both challenges and opportunities for business. In fact, setting sustainability objectives is often a result of identifying and seizing opportunities based on the social and political risks facing a company, industry, or region. Corporate sustainability strategy and social and political risk management go hand in hand.

“Leadership” companies view responsiveness to social and environmental issues as assets that produce increased revenues rather than only as liabilities with their associated costs. They recognize that an investment in structures and systems to ensure strong social and environmental performance often pays dividends in terms of improved processes, production quality, efficiency, yields, reputation, and profitability, as well as lower risk. For example, Toyota’s leaders tried to envisage what might transform its industry and threaten future market share. They pinpointed climate change and convened a team in 1993 to create the first great car of the twenty-first century, nearly a decade before that century arrived. As a result of a series of technological breakthroughs, manufacturing innovations, and careful marketing, Toyota has sold more than one million Prius gas–electric hybrid cars since introducing them in 1997. That’s five times as many hybrid vehicles as its nearest competitor.

## Current Practices in Risk Management

Risk management includes all the activities organizations undertake to minimize or control hazards that threaten their objectives. For businesses, access to or analysis of financial information leads to the most rigorous evaluation of options and effective decision making. Companies continue to struggle, however, to integrate social, environmental, and political risks into financial equations in meaningful ways. Failure to consider these risks in investment decisions leaves out critical elements when it comes to allocating resources. According to a 2007 poll by the American Institute of Certified Public Accountants (AICPA), 84 percent of companies don’t formally integrate social, environmental, and political risks into financial calculations. Often, therefore, companies make decisions about these risks based on personal biases, or they arbitrarily assign higher risk premiums to projects in unfamiliar locations, failing to focus management’s attention on reducing risk. Why? Many analysts mistakenly believe measuring social, environmental, and political risks is not possible. Historically these risks have also been addressed in more descriptive language rather than a format that reflects their financial implications.



Companies have traditionally taken two approaches toward assessing and managing social and political risk—qualitative and quantitative. Neither approach, however, allows companies to use the same formal techniques they employ to evaluate other types of risk, such as business continuity (the risk of disruption to critical functions

after a disaster or other unexpected occurrence), information security, or currency fluctuation.

## Qualitative Approach

In the 1970s, multinational firms, particularly in the extraction and banking industries, began creating in-house teams to evaluate political and social risks. These teams looked at risk assessment qualitatively, producing detailed briefings that outlined the challenges of conducting business in various parts of the world. Beginning in the 1980s, consultants were often hired to produce similar reports. While providing sound insights about certain risks, such as the likelihood of a coup or a country’s use of slave labor, these briefings did not explicitly connect the identified risks to the company’s bottom line. Without an understanding of the costs of these risks, executives had no way to integrate the information into business assessments the way they did for other, quantified, data. As a result, important insights contained in those briefs were sometimes relegated to footnotes in the company’s business plan.

## Quantitative Approach

Realizing the flaws of a purely qualitative approach, some analysts began to quantify political and social risk to make it more relevant to corporate managers. Various methods were developed and put in use.

### Scorecards

Indicators of potential political and social risks—such as judiciary independence, corruption, and government turnover—are evaluated and assigned a numerical value. A final “score” is then generated by aggregating and weighting the values of different indicators to calculate a country’s overall risk. Such scoring is helpful because it enables a comparison between countries. But it falls short of being directly useful to business decision makers because the risks are not converted into monetary terms.

### Statistical Analysis

The emergence of spreadsheet applications, such as Crystal Ball, an analytical tool that automatically generates equations to capture uncertainty, has contributed to quantitative analysis of risk. Results of such software programs show project managers either the most sensitive issues on which to concentrate—sensitivity analysis—or a cumulative probability curve indicating the potential economic performance of a project. The charts, graphs, and dynamic models produced by these calculations, however, cannot be integrated into financial evaluations because they do not generate a return on investment (ROI) number, a political/social risk beta (an indicator used in financial calculations to

compare a company's risk compared to the risk of the overall market), or any monetary results that can be included in financial calculations.

### Scenario Analysis

Risk mapping plots the expected degree of exposure to various risks on a graph, with probable frequency on the horizontal axis and expected severity on the vertical axis. Such modeling is beneficial as a communication tool, enabling managers to visualize where to allocate resources, and as a way to measure various types of risk. Mapping as currently practiced does not provide a link to financial statements that are critical for comparisons between competing projects. But, with some modifications, including assignment of monetary values to hypothetical consequences, axis points on such a risk map could correlate to financial data and be integrated into ROI calculations.

### Adjusted Discount Rate and Cost of Capital

One method of integrating social and political risks into financial models is to create a discount rate or cost-of-capital calculation that can be used in cash-flow projections. This can be done by creating a social discount rate that employs the weighted average cost of capital (WACC) and the traditional capital asset pricing model (CAPM). (A social discount rate is an important factor in determining the value of contributing funds to a project, such as a school, highway system, or an environmental protection program, that would benefit society in some way.) When dealing with markets that may exhibit hallmarks of social and political risk, this adjusted WACC accounts for social and political factors. Calculations for this risk-adjusted beta, however, have in the past largely relied on the standard country-specific risk-rating methodology generated by political-risk consulting firms, which are too broad to achieve the needed objectives. These ratings are neither industry-, project-, nor company-specific, though social and political risks affect companies and their reputations differently, even those operating in the same country.

## Effective Risk Management

Effective risk management involves identifying the socio-political and corporate environments that might create risks and then measuring and monitoring them. Reporting these risks in monetary terms is an important step toward integrating them into financial planning and corporate strategies.

One method of monetizing and better managing these nontraditional risks is by including them in slightly modified ROI calculations. Managers commonly calculate ROI, a measure of investment profitability, to make decisions about day-to-day operations and capital investment

planning. ROI is the most popular method for measuring corporate performance because it is the approach CEOs and CFOs are most familiar with. To make such analysis more complete and improve operational and cap-

ital investment decisions, political and social risks must be included in the conventional ROI calculation through several phases outlined below, which makes the ROI more explicit and relevant for effective risk management.

**Step 1: Generate options.** The first step in a modified ROI calculation that incorporates social and political risks is to think about the various options that could potentially minimize risk, such as investing in a range of countries or including a range of suppliers in the supply chain. This thinking is known as "real options." While real options calculations aren't used outside financial settings and stock-option calculations because of their complexity, this type of thinking incorporates financial insights at the strategic stage of project planning rather than as afterthoughts. This helps clarify the risks and their potential repercussions.

**Step 2: Calculate benefits and costs.** Calculating the savings and costs associated with each issue that could generate social and political risks is the second step. For example, if a corporation considered employing child labor, the savings would be calculated by measuring the wage differential between children and adults. The issue benefit, which is generally assigned a positive value, would be the savings. Next the potential costs associated with the risk of child labor should be calculated, such as lost sales after the public discovers this activity. The reputations of several industries have been seriously damaged by the use of child labor in their supply chains, and some companies have attempted to stop the practice. In 2001, major companies in the chocolate industry like Hershey, Cadbury, and Nestle became aware of kidnappings and forced child labor on cocoa plantations in the Ivory Coast, which tainted their reputations and reduced sales. Had companies in this industry calculated these costs in advance, they may have employed mitigation strategies to avoid sourcing from plantations using these practices. The biggest cost of social and political risk is usually to reputation and lost sales due to consumer boycotts and protests.

**Step 3: Estimate probability.** After calculating the potential costs of each risk, approximate (in percentages) the likelihood that each risk will occur and hurt the company. This is the *estimated probability*. Assign an estimated probability to each risk identified.





**Step 4: Calculate expected value.** Calculate the expected value of each risk by multiplying the estimated cost of that risk by the estimated probability it will occur.

**Step 5: Calculate net present value (NPV).** Calculate the net present value of each risk. Note that each issue has risks that emerge at different times. NPV calculations for social and political risk are determined in the same manner as traditional NPV calculations. Discount back using a set discount rate in the traditional manner used in financial accounting. Carry out these calculations for each social and political risk.

**Steps 6: Aggregate NPVs for social and political risks.** After calculating all NPVs for social and political risks, add together the social risk NPVs and then the political risk NPVs.

**Step 7: Integrate the results into traditional ROI calculations.** Insert the social risk NPV and the political risk NPV as line items in the normal ROI calculation. Provide schedules that show the calculations for benefits, costs, probability, and expected value for each social and political risk. This will allow senior managers to see both the results and the processes by which they were obtained.

## Defensive and Innovative Risk Management

Identifying and measuring social and political risks, and integrating them into ROI calculations, provides the basis for establishing a comprehensive risk management strategy. While financial risk can be shared or transferred (to joint venture partners, through insurance, or to other entities), this is often impossible with social and political risks. Companies operate in settings where they can be held liable for the misdemeanors of their suppliers or related businesses operating under the same name.

Managing social and political risk includes devising policies and programs to identify, measure, monitor, respond to, and report on issues that generate risk.

There are five methods for managing corporate risk:

- Insuring against risk
- Avoiding risk
- Mitigating risk
- Innovating around risk
- Some combination of the above

Insuring against risk is one of the most conventional methods for managing it. Many insurance policies, however, do not fully cover some of the biggest crises that may arise from political and social issues, such as total expropriation of property, forced joint venture partnerships with the government, or forced renegotiation of contracts. Avoiding certain risks is another option when approaching social and political issues, and it is best achieved by preemptively



identifying threats and seeking alternatives. For example, to avoid potential political risks, a company may decide to open operations in a less risky geography. To mitigate a social risk like unpaid overtime, it may implement a working-hours monitoring system in the factories from which it sources its products.

By undertaking the exercise of measuring political and social risk, companies become skilled at recognizing, managing, and even innovating around risk and opening up new business opportunities. In fact, by focusing solely on the downside of risk, companies can overlook opportunities that provide significant possibilities for innovation and creating competitive advantages.

Consider General Electric (GE), which in 2005 launched “ecomagination,” its commitment to addressing environmental challenges. The company recognized an opportunity where many others saw only risk. While other companies were litigating and lobbying to avoid liability for their environmental impacts, GE capitalized on growing concerns about the environment by developing products such as energy efficient light bulbs and hybrid locomotives. Ecomagination is a business strategy driving the company’s growth—2006 annual revenue from this program exceeded \$12 billion—and GE is not alone. Many companies are discovering opportunities to make money from issues traditionally seen as too risky.

McDonald’s is another example of a company that transformed risk into opportunity. While the fast-food industry as a whole has been under attack for contributing to increased obesity, McDonald’s recognized that its customers’ preferences were changing and it responded with healthier foods. McDonald’s began offering salads that were more appealing, and it partnered with Newman’s Own to provide all-natural gourmet salad dressing and premium coffee. It now also provides sliced apples in Happy Meals. As a result, McDonald’s sales and share price have increased in an age when other fast-food chains are scrambling to respond to the threats of obesity litigation and changing customer preferences.

Innovation is central to companies that identify and seize opportunities where others see only risk. Innovation can be a breakthrough idea; it can also be a new model for doing business in a seemingly risky or inaccessible market.

## Outlook in the Twenty-First Century

In an increasingly globalized world, companies are becoming aware of the need to better identify and manage social, environmental, and political risks. These risks can emerge

along supply chains and from regions in which companies conduct business. Sometimes the risks are related to products or methods of production and their effects on the environment. Corporations are simultaneously beginning to look at these risks, once considered only threats, and creating strategies to capitalize on the sustainability issues inherent in them: employee issues (strategies to address child labor, worker overtime); consumer issues (strategies to address and capitalize on obesity and eating more healthily); environmental issues (strategies to mitigate pollution, global warming, etc. through better methods of production and green products). To realize benefits, risks must be evaluated and handled within a system that adequately identifies, quantifies, and mitigates them. An increasingly robust treatment of risk issues has enabled some companies to identify opportunities to help them gain a competitive edge. As these successes become more widespread, so likely will the practice of monetizing social, environmental, and political issues for inclusion in financial reports and project plans.

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See also Accounting; Climate Change Disclosure; Corporate Citizenship; Fast Food Industry; Financial Services Industry; Human Rights; Investment, CleanTech; Investment, Socially Responsible (SRI); Leadership; Marketing; Performance Metrics; Social Enterprise; Supply Chain Management; Sustainable Value Creation; Transparency

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