

Integrating Social and Political Risk Into ROI Calculations

As global interconnectedness increases, corporations face the challenge of integrating social and political risks into management decisions. These risks include political instability, business corruption, child labor practices, environmental pollution, and others.

Despite increased risks and associated costs, most companies do not currently integrate these issues into operational and capital investment decisions. Consider, however, the repercussions that a company like BP currently faces as a result of not properly taking into account the social and political consequences related to a massive blowout at one of its oil rigs.

The BP case serves as a warning that these risks must be integrated into the decision-making process. Though both managers and academic researchers acknowledge the need for better integration into decision making, social and political risks are not commonly included.

About This Article

This article describes current practice in identification, integration, measurement, and management of social and political risks. It also offers a practical method for integrating these risks into

Recognizing sources of risk that many companies ignore

the financial analysis necessary for a more robust enterprise risk management system that improves investment and operations decisions.¹

Background: The Risk Landscape

If there was ever a question as to the importance of evaluating social and political risk, the issue was certainly clarified on April 20, 2010. That was the day that BP's Deepwater Horizon oil drilling rig exploded in the Gulf of Mexico, leading to a range of expensive consequences for the company.

At approximately 9:45 PM on that day, a bubble of methane gas shot up the drill column, expanding as it moved toward the Deepwater Horizon rig. Upon reaching the surface, the gas quickly exploded, igniting the oil that had followed it up the column. For two days, the platform burned with flames fed by the oil and gas still gushing from the Macondo oil well. On April 22, Deepwater Horizon sank to the ocean floor, collapsing the drill column as it slowly descended (Schwartz & Weber, 2010).

The Macondo well was not permanently sealed until September 18, 2010. By that time, it

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had spewed an estimated 185 million gallons of oil into the Gulf of Mexico (Wilson, 2010).

The consequences of the Deepwater Horizon blowout are vast and varied. As a direct result of the explosion, 11 engineers and rig crew lost their lives, with another 17 employees suffering injuries. More than 400 species face severe threats from the environmental damage caused by the oil spill (CBS News, 2010).

On June 16, 2010, BP (the owner of the Macondo well) agreed to set aside \$20 billion to compensate victims for the economic effects of the Gulf Coast oil spill. This amount is in addition to the over \$3 billion that BP has already spent on cleanup efforts.

Politically, the BP oil spill will certainly affect the future of deepwater drilling. Only a few weeks before the spill, President Obama had proposed opening areas of the US coast to deepwater drilling.

After the spill, he was forced to extend a moratorium that suspended deepwater drilling for six months (Straub, 2010).

Although the causes are still in dispute, many sources indicate that the Deepwater Horizon oil spill was a direct result of a failure to activate the well's blowout preventer. Both of the switches that the rig had in place to activate the shut-off valve failed, resulting in inability to contain the oil.

Had BP fully considered the social and political risks and costs that it faced in the case of a massive blowout such as the one that occurred on April 20, the company might have taken additional precautions that could have prevented the blowout. For example, both Brazil and Norway require installation of a backup device called an acoustic trigger. This precaution, which would have cost the company about \$500,000 to imple-

ment, might have been able to cut off the flow of oil (Gold, Casselman, & Chazan, 2010). Instead, BP is facing billions of dollars in insurance claims and cleanup costs.

Despite a broadening risk landscape, most companies still do not adequately integrate social and political issues into operational and capital investment decisions. However, integration of these risks is imperative for companies operating in today's globally interconnected marketplace.

Companies often find it challenging to integrate the risks associated with issues such as government instability, child labor practices, terrorism, and environmental pollution into management decisions. Although the need for—and the potential benefits of—a more robust methodology for incorporating such issues into the risk management process are broadly recognized (Diamonte, Liew, & Stevens, 1996; Kobrin, 1979; Meldrum, 2000; Minor, 2003; Khanna, Palepu, & Sinha, 2005), an adequate methodology has been largely absent.

As a result of the new risk landscape faced by companies, there has been increasing concern about organizations' ability to both identify and measure social and political risks. A clearer recognition of the importance of integrating a broader set of risks into management decisions (Sheffi & Rice, 2005), as well as developing expertise in measuring the impact of social and political issues on financial performance, requires that managers effectively include such issues in financial calculations.

Current Practice Among Business Corporations

According to a poll by the American Institute of Certified Public Accountants, only 16 percent of companies formally integrate social and political risks into return-on-investment (ROI) calculations (Bekefi & Epstein, 2008). Even when companies do consider these risks, they often treat them intuitively or relegate them to a footnote,

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without incorporating the risks in the actual calculation of ROI.

In effect, this places a value of zero (\$0) on a set of potential risks that can have significant negative impacts on corporate earnings, shareholder value, and brand value.

Current methods for quantifying social and political risk include the following:

- Country scorecards, risk ratings, and indexes (Bremmer, 2005; Kurtzman, Yago, & Phumiwasana, 2004): These methods provide an overview of key issues (such as the particular concerns associated with countries where corporations may be operating) but lack the specificity needed for individual corporations or particular projects.
- Statistical analysis: This approach uses Monte Carlo simulations that generate charts, graphs, and dynamic models (Swiss Federal Institute of Technology, 2006), but these cannot be integrated into financial evaluations.
- Adjusted discount rate and cost of capital: This method integrates social and political risks into financial modeling through a discount rate or cost-of-capital calculation that is applied to cash-flow calculations. It can be difficult to implement, and the risk ratings it uses are too broad to achieve the needed objectives.

Although the methods currently available to companies can help account for social and political risk to some degree, they generally are inadequate. In practice, companies often do not use them. When they do, their evaluations frequently are not monetized.

Variations in Risk Exposure

Some businesses have a heightened exposure to social and political risk. Variations in risk exposure can depend on factors such as location of

facilities, product and customer characteristics, nature of employment relationships, and industry attributes.

There are well-known social risks associated with many industries, including mining, footwear, apparel, toys, and chemicals. There are also varying social and political risks related to specific countries or regions of the world. To properly manage such risks, corporations need to make improvements in analysis, evaluation, preparation, mitigation, and response planning.

If Integrating These Risks Is So Critical, Why Is It Not Currently Being Done?

Even though social and political issues are increasingly having an impact on business, companies have not developed an adequate method for integrating these risks into management decision making. If these risks are considered at all, they generally are not made explicit. Company evaluations do not include risk estimates as part of their capital resource-allocation decisions, and managers may have only a general sense of the risks involved when they make decisions.

If integrating social and political risks into corporate decision making is so critical, why are companies failing to do it? There are at least two explanations.

Concerns About Reliability of Information

First, capital investment decision making relies primarily on information from the financial accounting system. Social and political risks are not typically included because they are thought to be unmeasurable and information about them often is considered to be unreliable.

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While reliability and verifiability are important, providing relevant information with the best monetary estimate of the impact and integrating it into operational and capital investment decisions could dramatically improve the managerial decision-making process.

Problems With Information Format

Second, social and political risks typically are not measured or are presented as estimates that cannot be integrated into an investment decision model. Usually, an explicit recognition of social and political issues is done in narrative form in the hope that senior managers can

integrate these considerations in a nonfinancial format or in a more general way into their investment decisions. In practice, such analysis often is ignored in decision making since it is not submitted in a similar

format to the financial calculations used for other investment requests.

Ignoring Critical Elements

Regardless of the reason, the failure to integrate social and political risks into investment decisions in a meaningful way has left critical elements out of current resource-allocation decisions. Even as companies invest in increasingly risky ventures (including diversification into complex geographic locations and extensive supply-chain networks), they have not used the tools available to more rigorously analyze their alternatives. The methodologies that are currently used by corporations have proven to be insufficient and detrimental, although the technological tools needed to collect and assimilate data exist.

A New Model for Social and Political Risk Assessment and Integration

Companies can more effectively integrate social and political issues into operational and capital investment decisions as part of their risk management process. Effective risk management involves recognizing the sociopolitical and corporate environments that might impact risk, identifying risks, evaluating potential effects, measuring these impacts, identifying and analyzing possible solutions, adopting the most appropriate solutions for managing risks, communicating results, and monitoring risks as they continue to evolve.

Identifying Risk—and Avoiding Surprise

Companies often function within the context of complex social and political environments. It is therefore critical to identify risks that can impact company value as the first step in the process of measuring and managing political and social risk. According to a survey of 140 corporate strategists, two-thirds had been surprised by as many as three high-impact competitive events in the past five years, and 97 percent of respondents reported that their companies lacked an early warning system (Day & Schoemaker, 2005).

There are many social issues that can impact a company doing business in the national and international spheres, in both developing countries and the developed world.² Some industries are more likely to experience these risks than are others. For example, businesses with big installations (such as factories, ports, mines, and refineries) can be the target of dissatisfaction and unrest in a local population.

Understanding Political Risk

Political risk can generally be understood as execution of political power in such a way that it threatens a company's value. There are two types of political risk that are relevant to companies

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doing business internationally: industry- and company-specific political risk and country-specific political risk.

Industry- and company-specific political risk is directed at one industry or company. By contrast, sector, provincial, and country-specific political risk is non-company-specific but rather is spread widely across a geographic area. This can include a civil war, drastic changes in foreign currency rules, or sweeping changes to the tax code.

Regardless of the source, understanding political risk relevant to a company means recognizing the difference between political issues that can impact corporate performance and situations that are dramatic but have no financial impact on the company.

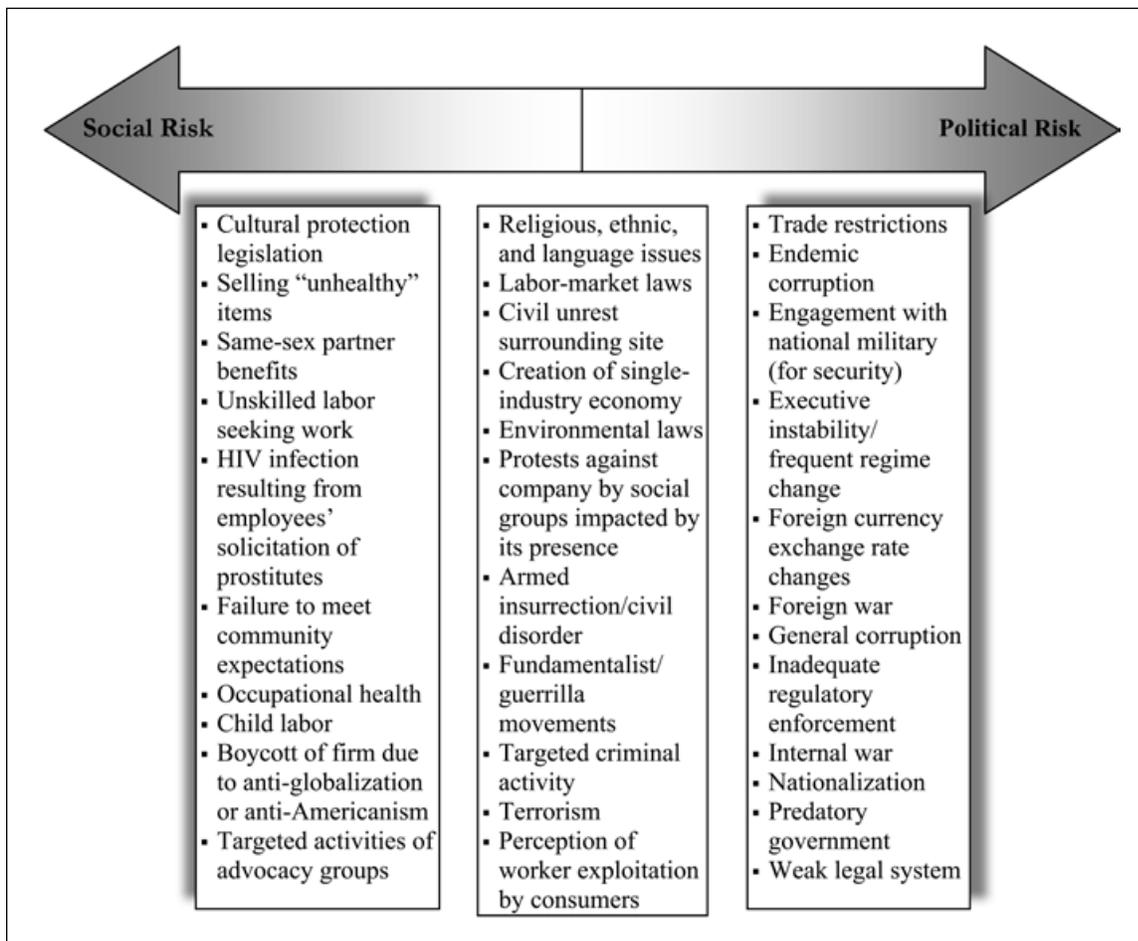
A Continuum of Risk

The distinction between social and political risks is often blurred. Therefore, we consider these issues as falling on a continuum, as illustrated in **Exhibit 1**. The categories highlighted in this exhibit represent only some of the most critical social and political risks that global companies are facing today. Each organization should generate its own list of social and political risks that are most relevant to its businesses and the business environments in which it operates.

Developing a Risk Profile

Effective management of social and political risks means first being able to identify the risks facing the firm and integrating them into terms

Exhibit 1. The Social-Political Risk Continuum



that can be included in a larger risk management framework. This can aid decision makers in developing a situation- or project-specific risk profile that will help reduce the likelihood of unwanted surprises, minimize the negative impacts that external factors can have on the business, and maximize the potential for creating solutions.

There are two elements to identify in the process of developing a risk profile (both are discussed in the paragraphs that follow):

- Enterprise risk sources
- Company- or project-relevant social and political risks

Enterprise Risk Sources

Enterprise social and political risk sources can arise from media coverage, operation location, suppliers, and customer base, among many other factors. When crafting a situation- or project-specific integrated risk profile that includes social and political issues, the details of the profile will depend on the firm's sector, industry characteristics, products, customers, geographic location, and employment practices. The differences among companies in these areas are critical considerations.

Identifying the company's unique sources of risk is useful for creating a company risk profile and helpful in honing the list of issues that could impact the company. Often, companies arbitrarily assign higher risk premiums to projects in unfamiliar locations, and thereby fail to focus management's attention on possible strategic and financial actions that can be taken to reduce risk (Lessard, 1996).

In order to begin the process of identifying social and political risks that may impact a com-

pany or product, it is critical to understand the setting in which the firm is doing business, and how that might generate risks. Risk may emerge from a range of sources. Some specific examples include the following:

- *Operation location:* Companies looking to operate in countries where an authoritarian government exists risk being pushed out by state-owned corporations in which government officials may be financially invested (Bremmer, 2010).
- *Reaction from society or from groups of people who are affected by, or who perceive an impact from, the company's business activities:* A BP press release dated May 24, 2010 (approximately five weeks after the explosion of the Deepwater Horizon oil rig), stated that BP was already facing over 23,000 claims from individuals and businesses affected by the explosion and the resulting oil spill (BP, 2010). These claims included lawsuits brought by families of workers killed in the explosion and claims from fishermen affected by the closing of oyster beds and fishing areas in the Gulf.
- *Employment practices that are deemed unacceptable to society:* In 2005, Wal-Mart paid \$135,540 to settle a lawsuit brought by the US Department of Labor alleging 24 violations involving employment of teenagers and allowing them to operate hazardous equipment (Associated Press, 2005). While the financial impact of the settlement may have been insignificant to the company, the negative effects on its reputation are still reverberating.

Exhibit 2 outlines some of the social and political risks generated by key sources (products, sector, customers, geographic location, and employee base), along with examples of industries that have been impacted by these issues. In this exhibit, risks are disaggregated into two catego-

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Exhibit 2. Examples of Risk Sources and Correlated Potential Risks

Source	Examples	Risk	
		Risk to Society	Risk to Companies
Product	Shoes, clothing, toys	<ul style="list-style-type: none"> Potentially poor working conditions, including long hours and low pay 	<ul style="list-style-type: none"> Reputation affected by consumer accusations of sweatshop conditions Cost of consumer boycotts/protests and pressure from employees once the issue becomes public
Sector	Retail	<ul style="list-style-type: none"> Selling products that have defects or that are tied to sensitive issues 	<ul style="list-style-type: none"> Companies selling products such as diamonds, shoes, toys, etc. could be faced with the same risks as the producers and may be met with lawsuits and/or boycotts
Customers	Socially responsible consumers	<ul style="list-style-type: none"> Incorrect use of certain products 	<ul style="list-style-type: none"> Reputation issues Consumer boycotts Inability to recruit talent
Geo-graphic location	Unstable developing country	<ul style="list-style-type: none"> Even if government is supportive of company, local population could be dissatisfied 	<ul style="list-style-type: none"> Potential for corruption, creating difficult situations when trying to uphold home-country law (such as US Foreign Corrupt Practices Act) Targeting by insurgents or other non-government actors
Employees	Children	<ul style="list-style-type: none"> Working at young ages 	<ul style="list-style-type: none"> Reputation affected by consumer disapproval about use of child labor Violation of child labor laws

ries: risks to society (which could create dissatisfaction in the community at large) and risks that could potentially feed back and have a negative impact on the company itself. Analyzing these characteristics to understand potential impacts is a critical first step in developing a risk profile and estimating profitability.

Company- or Project-Relevant Social and Political Risks

After identifying general enterprise risk sources and issues, it is important to also determine the company- or project-relevant social and political risks. These can vary depending on specifics such as location within a country and may be more nuanced than those previously identified.

Often the discussion of risk management focuses on financial issues to the exclusion of other, similarly important matters. Additional corporate strategic risks can emerge from sources that, while often not new, present a threat to the firm stemming from social or political issues.

Employee Risk Awareness: An Early Warning System

While the CEO and board of directors are the ultimate risk managers in the company, employees throughout the organization can also integrate risk management into their jobs. Certain employees may be in a particularly good position to spot risks at an early stage. Examples might include:

- a line manager at a plant in a developing country who becomes aware of negative community reactions to the corporation through discussions among workers and
- personnel in the public affairs department who become aware of negative government attitudes to the firm as they lobby government representatives.

These first signals may herald issues that can become much larger problems if they are ignored.

Risk to Company Reputation

In addition to social and political issues, the public's perception of companies and their reputation is an important component of risk (Fombrun & Shanley, 1990). While a good reputation can have potentially positive outcomes (such as enabling the firm to gain enhanced access to capital markets, attract better employees, attract investors, and charge premium prices), the inverse can also be true. Damage to a company's reputation from sources such as negative publicity and costly litigation can lead to loss of revenue, a decline in customers, or the exit of key employees (Argenti, 2005).

Understanding Reputation Risk

Negative perceptions about a corporation can emerge from the social and political issues with which it is involved, generating reputation risk for the company. Reputation issues can have as much negative impact on the organization as the underlying issues themselves, and can account for some of the largest costs due to lost sales and profits.

Increased consumer interest in company activities and the growth of Internet-savvy professionalized activist organizations that seek to effect social change by targeting corporations have generated new challenges for companies (Spar & LaMure, 2003).

Managing Reputation Risk

Like other social and political risks, reputation risk is something that companies must manage effectively. Companies can begin to manage these issues by identifying the stakeholders that may be affected by, or may have an impact on, a particular issue. Stakeholders often must be iden-

tified on an issue-by-issue basis and may be determined by location. Stakeholders can include local communities, customers, suppliers, employees, social activist groups, and home- or host-country governments.

Polling firms, a public relations team, and information obtained from other companies can assist in determining which stakeholders might view particular social and political issues negatively, potentially generating reputation risk. Evaluating a firm's stakeholders and the reputation risks that may emanate from them is an important process in the creation of the corporate risk profile.

Identifying reputation risk that is generated by these parties follows the same steps as the process for identifying political and social risk. Risk identification does not need to be a long and costly process. Even a few people spending a few hours discussing and identifying risks and assigning probability values to them will be helpful, if not precise—and is better than no deliberation on risk at all.

Embedding Risk Identification in Corporate Activities

The process of identifying social and political risks, along with the associated reputation risks, for a company or project should generate a company- or project-specific risk catalogue that includes all significant relevant risks and their sources. This identification process can combine internal company expertise and advice from external sources. It is possible, and likely most useful, to combine elements of all the methods discussed in the following paragraphs.

Internal Analysis

Gathering information on risks can be undertaken by employees who are specifically hired for this purpose. It can also be handled by personnel who are located in key geographic areas and

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who interface with local and national social and political entities.

External Analysis

Boutique political risk analysis firms can supply country-specific reports. In some cases, they can calculate national ratings based on factors such as risks from government, society, security, and economic issues.

Stakeholder Scanning

Gathering information from stakeholders (such as suppliers, consumers, and surrounding communities) via surveys or interviews is another method of culling data on social and political risk.

Social and Political Risk Assessment and Measurement

Improving Resource-Allocation Decisions

Business resource-allocation decisions are primarily based on ROI calculations. To make the analysis more complete and improve operational and capital investment decisions, political and social risks must be included in the conventional ROI calculations, making them more explicit and relevant. Moreover, the traditional ROI calculation should be modified to include “real options” thinking for a more nuanced and relevant result.

Real-Options Analysis and ROI Calculations

Real-options analysis is a valuable approach that should be used to integrate social and political risks into corporate financial decision making. An option is a right, but not an obligation, to take an action (such as buying a property or expanding an investment) at a predetermined price during a predetermined period of time.

Real-options thinking adds flexibility to the otherwise static net present value (NPV) calculations necessary for decision making.

Traditional discounted cash flow evaluation assumes that plans are fixed once decisions are made about a project and that investment is a one-time choice rather than an ongoing process informed by new information and ongoing evaluation. By contrast, real-options thinking incorporates uncertainty and the potential for decisions to be modified as a result of the continuous learning that is inherent in project planning and successful business strategy (Krychowski & Quélin, 2010).

Real-options thinking can accommodate initial investments that have longer time horizons for achieving a return, and it builds in the possibility of a variety of outcomes and responses to information as it unfolds (Luehrman, 1998a, 1998b). Additionally, the flexible nature of real-options thinking is especially useful in evaluating how socially responsible practices may yield benefits by allowing companies to better formulate their responses to legal, competitive, or other contingencies (Sprinkle & Maines, 2010).

Real-options thinking is particularly applicable in industries that must invest in developing a range of products, knowing that many of them will fail. For example, pharmaceutical companies must invest in research and development for a host of drugs, many of which will never make it to market. Such industries effectively invest in a portfolio of options that have different risk-return characteristics.

Evidence suggests that real-options analysis is used heavily throughout the financial industry, with methods such as the Black-Scholes model. By contrast, there is little evidence that real-options calculations are commonly used in non-

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financial settings. When real options are included at all, it is often done using ranges or as a discussion of underlying assumptions, rather than by including point estimates.³

Real-options thinking is very helpful to the analysis of social and political risk, and should be included in the decision-making process. But it generally must be used in the context of formal submissions for capital resource allocation approval, which continue to be based on ROI or NPV analyses. As one article noted:

Return on investment is the most popular approach to measure performance. ROI is popular for two reasons: it blends all the ingredients of profitability—revenues, costs, and investment—into a single percentage; and it can be compared with the rate of return on opportunities elsewhere, inside or outside the company. (DeBruine & Sopariwala, 2006)

If built on a foundation of real-options thinking, the ROI form that CEOs and CFOs are most familiar with can provide a comprehensive approach that integrates difficult-to-measure risks and improves decision making.

Integrating Social and Political Risk Into Financial Decision Making

Quantifying social and political risks allows companies to integrate these risks into a financial model, thereby incorporating social and political issues into traditional risk analysis and decision making. This allows companies to recognize the significant costs that can arise from ignoring issues that have become major risks in global business.

Measuring social and political risks and integrating them into ROI calculations is a reasonably easy process, as illustrated in **Exhibit 3**. The steps involved are discussed in the paragraphs that follow.

Exhibit 3. Steps to Measuring Social and Political Risk

1. Generate options using real-options thinking
2. Calculate benefit of each risk issue
3. Calculate potential costs, including reputation
4. Estimate probability of occurrence
5. Calculate expected value of each risk
6. Calculate NPV of each risk
7. Aggregate NPVs of social risks
8. Aggregate NPVs of political risks
9. Calculate expected value ROI

Step 1: Generate Options Using Real-Options Thinking

Thinking about the various options open to a company that could potentially minimize risk helps to clarify where risks lie and what their potential impact could be on the company.

Step 2: Calculate Issue Benefit

Monetizing the savings and costs associated with each issue provides a measure of the costs of social and political risk. Any monetary savings resulting from participating in a socially responsible activity represents the issue benefit, which is generally assigned a positive value. For example, any savings resulting from implementing an acoustic trigger and preventing a well blowout would represent the issue benefit of that activity.

Step 3: Calculate Risk Costs, Including Reputation Risk

Each risk is assigned a value in order to understand the risk costs of each activity. For example, the cost of possible repercussions (such as cleanup costs) resulting from a company's decision not to take further precautions against well blowouts would reflect the risk costs.

Reputation risk, which is considered a secondary cost resulting from social and political risk, can be determined by identifying which

stakeholders may view certain social and political issues negatively.

Step 4: Estimate Probability of Occurrence

The company should estimate the potential likelihood (or probability) that each risk identified in Step 3 might occur and cause damage to the company. A footnote can be included in the ROI analysis indicating that the percentages arrived at are midpoints (which would most likely settle within a range).

Step 5: Calculate Expected Value of Each Risk

Calculate the expected value for each risk by multiplying the estimated cost of the risk by the percentage estimated probability of its occurrence. Some have suggested that the probability of an oil spill greater than 10,000 barrels occurring in the central Gulf is 99 percent (Alexander, 2010). Based on this assumption, if the cost of a blowout is estimated at \$20 billion, then:

$$\text{Blowout Risk Expected Value} = (\$20 \text{ billion}) \times (99\%) = \$19.8 \text{ billion}$$

After steps 1 through 5 have been completed, the NPV of each issue can be calculated. (Note that each issue has risks that can emerge at different times.) NPV is calculated as the outcome of the equation at the bottom of the page.*

Step 6: Calculate NPV of Each Risk

Since NPV calculations for social and political risk are completed in the same way as traditional NPV calculations, companies can use the normal method of discounting back using a set discount

rate for each identified risk. These values are then listed on a schedule included with the normal project ROI calculations.

Steps 7 and 8: Aggregate NPVs of Social Risks; Aggregate NPVs of Political Risks

Once all NPVs for social and political risks have been calculated, the sum of the social-risk NPVs and the sum of the political-risk NPVs should be inserted as line items in the normal ROI calculation.

Schedules should be provided showing the calculations of benefit, expected value, likelihood, and costs of social and political risks, as illustrated in the sample Schedule A shown in **Exhibit 4**, which pertains to social risks. Another schedule (Schedule B) can be used to list political risks, along with their potential costs, likelihoods, and NPV.

Step 9: Calculate Expected Value of ROI

The results of calculations for Schedules A and B can be integrated into traditional ROI calculations.

Conclusion

As was seen with the Gulf oil spill disaster, a failure to adequately incorporate social and political risk into financial decision making can have dire consequences and costs. To prevent similar situations in the future, corporate risk-management practices must integrate social and political risks in order to effectively manage real risks and improve the resource-allocation process.

This can be accomplished by properly identifying risks, and then measuring, monetizing, and

$$\begin{array}{c}
 \text{expected value} \\
 \hline
 \text{* PV benefits} - \underbrace{\text{PV}[(\text{cost}_1) \times (\% \text{ likelihood}_1) + [(\text{cost}_2) \times (\% \text{ likelihood}_2) \dots \text{Risk}_N]}_{\text{net}} = \text{cost of risk} \\
 \downarrow \\
 \text{calculate NPV of issue}
 \end{array}$$

Exhibit 4. Example of Risk Schedule Items

SCHEDULE A		COSTS OF SOCIAL RISKS			
Risk	Benefit	Cost Types	Costs	Likelihood	Expected Value
Civil unrest surrounding site	\$.....	▪ Costs of engaging employees skilled in negotiating with protesters	\$..... %	\$.....
		▪ Cost of engaging extra security personnel	\$..... %	\$.....
Infringement of indigenous lands	\$.....	▪ Costs if litigation in international courts	\$..... %	\$.....
		▪ Cost of remunerating population	\$..... %	\$.....
Reputation costs, including lost sales and profits					\$.....
				NPV	\$.....

including them in a modified ROI calculation. Such a process enables social and political risks to be adequately accounted for, rather than being relegated to a footnote in financial calculations. It also allows companies to formulate mitigation strategies that may enable avoidance of risk, or generate cost savings if the risk emerges.

Social and political risks can devastate a company's operations. While estimating the impact of these risks is a somewhat inexact process, including them in ROI calculations is crucial to effective enterprise risk management. It allows companies to reflect the full extent of costs and risks inherent in corporate projects, which is critical for proper analysis.

Notes

1. This article draws upon a prior research study by Bekefi and Epstein (2006).
2. The distinction between developed and developing countries is often based on levels of economic development, which usually are closely associated with social development in terms of education, health care, and life expectancy. The United Nations' Human Development Index serves as a measure of development, as does the World Bank's Country

Classification Database, which uses gross national income to classify economies and their level of development.

3. For more discussion of real options, see Luehrman (1998a, 1998b).

References

Alexander, K. (2010, August 19). The 2010 oil spill: MMS/BOEMRE and NEPA. Congressional Research Service Report R41265. Available online at <http://ncseonline.org/nle/crs/abstract.cfm?NLEid=2281>

Argenti, P. A. (2005, September 30). The challenge of protecting reputation. *Financial Times*, p. 3.

Associated Press. (2005, February 12). Wal-Mart settles child labor cases: Company denies charges but agrees to pay penalty. Available online at <http://www.msnbc.msn.com/id/6958916/rssuserland>

Bekefi, T., & Epstein, M. J. (2006). Integrating social and political risk into management decision-making. *The Society of Management Accountants of Canada, the American Institute of Certified Public Accountants, and The Chartered Institute of Management Accountants*.

Bekefi, T., & Epstein, M. J. (2008). Measuring and managing social and political risk. *Strategic Finance*, 89(8), 33–41.

BP. (2010, May 24). Update on Gulf of Mexico oil spill response. BP press release. Available online at <http://www.bp.com/genericarticle.do?categoryId=2012968&contentId=7062283>

Bremmer, I. (2005). Managing risk in an unstable world. *Harvard Business Review*, 83(6), 51–60.

Bremmer, I. (2010, July 13). BP's lucky it spilled in U.S., not

- Chinese, waters. USA Today. Available online at http://www.usatoday.com/news/opinion/forum/2010-07-14-column14_ST_N.htm
- CBS News. (2010, May 25). Gulf oil spill, by the numbers. Available online at <http://www.cbsnews.com/stories/2010/04/30/national/main6447428.shtml>
- Day, G. S., & Schoemaker, P. J. H. (2005). Scanning the periphery. *Harvard Business Review*, 83(11), 135–148.
- DeBruine, M., & Sopariwala, P. R. (2006). Using capacity utilization to adjust ROI performance drivers. *Journal of Corporate Accounting & Finance*, 17(2), 63–69.
- Diamonte, R. L., Liew, J. M., & Stevens, R. J. (1996). Political risk in emerging markets. *Financial Analysts Journal*, 52(3), 71–76.
- Fombrun, C., & Shanley, M. (1990). What's in a name? Reputation building and corporate strategy. *Academy of Management Journal*, 33, 233–258.
- Gold, R., Casselman, B., & Chazan, G. (2010, April 28). Leaking oil well lacked safeguard device. *Wall Street Journal*. Available online at <http://online.wsj.com/article/SB10001424052748704423504575212031417936798.html>
- Khanna, T., Palepu, K. G., & Sinha, J. (2005). Strategies that fit emerging markets. *Harvard Business Review*, 83(6), 63–76.
- Kobrin, S. (1979). Political risk: A review and reconsideration. *Journal of International Business Studies*, 10(1), 67–80.
- Krychowski, C., & Quélin, B. V. (2010). Real options and strategic investment decisions: Can they be of use to scholars? *Academy of Management Perspectives*, 24(2), 65–78.
- Kurtzman, J., Yago, G., & Phumiwasana, T. (2004). The global costs of opacity. *MIT Sloan Management Review*, 46(1), 38–44.
- Lessard, D. R. (1996). Incorporating country risk in the valuation of offshore projects. *Journal of Applied Corporate Finance*, 9(3), 52–63.
- Luehrman, T. A. (1998a). Investment opportunities as real options: Getting started on the numbers. *Harvard Business Review*, 76(4), 51–67.
- Luehrman, T. A. (1998b). Strategy as a portfolio of real options. *Harvard Business Review*, 76(5), 89–99.
- Meldrum, D. H. (2000). Country risk and foreign direct investment. *Business Economics*, 35(1), 33–40.
- Minor, J. (2003). Mapping the new political risk. *Risk Management*, 50(3), 16–21.
- Schwartz, N., & Weber, H. R. (2010, May 8). Bubble of methane triggered rig blast. Associated Press. Available online at <http://www.physorg.com/news192527338.html>
- Sheffi, Y., & Rice, J. (2005). A supply chain view of the resilient enterprise. *MIT Sloan Management Review*, 47(1), 41–48.
- Spar, D. L., & LaMure, L. T. (2003). The power of activism: Assessing the impact of NGOs on global business. *California Management Review*, 45(3), 78–101.
- Sprinkle, G. B., & Maines, L. A. (2010). The benefits and costs of corporate social responsibility. *Business Horizons*, 53, 445–453.
- Straub, N. (2010, May 27). Obama to extend deepwater drilling moratorium. *New York Times*. Available online at <http://www.nytimes.com/gwire/2010/05/27/27greenwire-obama-to-extend-deepwater-drilling-moratorium-8011.html>
- Swiss Federal Institute of Technology. (2006). Handbook on methods of political risk analysis: Results and implications of the survey. Zurich: Crisis and Risk Network.
- Wilson, E. K. (2010, September 27). Oil spill's size swells. *Chemical & Engineering News*, 88(39), 14.

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