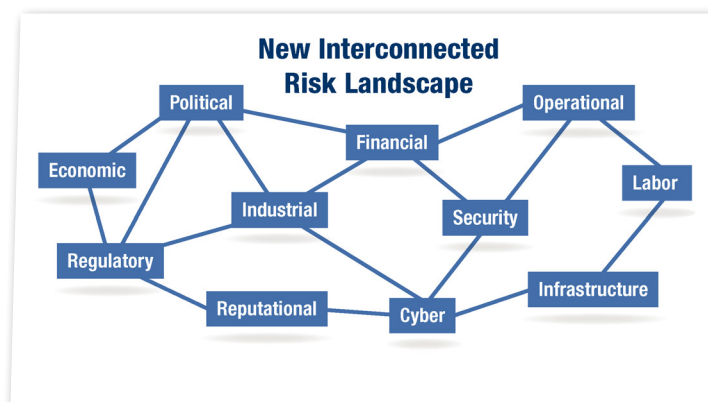


Custom Risk Analysis

New tools and solutions for next-generation risk analysis

Coping with new risk realities

Companies are operating in a more complex world, where global markets are interdependent, firms are bound together through intricate supply chains, and change is accelerated by digital technology. In such a dynamic environment, risks can emerge suddenly and cascade instantly across borders, markets, and industries, with impacts that can be both severe and hard to predict. Shocks on one side of the world can be felt everywhere, as can be seen in the current slowdown in China and its dampening effect on commodity demand and inter-regional trade.



As a consequence, companies are seeking advanced analytical tools to help them analyze and navigate the widening maze of external risks. These interconnected risks start with political and economic triggers and extend to operational, regulatory, labor, security, and cyber risks. Generic risk ratings are no longer enough: firms require more precise, predictive tools that can anticipate emerging risks, stress-test vulnerabilities, predict the timing of risk events, and gauge their impact and knock-on effects. To be effective, these risk tools must not just be sensitive to risk linkages, but also to the industrial mix and global footprint of a company's business.

A new approach to risk analysis

Control Risks and Oxford Economics have joined forces to provide the advanced analytical tools and custom solutions that companies need to make sense of today's complex and fast-moving environment. By combining Control Risks' extensive geopolitical, operational, and security expertise with Oxford Economics' rigorous economic forecasts and models on 200 countries and 100 industries, we are able to provide the most complete risk analysis in the market. Our analysis covers a full range of interconnected external risks, including:

- **Political:** such as government change, sovereign risk, sanctions, political unrest
- **Economics:** including risks to growth, employment, trade, and investment
- **Financial:** relating to interest rates, foreign exchange, and equity and commodity prices
- **Regulatory:** such as trade restrictions, fiscal policies, and exchange controls
- **Industrial:** from production and market shifts to operating costs
- **Operational:** including contract risk, expropriation risk, trade risk
- **Security:** associated with war, terrorism, and political violence
- **Reputational:** including third-party risks, corruption risks, integrity risks
- **Labor:** from strikes to disruptions in the supply and demand of talent
- **Infrastructure:** including roads, power supplies, and other local services
- **Cyber-risks:** such as cyber-espionage, cyber-crime, and cyber-activism

Our customized solutions

The depth of our political, economic, operational, and industrial analysis, combined with the experience of our extensive global network of analysts and our sophisticated use of world-class econometric models, enable us to tailor our risk analysis to your specific requirements and the nuances of your business. When developing a customized solution, we begin by getting a thorough understanding of your risk profile. In which markets, industries, and countries do you operate? What are your linkages through supply chains, distribution networks, and partners? Where are your firm's greatest risk exposures and vulnerabilities? What are your specific risk objectives and decision-support needs?

Once we establish your risk profile, we can agree on a risk analysis solution that best meets your needs and provides you with the right analysis, when you need it. Our custom solutions draw on five types of advanced risk analysis:

1. Risk identification

- Identify the range of traditional and non-traditional risks that can affect your business.
- Determine the risk linkages, such as between economic, political, and financial events.

2. Risk forecasting

- Set up early-warning systems for spotting emerging risks and forecasting new risks.
- Use scenario analysis to gauge vulnerability to future risks, and assign probabilities.



3. Risk assessment

- Measure the full impact, including the severity, speed, and timing of impact.
- Assess the spillover effects on countries, markets, and risk categories.

4. Risk monitoring

- Track changes in the global risk landscape on an ongoing, events-driven basis.
- Draw on quantitative and qualitative insights, and the best local market intelligence.

5. Risk mitigation

- Develop risk management strategies that minimize your firm's exposure to risk.
- Provide ongoing support, crisis management planning, and targeted problem solving.

The growing use of risk analysis tools

A 2014 study conducted by PwC and Oxford Economics showed that companies are expanding their use of risk analysis techniques, including more advanced tools such as scenario planning and early-warning systems. The survey of 1,800 global executives provided insight into the percentage of companies now or soon to be using the following techniques:

83% Risk rating system

82% Identification and forecasting of emerging risks

74% Risk dashboards and visualizations

64% Scenario planning

62% Horizon scanning and early-warning systems

53% Stress testing and reverse stress testing

Examples of our risk analysis solutions

Case Study: A large North American mining company

The issue: Our client was considering investing in a new mine project in Macedonia and wanted a better understanding of the political and business environment in the country before making its final decision. The client was particularly concerned about political risks in Macedonia, including the threats posed by nationalization, corruption, and political violence.

Our solution: We provided a presentation on the political and business environment in the country, including the main drivers of political and security risks in the coming years. The presentation included an outline of the key political risks in the country as they relate to mining companies, with a focus on how such risks could affect the client's mining investment. We followed up with an in-depth report on key threats that could affect their mining project, including risks of nationalization and corruption, as well as potential ethnic conflict and inter-ethnic violence.

Case Study: A US precision tool manufacturer

The issue: The client wanted to produce better sales forecasts for nine product lines across five regions around the world. Because its sales had been affected by volatile market conditions in the past, the planning team wanted to get more clarity on how potential macro events could affect its top line.

Our solution: We created an Excel-based model that uses our macro and industry forecasts to generate sales projections for each of the nine product lines. We developed the model by correlating past product sales with key economic drivers. The model allows the planning team to input alternative macro assumptions and comparisons with the central forecasts. We also provide a detailed forecast report that analyzes macro and sectorial conditions, and shows the impact of potential macro events and emerging risks.

Case Study: A leading petroleum exploration and production company

The issue: Our client won a bid for two oil blocs in Myanmar, a high-risk market. Before beginning exploration, it wished to understand corruption at both the state and provincial level, and the potential impact on its business operations. This ranged from the impact of corruption on day-to-day activities, such as setting up offices and bank accounts, and renewing business licenses in the nation's capital, through the effect on exploration and production in a remote and undeveloped region.

Our solution: We provided the client with a detailed corruption risk assessment. The report analyzed the regulatory and commercial environment, assessed the client's exposure to corruption risk in relation to its anti-bribery and corruption policies, and identified gaps and potential incompatibilities between a zero tolerance approach and the reality of operating in Myanmar. We then provided the client with recommendations for possible risk mitigation strategies, and offered practical solutions derived from our experience in helping other oil and gas players there. We advised correctly that the strength of its brand and size of investment would give the company considerable opportunities for shaping governance standards and influencing behaviors.

Case Study: A premier international bank

The issue: Following the financial crisis, governments around the world enacted financial regulations that require banks to test the robustness of their balance sheets against severe economic stresses. Regulators typically provide varying degrees of detail for their scenarios, and banks need to fill the gaps to ensure they have the required economic drivers to stress test their balance sheets. To comply with these new regulations, a major international bank asked us to perform stress-testing for them for the Eurozone Banking Union (EBA), Prudential Regulation Authority (PRA) in the UK, the Hong Kong Monetary Authority (HKMA), and the Prudential Regulation Authority in Australia (APRA). These scenarios form the core of the enterprise examination in the bank's enhanced stress testing framework.

Our solution: To conduct these stress tests we used the Oxford Economic Model, which covers 46 countries, including the US, EU, China, and the other main Asian economies. The Model provided a rigorous and consistent structure for analysis and forecasting, allowing the implications of alternative global scenarios and policy developments to be readily analyzed at both the macro and sectoral level. In particular, it proved to be a consistent tool for determining the implications of international economic events in individual countries. These included, for example, changes in financial market conditions globally and regionally; changes in the oil price; and changes in the pace of economic growth in the rest of the world. In addition to providing the impact of regulatory stress tests on a wide range of variables that are critical for stress testing the bank's balance sheets, we provided commentary on the key drivers and transmission mechanisms.