

# 10 Minutes on Supply Chain Risk Management\*

What you need to know about emerging topics essential to your business. Brought to you by PricewaterhouseCoopers.

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## Toward a safer and smarter supply chain

### Highlights

- Supply chains, already coping with pressures such as product recalls, are now also under severe economic stress and more vulnerable to disruptions.
- Supply chain disruptions cause serious damage to profitability, shareholder value, and reputation.
- A few suppliers make the biggest difference to the bottom line and brand. These critical relationships must be recognized and nurtured.
- Companies should analyze critical suppliers' financial and operational metrics to develop leading risk indicators. This will help to identify and even prevent potential disruptions.

**Global supply chains are being tested by major upheavals in the world economy. The financial crisis is taking a heavy toll on world-wide manufacturing activity. With credit still tight and consumer demand weak, bankruptcies have risen at an alarming rate.**

**These tough times demand greater scrutiny throughout the multi-tiered and extended supply chain. Some companies are beginning to pay more attention to issues such as supplier financials and inventory management to improve working capital. But others are going beyond these short-term considerations. For them, this is an opportunity to really get to know their supply chains, with a view to enhancing their fundamental strengths and addressing weaknesses that might have been overlooked in better times. Their healthier and safer supply chains are helping to ensure business continuity now and will pay off even more as the economy recovers.**

### Supporting your strongest links

1. Prioritize risk management resources. With growth stalling, this is the time to pause and re-evaluate suppliers. Identify suppliers most critical to strategy, operations, performance, and reputation. This will focus attention on those who generate the most benefit, and on others whose failures could be catastrophic.
2. Combine the financial data with qualitative information to get an accurate risk profile. Leading risk indicators from operational and reputational areas such as governance, treasury, and ethics can signal both potential problems and opportunities, which may not always surface in the financials alone.
3. Adopt this approach throughout the lifecycle of supply chain activities. Today's accelerated rate of change requires nonstop monitoring. Revisit assumptions and continuously seek and analyze new information to know your suppliers better and strengthen key relationships.

## At a glance

### Traditional supply chain risk management

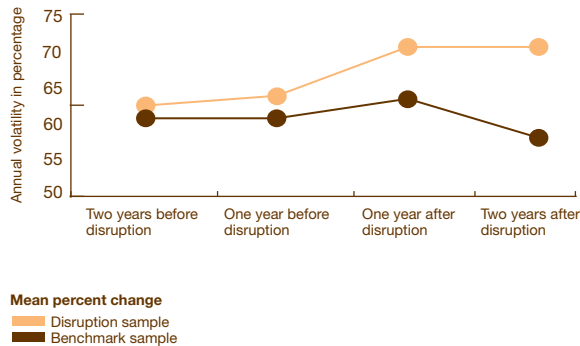
- Supply chains are productive and intricate webs woven over a long and relatively stable period of global economic integration.
- The focus of supply chain programs is on cost, reliability, and quality.
- Key performance indicators are used to define and evaluate success.
- Companies respond to adverse events after they occur. As a result, scarce resources are spent on crisis management.
- Companies and suppliers concentrate on what they perceive as “their own” issues, becoming blind to emerging risks and opportunities across the entire supply chain.

### Supply chain risk management for volatile times

- Supply chains are under stress as financial shock and other risks get transmitted rapidly throughout the supply chain and across national boundaries.
- Focus is on developing a comprehensive supply chain risk profile based on financial results as well as current and expected operational metrics.
- Leading key risk indicators along with predictive risk scoring models are used to give early warning of potential trouble.
- Companies focus on early identification of issues and take corrective action to reduce the impact of supply chain disruptions, or even prevent them.
- Alignment of objectives between companies and their suppliers helps to reduce risk, surface new opportunities and differentiate them from competition.

## Supply chain disruptions damage brand and bottom line

**Figure 1: How supply chain disruptions affect share price volatility**



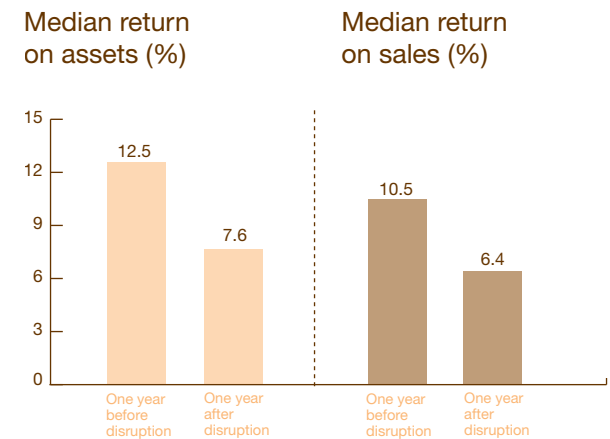
Most companies continue to follow traditional supply chain risk management practices because it is easy to demonstrate the financial benefit of cost-reduction activities, but difficult to make a business case for investments that improve supply chain resilience. Yet, such a case must be made.

PricewaterhouseCoopers recently compared the overall performance of 600 US public companies that announced supply chain disruptions from 1998 to 2007 with that of benchmark groups.<sup>1</sup> On average, affected companies' share prices dropped nine percent below the benchmark group immediately upon announcement of disruption. These companies continued to under-perform their peers for some time. Over a two-year period, their average stock return was almost nine percentage points lower. As Figure 1 shows, a majority of affected companies also experienced greater volatility for at least two years, a sign of diminished confidence among stakeholders.

Their profitability also took a hit. As shown in Figure 2, average return on assets and return on sales for affected companies went down by five and four percentage points, respectively. The performance of benchmark groups remained unchanged.

Clearly, companies with weak supply chains are punished.

**Figure 2: How supply chain disruptions affect profitability**



<sup>1</sup> PricewaterhouseCoopers, *From vulnerable to valuable: how integrity can transform a supply chain* (2008).

## Economic stress is increasing the risk of disruptions

“(This is) an opportunity to work with our vendors to create new solutions. We will get through this downturn. It is a wake-up call for business.”

Robert Willett, CEO  
Best Buy International  
*PwC’s 12th Annual Global CEO Survey*

Supply chains are vulnerable, in part, because they have never been as extended as they are today. Companies must also increasingly manage stakeholder expectations about issues such as quality, environment, and health and safety of workers. Now the risk of disruption has further increased because of extreme business volatility. Just a year ago supply chains were hit with skyrocketing prices of oil and other commodities. Now they seem to be caught in a perfect storm of rising bankruptcies, high levels of debt, tight credit, and weak demand.

### **Rocking precariously**

Companies that were stockpiling raw materials and building inventory because of surging prices found themselves in trouble as demand started collapsing. Finding it hard to predict the pace and pattern of recovery in worldwide demand, many companies are struggling to rebalance their inventories and experiencing erratic production schedules. Meanwhile, operating costs are being spread across lower volumes, creating economic hardship throughout the supply chain. Lack of credit is making this bad situation worse.

Suppliers, who are financially stretched, are struggling to access the credit that would normally be used to bridge the gap. The World Bank estimates a shortfall of up to \$300 billion in trade finance.

In this environment, even stable, cash-rich companies face the risk of disruption because of the innumerable supply chain interdependencies that exist within and across industries. For example, inventories at some suppliers are piling up because customers cancelled orders placed before the downturn. Supplier bankruptcy caused by the financial problems of another customer is increasing the risk of supply chain disruptions.

These problems run deep. In 2009, publicly-traded US companies with combined assets of almost \$75 billion have filed for bankruptcy, compared to companies with assets worth \$11 billion by this time last year. The ripple effects are being felt around the world. Thousands of factories in emerging economies, especially China, have closed. Regardless of where a company is in the supply chain, there is a high likelihood of being unpleasantly surprised.

## Prioritize resources on most critical suppliers

Janice Davis, VP of global sourcing at Bombardier, describes the challenge of supply chain risk management as “a continual trade-off and balancing act on when to work only with the first tier, allowing them to manage the value chain, and knowing when to step in to support or directly manage.”<sup>2</sup> So what can companies do?

### Know who matters most

Suppliers who make the biggest value contribution are most critical, and companies should focus risk management on these key partners. A large global communications technology company has identified 600 suppliers who contribute the most to the top 100 of its thousands of products by revenue. It conducts exhaustive financial and operational assessments of these suppliers, preparing itself for the complete shut down of a facility. Suppliers can be critical for a variety of reasons. Their value may lie in strengthening competitive positioning, improving public perception, or enhancing supply chain security. For example, recognizing the threat of security breaches and terrorist attacks, some suppliers actively participate in customs administrations’ programs that review and certify their security profiles, providing the extra benefit of quicker cargo release at the border.<sup>3</sup>

### Establish mutual objectives

It is important to agree on a set of common objectives with these critical suppliers because that leads to collaborative tackling of risks that threaten mutual objectives. It is not possible for a company to establish such an understanding with all suppliers. But if you get it right with your critical partners, they are likely to follow the example down the chain. Lower-tier suppliers deal with operational issues on a daily basis, and could be a front line of defense against major problems.

### Strengthen critical ties

The most critical links deserve to be supported. Supply chain finance tools, for example, are becoming popular as a way for companies to use their superior credit rating to strengthen suppliers while reducing costs. A company can negotiate extended payment terms with the supplier to free up its own working capital. In return, it can enable the supplier to be paid by a third party at a discount that lowers the supplier’s cost of capital.<sup>4</sup>

<sup>2</sup> PricewaterhouseCoopers, *How to fortify your supply chain through collaborative risk management* (2008).

<sup>3</sup> PricewaterhouseCoopers, *Global supply chain security* (2008).

<sup>4</sup> PricewaterhouseCoopers, *Demystifying supply chain finance* (2009).

## Qualitative analyses will result in more competitive supply chains

Companies are taking a fresh look at their supply chains; be it analyzing the financial viability of suppliers, releasing working capital from languishing inventory, or increasing reliance on special trade programs and free trade agreements to lower duties. Here's how you can not only get through the present but also succeed in the future.

### **Use the past to see the future**

A quarterly report only provides a snapshot, sometimes reflecting short-term circumstances from as many as 90 days ago. To understand whether a supplier's performance is improving, declining, or remaining steady, analyze data from a number of prior reporting periods. Compare it with industry averages to determine the relative financial health of the supplier.

### **Uncover leading operational and reputational risk indicators**

Still, financial analysis alone is not enough. The entire business environment, from the availability of raw materials to treasury management issues arising from cash being located in a different jurisdiction

from where it is needed, should also be analyzed. This will surface leading risk indicators that can provide early warnings. For example, pending litigation and sudden auditor or senior management changes indicate governance problems—before they appear in the financial data.

### **Make it work with people and technology**

Management information should alert executives of potentially disruptive events and the need for timely intervention. Harness technology—to facilitate data aggregation, advanced analytics, and easy-to-read dashboards—so that day-to-day responsibilities are less onerous. Empower people with a culture that clearly defines roles and responsibilities, and rewards actions that mitigate long-term risks.

By getting smart about critical suppliers and establishing shared objectives with them, you can create a more resilient supply chain. Short-term pressures may be driving many companies in this direction, but ultimately, this is an opportunity to design supply chains that protect shareholder value and brand, and even create a competitive differentiator in the long run.

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## Upcoming 10Minutes topics

### **The changing face of financial reporting**

Standard setters have proposed fundamentally changing the way public companies gather and display financial data for investors and the general public. While some welcome the changes, critics say the proposal is costly and, in large part, unnecessary. 10Minutes discusses the pros and cons.

### **Redefining revenue**

Rules for reporting revenue may soon undergo major revisions, with significant consequences for some industries. How and when companies report revenue is likely to change, along with the very definition of revenue itself. 10Minutes discusses the business challenges the revisions pose for companies and how to get a leg up on them.

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## How PwC can help

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