You can see it in stubbornly high unemployment rates or from the hundreds of companies receiving credit downgrades. After several straight years of distress, global economic growth remains sluggish. This is exacerbating a weak link in companies’ supply chains: the deteriorating financial strength of suppliers.

Increasingly, suppliers’ weaker balance sheets are posing just as great a risk to companies as suppliers’ potential operational problems. By rationalizing their supply chains during the recession, many companies have inadvertently become more reliant on fewer suppliers at exactly the moment when their own finances have become shaky. Meanwhile, those same suppliers are seeking to use their customers’ balance sheets to fund their working capital requirements.

As a result, supply chain risks have moved from the province of engineers into the realm of chief financial officers and treasurers. To emerge from the global recession unscathed, companies should rethink their approach to supply chains by behaving much more like their own credit rating agencies—and fast.
While low interest rates have permitted many companies to refinance recently, rating agencies have begun to warn that current lower default rates may be unsustainable. If GDP growth in the United States remains stuck in a range of 1% to 2% in 2011, defaults will rise again, according to Fitch Ratings analyst Mariarosa Verde. She estimates that a low default rate is only sustainable at growth rates above 2%.

Moreover, corporate credit ratings are still declining at an alarming rate. Our research shows that credit rating agencies have downgraded the ratings of more than 500 companies in North America since April. The number of businesses that annually file for bankruptcy protection in the United States has soared by 126% since the financial crisis triggered the recession several years ago, according to data from US Bankruptcy Courts.

Preparing for Supplier Credit Failures
Companies urgently need to prepare for supplier credit failures that could create a new nightmare for their supply chain. That means they must pay as much attention to evaluating the probability that their suppliers may default as they do to potential disruptions in their suppliers' operations.

It means they must evaluate the potential impact of a supplier default on their cash flow. And it means they must scrutinize suppliers on a much more holistic basis, reflecting the fact that a company’s operations, finances, and the quality of its management are linked.

To achieve this, companies should develop their own predictive credit analysis frameworks. They can no longer rely solely on credit ratings prepared by credit rating agencies. Instead, businesses need tools that will help them anticipate future problems in a supplier related to the deterioration of both the supplier’s finances and operations.

Developing Predictive Analytics
Designing forward-looking supplier risk analytics that can forecast suppliers' credit problems in advance isn’t easy. Many companies still struggle to identify the touchpoints that enable them to shrink or expand their supply chains without putting their own businesses in jeopardy from an operational perspective. One reason for this is that efforts to improve and quantify the risks in their supply chains are conducted in silos. As a result, they usually fall short of a thorough view of the entire supply chain.

### US Non-Investment Grade Defaults by Type in 2010

<table>
<thead>
<tr>
<th></th>
<th>Par Value ($Millions)</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distressed Exchange</td>
<td>725.4</td>
<td>41.6</td>
</tr>
<tr>
<td>Chapter 11 Filing</td>
<td>668.4</td>
<td>38.3</td>
</tr>
<tr>
<td>Missed Payment</td>
<td>350.0</td>
<td>20.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,743.8</strong></td>
<td><strong>100.0</strong></td>
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</tbody>
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Source: Fitch US High Yield Default Index.
Adding to the challenge is the increasing complexity of supply chains, as companies purchase more products and services from firms located in lower-cost countries. In these locations, the credit of many companies is often not rated. Financial data is also often less reliable.

And yet, it has never been more important for companies to understand their suppliers' financial vulnerabilities. The aftermath of a supplier bankruptcy can be devastating. For example, our research shows that when an auto parts supplier goes bankrupt, its parts prices can jump up by 10 to 15 percent.

The ultimate price tag of a supplier bankruptcy goes far beyond the direct cost of a business disruption in large part because supply chain management is now viewed as a company's core competency. A supply chain failure can easily prompt customers to take their business elsewhere. Investors also punish supply chain failures disproportionately. Indeed, the impact of a supply chain breakdown on a company's market valuation can eclipse all possible cost savings achieved from leaner chains.

Far too often the additional costs driven by dealing with a financially weak supplier are underestimated. That's in part because the metrics companies use to evaluate the impact of a supplier failure are often too simplistic. Companies often fail to take into account that the more they push out to potentially less secure suppliers, the more

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**The Other Weak Link: Customer Credit**

A prolonged recession has weakened the balance sheets of not only suppliers, but also customers. As a result, companies are running an increasing risk of being squeezed from both ends of their supply chains.

Companies are extending longer payment terms to customers. At the same time, they are assuming greater inventory costs to cope with weaker suppliers. In the process, their working capital is becoming strained.

Consider it the curse of recovering from a prolonged global recession. To ramp up their businesses, many companies have started to sell more to less creditworthy customers than they did before the global financial crisis. At the same time, their existing customers' financial strength has declined.

The trouble with this is that a cash-strapped customer can often have an even larger impact on a company's results than a weakened supplier. After a supplier went bankrupt, one global manufacturing company quickly began to examine the financial strength of its entire supplier network only to discover that the company's ability to forecast customer demand accurately was equally important to optimizing its supply chain.

As customer credit weakens, the volatility in supply chains will rise in part because some customers will try to change the pricing in their contracts. For example, Chinese steel mills have been trying to pay foreign mining giants for iron ore on a more frequent basis ever since they reneged on quarterly contracts when spot ore prices tumbled in 2008.

So-called customer "soft defaults" will also become more common. Already, many customers are delaying their payments, instead of declaring a default or ending a contract. In the meantime, these customers are asking companies to extend them credit to pay for their products until they finally go bankrupt—and leave the company holding the bag.
they are often obliged to use their own balance sheets to support suppliers. Many also miss the fact that they are just one of a supplier’s many customers. If a major customer also defaults, the company could suffer losses across the entire spectrum of its supply chain.

Credit Rating Agencies in Flux
Further underscoring the need for companies to conduct their own evaluations of financial weaknesses in supply chains is the fact that credit rating agency business models are also changing. The recent passage of new financial legislation in the US has made rating agencies more liable for the quality of their rating decisions. As a result, some credit rating agencies are starting to limit how their ratings can be used. In July, some dominant credit rating agencies refused to let bond issuers use their ratings in documentation for new bond sales, according to a Wall Street Journal report.
Improving Supply Chain Management Metrics
The first critical step in managing the increasingly strained financials of suppliers is for companies to acknowledge that credit has become a dominant driver of performance. Typically, companies select suppliers primarily based on their operational capabilities. But in today’s deteriorating credit environment, a supplier’s operations and finances need to be given equal weight.

Next, companies should reexamine their supply chain management metrics. Companies should evaluate the impact of a supplier default on their cash flow. Instead, most only examine the potential impact of a supplier’s default based on how much they are spending on its products and services.

Start with the impact of replacing a supplier’s contract on a company’s results. Ask yourself: How difficult will it be to replace a supplier if the company defaults? How tough will it be to find a customer to take the place of one that can no longer afford my products or services? And what will happen to my company’s cash flow during this search?

Look Beyond Financial Ratios
In order to enhance their credit risk management capabilities, companies need to develop predictive tools. This involves assembling a list of variables that could force a supplier or customer to default. We believe that companies must look far beyond simple financial ratios to span both a company’s operations and finances.

Why Your Exposure to a Supplier Default May Be Higher than You Think

When companies estimate their exposure to the potential default of a supplier, they often only evaluate how the loss of the supplier will directly affect their business. To understand the full potential impact of a bankruptcy, companies need to consider how a default will impact the remaining market participants as well.

For example, one energy market maker currently estimates that the direct and follow-on impacts of bankruptcies of the suppliers in its sector are only a fraction of its total exposure. At first, this firm only examined the replacement cost of the energy that would no longer be directly provided by the failed supplier. That replacement cost is based on a significant increase in spot prices, driven by a short-term shortage.

But many of these large suppliers use bilateral contracts, in addition to the market maker, to sell energy. If the supplier defaults, those bilateral customers will immediately begin sourcing energy from the spot market, using the market maker. As a result, the volume of energy to be replaced could be 20 times more than the direct volume.

Worse, the combination of the increased volumes moving through the spot market and higher prices from reduced supply creates potential credit exposures in excess of $100 million for this firm.

More robust diagnostics are crucial in developing a more realistic picture of what could actually happen if a supplier defaults—and in enabling a company to avoid that outcome.
After all, a company’s financial strength is dependent in large part on its operations. No company will remain financially sound for long if operational measures, like the percentage of orders filled, begin to decline.

Companies should also consider qualitative factors. A management team with a history of sound judgement may be more likely to chart a successful course through today’s troubled economic environment. To decipher whether the management team of a customer or supplier is up to this challenge, companies should examine everything from their ownership structure to their recent press coverage.

External risks must be examined. Besides common risks like exchange rate volatility or political interference, companies should consider large liabilities related to pensions and the environment. They can quickly reverse a company’s fortunes. So can events like strikes, terrorist attacks, corporate fraud, or so-called acts of God like an earthquake or a plane crash.

Once companies have surveyed the full range of potential default factors, they need to determine which of these variables will be the most useful in predicting supplier and customer defaults and then assign appropriate weightings to them. That's where an analytical tool becomes critical.

Applying statistical methods to determine the combination of operational, financial and more subjective factors will do more
than explain past disruptions. As new data becomes available, a model can be rerun to assess whether particular risks are increasing, and corrective management action can be taken before the problem materializes.

**Complexity Equals Opportunity**

Making the potential impact of suppliers’ deteriorating credit a higher priority in supply chain management adds a level of complexity to an already complicated process. However, the very complexity signifies the magnitude of the opportunity. There are nearly limitless places for problems to spring up in supply chains. Companies that identify the full range of default factors—essentially becoming their own credit rating agency—will have a competitive advantage over rivals who lack this level of sophistication.

Today, many companies are embarking on very costly measures to reduce the chance of a supply chain disruption. They are building up inventory and even purchasing their own sources of materials.

We believe conducting more thorough supply chain diagnostics—ones that incorporate the financial vulnerabilities of suppliers—is more cost-effective. The opportunity to match, or even surpass, the impact of such initiatives on a company’s bottom line should be well worth this manageable investment. Developing such frameworks will enable companies to avoid supplier defaults not only today, but also in the future.

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**Oliver Wyman and the Association for Financial Professionals—The Financial Insights Series**

*The New Weakest Link in Your Supply Chain: Supplier Credit* is the first of a series of papers by international management consulting firm Oliver Wyman and the Association of Financial Professionals that will address critical issues for finance professionals. The objective of these papers is to present ideas for consideration by corporate finance professionals as well as to stimulate discussion and feedback to Oliver Wyman and AFP through a number of mechanisms, including interactive roundtables, presentations at professional events, surveys, webinars, and personal interviews.

Through this process, Oliver Wyman and AFP will gather practical, actionable information on these topics from a diverse cross-section of financial leaders in their organizations. This will enable Oliver Wyman and AFP to deliver actionable in-practice guides to managing companies’ key financial challenges.

Oliver Wyman and AFP welcome your thoughts on the ideas presented in this paper. If you would like to provide feedback, or be alerted when we schedule events or other activities for corporate finance professionals, please contact Hans-Kristian Bryn or Michael Denton of Oliver Wyman. At the AFP, please contact Brian T. Kalish.
Oliver Wyman is an international management consulting firm that combines deep industry knowledge with specialized expertise in strategy, operations, risk management, organizational transformation, and leadership development. Its corporate risk practice works closely with leading organizations to effectively manage risk, enabling them to make risk-adjusted strategy, investment, and capital allocation decisions that improve performance and optimize value creation.

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