Special Report

Property risks

INTRODUCTION

THE LACK OF MAJOR NATURAL CATASTROPHES IN developed countries in recent memory may have lulled some multinational companies into a false sense of security. However, the events that have occurred so far in 2011 have been a rude awakening.

Australia, Japan, New Zealand and the USA have all experienced significant events by way of floods, tornadoes and earthquakes. European companies with subsidiaries in the affected regions have seen their property loss prevention measures and business continuity plans tested.

A little can go a long way when it comes to protecting property. If a company knows that it has operations in an area prone to earthquakes or floods, it can implement potential loss mitigation strategies that may be relatively inexpensive and can be disproportionately effective in reducing damage. For example, just raising a building's floor level in an area likely to be flooded can prevent flood water ruining stock and equipment.

While most major European companies may not have premises in the affected areas, many were relying upon suppliers located there. With little or no direct control over how these suppliers were protecting their businesses, the lessons may have been harder.

For example, a significant number of multinational businesses were affected by the Japanese earthquake, tsunami and associated damage to nuclear installations. A combination of direct damage to premises, infrastructure problems and reduced availability of power meant that some companies' key suppliers were unable to deliver at all. Others could only operate on a reduced basis and understandably gave preferential treatment to their best customers.

Furthermore, some of these suppliers were way down the supply chain of the affected companies. They were suppliers to suppliers to perhaps even more suppliers – in other words, well behind the first group of so-called tier-one suppliers that most risk-management-enlightened companies would know about. Some were producing just a tiny, albeit vital, part of the customer's ultimate product.

The result is that many international companies were hit hard. The problems that beset Japan's automotive industry and the knock-on effect for global motor manufacturers have been widely publicised. In addition, in view of the fact that Japan is a key producer of hi-tech products and that so many goods now contain chips or other electronic components, many other companies felt the aftershock of the Japanese earthquake.

This special report looks at some of the issues arising from the events so far this year and some of the lessons that companies may learn from the outcomes. For many risk managers, there may be no great surprises. But 2011 has put natural catastrophe exposures squarely back on the strategic risk map. Risk managers now have the opportunity to reinforce the value of risk management to their boards, in the light of what has been for many companies a salutary, and far from enjoyable, experience.

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This year has shown that predicting events counts for little if you don't fully prepare for their consequences

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The Japanese earthquake and tsunami revealed how little many businesses know about their network of suppliers

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This special report has been produced with input from FM Global:
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DISASTER PLANNING

A catastrophic six months

The events that dominated the headlines earlier this year show that it is not enough for organisations to predict such occurrences – they have to develop a strategy that plans for the full unfolding consequences

AUSTRALIAN FLOOD, NEW ZEALAND earthquake, Japanese earthquake and tsunami, US tornadoes – all of these hit the headlines in the first half of 2011.

Risk Management Solutions chief research officer and executive vice-president Robert Muir-Wood says: "It's certainly been a bad first half of the year and first quarter in particular. The last two or three years have been very light in terms of natural catastrophes, so maybe we had forgotten what the average feels like. It has certainly not been average in the last few months, but was definitely lower than average in the preceding period."

Muir-Wood lays a lot of the blame for the recent climate-related disasters on La Niña which affects ocean temperature, but earthquakes are a different matter. In New Zealand, there was a linked sequence of earthquakes triggering each other – and he warns that they may not be over yet.

His message for risk managers is that, while such events in themselves are clearly unpredictable, none of the 2011 catastrophes has occurred in places that are really surprising. FM Global vice-president, market and business development Martin Fessey and vice-president of operations and engineering manager Tom Roche echo this view.

Fessey says: "We know Christchurch [in New Zealand] is in a shake zone. The earthquakes were severe but not beyond expectations. Everyone knows the situation in Japan, with an earthquake long overdue, and the tsunami was predictable as well. Similarly, the floods in Australia could have been anticipated."

Key points

01: Disruption of utilities often follows a natural catastrophe event – consider emergency generating equipment

02: Raising floor levels can minimise risk in flood-prone areas

03: Preventive measures are often inexpensive

While such disasters may be predictable, some of the corollary issues have been less so. Research into building codes and construction techniques is still continuing in earthquake-hit Christchurch to find out why some buildings were not as resistant to damage as expected.

Roche comments that our attempts to tame these events can have limitations. Regarding the floods in Brisbane in January, there are some questions over the operation of the Wivenhove dam. With the dam full, officials had little choice but to make controlled releases of water, increasing the level in the Brisbane River and potentially adding to the flood problems in Queensland's state capital.

In Japan, the damage to infrastructure was what might have been expected, Roche

BUSINESS CONTINUITY STRATEGIES

Choked by the chain

The Japanese earthquake and tsunami illustrated the complex nature of global supply chains, and how businesses can be brought to a standstill by events a long way down the line. Risk managers need to know where their exposure lies

"THERE'S A CHANGING RISK landscape. Many companies are part of a vast, interdependent global supply network and some do not even manufacture themselves, but buy everything in. The natural catastrophes of 2011 and their effect on business continuity have brought that more into focus." So says FM Global vice-president, market and business development, Martin Fessey.

Fessey believes that the events of this year have reinforced the importance of insurance as a business continuity tool, something that may have been forgotten in less hazardous times. "There are a number of estimates as to the total insurance bill for damage so far this year. While they vary, depending on the source, they have one thing in common – they are all high. The considerable amount of money that has been paid by the insurance industry has helped companies to preserve their cash flow, and to get back into operation as soon as possible," he says.

"There has been some criticism of supply chain products in the past few years, suggesting that they may not cope with the needs and expectations of companies. But experience this year clearly highlights the importance of property and business continuity insurance," Fessey adds.

Another lesson that has been illustrated by recent events is that many businesses' strategies have introduced new exposures. "They may not have fully recognised this or understood all the implications," Fessey says.

"Much of the interruption that has occurred, certainly in the case of Japan, has not necessarily involved high-profile lines of manufacturing but relatively low-profile, although perhaps high-value, items that are critical in getting products out of the door."

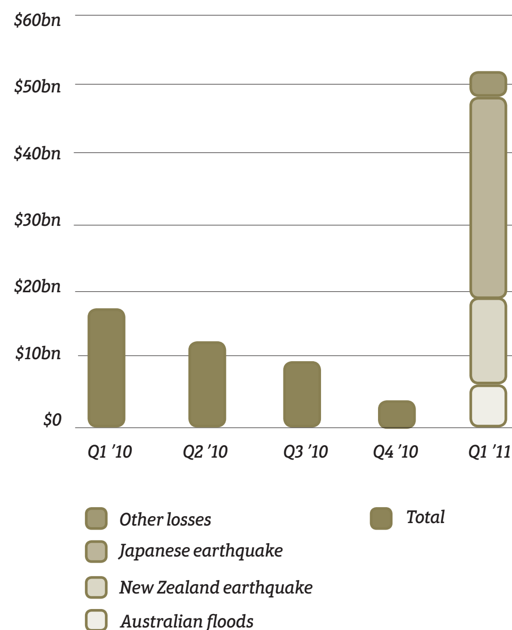
Reportedly, Japan produces around 40% of the world's technology components including chips, memory for digital phones, cameras and PCs, glass for flat screens, capacitors and transistors. Many of its

explains. “Natural catastrophes like earthquakes tend to have an impact on a large area, so damage to roads, public works and utilities can be expected. However, the unexpected element was the impact on the Fukushima nuclear station and the consequences in terms of shutting down some of the power systems and imposing rolling power blackouts.”

Preparing for the worst

The nuclear plant impact may have taken companies by surprise. However, Roche says that organisations planning their strategy to offset the effects of natural disasters need to take account of the fact that many natural catastrophes, such as hurricanes and floods, will be followed by disruption to utilities.

The companies that take this message on board can benefit considerably in terms of both preserving profitability and reputation. Roche cites the example of a US company storing supplies of processed fruit. “Our client anticipated that their power supplies could be disrupted by wind storms and ensured they had emergency power generating equipment at their site. In the event, they were able to save the product from their harvest while their competitors saw all their chilled produce ruined,” he says.



‘We live in a risky world from a natural catastrophe point of view, and such risks are only likely to increase’ **Martin Fessey** FM Global

He adds that, in putting such provisions in place, it is important to consider that on-site power generation may not just need to work for hours but for days, or even weeks. “Our client rightly saw that their challenge was not dealing with the power outage – they had already provided for that – but in planning to ensure that they could get enough fuel for their power system to last out the crisis,” he explains.

The key lesson is that companies cannot stop the kind of natural catastrophes that we have seen in 2011, but they can implement measures to make their businesses more resilient.

Another example, cited by Fessey, is the importance of keeping the envelopes of buildings intact if wind storms are likely to be a problem.

“We know that heavy winds can rip parts off buildings and, as a result, rain is driven into the building and causes damage. Companies can put measures in place fairly cheaply to deal with this eventuality.”

Fessey concludes: “We live in a risky world from a natural catastrophe point of view. The prevalence and consequence of such risks are only likely to increase.

“It’s a wake-up call in terms of where companies locate their facilities and supply arrangements – and how they can invest in some quite simple and inexpensive protections that will put them ahead of the competition should disaster strike. **SR**

customers are well-established brand names in Europe, and the components concerned are crucial for their products.

FM Global vice-president of operations and engineering manager Tom Roche says that it is not uncommon for companies to choose the same suppliers or for manufacturers in particular regions to supply a number of companies in the same industry sector. “The development of large specialist suppliers in such regions means that they can offer the advantages of good-quality control and competitive pricing. It also means that an event in one region can cause many ripples with, in some cases, devastating effect,” he explains.

Willis practice leader for life sciences and supply chain Tom Teixeira comments: “Before the disasters that happened this year, a lot of risk managers would have considered that they were covered for contingent business interruption by the extensions of their property and business continuity policies. However, in some cases these extensions did not provide enough cover. And, in any event, some of the supplier disruption was not down to property damage – as was the case, for example, in respect of the production interruptions caused by the power blackouts in Japan.”

He recommends: “Companies should look at interruption as a whole, taking account of the fact that it can be caused by a number of different risks such as terrorism and financial fragility.”

KEY LESSONS

- Insurance continues to be a valuable business continuity tool.
- The implications of business strategies such as ‘just in time’ deliveries need to be weighed against potentially increased loss exposure.
- Regional concentrations of suppliers of similar goods exacerbate shortages in the event of natural catastrophes.
- Companies need to better understand their supply chains behind their tier-one suppliers.
- Dual sourcing or buffer stocks may help to mitigate loss.
- Switching suppliers quickly in an emergency can be expensive and may raise corporate governance or regulatory issues.
- Insurers may want more information on companies’ supply chains or limit cover for unspecified suppliers.
- Good risk management – and good management generally – has helped some businesses to reduce disruption and their potential loss.

Signs of a step change

Teixeira also notes that some companies that were thought to be good at managing their complex supply chains, particularly in the automotive sector, proved not to know who »

» their critical suppliers were or understand the scale of business interruption that they could be faced with.

Teixeira says: "There needs to be a step change, and we're starting to see signs of it. Risk managers are now looking to their advisers for assessment of their internal facilities, how these integrate with tier one of their supply chain, what their crucial supplies are and where their exposure lies."

"Once they better understand their critical supplies and level of exposures," he adds, "it's possible to come up with some risk management solutions."

In some cases, this could be insurance, particularly for smaller companies that do not have the resources, capital or know-how to protect themselves. Larger companies may want to reassess their stock level strategy – 'just in time' may be not be appropriate for them. If they have identified a critical supplier or process, they might consider it worth spending extra money to dual source or consider holding buffer stocks.

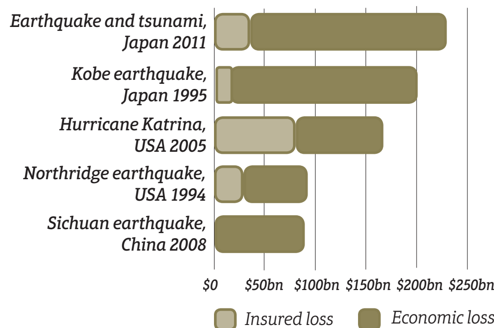
Teixeira adds: "Companies may have a good understanding of their tier-one suppliers – but what's really happening behind this level in tiers two, three, four, and so on? It will be critical to come up with methodologies and processes to understand all parts of the supply chain."

He warns that getting risk management strategies right up front is critical: "In some industries, such as aerospace and pharmaceuticals, if you lose a supplier overnight you cannot just switch to someone else to supply the product. It can take six to eight months to get another supplier approved by the regulatory body. That's a lot of business interruption."

Having to make an emergency decision on switching suppliers presents other dangers, too. Many large European companies are careful to take corporate governance and social responsibility issues into account when selecting suppliers. They also check on regulatory compliance.

The need to get a new supplier on stream immediately may not allow time to vet them as carefully, and that could create reputational problems. In addition, time pressures mean that companies may not be in a good negotiating position so could end up paying their replacement supplier considerably more, which will affect their profit margins.

Miller Insurance Services' head of property – corporate risks, Trevor Young,



'Companies may have a good understanding of their tier-one suppliers – but what's really happening behind this level in tiers two, three, four and so on?' **Tom Teixeira** Willis

agrees that the 2011 natural catastrophes have tested the resilience of business continuity plans and in particular dual sourcing arrangements.

It takes two

"A company may have dual-sourcing arrangements with two suppliers, perhaps getting 80% of its product from one and 20% from the other – but it needs to make sure that either one has the ability to pick up the shortfall as much as possible should the other fail," Young explains. He stresses that business continuity plans and the contractual arrangements around them should be as flexible as possible to mitigate any potential loss.

He adds that the insurance market will be scrutinising the extent of information and coverage provided for suppliers and customers. "Some insurers are still providing unnamed coverage, not just for first-tier suppliers but also for those in the second and third tiers. The market will be looking to tighten up its information requirements considerably. Any open coverage provided will be severely limited. Risk managers must provide more data or expect more limited cover in the future."

Young points to the contradiction between business imperatives and continuity protection. Businesses are looking to reduce their suppliers to gain better purchase terms, but this relinquishes the continuity resilience that is provided by having a large number of suppliers.

Some of the shortfall associated with a multi-supplier strategy may be made up in reduced insurance premiums. Young cites the example of a retailer sourcing from hundreds of suppliers. "From the procurement point of view, the approach looks unwieldy and not very effective but insurers were prepared to give preferential rates."

"Risk managers seem to have been shocked by a number of bottlenecks in their supply chains," Young adds. "Despite good governance, there still remain areas where companies are completely reliant on deliveries from one supplier of certain parts in a process – or even the machinery they use to make their products."

A welcome test

Not all the lessons are negative. Fessey says that many companies have managed their continuity problems unexpectedly well.

"A message that we're hearing from some clients is that, although their business continuity plans may not have gone absolutely according to plan, everyone in the company worked well together to deliver on business continuity. The situation clearly brought out strengths in companies' ability to manage 'on the run' and focus on the key issues. This reinforces the belief that risk management is a key part of general management."

Fessey says that Global FM has seen a number of examples where potentially significant business interruption has been reduced because of good management. "Perhaps insurance payments helped here too, because they reduced the criticality of replacement supplier prices, enabling businesses to focus on quality, specifications, delivery times and so on," he adds.

Roche concludes that companies have drawn several important lessons from this year's catastrophe events. "[They] have learnt quite a lot about their businesses in terms of where some of their products actually come from. It's been a call to arms for risk managers to reach out in their organisations and assist in this area."

It has also been an eye-opener for some businesses to learn just how important they are to their suppliers. "In some cases," Roche adds, "they discovered that they were not a major customer and their negotiating power was less than they had anticipated." **SR**