Business interruption (BI) is a complicated topic that risk professionals frequently find frustrating; accurately establishing coverage and, more arduous still, getting through a claim, can test even the most seasoned risk manager.

In the following survey, you will see that many respondents lack confidence in their BI coverage (for the purposes of this report, the term “business interruption” includes time element coverage). The RIMS Business Interruption Working Group that oversaw this survey has provided analysis and case studies to help shed light on these findings. This group consists of global BI experts from leading underwriters, accounting firms and brokerages.

Getting a handle on a BI claim starts well before the event takes place. By taking control of their data, establishing a team and developing plausible BI figures before losses occur, risk managers can do much to lessen the confusion and frustration common to the claims process. If it is done well, the BI process will be much less burdensome.

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**METHODOLOGY**
This survey was distributed to RIMS membership via internet link, and was fielded between September 28 and November 17, 2016. There were 372 respondents to the study. If you have additional questions about data collection, please contact RIMS at content@RIMS.org.
QUESTION 1
How frequently are your BI insured values reviewed against the company’s annual report and financial data (considering changes to the company and financial statements)?

![Bar chart showing the frequency of review for BI insured values]

- **Every year**: 68%
- **Every 1-2 years**: 9%
- **Every 2-3 years**: 3%
- **Every 3-5 years**: 2%
- **More than every 5 years**: 1%
- **Not sure**: 7%
- **Never**: 10%

SOME COMMENTS FROM RESPONDENTS

- **Only for certain divisions/operations**
- **We use a third-party forensic accounting firm.**
- **We do not report BI values domestically. Internationally we use financial data.**
- **Operating companies complete BI worksheets that are evaluated by risk management in comparison with corporate financial statements.**
- **Business units review BI values annually.**
QUESTION 2

Alongside your declared values, please indicate any other information you disclose to your BI underwriters (select all that apply):

<table>
<thead>
<tr>
<th>Information</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spreadsheet schedule of asset locations and values</td>
<td>75%</td>
</tr>
<tr>
<td>Risk engineering/loss control survey reports for key locations</td>
<td>57%</td>
</tr>
<tr>
<td>Narrative explaining company profile, business processes and activities</td>
<td>51%</td>
</tr>
<tr>
<td>Annual report and accounts</td>
<td>46%</td>
</tr>
<tr>
<td>Status of risk engineering survey recommendations and risk control improvements</td>
<td>45%</td>
</tr>
<tr>
<td>Completed BI/time element worksheet reporting current revenue projections and non-continuing expenses</td>
<td>41%</td>
</tr>
<tr>
<td>Ground up loss record for the last five years</td>
<td>38%</td>
</tr>
<tr>
<td>Estimated maximum loss scenarios</td>
<td>34%</td>
</tr>
<tr>
<td>Summary of notable loss events</td>
<td>32%</td>
</tr>
<tr>
<td>Summary presentation of exposures</td>
<td>31%</td>
</tr>
<tr>
<td>Description of organization governance and risk management</td>
<td>31%</td>
</tr>
<tr>
<td>Business continuity plans</td>
<td>28%</td>
</tr>
<tr>
<td>Natural hazard zone mapping</td>
<td>25%</td>
</tr>
<tr>
<td>Exposures and dependencies relating to suppliers or customers</td>
<td>22%</td>
</tr>
<tr>
<td>Modeling results of natural hazard zone mapping</td>
<td>14%</td>
</tr>
<tr>
<td>Other</td>
<td>7%</td>
</tr>
</tbody>
</table>

**ANALYSIS**

It appears that there are still risk managers who do not buy BI, even in the current soft market where prices have fallen greatly. Many that do buy it still rely on their insurers to analyze the risk and exposures. However, we are starting to see a trend of risk managers taking control of their own data, and getting back in the driver’s seat for negotiations with insurers.

Many respondents still rely on insurers to perform surveys, although over half provide their own surveys for key sites. This demonstrates a trend towards risk managers owning the information. However, only a third provided estimated maximum exposure information. The overall exposure data for both property damage and business interruption is important in establishing the correct...
perception of risk. How do we know if the insurance we buy is competitive if we do not own the data and use it to compare insurers? How do we know if it is value for money if we haven’t quantified exposures? Loss scenario testing that includes exposure quantification and policy cover review is an important risk management tool, but it also provides vital information to insurers to help them assess the risk.

We have observed that risk managers that have suffered a loss in the last five years generally provide more information than those that have not. Experience dictates that the clearer you are in relation to your exposures, and the more information you provide to your insurers, the smoother the claims process is likely to be (see question 15). Also, more manufacturing firms tend to provide this further information than companies in other industries. This should not be surprising since traditional BI policies were actually designed for the manufacturing industry. Furthermore, improved knowledge by all parties of supply chain exposures will allow informed decisions to be made on the adequacy of existing contingent business interruption cover and limits.

Only a quarter of risk managers provide insurers with information on natural hazard mapping or modeling, even though a majority of members will be regularly affected by natural catastrophes in some way, either directly through their own locations or indirectly through transportation hubs or suppliers.

QUESTION 3
Please indicate on the scale your confidence in the values declared/limits set for your BI cover:

![Confidence Scale]

2% 9% 23% 42% 17%
No confidence Extremely confident

ANALYSIS

Interestingly, when we break down this question to look at only the respondents who suffered a business income loss in the last five years, this group responded with only slightly more confidence than those who have not gone through a claim. This highlights just how under-prepared many organizations are to deal with a business income claim, even when they recently went through the process. Additionally, when we look at respondents across various industries and company sizes, the confidence remains similar. The low rate of confidence in BI values indicates the need for organizations to do more analysis before BI limits and values are determined.

Some of the comments from individuals who were not confident with their BI values and limits are below. These are well known remarks to many claims professionals.

• “Lack of confidence due to interdependencies not being fully considered.”
• “I think dollar amounts are correct for a 12-month period but I think the time to rebuild after a major loss could be closer to two years.”
• “It’s very hard to quantify and the business changes so frequently that it’s hard to be confident that the values are accurate for long periods of time.”

Business income coverage and how it will respond to an event is complex. Determining the maximum amount of coverage needed (and whether an organization is willing to pay for the limits) adds another layer of variables. The best way to determine necessary limits requires risk managers to understand their businesses, understand the various ways businesses can be impacted directly and indirectly due to disasters, and to project these effects onto their business. In large organizations, complete analysis typically requires the input of several key employees.

We believe that the reason risk managers who went through a BI claim do not have a higher confidence interval is because organizations learn how unprepared they are for a business income claim. Often when organizations go through a business income claim, or especially a contingent business income claim, they often realize previously unknown vulnerabilities to their operations, supply chain and revenue streams.
QUESTION 4

Do you insure on a gross earnings or a gross profit basis?

- Gross earnings: 47%
- Gross profit: 32%
- Not sure: 21%

QUESTION 5

Please indicate the length of the maximum indemnity period in your BI policy.

- Up to 12 months: 34%
- 12-18 months: 17%
- 18-24 months: 20%
- More than 24 months: 14%
- Not sure: 6%
- Other: 9%

Roughly one-third of respondents have a one-year indemnity period under their BI coverage. According to the experts in the RIMS business interruption working group, 12 months is rarely an adequate timeframe.
QUESTION 6
Do you believe your maximum indemnity period will be adequate in a worst-case scenario?

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>68%</td>
</tr>
<tr>
<td>No</td>
<td>14%</td>
</tr>
<tr>
<td>Not sure</td>
<td>19%</td>
</tr>
</tbody>
</table>

SOME COMMENTS FROM RESPONDENTS:

- We’ve had situations where 12 months is fine and where 12 months is not fine. It depends on the situation and the policy wording for when the period will start.
- We have a business continuity plan in place to take immediate steps to secure alternate locations to restore services in the short-term, while repairs are underway.
- Not in all instances. Currently reviewing need to extend indemnity period.

QUESTION 7
Please identify the length of your extended period of indemnity (EPI):

<table>
<thead>
<tr>
<th>Duration</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No EPI</td>
<td>5%</td>
</tr>
<tr>
<td>30 days</td>
<td>6%</td>
</tr>
<tr>
<td>60 days</td>
<td>3%</td>
</tr>
<tr>
<td>90 days</td>
<td>21%</td>
</tr>
<tr>
<td>More than 90 days</td>
<td>46%</td>
</tr>
<tr>
<td>Not sure</td>
<td>20%</td>
</tr>
</tbody>
</table>
QUESTION 8

Have you experienced a BI loss and subsequent claim within the past five years?

Yes: 40%
No: 58%
Not sure: 2%

QUESTION 9

How long did it take to settle your most recent BI claim?

Less than 6 months: 17%
6-12 months: 41%
1-2 years: 33%
2-3 years: 8%
More than 3 years: 1%

ANALYSIS

According to the survey results, approximately 60% of risk managers have not experienced a business interruption loss in the last five years, while 40% have undergone a loss. These results suggest that many companies and risk management professionals may not have not experienced a complex business interruption loss during their careers and, subsequently, BI claims may not be one of the top areas that concern the typical risk management professional. Many risk managers may find themselves unprepared for the complexities that accompany a business interruption loss and the overall claim process. Understanding the documentation requirements and necessary resources needed to successfully recover from a business interruption loss are critical for any organization.

When an event does occur that results in a business interruption claim, the recovery process is often lengthy before final resolution. The results of the survey confirm that resolution of these claims is not a quick process. Of the respondents who had business interruption claims, less than 20% were settled within six months of the event and approximately 40% were settled within six to 12 months after the event. These results confirm the complexities that accompany a typical BI loss. To fully document, negotiate and settle a large, complex BI loss can take 12 to 18 months or longer depending on the size and circumstances surrounding the event leading to the loss.

During the business interruption claims process, it is critical for risk management professionals to manage internal expectations around timing. A coordination of efforts is necessary in order to manage the departments most directly involved in the recovery. These departments might include operations, real estate, finance and accounting, budgeting and sales. Additionally, communication to company executives and stakeholders is critical to manage expectations about recovery timing, human capital resources required—and documentation needed to resolve the loss. Furthermore, frequent and open communication between risk management professionals and their insurance partners is important and may assist in the time to resolution. Business interruption claims are rarely simple and typically result in a series of negotiations between the insured and insurers, even with those risk professionals who have experienced losses in the past.
QUESTION 10

Please indicate any challenges you faced during the handling of your most recent BI claim (select all that apply):

- Difficulty quantifying loss: 58%
- Difficulties in providing paperwork required by insurers: 46%
- Coverage did not operate for parts of the claim we considered to be included: 23%
- Lack of advice from insurers/loss adjusters on how to recover the business: 14%
- Maximum indemnity period exhausted before business fully recovered: 4%
- Other: 27%

**ANALYSIS**

A majority of insureds faced difficulty quantifying their losses and providing the paperwork required by insurers. This is a common occurrence as BI losses can be very complex, even if a direct loss and especially when an indirect loss with multiple coverages that apply. Furthermore, insurers tend to be more demanding with BI losses compared to other types of losses. They often request significant amounts of information and detailed analysis of production forecasts and budgets, loss production volume measures, profit and loss statements, and operation and sales statistics, among other details.

Other notable issues included disagreements between adjusters and insureds and a lack of understanding by the insurers’ representatives of the insureds’ business/impact due to loss. Additional problematic areas included personality issues, uncooperative adjuster/forensic accountant, suspension period issues, and lack of direction on preparing claim.

Fortunately for the risk managers who participated in the survey, they face few issues with the maximum indemnity period exhausted before their businesses fully recovered.

Many of these challenges can be overcome by risk managers through the establishment of an appropriate team and relationships prior to loss. Risk managers should reach out to their insurer’s team prior to a loss to discuss their business operations, potential financial impacts to operations, loss data requirements, and communication processes and protocols. With this understanding in place, risk managers also should consider identifying and establishing relationships with cleaning vendors/contractors, forensic accountants, claim project managers, engineers, and other parties who will assist with the loss recovery.
**QUESTION 11**

If you have had a BI claim challenged, reduced, delayed and/or declined in the past five years, please indicate the reason(s) given by the insurer(s):

- **Basis clauses/conditions precedent** 47%
- **Information requested by insurers was not available** 44%
- **Insufficient limits or sub-limits purchased** 9%
- **Late notification** 3%
- **Under-declaration of insurance values** 3%
- **Warranty breach** 3%
- **Non-disclosure of material risk information** 0%

**ANALYSIS**

For those risk managers that faced BI claim recovery issues, many encountered problems with the basis clauses/conditions precedent. In other cases, the information requested by insurers was not available.

This can happen when risk managers do not understand their coverages and have not battle-tested their policies to determine what would occur in a specific loss scenario. It is hard to underestimate the importance of stress-testing.

The leading responses here indicate once more the need for a better dialogue between insurers and insured regarding coverage, loss accounting requirements and loss scenarios. For a BI claim to be successful, risk managers should discuss potential loss scenarios with their broker, forensic accountant and/or insurer. By doing so, estimates can be made of various loss scenarios, areas with limitations of coverage can be identified, and decisions can be made as to how to minimize losses and best account for them when they do happen.
QUESTION 12

Do you think your existing policy provides comprehensive, partial, insufficient or no BI cover for the following risks?

### Widespread Damage/Nat Cat

- **Comprehensive**: 56%
- **Partial**: 30%
- **Insufficient**: 7%
- **No coverage**: 3%
- **Not sure**: 4%

### Supply chain

- **Comprehensive**: 46%
- **Partial**: 21%
- **Insufficient**: 16%
- **No coverage**: 15%
- **Not sure**: 9%

### Cyberrisk

- **Comprehensive**: 39%
- **Partial**: 13%
- **Insufficient**: 22%
- **No coverage**: 17%
- **Not sure**: 10%

### Non-physical damage events

- **Comprehensive**: 31%
- **Partial**: 29%
- **Insufficient**: 19%
- **No coverage**: 15%
- **Not sure**: 10%

**ANALYSIS**

The most comprehensive coverage can be found for widespread damage/natural catastrophe, with about 55% of risk managers stating that their policy would respond. The worst coverage is for non (physical) damage events, with nearly 30% showing no coverage at all.

Only about 12% of firms have comprehensive protection in their policies for cyberrisk, while nearly 25% have no coverage and 10% were unsure. Most forms today are primarily addressing cyber breach rather than BI. However, the incidence of cyber BI is increasing quickly. Two recent events illustrate these concerns.

In 2014, it was reported that attackers hacked the network of a German steel mill, penetrated its production management software, and took control of the plant. They methodically destroyed human machine interaction components, and succeeded in preventing a blast furnace from initiating its security settings, causing serious material damage to the infrastructure.

In 2016, in the United States, Delta Airlines suspected they had been the victim of a power outage that was eventually determined to be a cyberattack. The airline had to cancel 451 flights because of the incident.

There may be a significant overlap in supply chain disruptions, widespread damage/natural catastrophe and non-physical damage events. This overlap can lead to a multiplier effect at a firm, when one event triggers a ripple impact at the firm. According to an annual study by the Business Continuity Institute sponsored by Zurich, the top three causes of supply chain disruption at nearly 75% of the companies surveyed are:

1. IT and telecom outages
2. Cyberattacks and data breach
3. Adverse weather
Other causes of supply chain interruption include: transportation issues, production problems, strikes and work stoppages, supplier insolvency, and political risk. Many of these supplier disruption causes are related to non-physical damage, so may not be covered under traditional business interruption property policies and, therefore, may benefit from broad, specific supply chain insurance offered by certain carriers.

It is interesting to note that approximately 7%–20% of respondents did not know whether their policy even provided any coverage for cyberrisk, supply chain disruptions, widespread damage/natural catastrophe, and non-physical damage events. Given these events’ high potential to significantly disrupt business for long periods of time, it may be advisable for firms to work with their brokers and carriers to better understand their risk and potential coverage (see the Tianjin Port case study on page 13). Companies can undertake pre-loss assessments so they can begin to quantify their true exposures and make informed decisions about proactive mitigation and risk transfer options.

DEMOGRAPHIC INFORMATION

Please identify your organization’s industry.

What is your organization’s estimated annual revenue?

![Pie chart showing the distribution of annual revenue.](image-url)
How many total employees are in your organization?

![Pie chart showing the distribution of employees by size of organization]

- More than 25,000: 18%
- 15,000-25,000: 7%
- 10,000-15,000: 9%
- 5,000-10,000: 16%
- 1,000-5,000: 31%
- 500-1,000: 8%
- 100-250: 4%
- 0-100: 2%

What is the geographical spread of your organization's activities? Select all that apply.

![Bar chart showing the geographical spread]

- United States: 91%
- Rest of North America: 52%
- Europe: 41%
- Asia: 36%
- South America: 30%
- Australasia: 27%
- Central America: 22%
- Middle East: 21%
- Africa: 19%
CASE STUDIES

The following business interruption case studies help elaborate on points made in the preceding analyses:

TIANJIN PORT CASE STUDY

Event
The explosions that occurred in Tianjin, China, 170 kilometers southeast of Beijing on August 12, 2015, represents the largest insured man-made losses to date in Asia and is one of the most complex insurance and reinsurance losses in recent history. The largest of the explosions had the greatest impact to Tianjin Port, the fourth-largest port globally by throughput as well as Tianjin Port Logistics Center, a large industrial park, which is home to both Chinese and international interests. In addition, local government sources indicated that 700 tons of sodium cyanide and other toxic substances were present at the time of the explosion.

Insurance Consequences
It was not immediately clear where this would fit in to existing insurance arrangements. Although a damage related event, the explosion in the port of Tianjin highlighted one of the many risks that are unlikely to be covered under traditional property damage/time element policies (unless a company’s locations were directly affected). For many in the United States, it is the impact on revenue and logistics that would have caused an interruption to business, and a company may struggle to find any cover for this within existing policies.

Full transit cover for stock (or a stock throughput policy to follow stock during its journey) may provide for some of the value of assets actually damaged, however, the disruption caused is unlikely to be covered whether stock was damaged or not. A port is not usually named as a supplier, so contingent business interruption would not apply and, therefore, any further cover for the resulting interruption to business may not be covered.

Exclusion zones were enforced, so denial of access would have been an issue too. Although the clean-up and reinstatement was expedited, the interruption period was significant.

Many insurers also had great difficulty in identifying addresses and stock held on sites affected. With such high throughput, it seems that it has been difficult to pinpoint the assets held there, and therefore even directly affected risk managers have struggled to support and prove their loss.

Conclusion
It is only through proper loss scenario testing that such gaps in cover can be identified. By leading with the events that could happen (using actual historic or hypothetical examples) rather than the insurance, risk managers can establish a clearer picture for cover and consider their options for further risk transfer such as stock throughput or non-damage/supply chain policies.

There is usually very restricted (or no) cover under property damage/time element policies for transportation and supply chain risks. Even if some cover is in place if a direct supplier is affected, further limitations often apply in terms of amount, perils (fire, lightning, explosion and aviation (FLEXA) or natural catastrophe exclusions) or territories.

TSUNAMI CASE STUDY

Challenges
A large manufacturer for the automotive industry suffered extra expense and contingent business interruption losses following the earthquake and tsunami in Japan in 2011. The claim was made more complicated in that the cause of the loss at the affected locations needed to be insured under its policies in order for contingent time element coverage to apply (i.e., flood, earthquake, etc.). Also, in addition to the insured documenting its own loss, the manufacturer’s insurers required supporting documentation from the impacted customers and suppliers to demonstrate the cause of the insured’s inability to ship to customers or source from suppliers.

Solutions
It was necessary for the insured to calculate its losses separately from the direct loss (supplier) and the auto company loss (customer). Utilizing a claim preparation service provider, the insured was able to properly document and supply detailed information and analysis to support its claim. This required records and detailed analysis of production forecasts and budgets, loss production volume measures and operation and sales statistics, among other details.

The Result
The supplier loss was settled with the insured, insured’s claim preparer, adjuster and insurer’s forensic accountants. For the direct and customer claims with coverage consideration, the total losses were settled to the insured’s satisfaction following significant deliberation with its insurers.
APPENDIX

Reviewing the Business Interruption Policy

It is important for risk managers and other key personnel to periodically review your business interruption coverage to make sure it is meeting the needs of the business. The following questions can help guide this process:

Has your CFO, COO and other key executives or managers with intimate knowledge of your operations and finances reviewed the BI coverage in place?

Has this group explored likely loss scenarios, how the company and its operations would be affected, and potential mitigation efforts? Would your policy pay for the cost of these mitigation efforts? Does this group identify any scenarios that would not be covered?

If not, plan for engaging this group in:

- Developing likely loss scenarios, flood, fire, explosion, subsidence, wind, etc.
- Engaging each individual to determine how these events would likely affect the business and operations.
- Analyzing your profit and loss statement to determine sales that would be lost and expenses that would discontinue; i.e. estimate your business income loss under different scenarios.

In addition, consider the following questions:

Is the period of indemnity sufficiently long to allow your business to rebuild and restore operations?

- How long will it take to replace key sites in the event of a total loss?
- Would any of your buildings or sites require extensive code upgrades or have an extended permit or design phases that would extend the time to restore operations? Is the increased cost of building to current codes covered?
- Would repairs and replacement take place in stages, allowing partial operations to continue but extending the time needed to restore operations?

Are the limits of insurance sufficient to indemnify you against a complete loss of normal revenue during the period of indemnity?

- When was the last time the time element limits were revisited? Has your business grown or operations substantially changed since then?
- Does the policy contain sublimits for off-site interruption and/or contingent business interruption? If so, are they sufficient?
- Does the policy contain penalties for under insurance or co-insurance? If so, do you have sufficient insurance to avoid these penalties?
- Is there a worst time of year for a loss to occur? If so, when is it and what would happen if you had a loss at or before that time?
- Do you have adequate payroll coverage in your time element policy? Will you continue to pay employees to retain them after a loss? What if the period of shutdown is greater than six or 12 months?

Does your policy cover your supply chain?

- Does your company use services or materials that would be difficult to source elsewhere?
- Are there bottlenecks in your production? Is there a key component that if its supply was interrupted the effects would extend to other lines and cause delays or stoppages of production?
- If an event interrupts key supplier(s), is there coverage for losses incurred as a result of suppliers shutting down? Is this type of loss subject to a separate sublimit?
- If the supply chain is affected by the same event, can you access alternative suppliers?
- Are plans in place to mitigate the effect of lost suppliers?
- Could currency fluctuations affect purchase prices of inventory or sales value of products?
- What type of extra expense coverage is in place? If extra expenses must reduce the loss to be recovered, is it likely that you would incur extra expenses to maintain normal operations and customer relations that may not reduce the loss?

If you are unsure about the answers to any of these questions or you do not believe that your policy will cover any of these items, talk to your broker or make alternative plans so your organization is not surprised by under insurance or events not covered.