

WORKSHOP

DEMYSTIFYING BUSINESS INTERRUPTION INSURANCE

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Workshop Agenda

- Function of Business Interruption Insurance
- Basis of Cover
- Calculation of the Insured Profit
- Indemnity Period
- Contingencies insurable and other extensions in Business Interruption Insurance
- Policy conditions and clauses
- Current Insurance market trends and new developments

Learning Outcome(s)

- Understand what Business Interruption (loss of profits) is, and when business interruption insurance operates
- Assess adequate limits/sums insured/indemnity periods
- Understand the cover provided by and main practices of business interruption insurance.
- Gain industry skills in underwriting and risk assessment of business interruption risks.
- Describe the typical coverage extensions provided on a business interruption policy
- Gain an essential perspective of current market practices and new developments in Business Interruption Insurance

Function of Business Interruption Insurance

Business Interruption Risk

Risk of Dynamic Nature:

- More Complex than Property Risk
- Purely Pecuniary in nature
- Closely linked to Insured material damage at the insured premises
- Importance of Time Factor

Effects of Fire / MBD / NATCAT on Business

Shortage of Funds

**Fines or Penalties
under contracts**

**Loss, damage or
Destruction to Plant /
Equipment**

**Disappearance of Net
Profit**

**Insecurity to cope
with Continuing
Costs e.g. Salary,
Rent etc.**

**Additional
expenditure in order
to diminish the
reduction in turnover**

Purpose of Business Interruption Insurance

The **indemnity** following the interruption is meant to put the insured **(as far as possible)** into the same **financial** position as he would have been had the incident not occurred.

- ❑ Pay bills to maintain business (rent, rates, interest payable, insurance, etc.)
- ❑ Meet the cost of salaries and wages
- ❑ Pay for increase in cost of working (“ICOW”) (subject to an economic limit)
- ❑ Restore the net (trading) profit
- ❑ Pay for extra expenses (over and above “ICOW”)

Why Understanding BI

BI risks and BI coverages are often complicated

BI Claim

\$\$\$

vs.

PD Claim

\$

BI is usually the largest exposure **AND** the least understood

What is Business Interruption Insurance?

Protects income of business when it is interrupted as a result of

- **INSURED property damage** (may include Machinery Breakdown) **at the premises** (or away from the premises – Contingent Business Interruption)
- As opposed to its assets - buildings, machinery and stock



Advanced Loss of Profit Insurance



Consequential Loss Insurance



Business Interruption Insurance

What is Business Interruption Insurance?

What needs to be covered

Charges/costs which continue after damage

+

Net Profit lost following damage

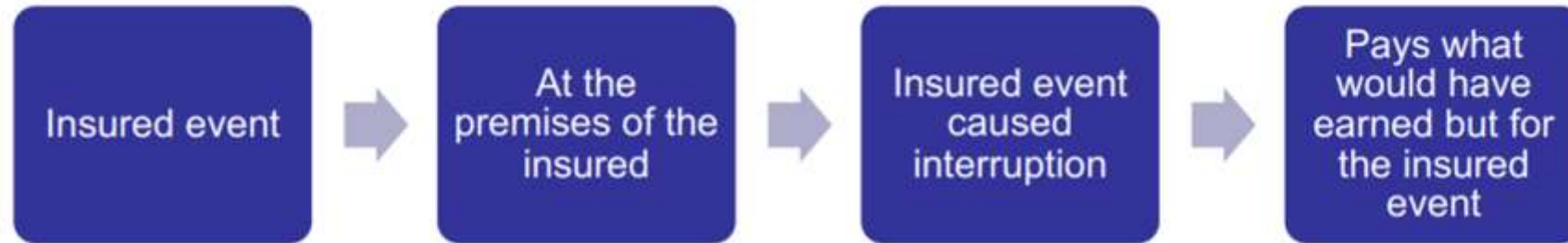
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Additional costs/extra expenses incurred following damage to prevent a loss of turnover/production

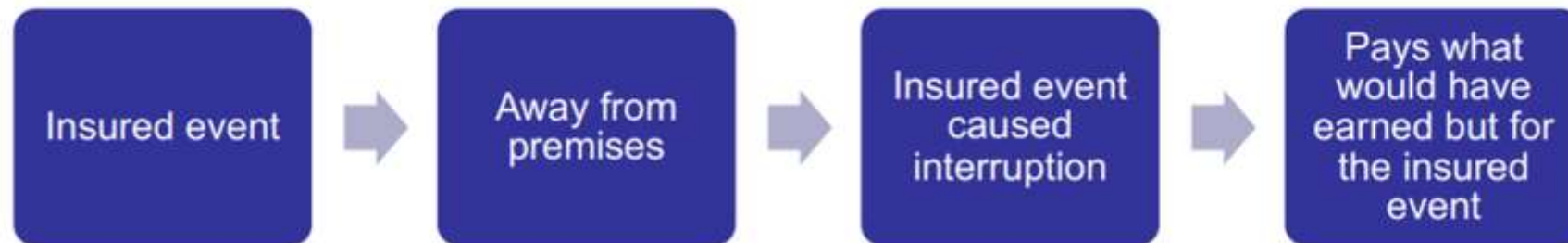
What is Business Interruption Insurance?

Two aspects of Business Interruption

Business interruption

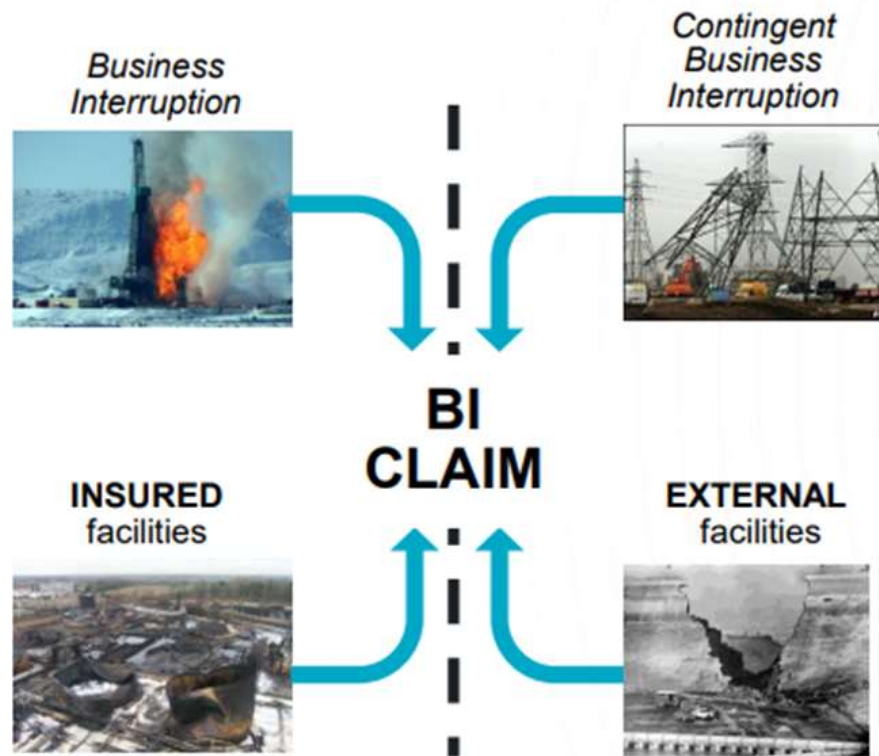


Contingent Business Interruption



What is Business Interruption Insurance?

Policy Coverage BI Trigger



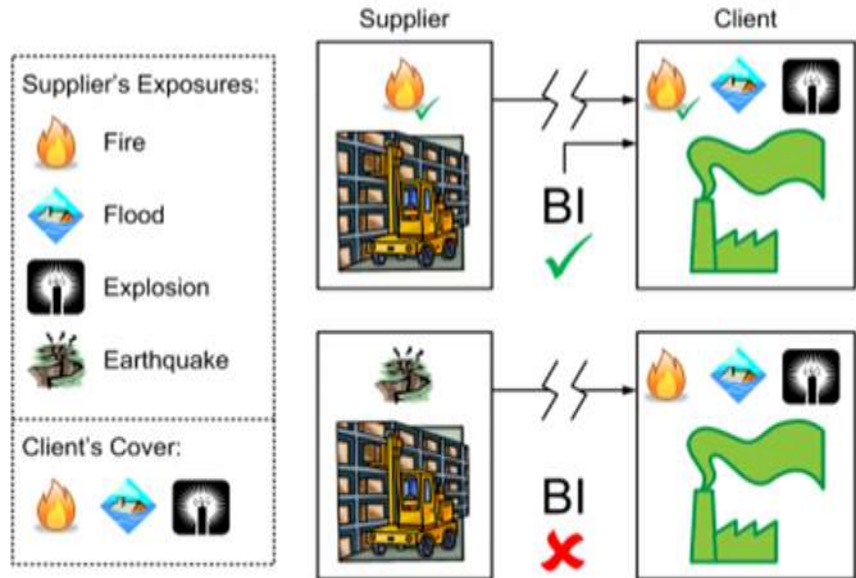
What is meant by an insured asset?

Why is it important to have clarity within the BI policy on this trigger?

What is Business Interruption Insurance?

Policy Coverage Contingent BI

A loss must be an insurable loss, as defined within the client's PD policy, in order for the BI cover to trigger.



What protection does the insured want with respect to CBI?

What are the concerns of insurers with respect to contingent BI cover?

To what extent are operators today aware of the risks of other suppliers/customers?

Basis of Cover: Business Interruption Insurance

Basis of Cover

1. Gross profit
2. Revenue (Service operators)
3. Fixed cost + Debt servicing (new ventures)
4. Loss of production income (upstream risks)

BI trigger: Insured's assets damaged by insured perils under the policy

Basis of Cover

Contingent Business Interruption:

Loss must be an insurable loss, as defined within client's PD policy for BI cover to trigger.

Some important consideration for CBI:

- CBI exposure not standard (vary from client to client)
- Standard cover / limits are available in the market
- Sub-limits (scenario specific)

Insurer's concern on CBI – Accumulation of risk

Basis of BI Cover

Policy Coverage Limits

Waiting period:

- BI cover is **not** for short duration outages.
- Policy pays out after defined waiting period.

Indemnity period:

- The period for which the policy cover applies following a loss.
- Wording defines if at point of loss or after the waiting period.

Sub-limits:

- Scenario or consequence specific limit in the level of coverage (stated as monetary value or time period).

What are markets trying to achieve with a BI deductible?

How important are limits in the event of a loss?

To what extent can an Insured test the policy limits internally?

Calculation of Insured Gross Profit

Insurance Gross Profit

Turnover

In every B.I. loss the production interruption leads to reduction in turnover, therefore “business turnover” is at the base of B.I. insurance.

Turnover can be broken down into four elements:



Insurance Gross Profit

What needs to be insured if a business is interrupted?

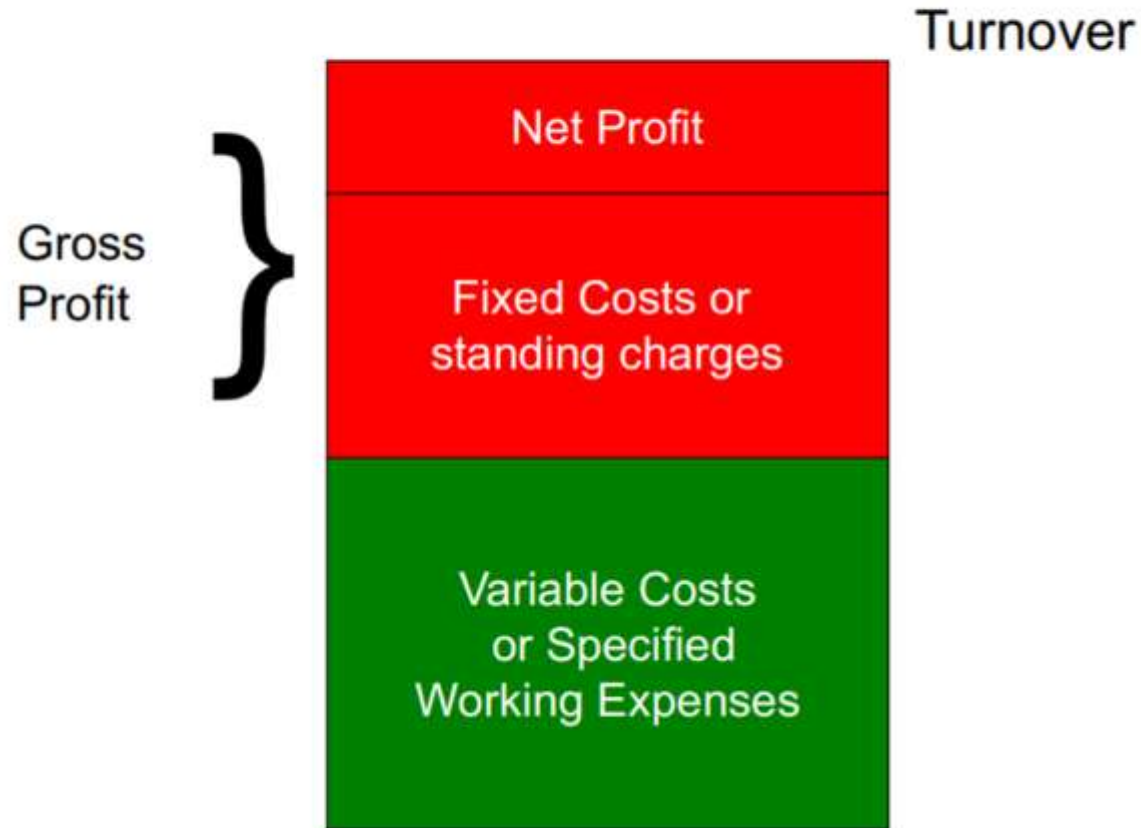


These three elements form = **BI** gross profit

(**not** to be confused with the accountant's gross profit)

What is Business Interruption Insurance?

Gross Profit



COMPANY			
INSURANCE GROSS PROFIT	Last year	Estimated	
Turnover (Revenue/Sales)	10,000,000	11,000,000	
Plus			
Closing stock	500,000	600,000	
Plus			
Closing work in progress	100,000	100,000	
A	10,600,000	11,700,000	
Uninsured working expenses (Vary directly with turnover)			
Raw material costs/purchases	6,000,000	6,500,000	
Packing	200,000	200,000	
Carriage	150,000	150,000	
Postage & freight	100,000	100,000	
Bad debts	50,000	50,000	
Other ?	0	0	
Other ?	0	0	
Total uninsured working expenses	6,500,000	7,000,000	
Plus			
Opening stock	450,000	550,000	
Plus			
Opening work in progress	100,000	100,000	
B	7,050,000	7,650,000	
Annual insurance gross profit (A - B)	3,550,000	4,050,000	

Definitions

Turnover

The money paid or payable to the insured for goods sold and delivered and for services rendered in course of business at the premises. The contributing elements are:

Variable charges (“uninsured working expenses”)

Cost which vary directly with the level of production (raw materials, components used in manufacturing, packaging material, post & carriage.

Standing charges

Costs which must be paid regardless of the level of production (rent, directors’ fees, taxes, interest on borrowed capital etc.) contribute to a BI loss and must be fully insured

Payroll

- wage and salary expenses which continue despite a reduction or stop of production
- usually insured as standing charges

Definitions

Net Profit

After all business expenses (i.e. variables, standing charges and payrolls) have been met, a net trading profit hopefully remains.

Any reduction in the level of production will affect this profit margin and, therefore, it must be insured!

Net Profit minus interest received = Net (Trading) Profit as part of the insurable Gross Profit

How to Calculate Insurance Gross Profit

ADDITION METHOD

$$\begin{aligned} &+ \text{ Net Profit} \\ &+ \text{ Fixed Cost / Standing Charges} \\ &\quad (\text{pay roll, salaries}) \\ \hline &= \text{ Gross Profit} \end{aligned}$$

DIFFERENCE METHOD

$$\begin{aligned} &+ \text{ Adjusted Turnover} \\ &- \text{ Variable Cost} \\ \hline &= \text{ Gross Profit} \end{aligned}$$

Exercise: Insurance Gross Profit

Policy Coverage Profit and Loss Summary Exercise

What is the BI sum insured on an insurable gross profit basis?

(Reminder: Insurable Gross Profit = Revenue Loss – Reduction in Costs)

- Revenue from sale of products.
- Raw material costs.
- Gross margin.

US\$m/year

2500

(2000)

500

• Fixed costs:

- Labour	(100)
- Materials	(25)
- Local taxes	(25)
- Administration	(25)
- Miscellaneous	(25)
- Total	(200)

Variable costs:

- Process costs	(50)
- Electricity	(25)
- Chemicals	(25)

- **Total** (100)

(300)

Insurable Gross
Profit =
US\$400m/year

- Net margin.

200

Class Exercise # 1: BI Sum Insured

Declared Values Insurance Purchase Exercise

You are buying the annual BI insurance policy for your company.

What BI limit should you buy... what is your BI sums insured?

Company details for insurance purchase:

- Gross profit (*estimate for coming year*). = US\$100 million per annum.
- Insurance policy term. = 12 months policy, renewal January 1st.
- Maximum indemnity period. = 24 months.
- Estimated business growth. = 30% per year.

US\$200 million?

US\$230 million?

US\$299 million?

Exercise: BI Sum Insured

Declared Values Insurance Purchase Exercise



Growth of 30% per year
in years 2 and 3

+ 30%

+30%

US\$100 million	US\$130 million	US\$169 million
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**Total loss, two years
from end of year 1**

US\$299 million

Setting the Sum Insured

The insured must take the following factors into consideration for the setting of the sum insured

- General rate of inflation (or deflation)
- Past performance of the business
- Plans for future expansion (or contraction) (incl. some “non-quantifiable” factors such as competitor’s behavior)
- Maximum period the company needs to recover in case of a loss

Setting the Sum Insured

1. Provisional Premium

- Insured agrees on a TSI of the assessed amount for the period of insurance
- Provisional premium is paid on 75% of this TSI at the beginning of the insurance period
- Insured supplies details on Gross Profit actually earned in the year of insurance when accounts are available

2. Final premium

- Insured pays difference according to corrected figures or receives a refund (usually maximum 1/3 of the 75% provisional premium paid)

BI Indemnity Period

Indemnity Period

Definition:

The period beginning with the occurrence of the incident and ending not later than the Maximum Indemnity Period thereafter during which the results of the business shall be affected.

The Maximum Indemnity Period (number of months) is stated in the specification of the policy, the usual minimum being 12 months. Choosing of an adequate maximum indemnity period is crucial

*The indemnity of the insurer will be limited either by the **sum insured** stipulated in the policy and evaluated as set out beforehand or by the time agreed to represent the **maximum indemnity period**.*

Indemnity Period

Factors Influencing the setting of the maximum IP

**Availability of
Alternate Premises**

**Availability of Raw
Material**

**Manufacturing the
Product in another
group's factory**

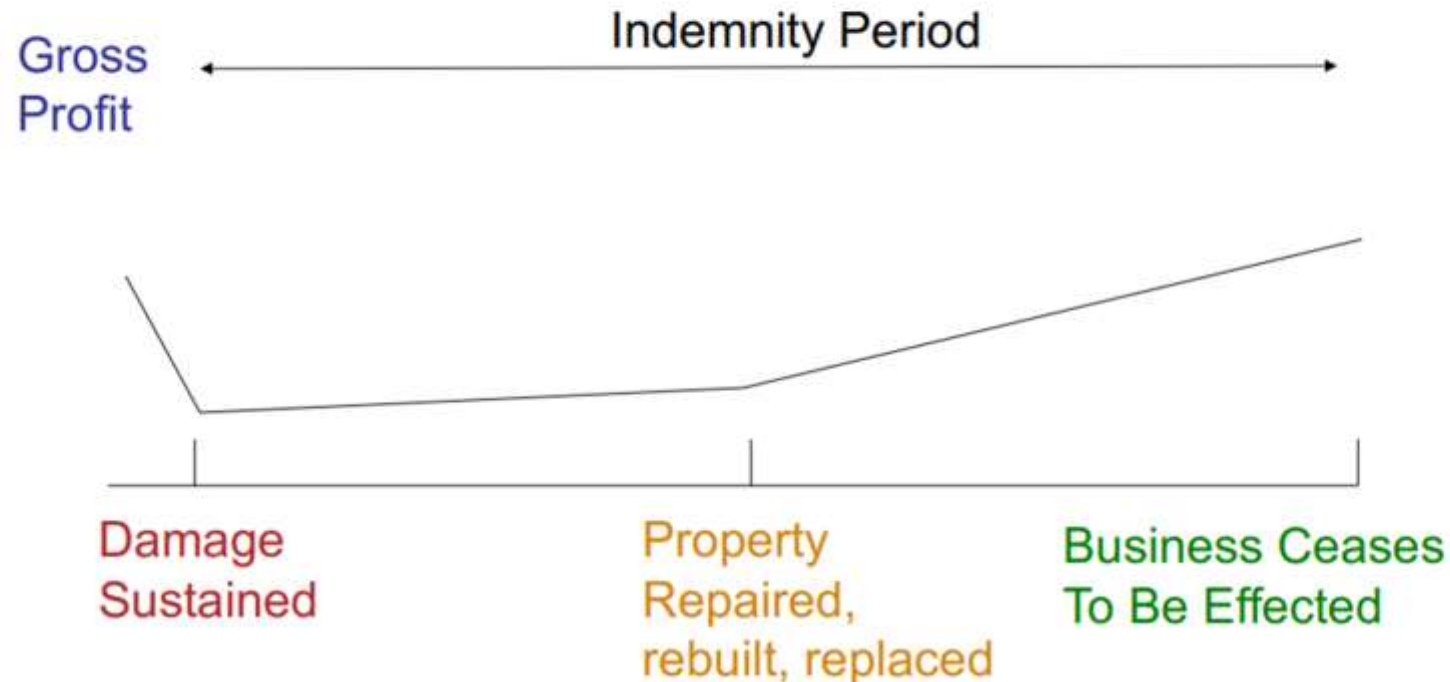
**Time Lag in the
replacement of
Machinery**

**Estimated Time to
Recover Customers**

**Ease of Repair or
Replacement of
Existing Premises**

Business Interruption Insurance

Indemnity period



Business Interruption Policy Conditions & Clauses

BI policy conditions & clauses

Insuring Clause

This Section will *indemnify* the Insured in respect of **interruption or interference** with the Business carried on by the Insured as a consequence of Damage to the Insured Property occurring during the Period of Insurance which is

- (i) Insured by Section 1 Property Damage, or
- (ii) Otherwise insured by a policy covering the interest of the Insured in such property against such damage.

and under which the insurers thereof have paid or admitted liability.

BI policy conditions & clauses

Indemnity

The amount payable as indemnity hereunder shall be;

(a) In respect of loss of **Gross Revenue**

The amount by which the **Gross Revenue** during the Indemnity Period falls short of the **Standard Gross Revenue** which would have been achieved had the interruption or interference not occurred.

(b) In respect of Increase in **Cost of Working**

The **additional expenditure** necessarily and reasonably incurred for the sole purpose of avoiding or diminishing the reduction in revenue which without such expenditure would have taken place during the indemnity period but not exceeding the amount of the reduction in revenue thereby avoided or diminished.

Less: Any sum saved during the Indemnity Period in respect of such charges or expenses of the Business payable out of the Gross Revenue as may cease or be reduced in consequence of the damage.

Material Damage Proviso

No claim is admitted under a business interruption policy unless the interruption has been caused by material damage for which property insurers have accepted liability, or would have accepted liability, but for the operation of deductibles.

Wording:

“Provided that... there shall be in force an insurance covering the interest of the insured in the property...and that payment shall have been made or liability admitted...”

Material Damage Proviso

The material damage proviso is a vital feature of BI insurance, because

- It secures for the BI cover the protection of all the conditions, clauses and warranties stipulated in the material damage section. Without such proviso the relevant wordings of the material damage policy would have to be incorporated into the BI wording itself.
- Material Damage and BI are intended to go together. In case of breach of warranty there will be no payment under either policy!
- A small material damage loss may well be within the deductible (or excess) of the material damage cover and, thus not payable by this insurance, but it could have a serious impact on the production, resulting in huge legitimate claims under the BI cover



Increased Cost of Working

Definition:

Increased Cost of Working is an ***additional expenditure*** necessarily and reasonably incurred for the sole purpose of ***avoiding or reducing the shortfall in turnover*** during the indemnity period.

An insured's increased cost of working will be covered by insurers as long as it does not exceed the **economic limit**.

Economic Limit: Insurers are not prepared to pay more as "Increase in Cost of Working" than the sum produced by applying the Rate of Gross Profit to the amount of the reduction thereby avoided.



Increased Cost of Working: Example

Formula for Economic Limit

Rate of Gross Profit x Reduction in Turnover avoided

Example, Company A:

Rate of Gross Profit	60%
Increased cost of working	USD 28,000
Avoiding turnover reduction of	USD40,000

Economic Limit = 60% x USD 40,000 = USD 24,000

The Insured must pay the remaining USD 4,000 by himself

BI Insurance - Rating

Main Factors

- Fire / MBD base rate
- BI “Sensitivity” (bottlenecks, facilities on other sites, reconstruction time)
- Indemnity Period (shorter or longer than 12 months)
- Waiting period, extensions etc.
- BI Premium rate – 2 x PD Rate

Basic Underwriting Features

1. source of business / leader
2. name of insured account
3. location address (es)
4. Occupancy
5. protection/ construction information
6. material damage policy in force / material damage proviso
7. perils insured against (should be the same as material damage policy)
8. period of Insurance
9. indemnity period
10. total sum insured / limits, sub-limits
11. deductibles in days or amount
12. loss history (5 years at least, MD & BI)
13. MD/BI MPL, survey? bottlenecks? contingency planning?
14. Extensions (e.g. suppliers or customers)

BI Policy Exclusions

- Any consequential or business interruption loss to the insured property which is not the direct consequence of an insured direct physical damage.
- Fines or penalties of whatever nature
- Loss of business due to causes such as suspension, lapse or cancellation of a license.
- Any loss or damage to property in course of construction, installation or erection.
- Any period during which business would not or could not have been conducted had damage not occurred
- Third party claims
- Loss of good will

Business Interruption Insurance - Extensions

BI Insurance Extensions

Delay in Repair

- 02 weeks max.
- Replacement of damaged equipment / machine of foreign make
- Repair / replacement delayed due to import or export restrictions, customs regulations, currency restrictions or any other regulations imposed by any government or public authority.

Denial of Access Extension

- Non damage cover
- Property within 5 km of site
- Limited number of days cover (30 days in excess of waiting period)

BI Insurance Extensions

Named / Unnamed Supplier / Customer Extension

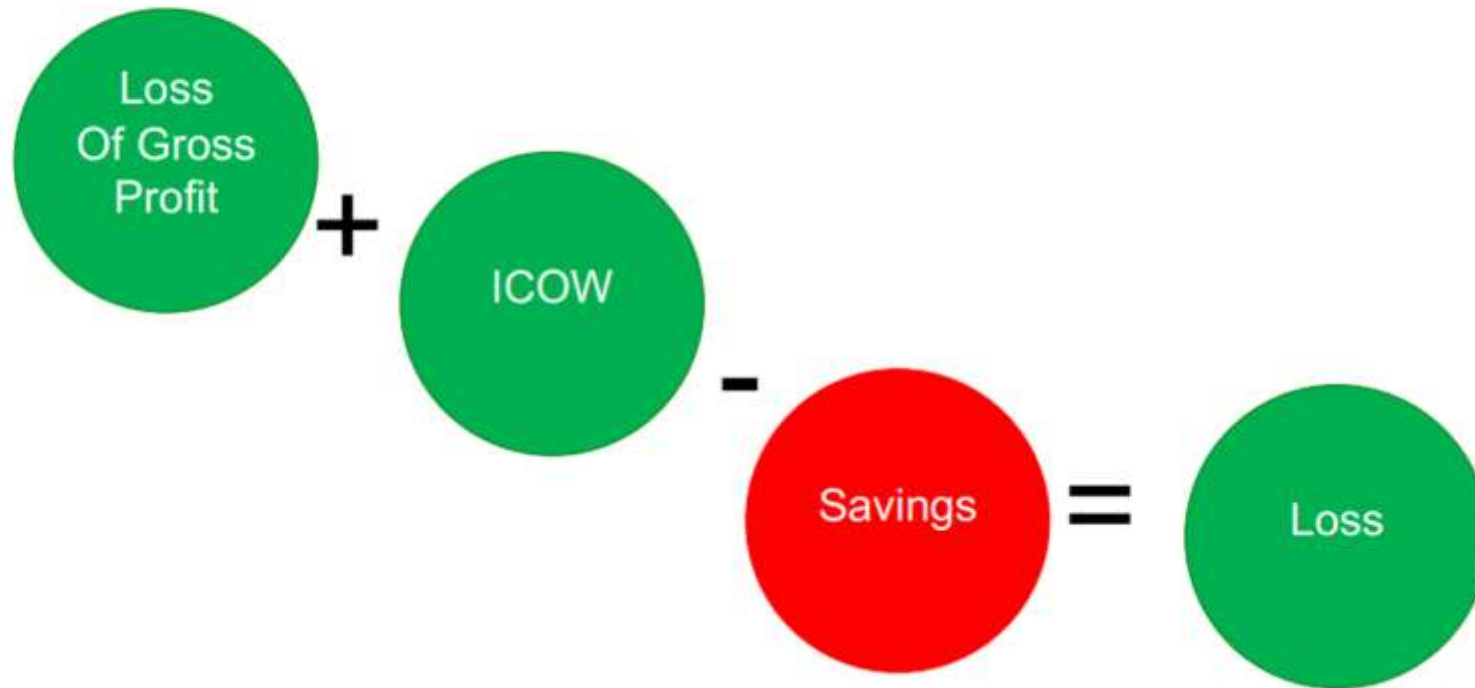
- Non damage cover
- Sub-limit up to USD 50 M
- Basis of Cover FLEXA / All Risk

Authorities Clause / interruption by Civil or Military Authorities

- Prevention of access to site due to Authorities / Court / Govt. Agency
- Sub-limit USD 10 M – USD 25 M
- Limited number of days cover (30 days in excess of waiting period)

Business Interruption Insurance

Components of claim



Subject to average if applicable

Class Exercise #2:

How much will BI insurers pay?



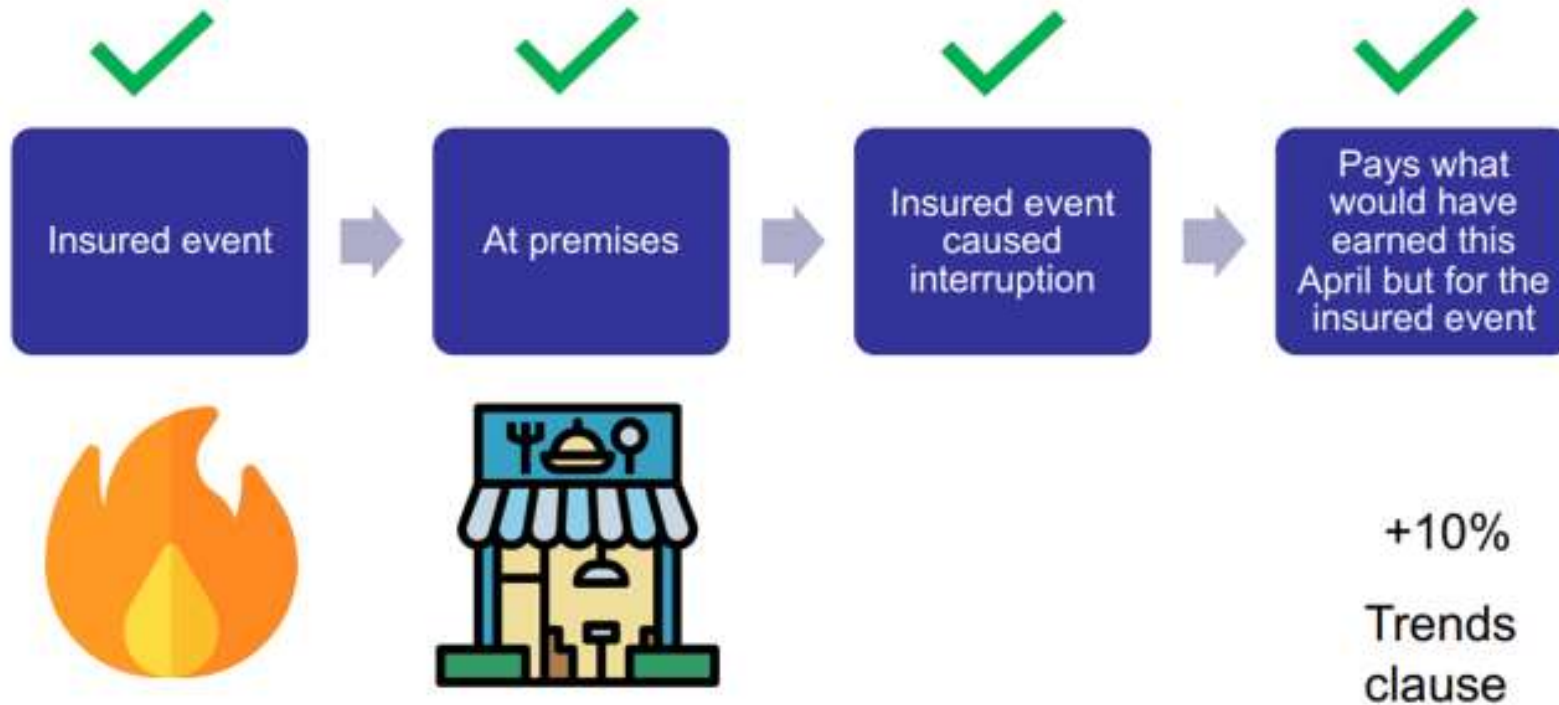
- Restaurant has fire
- Shut for whole of April then all customers return
- Last year's April Gross profit = 4,000,000 Rupees
- This year restaurant sales have grown 10%
- Sum insured and Maximum Indemnity Period sufficient

How much will insurers pay?

1. 0
2. 4,000,000 Rupees
3. 4,400,000 Rupees

Class Exercise #2: Solution

Policy pays 4,400,000 Rupees



18 March 2023

01 NOVEMBER 2023

47

Class Exercise #3:

How much will BI insurers pay?



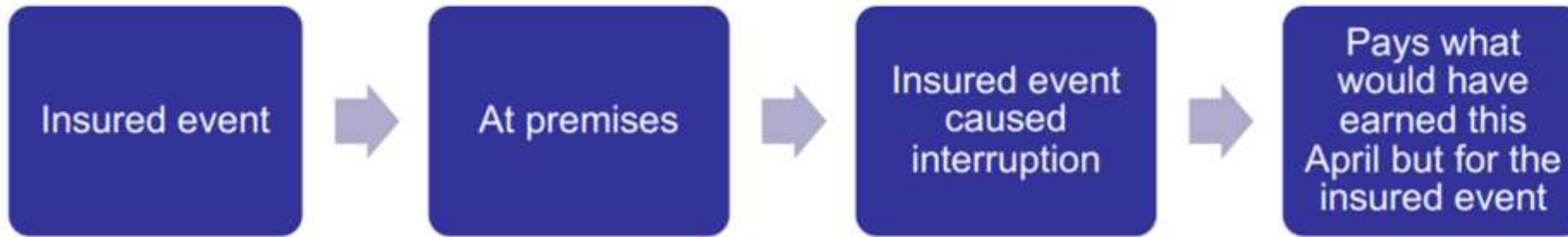
- Restaurant contaminated by virus
- Shut for whole of April then all customers return
- Last year's April Gross profit = 4,000,000 Rupees
- This year restaurant sales have grown 10%
- Sum insured and Maximum Indemnity Period sufficient

How much will insurers pay?

1. 0
2. 4,000,000 Rupees
3. 4,400,000 Rupees

Class Exercise #3: Solution

Policy pays 0



No physical damage!



+10%

Trends clause

Class Exercise #4:

How much will BI insurers pay?



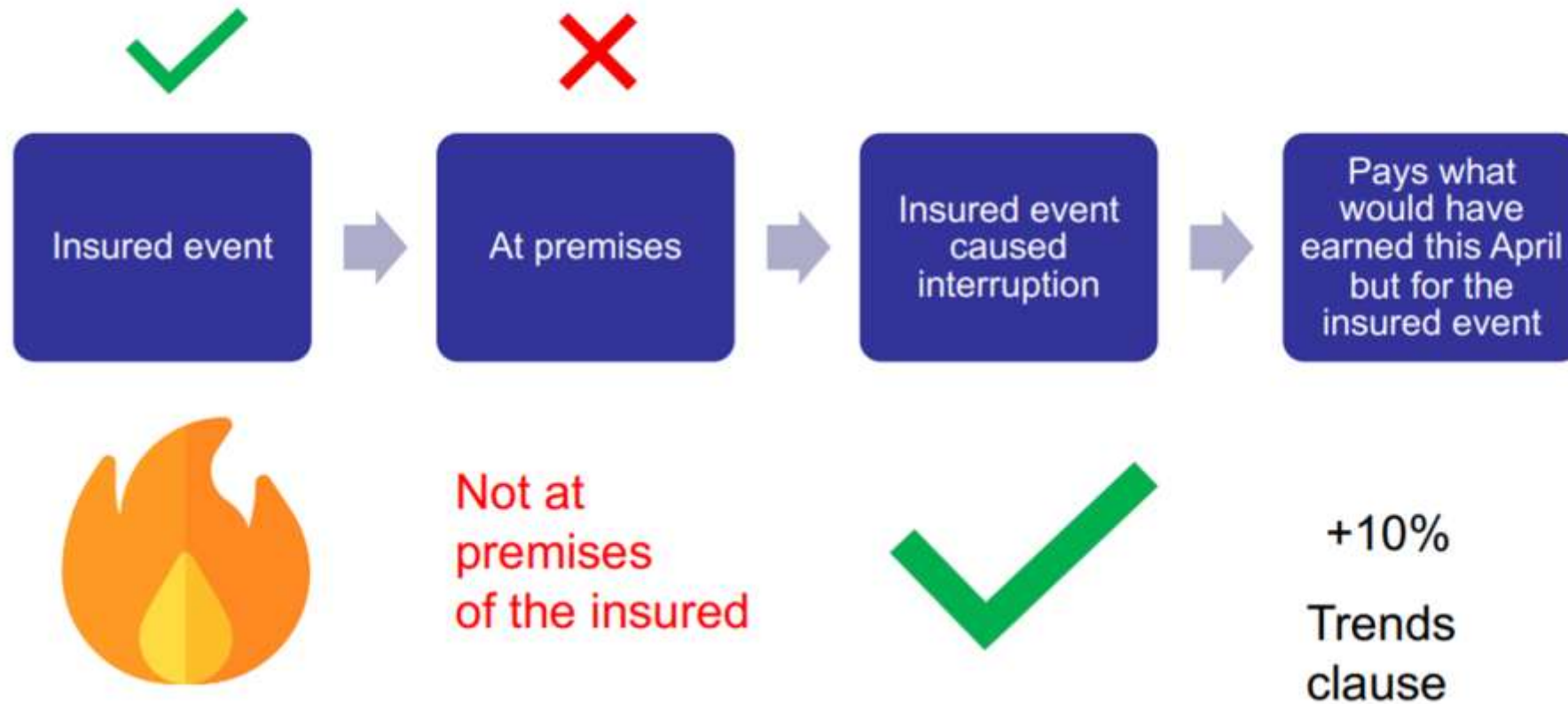
- Nearby building has fire
- No one can get access to restaurant for whole of April then all customers return
- Last year's April Gross profit = 4,000,000 Rupees
- This year restaurant sales have grown 10%
- Sum insured and Maximum Indemnity Period sufficient

How much will insurers pay?

1. 0
2. 4,000,000 Rupees
3. 4,400,000 Rupees

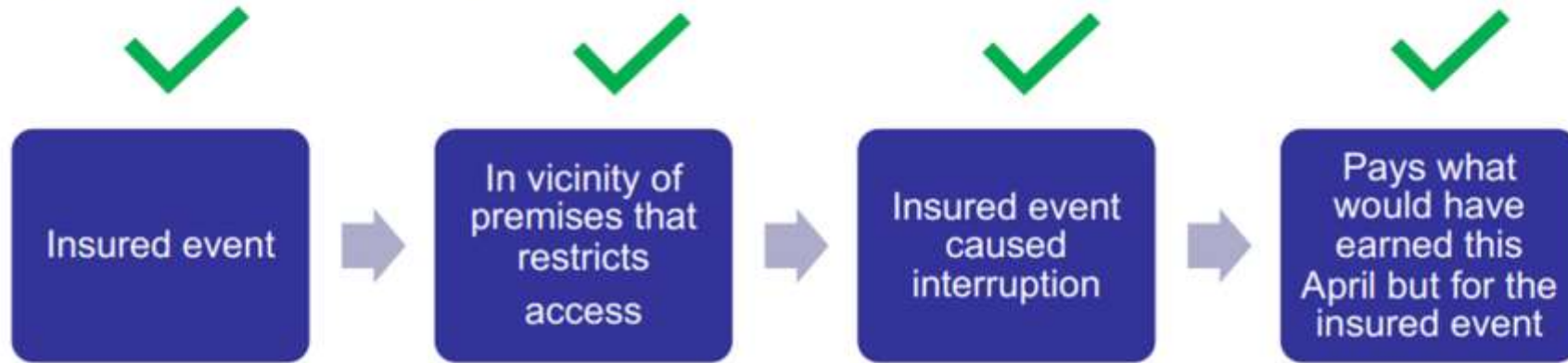
Class Exercise #4: Solution

Basic policy 0 Rupees



Class Exercise #4: Solution

Policy including denial/restriction of access 1,000,000 Rupees



+10%



Subject to any monetary
Time or distance limit

Current Insurance Market Trends & Developments

Current Insurance Market Trends & Developments



- Appointment of Forensic Accountants for BI Claim Assessment
- Insurers are more concerned on Declared BI Values
- Business Interruption Studies
- Modern BI Policy Form are on the basis of Declaration-Linked Basis
 - Estimated Gross Profit
 - No Average to apply
 - Usually provide cover up to 130% on Monthly Declared values and up to 120% on Annual Declared Value (**BI Volatility Clause**)

Workshop Wrap-up

- Business Interruption Risk is Dynamic in Nature
- More Complex than Property Insurance
- Closely linked to insured material damage at the insured premises
- Time factor very important
- Business Interruption (BI) insurance, like property insurance, is based on the principle of indemnity

Thank You