

MARSH



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April 30, 2010

6th International Open Shop Conference

Insurance, Risk Management and Controlling Your Total Cost of Risk

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Agenda and Purpose

- What changing market?
- Insurance 101
- Understanding the insurance business
- Construction specific insurance
- Total cost of risk
- Means and methods of controlling costs
- Questions

What are the Financial Fundamentals of an Insurance Company and Marketplace?

Underwriting and Investment Income

Underwriting Ratios

- **Loss Ratio** (Loss: Premium) is often used as a notional reflection of the profitability of a policy (or group of policies), an insurer's book of business or the entire industry. Its failing is that it does not recognize expenses.
- **Expense Ratio** (Expenses: Premium) is used to measure the management of the expenses of an insurer.
- **Combined Ratio** (Loss + Expense: Premium) reflects the underwriting results of an insurer or the entire industry.

Investment Income is earned by investing the premiums paid by insureds. The combination of underwriting results and investment income provides a more accurate picture of profitability.

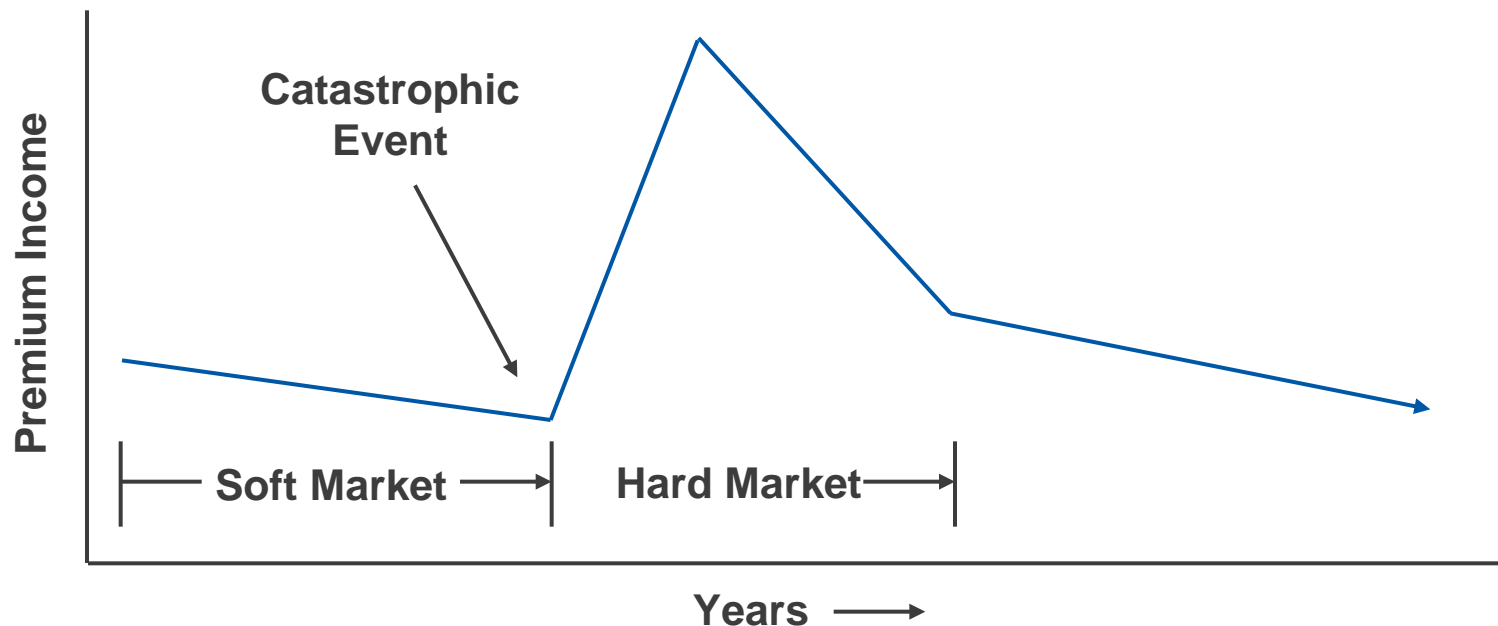
Hard & Soft Market Cycle

Soft Market

- Low premiums
- High capital
- High competition
- Underwriters at low profitability

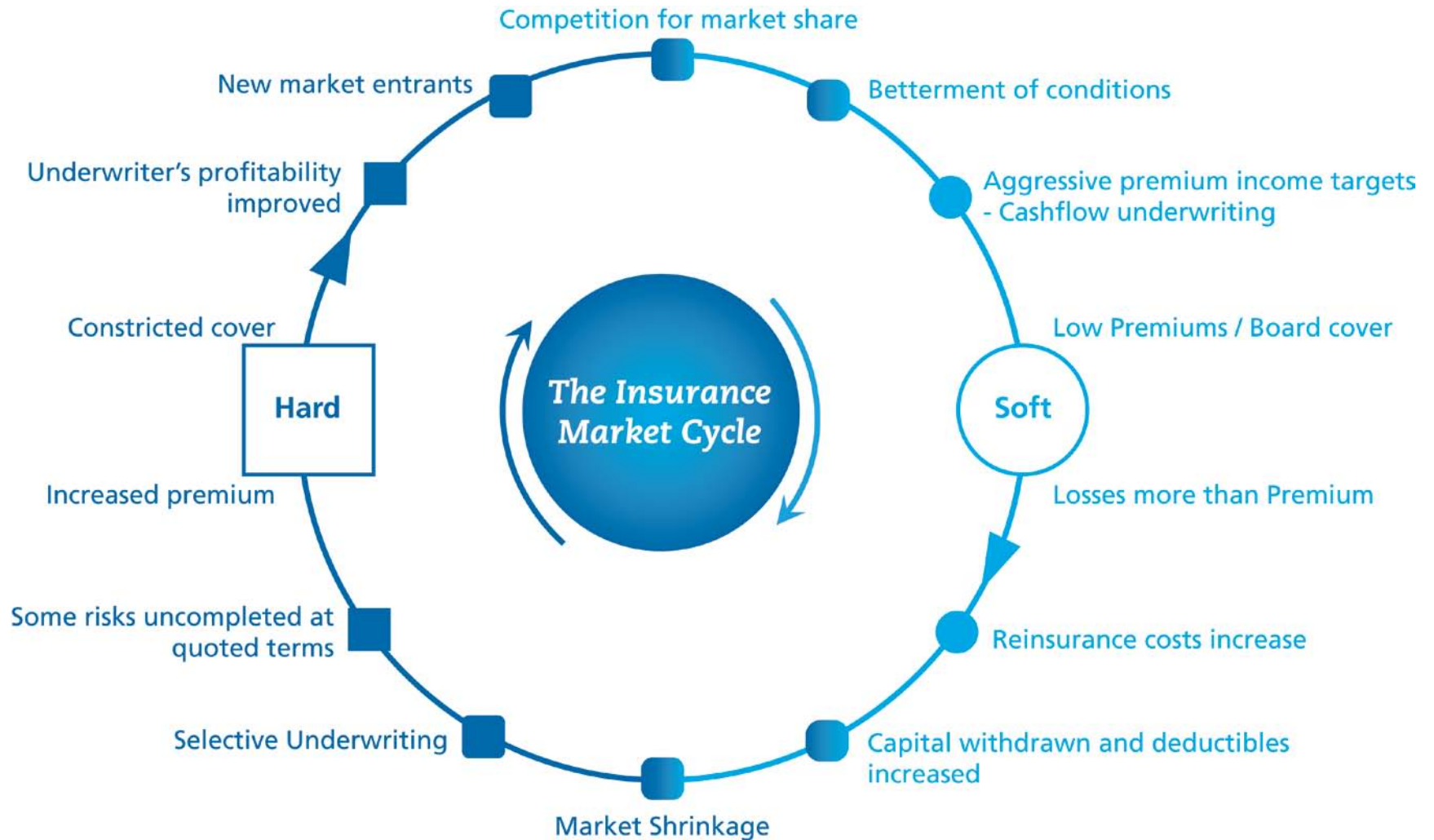
Hard Market

- Precipitated by a catastrophic event (Hurricane Andrew or the World Trade Center) and/or investment income drops
- Drastic increase in premium to compensate for the reduced NOI
- Underwriters are more selective and use more stringent guidelines



The insurance market cycle

Where are we?



Risk and Insurance



What is “Risk”?

- Risk is the uncertainty of loss
- Pure Risk versus Speculative Risk
- Types of Risk: Personal and Business Risks

RISK = Possibility of Financial Loss





The Four Quadrants of Business Risks

Any entity (public, private, for-profit, not-for-profit) attracts risk that can seriously impair its financial health or, worse, cause it to fail.

Financial Risks	Strategic Risks
<ul style="list-style-type: none">▪ Credit default▪ Market risks▪ Interest rate changes▪ Currency / foreign exchange fluctuations▪ Liquidity, cash flow issues	<ul style="list-style-type: none">▪ Competitive threat▪ Intellectual capital▪ Research & development▪ Channels and networks▪ Client / industry changes
<ul style="list-style-type: none">▪ Property damage▪ Employee injury▪ Natural disasters▪ General liability / legal risks▪ Business interruption	<ul style="list-style-type: none">▪ Information systems▪ Accounting / control systems▪ HR / key people▪ Supply chain
Hazard Risks	Operational Risks

What is “Risk Management”?

- Risk management is accident prevention and is important because it involves:
 - Your own safety as employees
 - Prevention of injury to customers and clients
 - Avoidance of costly and time consuming lawsuits
 - Protection of your physical assets and income, and
 - Safeguarding your jobs and salaries
- Your objective should be to prevent accidents (and thus insurance claims) from occurring.



What is “Risk Management”?

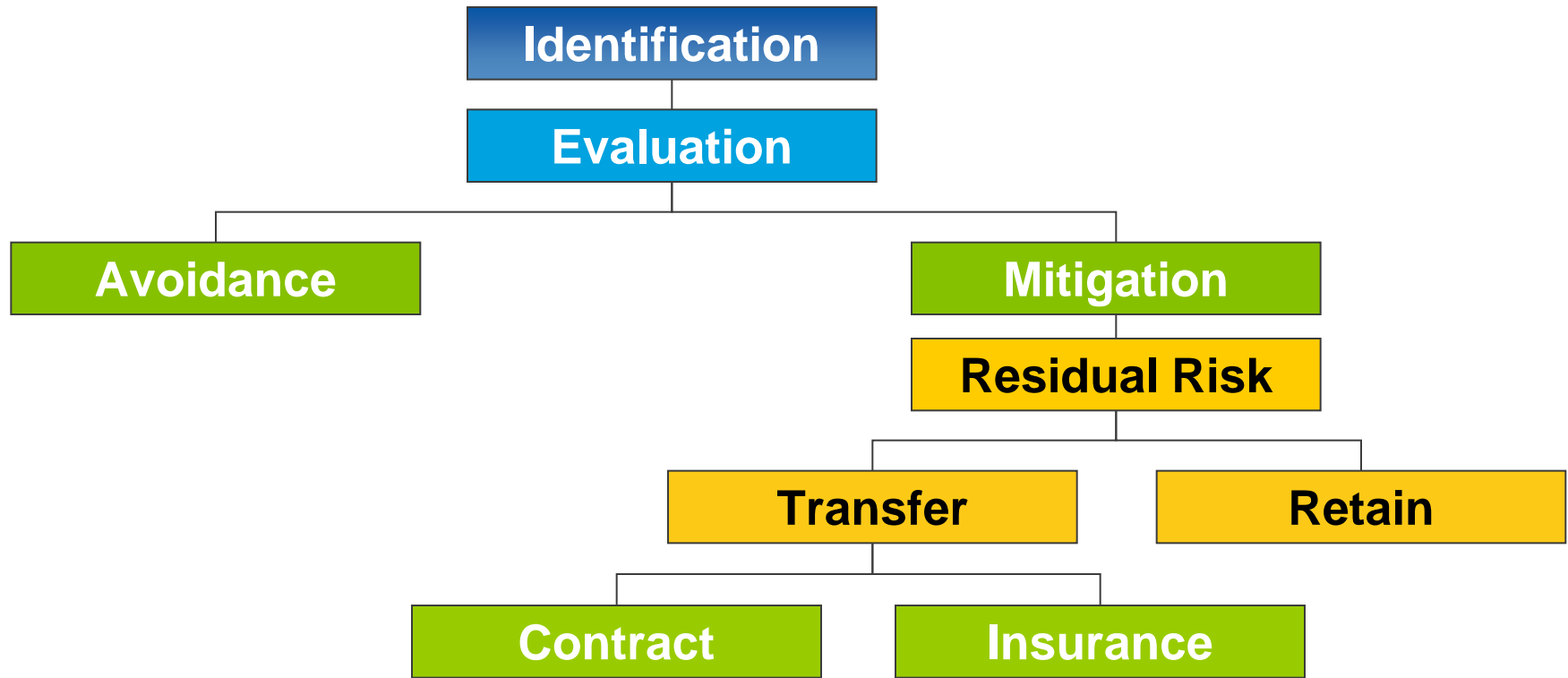
A *disciplined* process of dealing with risk...

- Identification
- Evaluation / Measure
- Mitigation
- Transfer / Retain





The Process of Risk Management: A Graphical Representation





How is Risk Identified?

- Interaction with your personnel
- Review of contractual obligations
- Liaising with Industry Focus Groups
- Insurer applications / questionnaires
- Business Risk Assessment process and risk control inspections
- Newspapers / Periodicals
- Annual General Meetings



What Can Be Done to Lessen or Avoid Risk?

Physical Assets

- Automatic sprinklers
- Intrusion alarms
- Containment (e.g. dyking of tanks)
- Earthquake resistance

Control The Risk

Operations

- Maintenance of facilities / equipment
- Site safety
- Proper training of employees
- Product quality control
- “Employment Practices” standards

Contracts

- “Hold-harmless” clauses
- Avoidance of assumption of past liabilities (mergers & acquisitions)
- Limits on legal rights of others to bring suit



Risk Transfer and/or Retention

Transfer

Shift burden to a third party

- By Contract

“TENANT will assume all liability and responsibility for damage to the premises, facilities and equipment of OWNER, regardless of fault...”

and/or

- Insurance

“In consideration of the payment of the premium, the Insurer will indemnify the Insured ...”

Retain

- Within the Insurance or Contract there will most likely be a level of Risk Retention

Self Insure

Construction Project Risk

- Damage to Property / Equipment
- Damage to Third Parties
- Disruption of Existing Facility
- Construction Accidents
- Materials / Equipment Cost and Availability
- Design, Geotechnical, System Failures
- Environmental Contamination
- Unavailability of Suitable Labor
- Insolvency of Contractors / Subcontractors
- Inclement Weather

Consequences of Risk

- Cost overrun
- Delayed completion / occupancy
- Injury to construction workers
- Injury to visitors or third party properties
- Damage to project
- Impaired public image / bad publicity
- Loss of revenues

Insurance Definition and Industry Structure

What is an “Insurance Policy”?

- “...a contract under which one party, the Insurer, agrees – in exchange for the payment of premium – to pay for specified losses the Insured may suffer, up to specified amounts, under conditions specified in the insurance contract”
Source: Federal Insurance Act
- Insurance works on the principle of risk sharing
- Protection from the unexpected
- Peace of mind
- Form of financial security

Insurance Industry – The Players

▪ Broker

- Negotiates terms on your behalf with insurers
- May represent one or several insurers
- Prepares submissions to underwriters
- Provides advice on the various coverages available
- Designs and places your insurance program
- Provides ongoing servicing of your insurance
- Provides advice on insurance and indemnity specs in contracts
- Provides assistance in claims
- Depending on size, offer a variety of risk management services
- Usually paid via commissions from underwriters

Insurance Industry – The Players

▪ Insurer

- Also referred to as the “underwriter” or “market”
- They are the risk taker and set the terms, conditions and pricing of the insurance (in negotiation with the broker)
- They defend and pay insured claims
- Many offer extra services such as fleet safety, loss control engineering
- There are generalist and specialist markets
- Several “construction” insurers in Canada

Insurance Industry – The Players

- **Adjuster**

- The individual or firm that settles the claim
- Can be an employee of the insurer or a separate entity (independent adjuster)
- Independent adjusters still represent the insurer

Core Coverages

Property Insurance

Property Insured

Property Insured covers “all property” of every kind and description owned by, leased or rented to the insured or for which the insured may be legally liable or in which the insured has an insurable interest.

- Real Property (Buildings)
- Personal Property (Fixed Equipment / Contents)
- Mobile Equipment (“Floater” as these assets tend to move around)
- Stock (Peak Season)
- Raw Materials

Property Insurance Conditions

- Territory – generally site specific in North America (off shore transit & property located outside North America is generally excluded)
- Cancellation – 60 days (desirable)
- Statutory Conditions
- Currency – Generally Canadian Currency
- Aggregates (Flood, Earthquake)
- Loss Payable / Mortgage Clause

Property Insurance

Notable Extensions / Sublimits

- Property in transit
- Property at any other location
- Property of officers and employees
- Valuable papers
- Accounts receivable
- Business interruption / extra expense (to follow)
- Blanket bylaws
- Consequential loss
- Off premises power
- Fire department service charges
- Newly acquired property
- Data processing equipment extension
- Auditors and consultant fees

Property Insurance Valuation

The value to be applied to the property insured in the event of a loss.

Most common methods:

- **Replacement Cost** – Cost to replace the damaged property *without deduction for depreciation* (with “new materials of like kind and quality”).
- **Actual Cash Value** – Basic coverage defined as the cost to replace with like kind and quality *less a deduction for depreciation* (i.e. “operating” depreciation as opposed to Capital Cost Allowance).
- **Agreed Value** – Amount established by the client, prior to inception and agreed by the insurer, that better represents the value of a specific building or piece of property e.g. antique property or a valuable painting (often supported by professional appraisal).
- **Wreckage Value** – Similar to “Agreed Value” but represents the cost to demolish a building that no longer has any value to an organization and, as such, would not be re-built.

Property Insurance

Limits and Deductibles

Limits

- Generally established by the insured for specific assets – building, fixed equipment, mobile equipment, stock, raw materials
- Presented as a “Statement of Values”
- Appraisers or experts can be used to establish values
(Note: to establish building’s value you would generally consult a contractor or appraiser not a real estate agent) Insurance brokers are not experts!
- Blanket amount vs. limit of loss

Deductibles

- Can vary with the asset
(designed to avoid nuisance or expected losses)
- Can be specific to an exposure (transit)
- Will be higher for catastrophic perils – flood, earthquake, windstorm
(can be a percentage of value)

Property Insurance

Property / Perils Excluded

Notable Property Excluded

- Land
- Aircraft, watercraft
- Licensed vehicles
- Money and securities
- Property more specifically insured

Notable Perils Excluded

- War and Nuclear Hazards (universally excluded)
- Terrorism (specialized cover)
- Mould
- Mechanical & Electrical breakdown (covered elsewhere)
- Wear & tear, gradual deterioration, rust, change in colour, flavour, texture (business risk)
- Employee dishonesty (covered elsewhere)
- Pollution (specialized cover)
- Mysterious disappearance (business risk)
- Inherent vice / latent defect (business risk)
- Cyber perils (specialized cover)

Business Interruption Insurance

- Your Property Insurance policy insures the direct loss that emanates from the physical damage to the Client's assets (buildings, inventory, equipment, etc.). Your lost revenue or profit is covered by Business Interruption Insurance.
- Coverage triggered only by loss or damage to "covered property" as a result of an "insured peril" (Property)
- Three types of coverage "Profits Form", "Gross Earnings Form" and Rental Income differentiated by indemnity period

General Liability Insurance

Insuring Agreements

- Covers the insured's legal obligation for damages because of liability imposed by law, or assumed under contract, due to bodily injury, personal injury or damage to tangible property that results from:
 - your operations
 - equipment, fixed or mobile (not licensed)
 - the actions of employees
 - products or work that is done for others
 - the actions of others on your behalf for whom you are responsible (“vicarious” liability)
- Legal expenses incurred by the insurer in your defence

General Liability Insurance

Limits, Deductible & Aggregates

Limit

- Generally \$1,000,000 minimum and can be increased via Commercial General Liability or Umbrella / Excess

Deductible / Reimbursement

- Negotiated based upon the type of exposure, can vary between bodily injury or property damage

Aggregates

- The maximum limit the policy will pay in any one policy year for all losses (a claim reduces the limit of insurance)
- Products & Completed Operations Aggregate
- General Aggregate

General Liability Insurance

Notable Exclusions

Insured Elsewhere

- Workers' Compensation Act
- Damage to property in insured's care, custody or control
- Injury, damage arising out of licensed vehicles
- Professional Liability
- Environmental Injury or damage (Sudden & Accidental / Time Element exceptions)
- Cyber Perils
- Product Recall

Business Risk

- Damage to insured's own work or product

Universally Excluded

- War or nuclear hazard
- Terrorism
- Mold
- Intentional injury or damage (*reasonable self-defence exception*)

General Liability Insurance

Notable Conditions & Extensions

Policy Conditions

- Territory – North America, Limited Worldwide or Worldwide
- Currency – Canadian or other
- Insurers' rights and your cooperation

Extensions

- Non-Owned Automobile
- Employees as additional insureds
- Tenants Legal Liability
- Incidental Malpractice
- Voluntary Medical Payments
- Host Liquor Liability
- Sudden and Accidental Pollution and/or Hostile Fire

Umbrella Liability Insurance

Scope of Coverage

- Provides excess insurance over specified underlying policies
- “Drops Down” to meet a reduced or exhausted aggregate limit in underlying policies
 - e.g. “Products and Completed Operations” under a General Liability Policy
- Grants primary protection (subject to a deductible or self insured retention and applicable exclusions) where there is no underlying insurance
 - e.g. where a General Liability Policy has a Canada / USA territorial limit, this policy may be broadened to provide protection worldwide
- Can be more effective and cheaper when buying higher limits

Umbrella Liability Insurance Coverage Example



Crime Insurance

Insuring Clauses

- ***Employee Dishonesty*** – Loss of money or other property caused by dishonest acts of an employee.
- ***Broad Form Money and Securities (loss inside & outside)*** – Loss of money, securities inside or outside premises. Loss of and damage to other property by robbery or attempted robbery.
- ***Forgery or Alteration*** – Loss from forgery or alteration of checks, drafts, promissory notes or similar written directions to pay a sum of money.
- ***Computer Fraud*** – Loss of money, securities or property through fraudulent use of a computer.
- ***Funds Transfer Fraud*** – Fraudulent instructions directing financial institution to transfer, pay or deliver funds from your account.
- ***Money Orders and Counterfeit Paper Currency***

Crime Insurance

Notable Exclusions

- Inventory shortage, ***by itself***, is not considered proof of an employee dishonesty claim
- While in custody of an armoured car company (the insurance pays in excess of what is recovered from armoured car company)
- Fire, ***except for money or securities***
- Kidnap or ransom threats
- Loss of income (profit) not realized by the client
- Trading Loss (except direct loss caused by Employee Dishonesty)

Automobile Insurance

Provincial vs. Private Insurance

- “Provincial” insurance means that the Provincial Government is the sole provider for primary coverages (BC, SASK, MB)
- “Private” insurance means that the providers are “for-profit” insurance companies

Automobile Insurance

Mandatory vs. Optional

Mandatory Coverages

- Third Party Liability and Accident Benefits, where applicable
- Mandatory limits vary with exposure, e.g. buses, large trucks are required to carry a higher limit

Optional Coverages

- Include Increased Liability in excess of the mandatory requirement
- Own Damage such as Collision / Comprehensive, with various deductible options
- Other Special Coverages and Endorsements

Certificates of Insurance

Certificates of Insurance

Purpose

- To provide evidence of insurance coverage – it is **NOT** an insurance policy and does not alter or amend the policy in any regard
- It is evidence of one party's insurance coverages to another party and generally will reflect contractual agreements between the parties
- Examples of who would require a certificate of insurance:
 - Project Owners
 - GC's
 - Banks
 - Landlords
 - Lessors of property / equipment (photocopiers, phone systems, machinery)
 - Parties contracting services from another

Certificates of Insurance

Who needs to see a Certificate of Insurance?

It's a two way street...

- Third parties with whom you have contracts, agreements, etc. will require that you provide them with a document evidencing your insurance coverage to confirm you have met obligations under contract
- Your company should require, by contract, that other parties provide you with evidence of their insurance to confirm they have met obligations made to you under contract

Certificates of Insurance

Why a Certificate of Insurance?

Should you show them your policy? The short answer: No.

- Your insurance policy is a confidential contract between your company and the Insurance Company
- Your policies contain more information than you have agreed to show to most third parties. A Certificate of Insurance Shows ONLY what the third party needs to see that you have agreed to
 - For example: Your company carries \$50,000,000 in liability limits. If you are required under contract to provide evidence of a minimum of \$2,000,000 of liability coverage, then \$2,000,000 is what is evidenced on the certificate
 - The Deep Pocket Theory – if you show it, they will sue for it



Construction Insurance

Construction Insurance

- Course of Construction / Builders Risk
- Wrap-Up Liability
- Errors and Omissions
- Bonds

Builders Risk

- Also known as “Course of Construction” (COC) or “Construction All Risks” (CAR), or “Builders Risk” this policy provides cover to buildings, or other real property, while under construction
- Is a physical damage policy (1st Party) generally issued on an “All Risks” basis including earthquake and flood. Extensions should be included to address any transit as well as offsite exposures
- Policy term generally follows the construction project term being construction start to substantial completion
- Insurers typically invoice a deposit premium at project inception and then adjust at project completion based upon final construction values as well as duration
- Can be purchased by either property owner or contractor

Builders Risk

- Consideration should be given to include additional soft costs and Delay in Start-Up insurance (business interruption)

Wrap-Up Commercial General Liability

- A project specific third party liability policy ensuring multiple entitles (in essence wrapping up all project participants under one policy)
- Primary basis of policy is to provide coverage for bodily injury / property damage including resulting loss of use for third parties
- Numerous risks included, e.g.
 - Products / completed operations liability
 - Contractual assumption of liability
 - Non-owned automobile

Professional Liability (Errors & Omissions)

- Covers liability arising from negligent acts, errors or omissions, in the performance of professional services, which results in:
 - Third party property damage
 - Third party bodily injury
 - Financial loss / Failure to perform
- Can be bought by:
 - Individual professionals
 - Professional firms
 - Contractors / Design-Builders / P3s
 - Owners on behalf of design team
 - Owners in a special “Excess” coverage format

Bonding – Contract Surety

- “A written agreement wherein one party (the Surety) obligates itself to a second party (the Obligee) to answer for the default of a third party (the Principal) in failing to perform specified acts within a stated time”
- Essentially, an owner (the Obligee) is looking for a guarantee (the Surety) for performance of a contract by the contractor (the Principal)
- When a contractor bids a job to an owner they will occasionally look for a guarantee of their bid. In construction the security that is normally provided is a “Bid Bond” and/or a “Consent of Surety”

Bonding – Contract Surety

- Once the contract has been awarded the security provided to the owner is typically a 50% Performance Bond and a 50% Labour & Material Payment Bond:
 - A Performance Bond guarantees the completion of the contract or will pay up to 50% of the value of the contract
 - A Labour & Material Bond guarantees that the direct subcontractors and suppliers get paid for their work that has been performed on the project. If the contractor defaults the bond will pay up to 50% of the value of the contract
- In the event of default the surety has three options available:
 1. Pay out the full penalty of the bond(s)
 2. Financially assist the contractor to ensure completion
 3. Tender out the completion to mitigate the loss

Cost of Risk

Cost of Risk

- Insurance premiums
- Losses within the deductibles
- Uninsured losses
- Administrative expenses following a loss
- Downtime following a loss
- Productivity following a loss

Cost of Risk – Fixed vs Variable Costs

- Insurance premiums - fixed
- Losses inside Deductibles - variable
- Uninsured losses - variable
- Administrative expenses following a loss - variable
- Downtime following a loss - variable
- Productivity following a loss - variable
- **Key Concept**

..... **Controlling your variable costs will have major impact on your total cost of risk. It is not just about reducing insurance costs.....**

Factors that affect your insurance premiums (the fixed cost)

Liability

- Type of work
 - Underwriters view different contractors as having a different risk profile
 - **Hazardous**
 - Asbestos
 - Roofing
 - Hot welding
 - **Medium**
 - Commercial mechanical/electrical & residential
 - Concrete work
 - Landscaping
 - **Low**
 - Cabinetry
 - Flooring
 - Framing

Factors that affect your insurance premiums (the fixed cost)

- Revenues
- Liability insurance typically on a rate per thousand
- Rates can be blended for multi-operations or by type of operation
- Higher revenues will have discounted rates (volume)
- Underwriters will have minimum premiums

Factors that affect your insurance premiums (the fixed cost)

Property

- Real property
 - Construction (frame/fire resistive/mixed)
 - Occupancy (office/shop/manufacturing/welding)
 - Protection (sprinklered/hydrant/fire department)
 - Exposure (surrounding area/neighbouring property)
- Contractors Equipment
 - Type of equipment/use
 - Valuation (replacement cost/actual cash value)
 - Age

Factors that affect your insurance premiums (the fixed cost)

- Automobile
 - Types of vehicles
 - Driver qualification
 - Use of vehicles
 - Safety programs

Factors that affect your insurance premiums (the fixed cost)

- All Coverages
- Limits
- Deductibles
- Claims
- Coverage specifications
- Safety Program
- Maintenance Program
- Contracting Strategy
- Business Plan
- Reputation
- Market Conditions

Tipping the field in your favour

1. Understand your contractual exposures

- Am I taking on other's risks?
- Can I pass these risks along?
- Is there a wrap up policy in place?
- What deductible am I assuming?

2. Partnering with the right broker

- Am I dealing with a construction broker?
- What is their experience?
- What insurers do they deal with?
- Can they deliver additional necessary service?

3. Spend time with your broker

- Does he/she understand my business?
- Provide your broker with complete information
- Show them your contracts

Tipping the field in your favour

4. Obtain competitive quotes

- Can your present broker get options?
- Does it make sense to shop every year?

5. Implement a Risk Management Strategy

- Safety
- Operational
- Contractual

6. Take full advantage of free services from your broker and your insurer

- Safety consulting
- Workplace audits
- Risk Control services

Cooperation

- “Uberrima Fides” (Utmost Good Faith) – Provide insurers with all **material information** necessary to assess the risk and underwrite the program **or subsequent coverage may be voided**
- Establish and maintain a viable risk management program – ? demonstration of commitment to controlling losses
- Complete requests for information promptly and completely (your broker can and will assist)
- Cooperate with engineering inspections
- Meet with insurers when requested
- Report all incidents which may give rise to a claim as soon as possible **or coverage may be prejudiced**. When in doubt, call your broker!
- Cooperate fully with insurers in providing information to investigate and adjust claims
- Work with your broker as a business partner / advisor

Closing Comments

ALL THINGS BEING EQUAL

- Every time you have a loss you incur variable costs
- Every time you have a loss it could affect your going forward fixed costs (insurance premiums)
- **“I Pay a lot for Insurance”**
 - Remember you are part of the game
 - How are your variable costs?
 - What can you do differently?
- **Pretend you do not have any insurance and act accordingly**
 - Your insurance should be considered an asset to protect your balance sheet, not a maintenance program
 - Not a mechanism to substitute best practices
 - Insurance should be for responding to large and catastrophic losses **NOT** small ones

Questions?

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