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Realising Value

Enstar Group Limited

Asbestos Liabilities – Actuaries working with Claims

November 2018

Topics

- Brief History and Background of A&E
- Actuarial Methodologies
- Challenges with Reserving
- Insurance Allocation

History and Background: Asbestos

Background:

- Asbestos was once considered a “miracle mineral” for its effectiveness as insulation and preventing the spread of fires
- Late 19th Century: Although used in limited capacities since Roman times, production began to skyrocket with commercial mining operations
- As early as 1906: Scientific evidence began to emerge linking asbestos fibers to cancer and other diseases of the lungs
- Early 20th Century: Despite increasing awareness of the health risks, asbestos production continued to rise, particularly accelerating during World War II
- 1970s: Newly created regulatory agencies started calling for bans; global production would not peak until 1977 before falling dramatically
- 1973: Landmark legal decision in Borel v. Fibreboard held that injured workers could sue employers and asbestos manufacturers in a products liability framework, opening door to thousands of similar claims; previously, injured workers could collect from the workers compensation system only
- 1980s: Mounting asbestos losses prompts manufacturer bankruptcies (notably, Johns-Manville in 1982)
- 1986: Standard ISO CGL policy form modified to exclude asbestos exposure
- Today: Although asbestos use has dramatically declined in the U.S., significant liability remains from pre-1986 policies, with asbestos now representing the single largest mass tort in US history
- **Current estimated ultimate loss to the insurance industry: $100 billion**

History and Background: Environmental

Background:

- 1980: Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) signed into law, establishing the Superfund program
- Goal is to clean up uncontrolled or abandoned hazardous waste sites involving releases of contaminants or other pollution into the environment
- Superfund permitted the recently created Environmental Protection Agency (EPA) to clean up toxic waste sites and hold responsible parties accountable for the costs

- Superfund liability is retroactive, joint & several, and strict; any one party may be held accountable for the entire cleanup of the site if deemed responsible for any portion of the hazardous waste at the site—defendants typically seek coverage via their CGL policies in place at the time
- ISO's CGL policy language evolved over time; early language intended to exclude pollution was deemed too broad in court, resulting in massive exposure to pollution liability
- **Current estimated ultimate loss to the insurance industry: $42 billion**

History of Asbestos – Insurance Litigation

- In the U.S., coverage provided under Workers' Compensation responded to occupational disease related to asbestos until the 1970s
- Borel vs. Fibreboard Paper Products Corp
  - Suit filed in Oct. 1969 in Federal court in the Eastern District of Texas
  - Eleven different manufacturers sued. Borel had used their products in his work as an insulator
  - Trial started in September 1971 and Borel had died in 1970
  - Manufacturers found to have violated the doctrine of strict liability
  - All appeals were ultimately denied by 1974
    - Liable when exposed to defendant's product and failure to provide adequate warning
  - Led to "greatest avalanche of toxic-tort litigation in the history of American jurisprudence" ***Outrageous Misconduct:Asbestos Industry on Trial*** by Broduer 1985
- In 1980, CA Supreme Court ruled in relation to a civil suit alleging fraud and conspiracy against the Johns-Manville Company enabled workers to sue their employers if the companies conspired to suppress knowledge regarding health hazards caused by asbestos

History of Asbestos – Insurance Litigation

- Court procedural rules allow consolidation of claims
  - Attempt to manage the overwhelming number of claims
  - Plaintiff bar strategically bundle claims
  - Leads to non-impaired claimants receiving compensation
- Comprehensive General Liability Policy (CGL) exposed to asbestos
  - Late 1970s, Industry introduces asbestos exclusion
  - Mid-1980s Absolute asbestos exclusion becomes effective
  - Products vs. Prem/Ops (no aggregate limits)
- Wellington Agreement - 1985
  - Creation of the Asbestos Claims Facility
  - Objective to reduce frictional costs related to coverage issues
  - Replaced by Center of Claims Resolution in 1988 – lasted until 2001
  - Wellington is perpetual and still in effect
- Significant litigation still exists
  - Requires product identification and medical impairment
  - Products coverage generally has aggregate limits
  - Premises/Completed Operations do not have aggregate limits

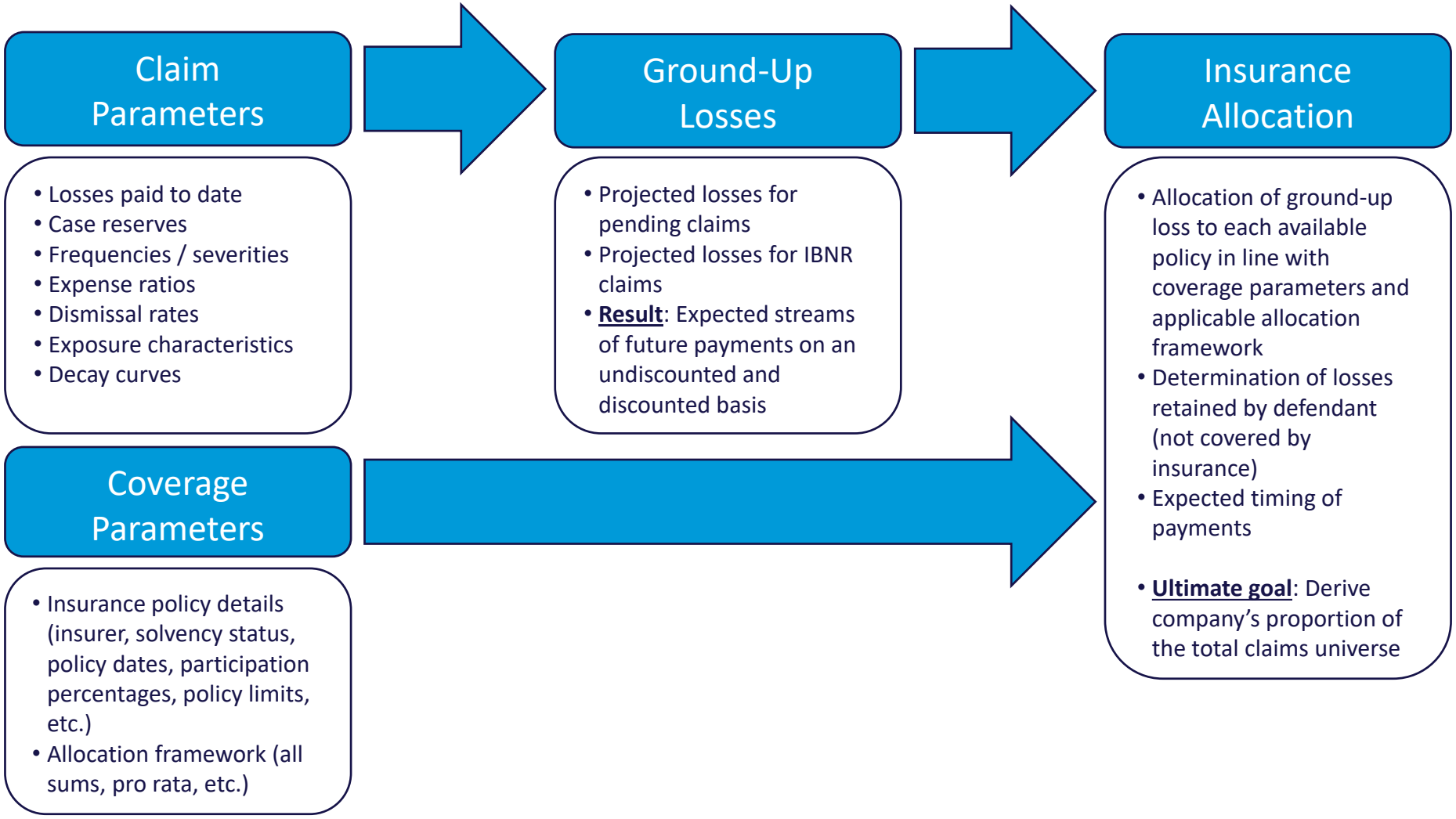
Actuarial Methodologies

- Ground-up defendant approach
  - Individual insureds
  - Frequency/Severity approach by disease type
    - Future claim filings
    - Average settlement rates (trended)
    - Expense to settlement ratios
    - Dismissal rates
  - Allocate to calendar years
  - Apply coverage chart
- Requires extrapolation
  - Defendant data not sufficient
- Requires IBNR loads

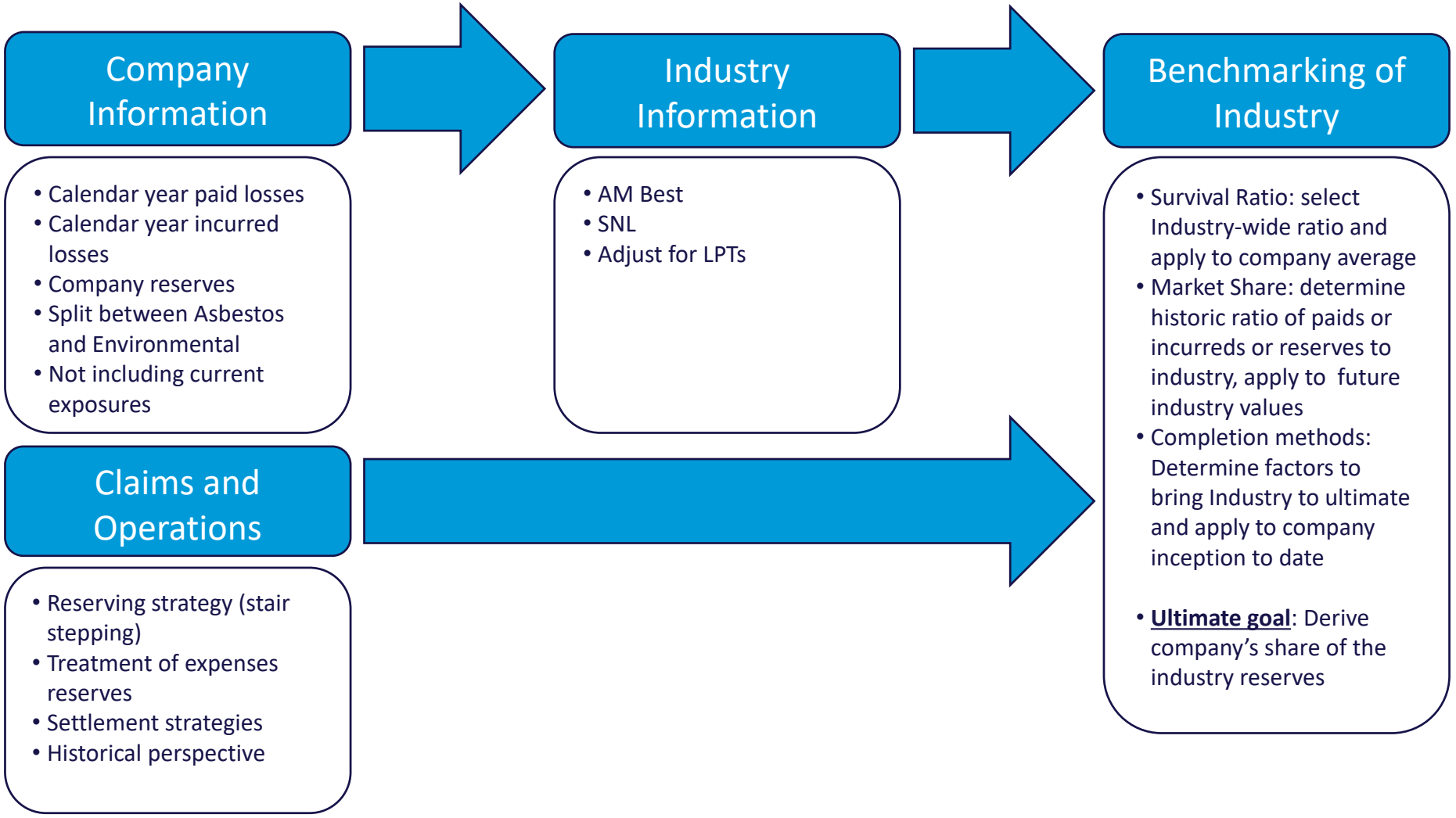
- Aggregate approaches
  - Utilize industry benchmarks
    - Survival Ratio
    - Market Share
    - Development based on AM Best
- Requires historical aggregate company and industry data
  - Footnote 33
  - Exclude large payments
  - Account for commutations



Ground Up Process for Individual Defendant



Aggregate Process



Challenges Inherent with Asbestos Reserving

Several factors make asbestos reserves more difficult to estimate than other P&C exposure:

Difficulty determining ground-up loss:

- Lack of a clearly defined accident date
- Reliance upon calendar year paid methods
- ***Inconsistent definitions of case reserves***
- Lack of cumulative data
- Long latency periods between exposure and diagnosis of disease
- ***Sensitivity of output to input assumptions***

Difficulty determining who pays for ground-up losses:

- ***Which policies are triggered?***
- ***How does loss get allocated between policies?***
- ***How are coverage gaps or overlapping coverages handled?***
- ***What happens when coverage detail is missing or vague?***
- ***Which losses fall back to the defendant?***

Nature of asbestos claims produce further challenges:

- Bankruptcies among initial defendants leading to suits against tertiary defendants
- Insurer insolvencies leading to liability spreading to remaining solvent companies
- ***Vague policy language leading to substantial legal fees that frequently exceed indemnity payments***
- Class action lawsuits leading to thousands of inactive claims, many of which get dismissed without indemnity payment, but still incur legal costs
- ***Alternative explanations for alleged damages (e.g., smoking)***
- Paper records predating digitization
- Claims from currently unimpaired plaintiffs seeking compensation before asbestos trusts run out
- Claims from plaintiffs alleging illness without occupational exposure
- Claims naming dozens of companies as defendants
- Venue shopping for plaintiff-friendly courts

Traditional actuarial methodologies often break down when applied to A&E exposure. Unique challenges in the A&E environment motivate alternative approaches.

Contrast with Environmental Loss Reserving

Environmental losses are often grouped with asbestos losses for financial reporting purposes (e.g., Note 33 disclosures in the P&C Statutory Annual Statement). However, despite some similarities, the two exposure types have key differences requiring different approaches:

Similarities

- Mass torts with estimated ultimates in the tens of billions
- Complex allocation issues alongside insolvent insurers resulting in high legal fees
- Tertiary defendants sued for the entire amount of damage originally caused by long bankrupt entities
- Overly broad policy language resulting in coverage where coverage was never intended or priced into rates
- Current Approach: Most policies exclude coverage, but select companies offer specialized asbestos / environmental policies priced accordingly

Differences

- Asbestos costs more uncertain: Damages depend on future lifetimes
- Environmental costs more certain, but requires specialized expertise to estimate amounts required to identify and clean up a contaminated site
- Asbestos claims have a much longer latency period: A polluted site is immediately apparent, while an asbestos worker may go 40 years before developing mesothelioma
- Environmental industry estimates now considered reasonably stable; A.M. Best's estimated environmental ultimate has remained at $42B since 2009 (down from $56B in 2008), while their asbestos ultimate increased multiple times (from $65B in 2008 to $100B today)
  - Environmental: Reduction and stability because incurred losses have steadily declined since 1999, while the industry's "mega" losses relating to the petrochemical industry largely have been settled
  - Asbestos: Increases to ultimates as paid losses continue to exceed rates predicted by epidemiological studies; the drop off in payments has not been as fast as hoped

For these reasons, today, asbestos receives more attention than environmental reserving.

Typical Data Available for Asbestos Reserving

The calendar year claim trend report is a fairly standard source for asbestos claims data, however, data availability varies considerably from account to account, with missing data and data corrections fairly common. Reports like this can be used to generate account-specific claim parameters.

Claim Trend Data Report

Year: 2016
Status: All
Book: All

Number of Accounts represented in Data Below: 1
Number of States (counted individually by Account): 1
Total Accounts: 1 All States Completed: 1 Not Fully Completed: 0

Cumulative Data

	Prior	2012	2013	2014	2015	2016
Pending at the End of Year	838	911	887	903	734	828
Filed	26,141	26,557	26,902	27,212	27,536	27,876
Dismissed	25,082	25,385	25,721	25,979	26,437	26,660
Settled	221	261	294	330	365	388
Indemnity	54,058,500	64,721,833	71,478,833	78,756,333	89,993,833	97,083,833
Expense	15,449,954	18,297,057	20,624,306	23,213,079	25,552,680	27,971,393
Avg. Per Claimant Settlement Value	244,609	247,976	243,125	238,656	246,558	250,216
Avg. Per Claimant Resolution Value	2,136	2,524	2,748	2,994	3,358	3,589
Avg. Per Claimant Expense	611	713	793	882	953	1,034

3-Year Averages	2014, 2015 & 2016
Avg. Per Claimant Settlement Value	272,394
Avg. Per Claimant Resolution Value	24,787
Avg. Per Claimant Expense	7,112

Yearly Data

	Prior	2012	2013	2014	2015	2016
Pending at the End of Year	838	911	887	903	734	828
Filed	26,141	416	345	310	324	340
Dismissed	25,082	303	336	258	458	223
Settled	221	40	33	36	35	23
Indemnity	54,058,500	10,663,333	6,757,000	7,277,500	11,237,500	7,090,000
Expense	15,449,954	2,847,103	2,327,249	2,588,773	2,339,601	2,418,713
Avg. Per Claimant Settlement Value	244,609	266,583	204,758	202,153	321,071	308,261
Avg. Per Claimant Resolution Value	2,136	31,088	18,312	24,753	22,794	28,821
Avg. Per Claimant Expense	611	8,301	6,307	8,805	4,746	9,832

Insured	Claim Number	State
	10503140726	XX

Insured	Claim Number	State

Criteria:

Insured	State	Adjuster
	All	*All*

Insurance Allocation: A Difficult Task (cont.)

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The situation gets more complex knowing the age of relevant policies. Often, grainy photocopies of decades-old documents are all that remain. These complications produce considerable legal expense.

CEDED REINSURANCE SPREADER

BRANCH NAME
POLICY NUMBER (INCLUDE PREFIX) XXF 190-84-41
DATE 2/23/87
COMPLETED BY
NAME OF INSURED
EFF. DATE OF THIS TRANSACTION 1-1-87
COMPLETE IF SUPERCOVER (UP 713)
C GROUP RISK ID
POLICY TERM 1-1-87 TO 1-1-88
REINSURANCE TERM (IF DIFFERENT) TO
RETRO DATE
DATE IN C M
COVERAGE CODE 1 2 3 4 5
NEW / RENEWAL OR ANNIVERSARY (checked) / ENDORSEMENT / REVISION / CANCELLATION
PREMIUM FOR THIS TRANSACTION IS: ADDITIONAL (checked) / RETURN / NO PREMIUM ADJUSTMENT
PREMIUM: PREPAID (checked) / INSTALLMENTS PER POLICY
DOES THIS REINSURANCE TRANSACTION APPLY TO ANY LOSS FOR WHICH A RESERVE HAS ALREADY BEEN ESTABLISHED OR PAYMENT MADE? YES / NO (checked)
IF YES LIST CLAIM NUMBER
REINS PREMIUM SUBJECT TO AUDIT: YES / NO (checked)
REINS RATE IS:
REINS MINIMUM PREMIUM

CESSION DATA	REINSURANCE ACCOUNT CODE	TYPE CODE	%	LIMIT OF LIABILITY DOLLARS	PREMIUM	E & SR TREATY
GROSS (TOTAL) POLICY LIMITS 1 2 3 4 5 6 (7)			100%	20,000,000	80,000	14.0% OF TREATY PREMIUM 7056
NET (NOT INCLUDING TREATIES)						
E & SR TREATY LIMIT 1 2 3 4 (5)	95 586 035	7	.63	12,500,00	50,400	REINS COMM 29.42%
E & SR CASUALTY FIRST SURPLUS	95 186 600ES	7	.37	7,500,000	29,600	30%
	97 000 227SF					

REINSURER
INTERMEDIARY
CERT NO OR COVER NOTE NO
25 % / 27.5% / 30 %

ENTRY INSTRUCTIONS—E & SR—CASUALTY
PRODUCER'S COMM 10 %

GROSS PREMIUMS — CLAIMS MADE / OCCURRENCE

00 OTHER—GENERAL LIABILITY; 02 PROD WORKM; 04 BOWLING SEA; 06 OTHER SEA; 03 FISH SEA; 05 ATHLETIC SEA; 06 TWIN; 08 HOLE IN ONE; 01 ADVERTISERS; 02 ADV AGENCY; 03 RADIO; 04 TELEVISION; 06 CR BUR; 08 MAG; 12 F FIN; 00 OTHER; 06 EDP; 10 PAPER; 14 CATV; 06 TRUCKMEN; 00 OTHER COMMERCIAL — 200 / 100; 01 BUSES; 00 OTHER PUBLIC; 06 CONDOS (712 ONLY); 00 ALL OTHER OL & T; 07 CONTRACTORS (712 ONLY); 00 ALL OTHER M & C — 60,000 / 19,700; 00 ALL PRODUCTS; 01 CPA; 04 ARCHS; 00 OTHERS; 02 LAWYERS; 08 D & O CONDOS (712 ONLY); 01 PHY-SURG-DENT; 02 HOSPITAL; 00 ALL OTHER MEDICAL PROF; WORKERS COMPENSATION (711 ONLY)

711—ORDINARY EXCESS; 712—SUPERCOVER OVER NON-FFIC; 713—SUPERCOVER OVER FFIC

TRANSACTION NO ONE; PRIMARY BI LIMITS 2 3 4 5 6 (7) 8 9; UNDERLYING BUM CODE; PRIMARY PD LIMITS 0 1 2 3 4 5 6 (7) 8 9; SUPERCOVER; PAGE ONE OF ONE

COPY BRANCH

E&SR
CASUALTY SURPLUS TREATY

Date: 12-16-86
Branch: [illegible]
DEC 1 6 1986

Name
Location
Gross Sales/Receipts 70,180,000

Operations/Products (describe adequately) Mfgs. molding compounds & resins

Fleet Breakdown: 31 PP, Lt, Med 7 Hvy/X-Hvy Buses
Catastrophe Exposures: Pollution, Explosion, Fire or Flammability

PRIMARY AND UNDERLYING EXCESS INSURANCE:

Company	Coverage	Limits	Premium (show Credits)
	Auto	1MM	$15,700
	G.L.	1MM	$73,128
	E.L.	100,000	?
	Umbrella	10MM	$68,285

E&SR POLICY #
POLICY PERIOD

Coverage	Limits	Gross Premium
Excess Umbrella	20X10	~~431,680~~ 122,000

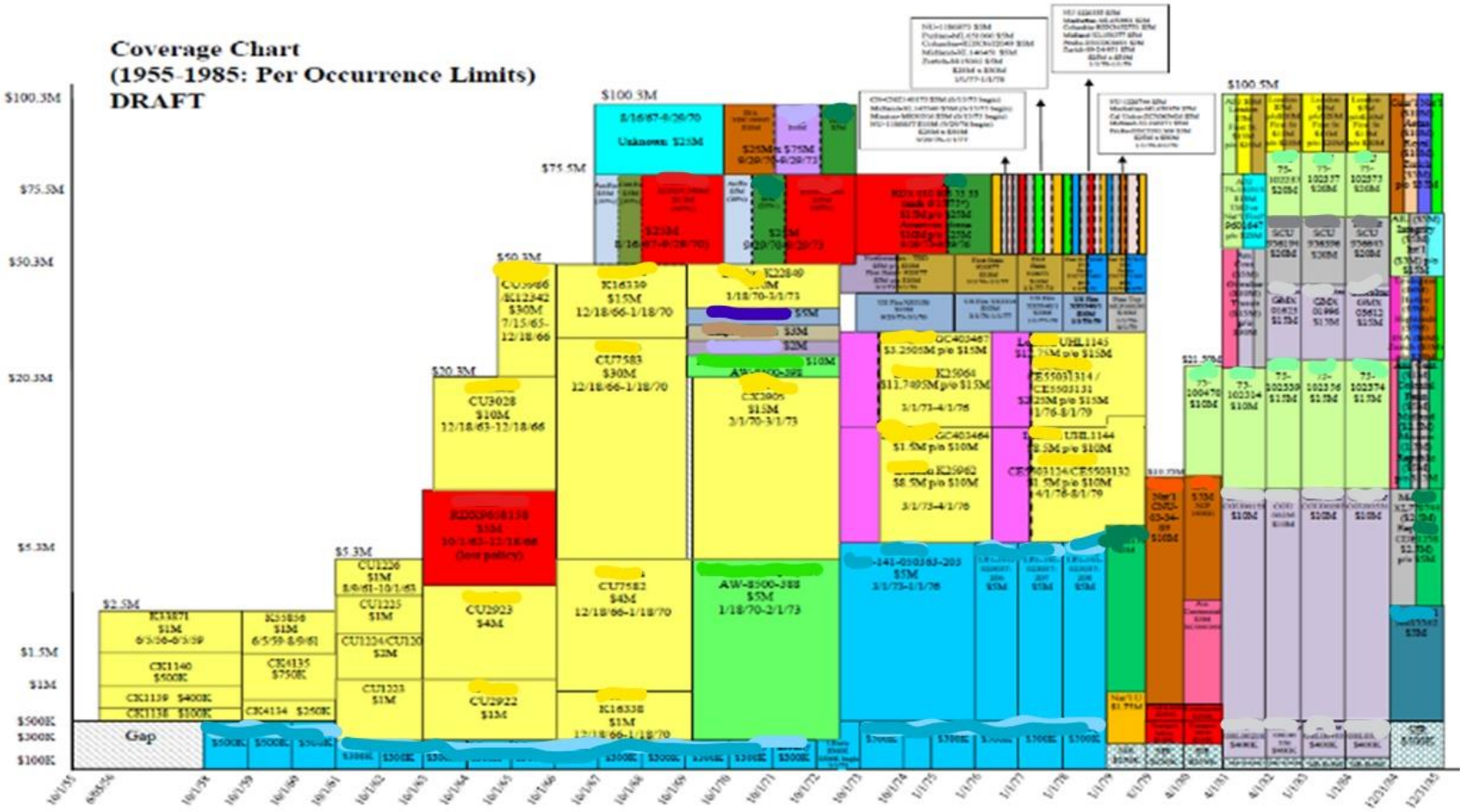
Restrictions/Extensions Terms & conditions of the first Umbrella. Must exclude absolute Pollution in 1st Umbrella

Reinsurance: First knock (if applicable): Limit / Premium
Quota-Share: E&SR Treaty / Casualty Surplus / Other

Authorized Signature:

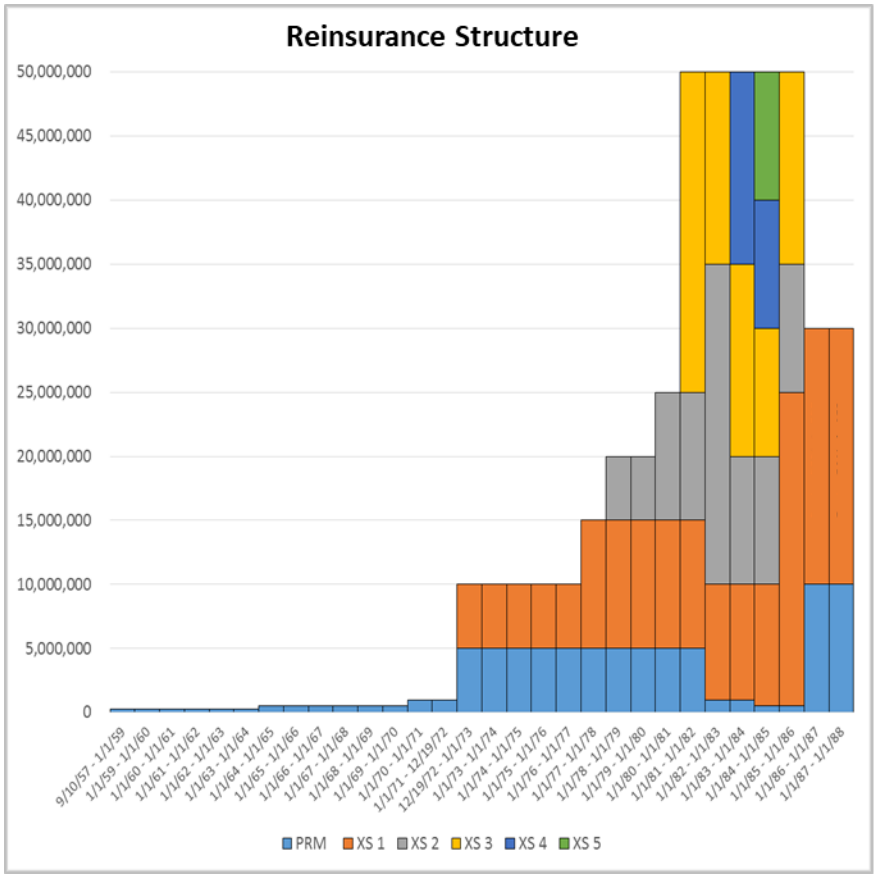
Insurance Allocation: A Difficult Task

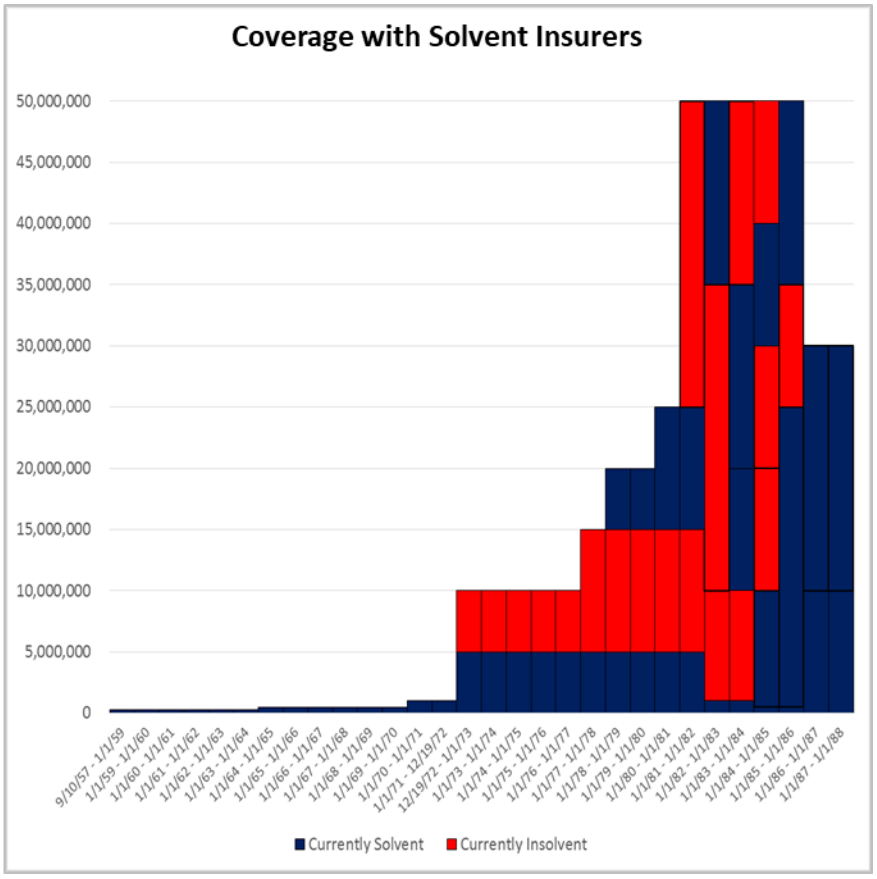
Insurance coverage detail can get incredibly complex with multiple parties, missing documentation, insolvent insurers, disputed coverages, and other complications. Enstar's exposure often arises via small portions in various layers of loss across dozens of different accounts.



Insurance Allocation: A Difficult Task (cont.)

Even comparatively simple coverage towers have complications. Insurer in this example has exposure to asbestos company with a 50% share of the $20M xs $10M layer in 1986 and 1987. Other insurance company insolvencies leave insurer holding the bag, making a total loss more likely.





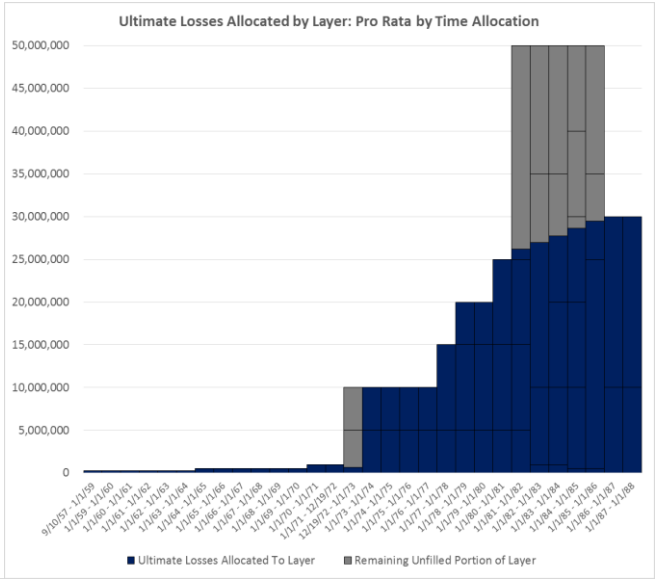
Allocation of Loss to Policy: Without Insolvencies

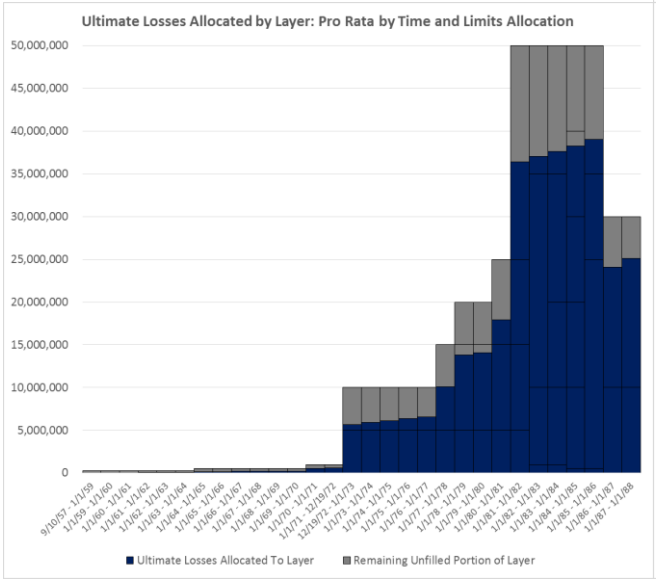
After deriving ultimate claims, loss must be allocated to policy. Different allocation methods can produce dramatically different indications per policy. The "right" allocation method is a matter of legal interpretation and detailed scrutiny of policy language.

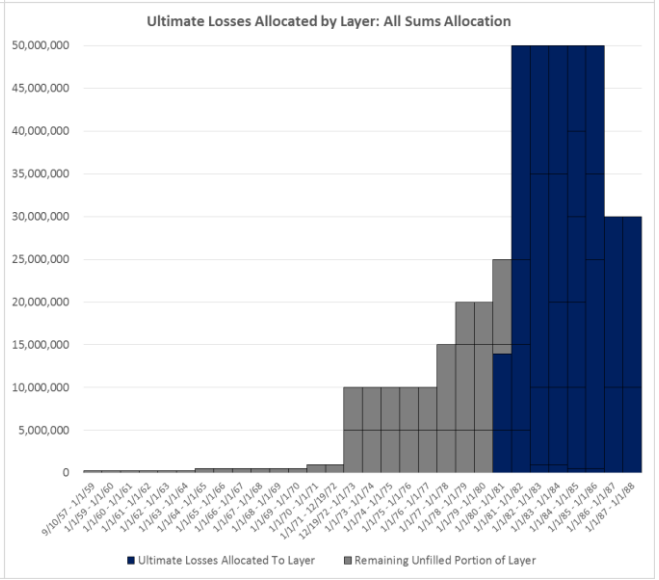
Pro Rata by Time: Loss is spread across time with all policies triggered sharing the loss equally (e.g., a $1M claim with exposure from 1971 to 1980 would be a $100K loss to each tower). The stair-step pattern arises because the exposure distribution shifts forward in time (e.g., a claim to be reported in 2030 is more likely to trigger the 1987 policy than the 1957 policy).

Pro Rata by Time and Limits: Similar, but a tower with a $50M limit would receive an allocation 5 times as high as a tower with a $10M limit.

All Sums: In one ruling, a court found that insurers must pay "all sums" which the insured becomes legally obligated to pay and concluded that "once coverage is triggered ... the insurer is liable in full" for an insured's liability because "there is nothing in the policies that provides for a reduction of the insurer's liability if an injury occurs only in part during a policy period."







Allocation of Loss to Policy: With Insolvencies

Insolvencies complicate the allocation. Losses are allocated to policies in the same manner as before, however, coverage holes appear where losses are allocated to insolvent insurers. In practice, coverage gaps can be spread to remaining solvent insurers (or back to the defendant to retain without coverage), producing additional rounds of litigation.

Additionally, currently insolvent insurers may have partially paid loss before insolvency. The examples shown here allocate currently paid loss to all insurers, but future unpaid loss to solvent insurers only. Theoretically, an allocation of paid loss is unnecessary, but that data might be difficult to track down.