Asbestos Reserving Issues
Legacy Exposures, But Always a Current Event

A presentation to the Casualty Loss Reserve Seminar
by Sandra Santomenna, ACAS, MAAA
September 20, 2010

Agenda

- Approach to Quantification of Asbestos Liabilities
- Industry Background and Trends
How to Quantify An Insurer’s Asbestos Liabilities?

- Traditional actuarial methods (e.g., accident year loss development projections) are sub-optimal
  - Significant calendar year effects (along diagonal)
  - Significant changes in the litigation environment (e.g., tort reforms)
  - An individual claim is typically allocated across multiple accident years
- Epidemiological component
  - Claim emergence is a function of exposure dates and long disease latency

- Methods for projecting asbestos liabilities
  - Aggregate techniques using industry rules of thumb
  - Best Practice: Exposure-based analysis

Aggregate Techniques

- Aggregate benchmarks and industry rules of thumb
  - Survival ratio techniques
  - IBNR to case ratio
  - Market share
  - Calendar year loss development
  - Comparisons to peer companies (e.g., significant reserve additions)

Exposure-Based Analysis

- Exposure-based analysis improves understanding of ultimate A&E liabilities
  - For an insurer or reinsurer, it considers
    - Mix of insureds
    - Types of coverage
      - Policy wording
      - Attachment points and limits
    - Years of coverage
  - Claims handling and settlement activities

- Greater understanding equips the insurer to deal strategically with its exposure
Exposure-Based Asbestos Analysis – Data Examples

- Coverage details
  - Term
  - Attachment (ground-up)
  - 100% Layer
  - Percentage participation
  - Expense treatment
  - Exclusions
- Specific account experience
  - Filed and closed claims
  - Paid indemnity and expense
  - Cost share agreements or coverage blocks
  - Comments (e.g., state mix, coverage disputes, etc.)

Overview of Exposure-Based Analysis

- Identify insurer’s potential exposures and assign insured defendants to Towers Watson Tier (major v. peripheral defendants)
  - Claims, log files, underwriting records
- Project ground-up ultimate loss of defendant (for major defendants)
- Allocate defendant costs to year
- Compare defendant costs by year to insurer’s coverage terms to estimate insurer’s gross liabilities
- Estimate cessions to determine net liabilities
  - Review historical net-to-gross ratios
  - Best Practice: Apply specific terms of outward reinsurance protections to gross insured loss estimates to determine estimates of cessions
    - Can evaluate collectibility of cessions by reinsurer

Exposure-Based Asbestos Analysis

- Develop ground-up ultimate loss and expense for each individually reviewed insured account
  - For direct business, more data is often available
    - Obtain ground-up experience (e.g., historical # claims filed and closed, $ indemnity and expense paid)
    - Perform F x S projection
      - Future claim frequency reflecting epidemiology
      - Future claim severity reflecting changes to litigation environment and trends
  - For reinsurance, rely more on industry information
    - Use public information (e.g., SEC Form 10-K’s) to estimate ground-up costs
    - Towers Watson projections also rely on tier assignment and distributions of underlying defendant claim F x S that vary by tier
Exposure-Based Asbestos Analysis

- Total insured loss estimate is sum of:
  - Estimated losses for individually reviewed accounts with known asbestos exposure
    - Individually review all major accounts
    - Individually review all (or a sample of) open peripheral defendant accounts
      - If needed, extrapolate results for individually reviewed accounts to non-reviewed accounts
      - Consider re-opening potential
  - IBNR
    - Potential expansion of recognized exposed limits
    - Emergence of new accounts with asbestos claims
  - Provision for other costs – e.g., DJ

Industry Background and Trends

- Key uncertainties in evaluating asbestos liabilities
  - The litigation environment has changed dramatically
  - Future experience will be subject to societal and legal influences
  - Mesothelioma claims will drive future costs
  - Who pays?
    - Solvent defendants
    - Bankruptcy Trusts
    - Insurers
    - Reinsurers
Key Uncertainties in Evaluating Asbestos Liabilities

- The litigation environment has changed dramatically
  - Total claim volume surged from 2000-2003
    - Most of the surge was nonmalignant claims arising from mass screenings
    - Malignant claims also reached historic highs
  - Total claim volume has since dropped
    - Nonmalignant claims dropped sharply beginning in 2004
      - Very little mass screening activity
      - Decrease in bankruptcy filings
      - Federal trust fund bill failed
      - State tort and judicial reforms enacted
    - Malignant claims also eased from peak levels
    - Trends vary by defendant

The Litigation Environment Has Changed Dramatically
Malignant vs. Nonmalignant Claim Filing Trends

- New filings have fallen to a fraction of prior levels

The Litigation Environment Has Changed Dramatically
Nonmalignant Claim Filing Trends
The Litigation Environment Has Changed Dramatically
Lung Cancer Claim Filing Trends
- General increase through early 2000s, then marked decline

The Litigation Environment Has Changed Dramatically
Other Cancer Claim Filing Trends
- As with lung cancer, marked drop in new claim filings in recent years

Key Uncertainties in Evaluating Asbestos Liabilities
- Future experience will be subject to societal and legal influences
- Legislative and judicial reforms have reduced nonmalignant claims
- Unfavorable jurisdictions for defendants remain
- Going forward, the cost driver is expected to be mesothelioma claims
- Large exposed population, spanning multiple industries and decades
- Signature disease links injury to asbestos exposure
- With long latency, exposure continued for decades
- Epidemiological studies can predict the number of future diagnoses
- Union organized efforts increase the propensity to sue
- Mesothelioma claims now represent 80-90% of total payments
- Mesothelioma claim values are high
- Especially for peripheral defendants, the following issues are important in managing liabilities:
  - Causation (e.g., requiring product identification)
  - Traditional tort defenses (e.g., component part and government contractor)
  - Apportionment of damages
Mesothelioma Claims Will Drive Future Costs
Diagnosis and Claim Filing Trends

- Annual incidence count relatively flat (with females increasing), but fairly large swings in annual claim filing counts
- Mesothelioma claims increased in last few years

Mesothelioma Claims Will Drive Future Costs
Propensity to Sue

- The propensity to sue (PTS) varies by age, with lower claim filing levels for the very young and the very old portions of the diagnosed population

Mesothelioma Claims Will Drive Future Costs
Run-Off of Future Claim Counts

- Nicholson (1982) drops off faster
- Stallard (2007 based on Manville claims filed from 2002-2006) extends longer
Mesothelioma Claims Will Drive Future Costs
Summary of Claim Filing Trends

- ~3,050 new diagnoses of mesothelioma in U.S. in 2006
- Annual count ranged from 3,000 to 3,200 during 1999-2006
- More than 2,500 annual deaths linked to mesothelioma in U.S. in 1999-2006
- Number may be somewhat under-reported
  - Incidence and death counts both dropped from 2005 to 2006
    - Counts have finally peaked? Or just a blip in data?
- 1,500 to 2,000 mesothelioma claims filed per year since 2000
  - Propensity to sue is lower for females and the very young and very old
  - Many of the newer wave of claims relate to premises and "second hand" exposure
- Projected 2010-2055 mesothelioma claim filings = ~30,000.
  - ~50% in next ten years (2010 – 2019)

Mesothelioma Claims Will Drive Future Costs
Claim Values

- Less than 1% of cases go trial, but verdicts influence settlements
  - 2007: 30 verdicts, 15 defense, average of 21 awards = $5.5M
  - 2008: 45 verdicts, 20 defense, average of 27 awards = $5.1M
  - 2009: 30 verdicts, 9 defense, average of 23 awards = $5.6M
  - 2010: 10 verdicts, 6 defense, average of 4 awards = $6.1M
  - 2007+: 11 verdicts >$10M
- Average claim values and trends for individual defendants vary
  - Major vs. peripheral defendants
  - Defenses
  - Use of matrix agreements

Bankruptcies Muddy the Picture
Number of Asbestos-Related Bankruptcies per Year

Number of Asbestos-Related Bankruptcies
Bankruptcies Muddy the Picture

- Approximately 40 confirmed bankruptcy trusts have reported information
  - Assets:
    - 2009 report indicates $26.9B of trust assets currently available
  - Payments:
    - 2006: all Trusts paid out $283M
    - 2007: all Trusts paid out $1.10B
    - 2008: all Trusts paid out $2.89B

- As bankruptcy plans are confirmed and begin to pay claims, return of cash flow to plaintiff firms provides even more incentive for advertising, affecting mesothelioma claim filing levels

- Concern that lack of transparency of bankruptcy payments exacerbates issue of allocation of bankrupt shares of liability to solvent defendants

## Anticipated Bankruptcy Trust Payments

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**Total** 15,293 39,819 562,885 756,940

* Payment percentage not yet announced for these trusts – conservative assumption of 20% used here
** Assumes DII with Harbison-Walker exposure
*** Assumes TDP uses actual average 15% value for mesothelioma, assumes 95% above scheduled value

Source: Mealey’s Asbestos Conference Feb. 8-9, 2007, David Austern

Key Uncertainties in Evaluating Asbestos Liabilities

- Insurance Recoveries
  - Rules regarding allocation of losses to coverage vary by jurisdiction
    - Definition of Occurrence
    - Pro Rata vs. All Sums
    - Coverage Trigger
  - Several court decisions have expanded coverage
    - All sums allocation
    - Nonproducts claims
  - Interpretation of individual policies is often subject to dispute
    - Limits for non-annual coverage
    - Interpretation of SIRs / deductibles
    - Wording of exclusions
    - Treatment of expense
  - Also need to consider insurer solvency and creditworthiness
Asbestos
Cumulative Net Paid and Reported Loss and Expense
Source: U.S. P/C Insurers Note 32 Data Published by A.M. Best

Asbestos
U.S. P/C Insurer Annual Net Paid Loss and Expense

Asbestos: Survival Ratios of Top 10* P/C Insurers
(Note: Survival ratios are often used for comparisons since they are easily calculated from public information, but they are subject to distortions and misinterpretation)

Liberty Mutual includes purchase of Safeco.
*Ranked by 2009 Net A&E Reserves
Conclusions

- Great strides have been made in tort reform that have reduced the number of claims, especially nonmalignant.
- Recent favorable court decisions will serve to limit the liability of some defendants.
- However, challenges to tort reform continue.
- Annual mesothelioma claims have increased and these claims are costly.
  - New claims include take-home exposure, contract workers (premises exposure), and possibly international exposure.
- Expenses (at least per claim) may increase.
- Bankruptcy trust money will influence filing levels.
  - Advertising
  - Cancer and nonmalignant claims are especially elastic with recruitment activities.
  - Resurgence of nonmalignant claims against solvent defendants appears unlikely.
- While the pendulum has swung more toward defendants recently…
  - Volatile economy and new public mood may affect litigiousness.
  - Insurers/defendants fighting against rollback of tort reforms.
  - Also pursuing transparency in claim process.
- Risk transfer deals may increase when economy improves and capital is available.

Sandra Santomenno

Ms. Santomenno has extensive experience with valuing asbestos liabilities for asbestos defendants, reinsurance and insurance clients. Project work includes loss portfolio pricing, arbitration support and due diligence portfolio reviews, as well as government asbestos legislation, regulatory and rating agency reviews. She also has significant experience placing and developing reinsurance programs.

Before joining Towers Watson, Ms. Santomenno served as senior actuary at GE Insurance Solutions, where she was responsible for the reserve management of more than $900 million in net global asbestos, pollution and other discontinued operations reserving.

Prior to that, she was president of a consulting and reinsurance brokerage subsidiary of Munich Re, Munich American Services (MAS). She oversaw all of the MAS consulting activity, which included actuarial, accounting, claims and underwriting consulting activities along with client marketing and development. As president of the MAS Intermediary Company, she oversaw all intermediary and brokerage activities.

She was also a manager with Ernst & Young’s New York actuarial and risk management consulting practice responsible for business development and consulting activities.

Ms. Santomenno began her career at Aetna Life & Casualty where she held a variety of actuarial positions in both commercial and personal lines pricing and reserving through a series of job rotations in the actuarial training program.

Ms. Santomenno has a B.A. in mathematics from Cornell University. She is an Associate of the Casualty Actuarial Society and a Member of the American Academy of Actuaries, serving on its Program Planning Committee. She is a frequent speaker on asbestos and reinsurance topics.