

At A Glance

## Analyzing Product Liability Exposure in Mergers, Acquisitions, and Other Transactions

A construction management firm is considering vertically integrating with a building products company. An investment fund wants to acquire the assets of a former consumer products firm. What do these purchases have in common? By pursuing these transactions, the acquirer may be taking on product liability that reduces the value of the acquisition, or may even make the acquisition unwise.

Through due diligence, the construction management firm learns the building products company distributed asbestos-containing products and has a history of associated personal injury claims. The investment fund discovers the consumer products firm has received property damage claims related to product failures and has had several products recalled in the past. Both potential purchasers want to quantify the future liabilities associated with these claims.

For more than 20 years, NERA's experts have brought together the disciplines of economics, statistics, computer programming, claims management, accounting, epidemiological modeling, and insurance modeling to analyze mass tort and other product liabilities across different industries and in different contexts, including mergers, acquisitions, and other transactions such as spin-offs and the purchase of insurance.

### Is Product Liability an Issue?

In an M&A setting, product liability concerns arise when the target has received a significant or potentially escalating number of claims alleging personal injury or property damage. The alleged injury or damage may follow immediately from a product failure (e.g., a gas can explosion) or may involve a latency period (as with silica or mold exposure). In some cases, these claims may be grouped together as a class action. In other cases, however, the claims are litigated separately because the specific facts or injuries may differ sufficiently to prevent the amalgamation of claims into a single class. Historical mass torts have included:

- Building products, including polybutylene pipe and hardboard siding
- Medical devices and pharmaceuticals
- Other consumer products, such as pet food or children's toys
- Asbestos and silica
- Other hazardous materials, including chemical exposures

### Valuation of Product and Mass Torts Liabilities

Combining scientific analysis with behavioral economics, NERA experts have developed rigorous models to forecast liabilities for product-related claims and mass torts. The models estimate the number of future claims (either personal injury or property damage) or the size of a product recall, as well as the expected costs.

- To forecast claims, we estimate the size of the population potentially exposed (e.g., workers in industries in which the products were used, or consumers who purchased the products); predict levels of potential injuries or the most likely pattern of product defects; and project the number of claims filed. Because not every injury or product defect will result in a claim, we examine historical claiming rates and assess how those rates may



change in the future, e.g., with publicity, entrepreneurial tactics by plaintiffs' attorneys, or tort reform. To project product recalls, we estimate the number of products sold and project the likely recall rates over time.

- To value expected future claims, we analyze patterns of historical settlements or costs of product recalls. We can use statistical analysis to adjust values for anticipated changes, or can build models to estimate such values where history is limited or unrepresentative.

## Importance of Scenario Modeling

In the context of a potential transaction, clients are frequently interested in understanding the range of possible future liabilities for risk modeling purposes. Historical variability in both claim filings and settlement values can increase the uncertainty in future valuations. In addition, a company may have just started receiving claims (making the ultimate size of the liability more uncertain) or may be a well-known defendant, with a mature claims history. In running alternative scenarios, we account for the past variability of the claims filing and settlement history and model alternative paths for the litigation going forward.

## Challenges to Forecasting in Anticipation of a Deal or Transaction

Valuing product liabilities in advance of a potential deal or transaction frequently brings the twin challenges of a lack of data and a short time horizon. Often companies discover the potential for mass tort liabilities as they perform due diligence on the target company, when the data available may be limited.

We have experience developing rigorous forecasts with limited data (including, for example, using aggregate statistics rather than claim-specific information). We can augment available data with publicly-available information, and our assessment may be informed by the tort experience of other companies with exposure in a similar industry or region, as well as our knowledge of general trends in various types of litigation. Our experience enables us to turn around the analysis quickly to meet transaction deadlines.

## Sample Client Experience

- For a venture capital firm looking to acquire a building products company, we provided a valuation of the firm's asbestos liabilities, including upper and lower bound estimates. After reviewing historical claims data, participating

in calls with the target company's litigation counsel, and drawing on our experience, we evaluated the potential for the filing rates and settlement values to increase in the future. Following our analysis, the client made a successful bid for the target.

- For an investment fund considering acquiring the assets of a defunct manufacturing company, we projected personal injury claims, property damage claims, and product recalls associated with past product sales. To do so, we estimated the amount of product sold historically, along with associated injuries and failure rates. We estimated the range of future liabilities under alternative scenarios.
- For a potential acquirer of a building products manufacturer, we projected liabilities associated with property damage claims. Using sales data, we estimated the total product sold and historical failure rates. Then, running alternative forecast scenarios, we projected the range of future liability, assuming the product failures would persist. Based on our forecast, the potential acquirer did not pursue the transaction.

## About NERA

NERA Economic Consulting ([www.nera.com](http://www.nera.com)) is a global firm of experts dedicated to applying economic, finance, and quantitative principles to complex business and legal challenges. For over half a century, NERA's economists have been creating strategies, studies, reports, expert testimony, and policy recommendations for government authorities and the world's leading law firms and corporations. NERA serves clients from more than 25 offices across North America, Europe, and Asia Pacific.

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