

ECONOMIC DAMAGES : Behind Every Great Fortune

INTRODUCTION

This is the first ECONOMICS, a newsletter produced by The Brattle Group covering economic issues that arise in commercial litigation, antitrust actions, and regulatory proceedings. This initial article derives from observations and experience in litigation concerning damage claims. A common issue in such cases is the measure of damages from a lost opportunity. Although simple in concept, the correct estimation of damages is often difficult in practice. Two of the most common mistakes are the improper consideration of mitigation opportunities and the improper assessment of market evidence. Many of the largest and most discussed damage estimates result from these fundamental mistakes. Any affirmative analysis must avoid these errors because they can be easily exposed. Conversely, the failure to rebut such errors can be an equally serious mistake.

The value of a lost business opportunity is central to a variety of litigated matters. In antitrust or competition law cases, this issue arises in the context of market foreclosure. As deregulation continues worldwide, new entrants are claiming damages from insufficient or discriminatory market access to key network facilities. Disputes over patents and other forms of intellectual property focus on the value of the infringed property right. Breach of contract cases can require the analysis of damages that stem from the alleged loss of economic opportunities.

The basic methodology of damage analysis, the comparison of actual and but-for worlds, is generally accepted, but damage estimates in practice can vary greatly. Some of these disparities derive from philosophical disagreements. For instance, should damages be valued on the basis of expectations at the time the damage was initiated (*ex ante*) or with the benefit of hindsight from the perspective of the present (*ex post*)? More often, however, differences result because one or more of the parties involved has failed to consider properly all of the key economic issues and evidence.

In this article, we describe the basic analytical framework that is common to most damage analyses. We then define and illustrate two fundamental errors that are made frequently in presenting or challenging damage claims: the failure to account for mitigation possibilities, and the failure to consider market evidence.

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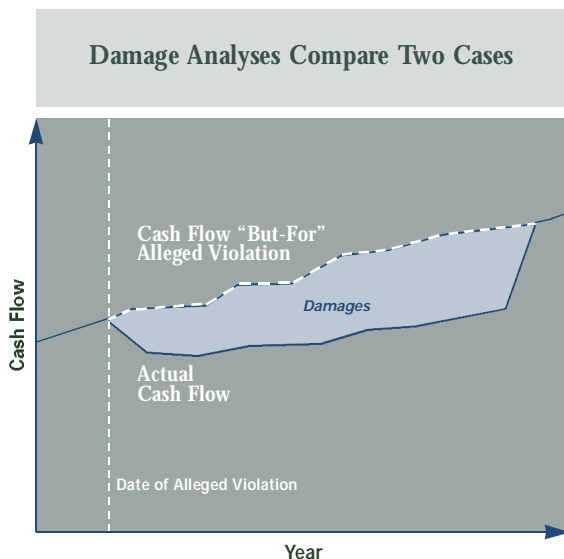
The Brattle Group consults on economic, financial, environmental, engineering, and management matters to corporations and law firms in the United States and abroad.

ANALYTICAL FRAMEWORK

There are several possible objectives for assessing damage awards in civil litigation. These include punishment of the defendant, deterrence of objectionable conduct, compensation of the plaintiff, and provision of efficient incentives to settle or litigate cases. We focus here on “compensation,” defined as a damage award sufficient to render the plaintiff indifferent between the receipt of damages or the timely restoration of the relevant business opportunity.

The economic analysis required to establish or critique a damage claim will vary from case to case. However, all damage analyses explicitly or implicitly involve a comparison of two sets of cash flows:

- (1) cash flows that actually arose (or should have arisen with appropriate mitigation) following the disputed conduct, and
- (2) the cash flows that reasonably would have been expected “but-for” the disputed conduct.



These scenarios are generally referred to as the “actual” world case and the “but-for” world case. Cash flows for the actual and but-for cases must be estimated and brought to a present value at a common date for appropriate comparison. The discount and interest rates must reflect the risk of the cash flows in question and the time value of money. Once cash flows are brought to present values, damages are calculated as the difference between the actual and but-for cases.

COMMON MISTAKES: FAILURE TO ACCOUNT FOR MITIGATION OPPORTUNITIES

A damage analysis should estimate only the economic loss that follows necessarily from the alleged or actual legal violation. The law typically acknowledges this fact by imposing an obligation on plaintiffs to mitigate damages. A proper damage analysis reflects this obligation by incorporating reasonable mitigation opportunities, whether or not they were actually exploited by the plaintiff. The most common errors involve either failing to account for mitigation opportunities entirely or overstating the feasibility of mitigation.

Mitigation opportunities arise frequently in damage analysis. If a damaged party has not sunk costs into a foreclosed opportunity, there will be other opportunities to invest that money to earn a competitive return. A party that has lost revenues may be able to obtain funds in capital markets to pursue otherwise lost opportunities. A company suffering a breach of a take-or-pay contract may be able to sell its product in other markets. A business interrupted by an equipment failure may be able to use inventories to continue operations.

However, mitigation opportunities can present difficult analytical issues. Because mitigation opportunities often go unexploited, estimating their value can take on many of the challenges of estimating the entire but-for case. Nonetheless, a thoughtful evaluation of these opportunities is essential to the accuracy of any damage estimate.

COMMON MISTAKES: FAILURE TO CONSIDER MARKET EVIDENCE

Balzac once proclaimed that “behind every great fortune is a crime.” Similarly, behind many great damage claims is a market imperfection.

The imperfection may be real or assumed. Damage claims can be based on elaborate statistical analyses that may be inconsistent with available market evidence. For example, a damage analysis for a particular company may involve the present value of detailed projections of hypothetical sales revenues, as well as costs for marketing, manufacturing, and administration. At the same time, an analysis of comparable businesses traded on the stock market may imply a considerably lower or higher value. Absent some market imperfection, that damage claim is contradicted by the market evidence.

Market evidence is sometimes dismissed by the claim that a particular business is uniquely profitable. However, in many cases the unique profitability requires competitors to watch with envy, rather than responding to new products or concepts by lowering prices, copying an innovation, or finding other competitive strategies. If a product or concept is not truly unique or cannot be shielded legally from competition (for example, by a patent), the inevitable response of markets tends to eliminate supra-competitive profits over time.

The following case studies illustrate how damage claims can become vulnerable when mitigation opportunities are not properly considered or when market evidence is not correctly analyzed. They also demonstrate the danger of not rebutting these errors where they exist.

CASE STUDY I: PENNZOIL V. TEXACO

In the 1980s, Pennzoil agreed to acquire 43 percent of Getty’s assets. However, Getty abandoned the deal in favor of an acquisition by Texaco. Pennzoil sued Texaco for tortious interference with contractual relations, presenting a damage claim of \$7.5 billion. The claim went unrebutted as Texaco focused its defense solely on liability issues. Texaco lost on the liability issue, and the jury awarded Pennzoil the entire amount of its claim.

The case involved the largest commercial damage award of its time, but an aggressive defense could have been offered on the grounds that the damage claim entirely ignored markets and mitigation opportunities.

Pennzoil claimed that it would have acquired a 43 percent interest in Getty’s proven reserves for about \$3.4 billion had it not been for Texaco’s alleged interference. Pennzoil also estimated that its costs to develop reserves of a similar magnitude by engaging in direct exploration would be approximately \$10.9 billion. Pennzoil’s \$7.5 billion damage claim was based on the difference between the stock acquisition cost and its own replacement cost. Pennzoil effectively assumed an opportunity to acquire substantial assets at a fraction of their true value.

Texaco could have offered testimony that Pennzoil’s damage claim completely overlooked mitigation possibilities. At the time of the Pennzoil-Getty agreement, the shares of many major oil companies were selling at a similar fraction of the replacement costs of their reserves. If Pennzoil were correct in its assumption that replacement costs indicated the true value of reserves, then Pennzoil could have mitigated the lost opportunity by purchasing stock in another major oil company.

In a similar vein, Pennzoil's own stock was trading at a small fraction of the replacement cost of its reserves. Pennzoil stock constituted another mitigation opportunity. In other words, Pennzoil could have profited greatly by dedicating its financial resources to a major stock buy-back. Compared to the various options discussed above, actually drilling to replace the anticipated Getty reserves would have been a waste of shareholder funds.

Pennzoil's damage claim also contradicted available market evidence and ignored market dynamics. To accept Pennzoil's claim, one would have had to discount the natural forces of competition that would drive buyers and sellers to transact at a fair price for the reserves. Pennzoil's analysis implied that Getty's management was irresponsibly willing to give up the reserves at a fraction of their true value. The thousands of shareholders who sold Getty stock at prevailing market prices were similarly implicated.

Nor did Pennzoil's claim spare potential purchasers of Getty stock. Numerous potential investors, among them sophisticated equity analysts and fund managers, sat on the sidelines, when apparently Getty's stock represented a fantastic deal. Pennzoil's claim also implied that the executives of all other major oil companies were negligent in failing to step forward and engage in a bidding war for Getty's reserves. Only Texaco acted, and at a valuation significantly lower than implied by Pennzoil's claim.

Pennzoil's success in the courtroom did not sway the market's assessment of Getty's value. Pennzoil's analysis implied that Texaco could afford to pay the entire damage award and more. Under Pennzoil's theory, Texaco had benefitted by purchasing Getty's reserves at a price significantly below their true value. Moreover, Texaco had not limited itself to purchasing 43 percent of Getty's reserves: Texaco had bought the entire company at an alleged discount. If Pennzoil's theory were correct, then the benefits from Texaco's purchase would have been more than enough to pay the entire damage award. Instead, the damage award forced Texaco into bankruptcy.

The lost opportunity in this case was Texaco's failure to rebut a vulnerable damage claim. Texaco could have used market data in a non-speculative manner to show that it had bought the reserves for a price commensurate with their true value and had neither experienced a windfall nor inflicted damage upon Pennzoil that could not have been mitigated. Texaco's decision not to do so proved costly.

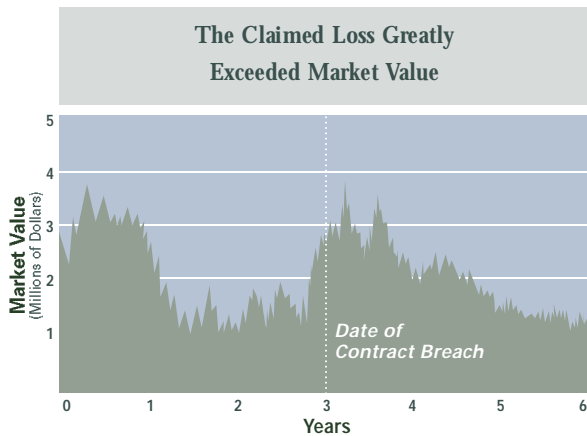
CASE STUDY II: THE "CAN'T MISS" PRODUCT

We estimated damages on behalf of a company accused of a breach of a two-year contract. The contract involved revenues and costs that were relatively certain. The loss of the contract was responsible for damages of several hundred thousand dollars.

However, the total damage claim went well beyond the incremental revenues and costs of the contract. The plaintiff sought \$40 million in damages based on a theory of delayed opportunity. The theory derived from plaintiff's development of an innovative high-technology product. The plaintiff had forecast that the new product would be extremely profitable after the completion of the initial development phase.

The plaintiff's expert argued that, had revenues been available from the contract in dispute, the company could have funded the development of its new product as planned. Instead, the loss of these funds allegedly stalled the development.

The plaintiff's cash flow projections implied that the new product would have been worth well over \$80 million in the first few years of its introduction to the market. The damage claim of \$40 million was calculated as the present value of a two-year delay to the product's anticipated cash-flow stream, caused by the temporary funding problem.



A careful consideration of the plaintiff's damage analysis exposed a number of flaws. First, the damage claim was contradicted directly by a wealth of market evidence. For example, over the period in dispute, the stock market had never valued the entire company at more than \$4 million despite the fact that the company had communicated its excitement about the potential new product in public statements. Existing shareholders and other potential investors evidently did not believe that the new product was worth \$80 million, because they did not bid up the stock price. Nor did the market appear to believe that the problem with the contract in dispute had any significant impact on the company, because the stock price had remained stable in the weeks before and after the loss of the contract was announced.

There was also the issue of mitigation opportunities. After losing the cash-flow stream from the disputed contract, the plaintiff would logically have considered alternative sources of funding for the project. However, the company had not tried to issue new shares. Instead, the company had contacted a number of potential investors to assist in funding, and had accumulated dozens of rejection letters from large companies and venture capital firms.

Therefore, to accept plaintiff's damage claim with these facts in mind, one had to believe that the stockholders of the company, other potential investors in the stock market, and dozens of other firms with specific expertise in the development of new products had missed an opportunity to fund for several hundred thousand dollars a project worth over \$80 million.

Ultimately, the \$40 million claim was dismissed. The market demonstrated the equity of this result a few years later when the plaintiff's financial situation improved. If the plaintiff had been correct, its stock should have increased significantly in value as the company passed its cash-flow crisis and resumed product development. It did not. Rather, the product ultimately failed to work, and the stock price of the company fell 75 percent within the next few years. The enormous commercial risk of the new product had asserted itself – the same risk that the damage claim had ignored, but that had prevented the market from ever assigning any significant value to the product.

CONCLUSION

While some differences in damage estimates derive from genuine and legitimate disagreements over the interpretation of available data, others derive from fundamental errors. Improper consideration of mitigation opportunities or failure to acknowledge properly the evidence or response of competitive markets are two errors at the core of many problematic claims. Damage analyses must address these issues correctly or be vulnerable to simple yet effective rebuttal. However, as the Pennzoil case demonstrates, the failure to expose these analytical flaws can be an equally serious mistake.

JIM REITZES AND DOUG DOBSON JOIN ANTITRUST PRACTICE

The Brattle Group has recently expanded our antitrust practice with the addition of Dr. James D. Reitzes and Douglas C. Dobson as Principals in the Washington office. Both Jim and Doug are former Federal Trade Commission economists with more than 35 years of combined experience. They will be focusing on Hart-Scott-Rodino merger matters and on antitrust liability and damages estimation.

Jim Reitzes' expertise includes not only economic analyses of the competitive effects of mergers and acquisitions, but also extensive experience in private actions involving antitrust issues. Jim has offered expert analysis and testimony in proceedings involving antitrust, securities fraud, patent infringement, taxation, and international trade in the United States, Canada, and the European Community. He has published a variety of articles on business strategies and regulatory policies, including pioneering work related to the "unilateral effects" theory of anticompetitive merger behavior. Dr. Reitzes holds a B. A. in economics and history from Stanford University and a Ph.D. in economics from the University of Wisconsin.

Doug Dobson's areas of expertise include industrial organization, antitrust analysis, and regulatory economics – especially with reference to the competitive analysis of mergers and joint ventures. During his tenure as Assistant Bureau Director for Economic Evidence and Competition Analysis at the Federal Trade Commission, Doug prepared numerous economic policy position papers and directed the investigation and litigation of matters involving a wide variety of antitrust issues and a broad cross-section of American industry. Doug received his A.B. in economics from Bates College, an M.B.A. in marketing from the University of Rochester, and completed all requirements except the dissertation for a Ph.D. in economics from the University of Rochester's Simon School of Business.

Reitzes and Dobson strengthen *The Brattle Group's* antitrust practice by bringing extensive experience in the application of industrial organization economics to complex litigation, including the use of cutting-edge theoretical models and sophisticated empirical approaches for defining markets and simulating market behavior.

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Next Issue : INTELLECTUAL PROPERTY

Various approaches to estimating damages from patent infringement can be misused to yield dramatically different results. We show how proper consideration of risk and market conditions causes results from different approaches to converge.

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